



**TULSA  
COMMUNITY  
COLLEGE**

**2016-2017 CATALOG**

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## OUR VISION

TCC will excel as an inclusive, engaged center of life-long learning that transforms the world by empowering learners intellectually, culturally, and socially.

Learning - for students, faculty, staff, and community member - comprises the heart of our institutional mission, and our core values ensure the primacy of learning. An aspiration without end, learning must be undertaken with passion, tended with reason, and shared with integrity. A collaborative endeavor, learning reveals the possibilities of our world, thus making our lives more meaningful and more productive.

Accordingly, our priorities are as follows:

- TCC academic programs will be timely and timeless.
- TCC will foster a dynamic, collaborative intellectual environment wherein students are fully engaged in the learning process, thereby becoming independent, globally aware, life-long learners.
- TCC will nurture the development of the whole student.
- TCC will promote professional development among faculty and staff.
- TCC will enrich the community through active participation and dedicated leadership in the public sphere.
- TCC will secure the financial and human resources necessary to achieve our vision.

## CORE VALUES

As an educational institution charged with providing lifelong learning opportunities for its students and its community, Tulsa Community College identifies integrity and quality as the cornerstones upon which all other values rest - shaping both priorities and decision making throughout the institution.

**Student Success** is the reason TCC exists. We strive for all students to be successful in their educations and we strive for the education to effectively prepare students for their lives. Learning is the focus because it is the essence of an institution of learning.

**Excellence** drives us. We strive to provide excellent education to our students, excellent resources to our community, and excellent administration and management for our employees.

**Stewardship** guides our daily decision-making. We investigate community needs and expectations and then respond by providing quality education that is responsive, convenient and affordable.

**Innovation** sparks our creativity and ensures that the hearts and minds of our students, faculty, staff and administration are actively engaged in acquiring learning, increasing our knowledge, and leading the community forward.

**Diversity** is our common bond. Sincere appreciation for and cultivation of differences enriches our lives, the community, and the education we offer. It is a source of our pride and integral to our success.

## OUR MISSION

Tulsa Community College betters its community through the intellectual achievement, creative energy, and responsible citizenship of its students, faculty, and staff by their engagement in teaching, learning, and service opportunities that transform and enrich lives. Tulsa Community College commits to innovative, flexible, and affordable public higher education that responds to a dynamic global environment.

## **OUR FUNCTION WITHIN OUR COMMUNITY**

The mission of Tulsa Community College as defined by the Oklahoma State Regents for Higher Education is to:

- Provide general education for all students.
- Provide education in several basic fields of university-parallel study for those students who plan to transfer to a senior institution and complete a bachelor's degree.
- Provide one and two-year programs of workforce development education to prepare individuals to enter the labor market.
- Provide programs of remedial and developmental education for those whose previous education may not have prepared them for college.
- Provide both formal and informal programs of study especially designed for adults and out-of-school youth in order to serve the community generally with a continuing education opportunity.
- Carry out programs of institutional research designed to improve the institution's efficiency and effectiveness of operation.
- Participate in programs of economic development with comprehensive or regional universities toward the end that the needs of each institution's geographic service area are met.

The College is committed to excellence in instruction, student services, and programs relevant to the needs and interests of the greater Tulsa area. Tulsa Community College offers educational opportunities leading to Associate Degrees, Certificates of Achievement, and/or self-improvement in a supportive learning environment conducive to the development of the student's potential. Tulsa Community College will develop a globally and multiculturally competent citizenry to ensure the survival and well-being of our community.

## ACADEMIC CALENDAR 2016-2017

	<b>FALL 2016</b>	<b>SPRING 2017</b>	<b>SUMMER 2017</b>
<b>16 Week Semester/8 Week Terms Open Enrollment</b>	Mar. 28 - Aug. 22 Mon.	Oct. 31 - Jan. 9 Mon.	Mar. 5 - June 5 Mon.
<b>Enrollment/Schedule adjustments must be completed prior to the first class meeting</b>			
<b>Classes Begin</b>	Aug. 22 Mon.	Jan. 9 Mon.	June 5 Mon.
<b>100% Refund on Drop(s) * See other terms noted below</b>	Aug. 18 - Sept. 2 Mon.-Fri.	Jan. 9 - Jan 20 Mon.-Fri.	June 5 - June 11 Mon.-Sun.
<b>Labor Day, Martin Luther King Day, and Memorial Day - (College is Closed)</b>	Sept. 5** Mon.	Jan. 16** Mon.	May 29** Mon.
<b>Deadline to File for Graduation</b>	Oct. 28 Fri.	Mar. 31 Fri.	July 14 Fri.
<b>Professional Development Day No classes (College is Closed - All Employees Work)</b>	Nov. 8 Tues.		
<b>Last Day to Change from Credit to Audit &amp; Last Day to Withdraw with W Grade* (16 week Fall/Spring)</b>	Nov. 11 Fri.	April 7 Fri.	July 14 Fri.
<b>Thanksgiving, Spring Break, Independence Day No Classes (College is Closed Thanksgiving, Indepen- dence Day)</b>	Nov. 23 - 27 ** Wed.-Sun.	Mar. 13 - 19 Mon.-Sun.	July 4 ** Mon.
<b>Final Week of Term Final Exams scheduled during this week</b>	Dec. 12 - Dec. 18 Mon.-Sun.	May 1 - May 7 Mon.-Sun.	July 26 - July 30 Wed.-Sun.
<b>Commencement Ceremony</b>		May 5 Fri.	
<b>Semester Closes</b>	Dec. 18 Sun.	May 7 Sun.	July 30 Sun.
<b>Winter Break (College is Closed)</b>	Dec. 23 - Jan. 2** Fri.-Mon.		
<b>Fall Term :* First 8-week session begins</b> Last day to withdraw and/or change from credit to audit, * <b>First 8-week session ends</b>	Aug. 22 Mon. Sept. 30 Fri. Oct. 16 Sun.		
<b>Fall Term :* Second 8-week session begins</b> Last day to withdraw and/or change from credit to audit, * <b>Second 8-week session ends</b>	Oct. 17 Mon. Dec. 2 Fri. Dec. 18 Sun.		
<b>Fall Term: 16-week session ends</b>	Dec. 18 Sun.		
<b>Spring Term :* First 8-week session begins</b> Last day to withdraw and/or change from credit to audit, * <b>First 8-week session ends</b>		Jan. 9 Mon. Feb. 17 Fri. Mar. 5 Sun.	
<b>Spring Term :* Second 8-week session begins</b> Last day to withdraw and/or change from credit to audit, * <b>Second 8-week session ends</b>		Mar. 6 Mon. April 21 Fri. May 7 Sun.	
<b>Spring Term: 16-week session ends</b>		May 7 Sun.	
<b>Summer Intersession Term:* Begins</b>			May 8 Mon.
<b>Summer Intersession Term:* Ends</b>			June 4 Sun.

\*Terms of a duration less than a regular semester will have different enrollment dates and refund policies.

Schedule adjustment or 100% refund on a drop:

8 week terms - the first week of the term

Short Courses - before 5pm on the second day of class for internet classes or before 5pm of the next regular work day for all other classes.

\*\* Use MYTCC online services to add, drop or pay daily. Go to the TCC homepage: [www.tulsacc.edu](http://www.tulsacc.edu)

## **GENERAL INFORMATION**

### **College Overview**

Tulsa Community College has served Tulsa and the surrounding communities since 1970. Since its inception, TCC has established a tradition of offering students a personal approach to higher education, an education that is designed to be practical and useful. When the College first opened its doors in September 1970, initial enrollment was 2,796 students. In the 40 years that the College has served the Greater Tulsa area, TCC has provided quality educational services to more than 450,000 people.

TCC is consistently ranked in the top two percent of more than 1,150 community colleges nationally in the number of associate degrees awarded in all disciplines. TCC serves more students in higher education in northeastern Oklahoma than any other public college or university. The College is regularly among the state's top three institutions in first-time college freshman enrollment.

The largest two-year college in Oklahoma, TCC serves approximately 27,000 students annually in college credit classes. Of the first-time freshmen enrolling in a public college or university within the Oklahoma State System for Higher Education in recent years, sixty-five percent (65%) of the Tulsa County students begin their college education at Tulsa Community College.

TCC has four campuses in operation: the Metro Campus, located in the heart of downtown Tulsa; the Northeast Campus, located at Apache and North Harvard; the Southeast Campus, located at 81st and Highway 169; and the West Campus, at 7505 W. 41st Street. In addition, the Education Outreach Center at 21st and Garnett provides a variety of services to students in East Tulsa; the Owasso Community Campus serves students living in Owasso and neighboring communities; and the Glenpool Community Campus serves students living in Glenpool and the surrounding communities.

Tulsa Community College is recognized as the leader in Oklahoma in the offering of distance learning classes, with more than 7,000 students enrolled in online courses.

The primary reasons for TCC's growth are:

- Wide variety of courses
- Qualified and dedicated faculty
- Emphasis on student learning
- Low cost
- Day, evening, and weekend classes
- Located close to home and/or work
- Career guidance and advisement program
- Job placement service
- Comprehensive services for part-time as well as for full-time students

The College provides programs of study for people who are:

- Preparing to transfer to the junior level at a four-year college or university
- Preparing for specific occupational careers
- Retraining or updating in specific career skills
- Seeking continuing education opportunities
- Needing developmental or remedial programs in basic skills

Tulsa Community College programs are designed to prepare students for advanced studies or careers in their chosen fields of interest. For many students, the College remains an ongoing source of continuing education.

### **Why Should I Go To Tulsa Community College?**

You don't have to leave home or friends to get a good college education. You can find it right here. Tulsa Community College, one of the largest and most comprehensive community colleges in the country, has a reputation for offering academic quality at a reasonable cost. Our faculty members dedicate themselves to teaching and offer students the individual attention needed in any academic pursuit. Our many choices in courses give you flexibility to explore your interests.

### **How Much Does It Cost?**

The combined tuition and fees for Oklahoma residents is approximately \$115.00\* per credit hour. Costs could range from approximately \$120.00\* for a one-credit course to \$2895.00\* for tuition and fees for a full-time student (12 credit hours a term) for a full academic year. For example, if you enroll in a three-credit history course, the cost would be approximately \$370.00\*.

\*Tuition and fees are subject to change. Course fees, admission fee, international student fee, and book costs are not included.



**Can I Get Financial Aid?**

Financial aid is designed to supplement the financial resources of the student and student's parent(s). Financial aid is available through grants, scholarships, loans and part-time employment from federal, state, institutional and private sources. At Tulsa Community College, the Financial Aid and Scholarships office is available to assist qualified students to meet the costs of their education. TCC offers tuition waivers and/or scholarships to eligible students. For more information visit the financial aid section of TCC's website: [www.tulsacc.edu/finaid](http://www.tulsacc.edu/finaid).

**What Degrees Are Offered?**

Tulsa Community College awards three degrees: Associate in Arts, Associate in Science, and Associate in Applied Science. Each degree requires the completion of a program of study totaling a minimum of 60 credit hours. A full-time student can complete degree requirements in two years or less, but many of our students are employed and take longer. Certificate programs are designed for students who are not currently studying for an associate degree but who want certification that they have completed a program of study.

**Who Can Attend?**

You are eligible to enroll at Tulsa Community College if you are a graduate of an accredited high school or at least 18 years of age and capable of benefiting from the courses offered. Enrollment Services may grant special permission to others. Prior to registration, your official transcripts should be sent to any Enrollment Services Office directly from the high school or college you previously attended. Also, appropriate placement exam scores, ACT, or a similar battery of tests should be taken before you enroll.

**What If I Enroll and Then Can't Attend?**

Students who enroll at Tulsa Community College and are not able to attend should follow the published withdrawal or drop procedures. It is the student's responsibility to be sure that unwanted courses are dropped. Students meeting the criteria can enroll at TCC while in high school as a high school concurrent student.

**Will My Courses Transfer?**

All state-supported four-year colleges and universities in Oklahoma have an articulation agreement with Tulsa Community College. This means that if you earn the Associate in Arts (A.A.) or Associate in Science (A.S.) degree at Tulsa Community College, you automatically satisfy the **general education requirements** of these four-year colleges or universities. The articulation agreement does not apply to out-of-state colleges/universities or to private Oklahoma colleges/universities. Any student who wants to be assured that a specific course, group of courses, or degree program will transfer **for equivalent credit** should work with a TCC academic advisor or contact the senior transfer institution for academic advisement. Many courses in workforce development Certificate of Achievement or Associate in Applied Science (A.A.S.) degree programs will also transfer. Again, students who want to be assured that a specific course, group of courses, or workforce degree program will transfer for equivalent credit should work with a TCC academic advisor or contact the senior transfer institution for academic advisement. Students may find copies of signed articulation agreements with four-year colleges or universities at [www.tulsacc.edu/programs-and-courses/university-transfer-general-information/signed-university-transfer-articulation](http://www.tulsacc.edu/programs-and-courses/university-transfer-general-information/signed-university-transfer-articulation).

**What About Student Life?**

Student Life provides a multitude of programs in the areas of education, recreation, entertainment, discounts, and services. Students can participate in leadership development, intramural sports, free movies, family events, lectures and discount tickets — just to name a few. The Student Union on each campus provides a relaxed and enjoyable atmosphere. Students can also get involved in Student Government Association (SGA) or join any of the student organizations offered on each campus. Most activities are free and designed to enhance the social, recreational, and educational aspects of your college life. Each campus has a Fitness Center where students may take classes or engage in independent fitness activities.



## **ACCREDITATION**

Tulsa Community College is accredited by the Oklahoma State Regents for Higher Education (655 Research Parkway, Suite 200, Oklahoma City, OK 73104; 405-225-9100) and the Higher Learning Commission, ([www.ncahlc.org](http://www.ncahlc.org) or 312-263-0456). The College is a member of the American Association of Community Colleges, the North Central Council of Two-Year Colleges and is also approved by the federal government to offer education under the Veterans and Social Security laws. Some programs at TCC receive accreditation approval from additional organizations or agencies. These programs are listed below.

Tulsa Community College supports all accreditation processes for the purpose of program education and improvement in order to maximize student achievement. The College recognizes that participation in the rigorous and detailed self-study activities necessary for accreditation assures quality programs that will reflect the preparation necessary for our graduates to successfully transition to the workplace.

Tulsa Community College continuously strives to maintain good standing with each accrediting organization or agency by voluntarily complying with all accreditation criteria. This includes the timely submission of required fees and any documentation requested by the accrediting agency. Tulsa Community College will also notify the appropriate accrediting body of any changes in program leadership, administrative structure, significant decreases in resources available to the program, substantive changes in class size, curriculum pattern or the establishment of an expansion program.

### **Cardiovascular Technology**

Joint Review Committee on Education in Cardiovascular Technology  
(978) 456-5594 1449 Hill Street, Whitinsville, MA 01488  
Whitinsville, MA 01588  
[www.irccvt.org](http://www.irccvt.org)  
(978) 456-5594

### **Child Development** (Fully Approved)

National Association for the Education of Young Children (NAEYC)  
(202) 232-8777 1313 L St. NW, Suite 500, Washington, D.C. 20005  
(Fully Approved)

### **Dental Hygiene** (Fully Approved)

American Dental Association Commission on Dental Accreditation  
(800) 621-8099 211 E. Chicago Avenue Chicago, IL 60611

### **Diagnostic Medical Sonography**

Joint Review Committee on Education in Diagnostic Medical Sonography  
(443) 973-3251 6021 University Blvd., Suite 500, Ellicott City, MD 21043  
Ellicott City, MD 21043

### **Health Information Technology** (Fully Approved)

Associate Degree Program  
Commission on Accreditation for Health Informatics and Information Management Education (CAHIIM)  
(312) 233-1132 233 N. Michigan Ave., Suite 2150 Chicago, IL 60601-5519

### **Coding & Reimbursement Specialist Certificate Program** (Fully Approved)

American Health Information Management Association  
(800) 224-4621 233 N. Michigan Avenue, Suite 2150 Chicago, IL 60601-5519

### **Medical Laboratory Technology** (Fully Approved)

National Accrediting Agency for Clinical Laboratory Sciences  
(847) 939-3597 5600 N. River Road, Suite 720 Rosemont, IL 60018-5199

### **Nursing** (Fully Approved)

Oklahoma Board of Nursing  
(405) 962-1800 2915 N. Classen Blvd., Suite 524 Oklahoma City, OK 73106  
Accreditation Commission for Education in Nursing  
(404) 975-5000 3343 Peachtree Road NE Suite 850 Atlanta, GA 30326

**Occupational Therapy Assistant** (Fully Approved)

Accreditation Council for Occupational Therapy  
(301) 652-2682 4720 Montgomery Lane Bethesda, Maryland 20814-3425

**Phlebotomy Certificate** (Fully Approved)

National Accrediting Agency for Clinical Laboratory Sciences  
(847) 939-3597 5600 N. River Road, Suite 720 Rosemont, IL 60018-5199

**Physical Therapist Assistant** (Fully Approved)

Commission on Accreditation in Physical Therapy Education (CAPTE)  
(703) 706-3245 1111 North Fairfax St. Alexandria, VA 22314  
www.capteonline.org

**Radiography** (Fully Approved)

Joint Review Committee on Education in Radiologic Technology  
(312) 704-5300 20 N. Wacker Dr., Suite 2850 Chicago, IL 60606

**Respiratory Care** (Fully Approved)

Commission on Accreditation for Respiratory Care  
(817) 283-2835 1248 Hardwood Rd., Bedford, TX 76021

**Surgical Technology** (Fully Approved)

Commission on Accreditation of Allied Health Education Programs  
(312) 553-9355 35 East Wacker Drive, Suite 1970 Chicago, IL 60601-2208

**Veterinary Technology** (Fully Approved)

American Veterinary Medical Association/Committee on Vet. Tech. Education & Activities  
Headquarters: (800) 248-2862 1931 N. Meacham Rd., Suite 100 Schaumburg, IL 60173-4360

**Day, Evening, and Weekend Classes**

Tulsa Community College operates on a daytime, evening, and weekend schedule to serve both full- and part-time students from the Greater Tulsa Metropolitan Area. Currently, more than 80 percent of Tulsa Community College students work either full or part time, and the College's flexible schedule is designed to offer a wide range of courses at various times for students with different educational interests and work hours. Students can choose classes that are 16 weeks long (one term), or more concentrated classes that meet for eight or four weeks, or for shorter durations. Courses are also available on weekends. In addition, more than 245 courses are offered online.

The wide variety of courses is offered not only for the benefit of those working toward a degree, but also for those who need courses to improve their employment opportunities, who are changing occupations, or who desire personal enrichment. Instruction is provided by the full-time faculty, as well as highly competent professionals from business, industry, and other professional areas. All College policies apply to day, evening, and weekend students.

**Summer Classes**

The College offers a summer program in professional, occupational, and general education for: (1) current Tulsa Community College students; (2) high school graduates who plan to attend Tulsa Community College during the fall; (3) high school graduates who plan to attend another college or university during the fall; (4) Tulsa area students who are home from other colleges or universities for summer vacation; and (5) high school students ranked as juniors or seniors (see concurrent enrollment for high school students) who intend to accelerate their collegiate program to reduce their academic load during the fall and spring terms. Students attending another college should coordinate Tulsa Community College classes with their primary college.

The summer term consists of one eight-week session, day and evening, usually beginning during the first week of June, with each daytime class meeting two or four times a week (depending on the scheduled time), and evening classes meeting twice a week. Shorter courses are also available within the eight week summer term.

**Interession Courses**

May Interession begins on the day after spring graduation and is completed the day prior to the start of summer classes. Interession courses are also available in August, December, and January.

**Student Enrollment and Achievement Data**

The number of students enrolled in Tulsa Community College collegiate credit classes for the Academic Year 2014-2015 was 26,112\*. Of these students, 33% were enrolled full-time and 67% were enrolled part-time. Approximately 3 percent of those enrolled in credit programs already possessed a baccalaureate or higher degree. Forty-four percent of the students are 21 years of age or less, 44% are between the ages of 22-39 years and 12% are over 40 years old.

*\*unduplicated, collegiate credit seeking student enrollment for the academic year.*

**ADMISSIONS AND REGISTRATION**

The admission criteria set forth below are the minimum standards established by the Oklahoma State Regents for Higher Education. Although they provide for "open door" admission to the College, certain programs require additional standards to be met before a student is admitted. Selected workforce development programs require that a separate program application for admission be submitted prior to entry into specific courses.

The policies and procedures of Tulsa Community College have been formulated and adopted to assure the student of comprehensive services by the institution. They are designed to assure the institution of complete recognition and services from accrediting agencies, other institutions of higher education, employers, and funding agencies.

We believe student success is enhanced with assessment of basic skills, orientation to college, and placement in courses that will meet the individual's needs. Details on the assessment/orientation/placement policies for Tulsa Community College are available in this catalog.

**Qualifications for Admissions**

The Oklahoma State Regents for Higher Education require students to document their prior education within completion of the first nine credit hours of college coursework. As a result, although students may enroll for their first term at TCC without presenting their credentials (ex: high school transcript or transcripts from other colleges attended), students must submit the required records prior to re-enrollment to avoid an enrollment hold. For questions, visit any TCC Enrollment Services Office.

The Oklahoma State Regents require students to clear all curricular and/or academic performance deficiencies within their first 24 credit hours of college coursework. Students who have not removed all deficiencies or demonstrated appropriate proficiencies at the time will have a hold placed on enrollment and must work with a TCC academic advisor, who will recommend appropriate courses to clear all remaining curricular and/or academic performances deficiencies. For questions, visit any TCC Academic Advisement Center.

Students may qualify for admission to Tulsa Community College in a variety of ways. The different types of admissions are as follows:

**I. Admission Directly from High School/GED****A. For Students Seeking Admission to Associate Degree and Certificate Programs.**

Any individual who (a) is a graduate of an accredited high school or has achieved a high school equivalency certificate based on the GED (high school class must have graduated), and (b) has participated in the ACT or a similar acceptable battery of tests, is eligible for admission. (If there is an enrollment limit, Oklahoma residents will be given priority.) GED recipients whose high school class has not graduated should contact the Enrollment Service Office on any TCC campus to inquire about the current admissions requirements and admission procedure.

**B. High School Curricular Requirements for Programs Leading to Associate in Arts, and Associate in Science, and Degrees:****(Units/Years) Course Areas**

**(4)** English (Grammar, Composition, Literature; should include an integrated writing component)

**(3)** Lab Science (Biology, Chemistry, Physics, or any lab science certified by school district; General Science with or without a lab may not be used to meet this requirement)

**(3)** Mathematics (from Algebra I, Algebra II, Geometry, Trigonometry, Mathematics Analysis, Calculus, Applied Mathematics with Algebra I & II, Advanced Placement Statistics)

**(3)** History (including 1 unit of U.S. History) Citizenship skills, two additional units from: Economics, Geography, History, Government and Non-Western Culture

**(3)** Other (from any of the subjects listed above or selected from the following: Computer Science, Foreign Language, or any Advanced Placement Course)

**16 Total**

In addition to the previous requirements, the following subjects are recommended for college preparation:

**(Units/Years) Course Areas**

**(2)** Additional units: Fine Arts - music, art, drama, speech

**(1)** Units: Lab Science (as described previously)

**(1)** Units: Mathematics (as described previously)

**4 Total**

**Basic skills courses:** English, Science and Mathematics (deficiencies may be removed through testing.)

**Guided electives:** History, Citizenship, and others (deficiencies are removed by college level coursework). World History will count toward Non-Western Culture.

While these curricular requirements will normally be met by students in grades 9 through 12, advanced students who complete these courses in earlier grades will not be required to take additional courses for purposes of admission. The remainder of the units required by the State Board of Education for high school graduation may be selected from courses to meet students' individual needs and interests.

Students lacking curricular requirements in the basic skills courses (English, Mathematics and Science) are admissible into Associate in Science or Associate in Arts programs in the community colleges but must remove the deficiencies at the earliest possible time, but no later than within the first 24 hours attempted, or have all subsequent enrollments restricted until the deficiencies are removed. In addition, students must remove curricular deficiencies in a discipline area before taking a collegiate level course in that discipline.

### **C. High School Curricular Requirements for Admission to Other Degree or Certificate Programs**

Students entering Associate in Applied Science degree or certificate programs must meet high school curricular requirements for a particular course area before taking courses in the same discipline as part of the degree. Students admitted under this provision must meet all the high school curricular requirements before transferring into an Associate in Arts, Associate in Science or baccalaureate program (See I.B. and I.D.)

### **D. Removing High School Curricular Deficiencies**

#### **1. Curricular deficiencies in English, Mathematics and Science may be removed by:**

- a)** successful completion (grade "C" or higher) of a zero-level course: English - ENGL 0933; Lab Science - BIOL 0123 or PHSC 0123; Mathematics - MATH 0123 or MATH 0105.; or **b)** testing (ACT or appropriate placement exam score) at the appropriate proficiency levels. (Zero-level courses do not count toward satisfaction of degree program requirements.)
- 2.** A history deficiency may be removed by successfully completing a three-credit-hour history course in addition to the three-credit-hour U.S. History needed for graduation.
- 3.** All other elective curricular deficiencies may be met by completing the stated course area.

## **II. Special Admission Programs**

### **A. Adult Admission**

**1.** Students who are 21 years of age or older or on active military duty may be admitted based on criteria established at Tulsa Community College and submitted to and approved by the State Regents. For students admitted under the adult admission category, the campus must consider the probability of the academic success of the student. Related to the curricular requirements, students admitted under the adult admission category must demonstrate proficiency to the satisfaction of the admitting institution in the curricular area the student desires to pursue. Students should contact the Enrollment Services Office on any campus for admissions processing. Institutions will be required to submit an annual report of those students admitted in this category to the State Regents.

**2.** Any student who (1) is not a high school graduate but whose high school class has graduated and (2) has participated in the ACT, appropriate placement exam score or similar battery of tests is eligible for admission to any of

the two-year colleges in the State System. Remediation may be required depending on level of test score. Contact the Enrollment Services Office for admissions processing. GED students not meeting the above criteria should contact any Enrollment Services Office.

### **B. Special Non-Degree-Seeking Student**

Students who wish to enroll in courses without intending to pursue a degree may enroll in no more than nine hours without providing transcripts. Proficiency assessments and prerequisite verification are required before enrolling in certain courses. Retention standards will be enforced for all students. Students must be degree seeking and provide all credentials to be eligible for financial aid. Contact the Enrollment Services Office on any campus to discuss the non-degree objective.

### **C. Home Study or Unaccredited High School Graduates**

An individual who is a graduate of a private, parochial, or other non-public high school which is not accredited by a recognized accrediting agency is eligible for admission to an institution in the State System as follows:

1. The student must have participated in the American College Testing or Scholastic Aptitude Test program.
2. The student's high school class of his or her peers must have graduated.
3. The student must satisfy the high school curricular requirements for the institution to which he/she is applying, as certified by the high school or, in the case of home study, the parent.

**Note:** *Students under 17 years of age are not eligible for Federal Title IV funds. (Pell, SEOG, Loans)*

### **D. Concurrent Enrollment of High School Students**

#### **Admission Requirements**

- Students must be juniors or seniors. Students who are home schooled or attending unaccredited high schools must be at least 16 years of age as a junior and 17 years of age as a senior.
- Students must have participated in the ACT and made the following composite scores: juniors 21 (ACT) and seniors 19 (ACT).

*or*

- Those who have participated in the ACT and did not meet the score requirements may be considered for admission purposes based on their high school GPA. Juniors must have a 3.5 GPA and seniors must have a 3.0 GPA on a 4.0 scale *and*

#### **Enrollment Requirements**

- Juniors and seniors must score 20 (ACT) in Mathematics to enroll in a Mathematics course and 19 (ACT) in all other subject areas to be eligible to enroll in other courses.
- Students must also meet the high school curricular requirements for a particular course area before taking courses in that same discipline. High school seniors desiring to enroll in English courses must have completed three (3) units of high school English and be currently enrolled in senior English.

Students must complete an Application for Admission online at [www.tulsacc.edu](http://www.tulsacc.edu) at least two business days prior to enrollment and provide the following documents to the Director of Enrollment Services on the campus offering the class:

- Concurrent Enrollment Application\*
- Current official high school transcript
- Official ACT

All documents must be received in advance of intended enrollment to allow time for processing.

ACE Tuition Waiver Scholarships are awarded as funds are available. Students must be enrolled in a minimum of three (3) and a maximum of six (6) credit hours per term and must follow the policy regulations. *Contact Enrollment Services staff on any TCC campus for high school concurrent enrollment details.*

High school students who have provided the appropriate documents and meet score requirements must follow the criteria below:

- Combined high school and college courses enrollment will not exceed 19 credit hours per long term or 9 credit hours in the summer.
- Students may not enroll in zero-level courses designed to remove deficiencies.
- Re-enrollment is contingent upon the student achieving a 2.0 GPA at TCC.

All other students not qualified by grade level may be considered for enrollment under the Opportunity Admissions category. A detailed explanation of the Oklahoma State Regents' policy on concurrent enrollment is available from any TCC Admission/Enrollment Services Office.



**Note:** Questions regarding admissions or enrollment should be directed to the Enrollment Services Office on the campus the student plans to attend. Admission to the institution does not guarantee eligibility for course placement.

\*The High School Concurrent Application may be obtained from your principal, counselor, or the Enrollment Services Office on any TCC campus.

### **E. Opportunity Admissions Category**

Students who have not graduated from high school whose Composite Standard Score on the ACT places them at the 99th percentile using Oklahoma norms or whose combined Verbal and Mathematical score on the Scholastic Aptitude Test (SAT) places them at the 99th percentile using national norms may apply for full enrollment at a college or university of The Oklahoma State System of Higher Education. The College will determine admissibility based on test score, evaluation of the student's level of maturity and ability to function in the adult college environment, and whether the experience will be in the best interest of the student intellectually and socially. Proficiency assessments may be required before enrolling in certain courses.

### **F. Undocumented Eligible High School Graduates (HB 1804 Title 70, Section 3242 [2007])**

Students with undocumented immigration status must meet the requirements set forth by law to be eligible for enrollment in an institution of the Oklahoma State System of Higher Education. Students should contact any Enrollment Services Office for admissions criteria, procedures and the Affidavit of Intent form.

### **G. Senior Citizens (Oklahoma Residents Age 65 or Older)**

Tuition waivers are available for Oklahoma residents age 65 or older who wish to audit a course. Auditing of academic courses is contingent upon space available on the date the class begins. See section "Audit of Courses," in this same chapter for detailed procedures. Questions regarding this process should be directed to the Enrollment Services Office on the campus the student plans to attend.

### **H. International Student Admissions**

Tulsa Community College is authorized under federal law to enroll international students. An international student is defined as "a student who is, or will be, in the U.S. on a student visa." At Tulsa Community College, this refers specifically to the student (F) visa. The International Student Service Office provides admission and support services to these students. International admission information is available from the International Student Services Office located on the Northeast Campus, by telephone at (918) 595-7478 or online at [www.tulsacc.edu/iss](http://www.tulsacc.edu/iss).

### **I. Admission of Students for Whom English is a Second Language**

All students for whom English is a second language shall be required to present evidence of proficiency in the English language prior to admission to a college or university of the State System, either as first-time students or by transfer from another college or university. The intent of this policy is to admit into an institution only those students who have a reasonable chance of success based on their ability to comprehend and use spoken and written English.

The following minimum standards shall be utilized by all State System institutions to determine English language proficiency:

1. Students must either demonstrate their competency in English through **a)** passing the test as described or **b)** demonstrating proficiency through successfully completing the State Regents' high school core requirements in an English-speaking school or **c)** graduating from an English-speaking high school and demonstrating competency as described in "I.D. Removing High School Curricular Deficiencies".
2. Applicants for first-time admission at the undergraduate level must present evidence of English language proficiency. The Test of English as a Foreign Language (TOEFL) or the International English Language Testing System (IELTS) is used to satisfy the requirement.

Applicants must attain at least a score of:

- 500 on the traditional TOEFL, or
- 173 on the computerized TOEFL version, or
- 61 on the Internet based TOEFL version, or
- a score of 6 on the IELTS.

Applicants who do not meet these requirements may be admitted to the English as a Second Language program by meeting the following requirements:

- presenting a score of 460 or higher on the traditional TOEFL, or
- a score of 140 on the computerized TOEFL version, or
- a score of 48 on the Internet based TOEFL version, or
- a score of 5 on the IELTS or



- immediately, after taking the TOEFL and prior to admission, successfully complete a program of 12 weeks of study at an approved English language center or program operated by an institution of higher learning or a private school approved by the State Regents.

System institutions with an approved program of English as a Second Language may admit students into this program, but no other courses, without meeting the other requirements of this policy. Results of TOEFL tests administered at Institutional Testing Centers are not accepted by colleges and universities other than the administering institution. Information about the TOEFL and a testing schedule is available from the Testing Center, located on the Northeast Campus, by telephone at (918) 595-7534 or online at [www.tulsacc.edu/Testing](http://www.tulsacc.edu/Testing).

3. Applicants seeking admission by transfer who have attended an accredited college or university for a minimum of 24 semester credit hours with passing grades shall be admitted on the same basis as other transfer students.
4. Students who do not have the 500 TOEFL score may study English as a Second Language after taking the ESL Placement test. This test measures the English language proficiency of non-native speakers. To schedule a free testing appointment, please call (918) 595-8411, Multicultural Language Center, Northeast Campus, [www.tulsacc.edu/esl](http://www.tulsacc.edu/esl).

### **III. Admission by Transfer from a State System Institution**

An Oklahoma State System student who wishes to transfer to another State System institution may do so under the following conditions:

#### **A. Admission Requirements**

1. Provide official transcripts from each college/university previously attended and, if fewer than 7 credit hours have been completed at other colleges/universities excluding credit hours completed as a concurrently enrolled high school student, a high school transcript with graduation date or passing GED scores.
2. A student under 21 years of age must meet the high school curricular requirements as indicated in Section I of this policy and have a grade point average high enough to meet TCC's retention standards. (see Policy for Continued Enrollment II.B.).

#### **B. Transfer Credit Policies**

1. Transfer Credit Evaluation
  - a. Courses will be listed under the name of the transferring institution. Courses will be equated to TCC disciplines, course numbers, and credit hours and the grade assigned will be the grade awarded by the transferring institution.
  - b. Courses evaluated as semi-equivalent or a general elective will be accepted for transfer credit and may be applicable toward graduation requirements as elective credits.
  - c. Courses evaluated with passing grades (P or S) will be accepted for credit.
  - d. Courses recognized as semi-equivalents will be accepted and credit given even though TCC does not have a like equivalent for that course.
2. Academic Status of Transfer Students
  - a. Transfer students with a cumulative GPA of 2.0 or higher (as calculated by A, B, C, D, and F systems, 4.0 scale) will be admitted to Tulsa Community College in good standing.
  - b. Students with a cumulative GPA of less than 2.0 average will be admitted to their first enrollment at TCC on academic probation or academic notice and will be expected to meet the standards for continued enrollment.
  - c. Students returning to TCC after enrollment at another institution or institutions will be considered for admission based on academic records at all the college(s), including the grades earned at TCC.
3. Disciplinary Probation or Suspension — Students on disciplinary suspension or social probation from another institution will not be considered until the suspension or probation is removed by the enacting institution or the student is accepted by the Admissions Committee.

### **IV. Admission of Nonresidents of Oklahoma**

#### **A. Admission of First-time Entering Freshmen**

In order to be eligible for admission to any institution in The Oklahoma State System of Higher Education, a non-resident of Oklahoma (a) must be a graduate of a high school accredited by the appropriate regional association or by an appropriate accrediting agency of his/her home state, (b) must have participated in the ACT or a similarly acceptable battery of tests, and (c) must meet the high school curricular requirements outlined in Section I of this policy.

#### **B. Undergraduate Students Entering by Transfer From Out-of-State College or University**

Undergraduate students wishing to transfer from an out-of-state college or university to Tulsa Community College may do so as follows:

1. Transcripts of record from colleges or universities accredited by the Higher Learning Commission or other regional associations will be given full value.
  - a. Each nonresident applicant must be in good standing in the institution from which he/she plans to transfer.

- b. Each nonresident applicant must have made satisfactory progress (an average grade of "C" or better or meets this policy's current retention standards, whichever is higher) in the institution from which he/she plans to transfer.
  - c. Each nonresident applicant must meet the high school curricular requirements outlined in the "Qualifications for Admissions" section.
2. Transcripts of record from institutions not accredited by a regional association may be reviewed for transfer acceptance when appropriate to the student's degree program and when the College has had an opportunity to validate the courses or programs.
- a. Each nonresident undergraduate applicant must meet the conditions of IV.B. 1.a., 1.b., and 1.c. listed previously.
  - b. Each nonresident undergraduate applicant who meets IV.B. 1.a., 1.b., and 1.c. above also will be required to validate the transferred credit by making satisfactory progress (an average of "C" or better) for at least one term.
3. Any student who does not meet the criteria stated above may petition the Admissions Committee for further consideration.

**C. This school is authorized under Federal law to enroll non-immigrant alien students.**

**Admission Procedures**

**I. First Enrollment at Tulsa Community College**

**A. Application for Admission**

1. An application is required for admission and should be submitted prior to expected enrollment. All questions must be answered. Application information may be submitted initially via the TCC web site at [www.tulsacc.edu](http://www.tulsacc.edu) (click on MyTCC). This information must be verified upon each registration at the College.
2. A twenty dollar (\$20) one-time, non-refundable processing fee will be assessed with the first term's tuition and fees. The Social Security number is used by Tulsa Community College for identification purposes only and will not be given out to any individual or agency (unless required by law or as provided for in federal regulations), without the student's written permission. TCC will assign a student identification number, but will collect your Social Security number for business transactions and verification purposes. Omission or falsification of information on the application is grounds for rejection of the application and/or disciplinary action against an enrolled student. Students seeking Financial Aid must use their Social Security numbers.
3. High school transcript, ACT, SAT, appropriate placement exam score, and/or college transcript should be sent to the Enrollment Services Office on the campus of planned attendance prior to enrollment. (See "Qualifications for Admissions" section). Credentials submitted to the College will not be copied or returned. Credentials provided in-person must be a sealed envelope of the issuing institution. SAT scores are not used for placement into courses.
4. First-time degree seeking college students are required to participate in New Student Orientation (NSO) and are required to be assessed for placement in courses. (See "Student Life and "Assessment Services" sections in this catalog for details.)

**II. Re-admission After One Regular Term of Non-Enrollment**

**A. Application information is verified to update student information.**

**B. Re-entering Degree-seeking Students**

Students must submit transcripts from each college attended since the last enrollment at Tulsa Community College, and any credentials not submitted previously. Previous attendance at TCC does not mean a student was officially admitted to the College.

**III. Admission After Suspension**

**A. Academic Suspension**

Students who have been placed on suspension from Tulsa Community College may petition the Admissions Committee for admission after a one-term lapse in enrollment (not including summer). The student must:

1. Complete the Petition for Re-Admission after Suspension form found on the TCC website.
2. Provide official transcripts from all previous schools. (It is the student's responsibility to contact the Enrollment Services Office to verify all credentials are received.)

The Re-Admission Petition and all supporting credentials must be received 30 days before enrolling. Please submit all credentials to any campus Enrollment Services office.

3. Upon receipt of the completed petition and all credentials, the request will be reviewed by the Admissions Committee and the student will be notified of the results. See "Policy for Continued Enrollment." Students suspended from another college or university may attend TCC immediately after academic suspension; contact the Enrollment Services Office on any campus.

**B. Disciplinary Suspension**

Students who have been placed on disciplinary suspension from Tulsa Community College must contact the Senior Student Affairs Officer for Student Affairs for re-admission. All criteria outlined in the suspension letter must be met before a suspended student may apply for consideration of re-admission after disciplinary suspension.

**Admission to Continuing Education (no credit/no degree)**

Visit the Continuing Education and Workforce Development website at [www.tulsacc.edu/ce](http://www.tulsacc.edu/ce) for admission into the classes. There are no applications or application fees associated with our classes. Visit the website, pick out the classes want and follow the easy steps to register and pay online. You can also call 918-585-7200 for assistance if needed. There may be some classes that have prerequisites associated with the class, but they will be noted in the class description.

**College Credit for Military Training Experience**

In evaluating armed services credit, Tulsa Community College follows recommendations of the Guide to the Evaluation of Educational Experiences in the Armed Services, published by the American Council on Education. Credit for military service will be granted only for equivalent courses offered in the Tulsa Community College degree major declared by the student and is awarded only after the student has earned twelve (12) hours in residency at TCC. Tulsa Community College may accept, modify, or reject military training credit depending upon the evaluation. Documents submitted by the student to the Enrollment Services Office become a part of the student's official records and will be retained by the College.

**Credit by Prior Learning Assessment**

Students who believe they are qualified to establish college credit as a result of previous training or experience should inquire about advanced standing options. Credit is limited to existing TCC courses in the curriculum for the student's declared major. Students who establish credit through advanced standing will be assigned a grade of "S" on their record to indicate successful completion. Fees for advanced standing tests are listed in the Tuition and Fees section of this publication. No refund of fees will be given for advanced standing examinations that are not passed. Credit for military training falls under the American Council on Education (ACE) guide as extracurricular credit. TCC may recognize these credits as advanced standing. Questions relating to advanced standing testing should be directed to the Advisement Centers. Credit may be established by several different methods. More information about advanced standing testing can be found in the Advisement Centers on each campus or online at [www.tulsacc.edu/Testing](http://www.tulsacc.edu/Testing).

- I. Credit may be established in specific academic programs by the evaluation of documents indicating formal education, test scores, and/or transcripts relating directly to a specific course. These documents will be reviewed by the related academic division or designate and the ensuing recommendation will be considered final. Contact the Enrollment Services Office for procedures.
- II. In order to qualify for advanced standing credit or advanced standing examinations given at TCC, a student must **1)** be enrolled or academically eligible to re-enroll, **2)** complete twelve semester credit hours of resident academic work, **3)** complete the application for advanced standing credit and receive approval, **4)** pay for the advanced standing exam, and **5)** have not taken the examination within the last six months. Fees for the departmental examination are to be paid prior to taking the exam. Fees for the CLEP exams are paid on the testing date. The advanced standing examinations are administered during the ninth week of the term (fifth week of the summer term).

**A. College Level Examination Program (CLEP)**

Tulsa Community College is a national test site for the College Board's College Level Examination Program (CLEP) Examinations are administered in the Testing Center on the Northeast Campus. For a list of exams accepted at TCC or for minimum scores required for establishing credit through CLEP, contact the Advisement Center, or Enrollment Services Office on each campus or online at [www.tulsacc.edu/Testing](http://www.tulsacc.edu/Testing).

**B. Departmental Examinations Offered by TCC**

Currently or previously enrolled students who feel they are qualified for advanced standing credit by examination in an area not offered or administered through the CLEP program may attempt to establish credit through a departmental examination. Students seeking these examinations should inquire through the campus Advisement Center and may be required to have approval for the examination by the Associate Dean of the academic division for that discipline. The departmental examinations are written and scored by TCC faculty and are intended to measure competence comparable to what would be required if the student took and received credit for that course at TCC. A score equivalent to a grade of "C" shall be the cut-off score.

**C. Advanced Placement Program (APP)**

This program enables high school students to take comprehensive examinations for credit at the college level. Inquiries concerning this program should be directed to the high school counselor and arrangements for taking the examination and scoring will be coordinated at the high school in which the student is enrolled. TCC does not administer the AP exam. TCC will award college credit with qualifying scores in specified subject areas that are determined by the academic division that administers the discipline of that course. Submit score sheets to the Enrollment Services Office.

#### **D. Extracurricular Learning**

Advanced standing for credit awarded for military training schools, business and industry, labor union, governmental agencies and other non-collegiate learning shall not exceed the criteria or recommendations contained in publications of the American Council on Education. Contact the Enrollment Services Office.

#### **E. International Baccalaureate**

Advanced standing credit may be awarded to a student who has taken "higher level" courses in the International Baccalaureate program and has scored at least a four (on a seven-point scale) on the higher level course examination. Such credit shall be awarded on a course-by-course basis. Contact the Enrollment Services Office.

### **Classification of Students**

The classification of students is determined as follows:

1. Freshman: 0-30 earned semester credit hours.
2. Sophomore: 31 or more earned semester credit hours.
3. Full-time: students enrolled in 12 or more semester credit hours in a 16-week semester term (6 or more semester credit hours in a summer academic term).
4. Part-time: students enrolled in 11 or fewer semester credit hours in a regular academic term (5 or fewer in a summer academic term).

### **Proficiency Requirements**

In compliance with the requirements of the Oklahoma State Regents for Higher Education (OSRHE), all TCC students must demonstrate proficiency in English, math, and science before enrolling in college-level courses in these disciplines. Students must also demonstrate college-level reading competency before enrolling in General Education courses. ACT scores, appropriate placement exam scores, and college transcripts can be used to demonstrate proficiency. Any degree-seeking, first-time college student who has not satisfied his or her proficiency requirements is required to enroll in and successfully complete ENGL 1003 (Academic Strategies) within the first two semesters of attendance.

Support for students for whom English is a second language and who do not meet proficiency requirements for placement in English and Reading on the appropriate placement exam, will be referred to the Language Center at Northeast Campus to take the TCC ESL Placement test. The ESL Placement test measures the English language proficiency of non-native speakers. To schedule a free testing appointment, please call (918) 595-8411, room 1521, Northeast Campus, [www.tulsacc.edu/esl](http://www.tulsacc.edu/esl).

### **Computer Proficiency Requirement**

To receive an AA or AS degree from TCC, students must demonstrate computer proficiency, including a basic knowledge of operating systems, word processing, and the ethical use of Internet research capabilities, via one of the following options:

- Successful completion of CSCI 1203 or a CSCI/CSYS course that lists CSCI 1203 as a prerequisite
- Successful completion of an advanced standing exam for CSCI 1203
- Successful completion of the TCC computer proficiency exam
- Documented work experience or other academic coursework involving the following competencies:
  1. Proper use of common computer terms
  2. Saving, retrieving, and organizing data stored on a computer
  3. Using word processing, spreadsheets, and presentation software, as well as the Internet, to perform a task or solve a problem

### **Smoking**

TCC prohibits smoking or the use of other tobacco products within all College-owned or leased buildings.

## Standards of Conduct

The college student is considered a responsible adult. The student's admission indicates acceptance of those standards of conduct which appear in the Student Code of Conduct. The Student Code of Conduct is published on the TCC web site at [www.tulsacc.edu](http://www.tulsacc.edu) and can be requested in print from any campus Dean of Student Services Office.

## In-State/Out-of-State Resident Classification

The definition of a legal resident of Oklahoma to be used in the assessment of fees at TCC is as follows: The legal residence of a dependent person is that of his/her father, mother or legal guardian(s) as defined by the Oklahoma State Regents for Higher Education. Proof (if requested) of residency may be defined as establishing domicile in Oklahoma and physical residence for the previous 12 months. Domicile is defined as having two components—residence and the intention to remain. If it is determined that an applicant entered the state with the express purpose of attending college, non-resident status will be assigned. Other classification options may be available for military personnel or spouses and dependents. Contact the Enrollment Services Office for details. Contact the Director of Enrollment Services on any campus for clarification and to petition for resident classification. Complete In-State and Out-of-State policy information is also available at [www.osrhe.edu](http://www.osrhe.edu).

## Withdrawal From Classes

### Results of Withdrawing

- A "W" or "Withdrawal" grade will be awarded on student's transcript for the courses from which the student withdraws.
- The "W" grade will not affect student's GPA.
- The Student may have financial aid repercussions for unsatisfactory academic progress and become ineligible for financial aid in the following semester.

### Deadlines

- Withdrawal deadlines for regular semester courses (16 week) or eight-week courses are published in the academic calendar, found in the TCC Catalog.
- Students are strongly encouraged to visit with any Enrollment Services Office regarding the deadlines for shorter courses.

### Financial Aid Recipients

- Students who withdraw from any or all courses may be required to have a recalculation of Federal Student Aid as of the date of withdrawal. As a result of the recalculation, the student may owe money to TCC.
- Students who withdraw from one or more courses may affect their satisfactory academic progress (SAP) and may become ineligible to receive financial aid.
- Students who receive scholarships, veteran's benefits, loans, grants, and/or Tulsa Achieves are required to meet with a Financial Aid representative for advisement before withdrawing.

### Process for Withdrawal

#### On Campus Student Process:

- Notify and discuss withdrawal with instructor.
- Complete and sign Request for Withdrawal form. Forms are available in any TCC Advisement Office.
- Submit completed Request for Withdrawal Form to any TCC Advisement Office.

\*\*Students are strongly encouraged to complete the withdrawal process in person, however, if circumstances arise where the student is unable to come to campus, follow the Distance Learning Student Process below.\*\*

### Distance Learning Student Process

The withdrawal process has changed in recent semesters due to changes in financial aid requirements. It is understandable that it is not always convenient or possible to come into campus to withdraw, but due to some of these changes, it is highly recommended that you come in to any advisement office to discuss the process and how it might affect you.

If it is not possible to come to a campus, you may download the withdraw form. Read through the instruction sheet carefully, then fill out the first page of the withdraw form completely. Fax both front and back pages of the form to any TCC advisement office. Fax numbers are listed on the form.

Make sure to initial where appropriate and sign and date under the "Student Responsibility" section. Also, remember to include a clear and legible copy of an official photo ID such as a Driver's License or TCC Student ID with your fax.

If you receive financial aid and are enrolled in classes that have not started yet, make sure to sign and date under the "Affidavit of Enrollment" section.



**NOTE:** TCC will not process withdrawals that are not requested on the TCC Withdrawal form. A legible copy of a valid government issued ID or TCC student ID must be included.

## **Audit of a Course**

### **I. Regular Course Audit**

The student must complete the "Audit Contract" for each class being audited. The student and appropriate instructor must sign the form and the request to audit must be completed prior to the close of the withdrawal period for the specific class student may revert from audit to credit only during the schedule adjustment period for the specific course. The auditing student must adhere to the instructor's class attendance and participation requirements. A student not adhering to the instructor's requirements may be withdrawn by the instructor for non-attendance. A grade of AU (audit) counts in hours attempted. Audited courses will not apply toward graduation requirements, or for financial aid or veteran's benefits. For other options, see II. Special Admission Programs, Adult Admission section.

### **II. Audit for Oklahoma Residents Who Are Age 65 or Older and Desire a Tuition Waiver**

The Oklahoma State Regents for Higher Education approved a policy authorizing institutions of the State System to waive the fees for Oklahoma residents who are sixty-five (65) years of age, or older, for auditing of academic courses contingent upon space being available in the classrooms and laboratories housing such courses. Information relative to this program is as follows:

**A.** Enrollment is open on a space-available basis on the date the class begins. People will be allowed to enroll at TCC under this plan only after the regular enrollment period preceding each term and at times designated by the College. Enrollment is allowed only if the normal class limit has not been met. No class overloads will be allowed. Students must meet any proficiency requirements or prerequisites prior to enrollment.

**B.** Students must meet Oklahoma residency requirements as defined by the Oklahoma State Regents, be age sixty-five (65) or older, and must verify both residency and age (i.e., by presenting a valid birth certificate, driver's license, etc.).

**C.** A maximum of seven (7) semester credit hours per regular term and four (4) semester credit hours in a summer term is allowed under this policy. If a student wishes to enroll in more than the maximum credit hours allowed, he/she must pay the regular fees for hours beyond the maximum.

**D.** Since audit is mandatory under the fee waiver, the Director of Enrollment Services signature will authorize the audit status in lieu of other College officials.

## **TUITION AND FEES\***

Fee amounts are approved by the State Regents for Higher Education and may be changed by direction of the State Regents. General enrollment fees and nonresident tuition and other fees for special educational services are due prior to the first day of class.

### **Oklahoma Residents:**

Enrollment Fee: \$90.97 per credit hour

### **Non-Oklahoma Residents:**

Enrollment Fee: \$296.97 per credit hour

**Audit(Without Credit):** Same fees apply as a credit course

### **Advanced Standing**

Advanced Standing Credit Evaluation/Transcription: \$5.00 per credit hour (non-refundable)

Department Exams: \$5.00 per credit hour (non-refundable)

CLEP: National Testing Agency Rate

ACT: National Rate + \$5.00

### **General Fees**

Application Fee: \$20.00 non-refundable

Student Malpractice Insurance: Market rate

Veterinary Tech Medical Insurance: \$45.00 per course

International Student Status Maintenance Fee (Fall, Sprint & Summer Terms): \$50.00 per semester

Global Ed Insurance: Market rate

### **Special Fees**

Facility Fee: \$2.00 per credit hour

Remedial Fee: \$13.00 per credit hour

Student Assessment Fee: \$1.50 per credit hour

Technology Fee: \$8.00 per credit hour

Library Fee: \$2.75 per credit hour

### **Fees for Student Services**

Student Activity Fee: \$5.15 per credit hour

Student Center Fee: \$7.30 per credit hour

Cultural & Recreational Service Fee: \$1.25 per credit hour



Student ID Card (non-refundable): \$5.00 per semester

Parking Fee: \$1.50 per credit hour (up to \$18.00)

**Continuing Education** (non-credit): Fees vary

\*Tuition and fees are subject to change

**Special Course Supplies and Institutional Services**

Students are expected to furnish expendable supplies in certain courses. The institution may furnish a portion of all these expendable supplies to the student at a fixed cost per course, and these materials will be available at the proper scheduled time. Certain other services may also be provided for the student by the College at a fixed cost. The price schedule is listed below:

**Course Lab Fees**

Accounting (Software Courses): \$12.00 per course

Allied Health: \$12.00 per course

Art: \$12.00 per course

Aviation - Air Traffic Control: \$75.00 per course

Computer Information Systems \$12.00 per course

Dental Hygiene: \$20.00 per course

Drafting: \$12.00 per course

Electronics: \$12.00 per course

Engineering: \$12.00 per course

English Developmental Studies: \$7.00 per course

Health Information Technology: \$12.00 per course

Horticulture: \$12.00 per course

Interior Design: \$12.00 per course

Legal Research Law Library Fee: \$60.00 per course

Numerical Control/Machinist: \$20.00 per course

Nursing: \$12.00 per course

Paralegal: \$12.00 per course

Science: \$22.00 per course

Music Lessons Fee (Private): \$50.00 per credit hour

Theatre 1241: \$50.00 per course and 1242: \$100.00 per course

Veterinary Technology: \$25.00 per course

**Special Instruction Fees**

First Aid Fee: \$27.00 per course

Nursing and Fire & Emergency Services Assessment Fee: Market rate

Allied Health, Nursing and Fire & Emergency Services Drug Screen Fee: Market rate

Allied Health, Nursing and Fire & Emergency Services Immunization Tracking Services Fee: Market rate

Allied Health, Nursing and Fire & Emergency Services Criminal Background Check Fee: Market rate

Aviation - Air Traffic Control Program Fee: \$150.00

Aviation Technology Service Fees Private: Direct cost of service

Child Development Background Check: Market rate

Commercial with Instrumental Rating: Direct cost of service

Veterinary Technology Vaccination Fee: Market rate

Dental Hygiene Equipment Fee: \$100.00

Distance Learning Fee (online and Interactive Television (ITV) courses): \$12.00 per credit hour

Distant Learning (Blended) \$6.00 per credit hour

**REFUNDS**

**Refund Procedure (The means by which refunds are currently being distributed is subject to change)**

When a student enrolls in a class at Tulsa Community College, he/she reserves a place which cannot be made available to another student until he/she officially drops from the class. Many students cannot enter Tulsa Community College each term because classes are filled. Students processing a complete drop prior to the first day of classes may receive a 100 percent refund, except for the application fee, ID fee, and/or international student status maintenance fee, Tuition Option Plan fees and Deferred fees. Refunds will not be honored unless all financial obligations to Tulsa Community College have been cleared.

**Refund Policy**

**I. Complete Withdrawal from the Institution**

**A. 100 percent** refund for dropping all classes during the first two weeks of a regular 16 week semester, first week of a summer or eight week mini-term or before the second class session of a course that is less than eight weeks in length. In order to receive a refund for courses shorter in duration than eight weeks, the student must drop the class before 5 p.m. on the second day of class for Internet classes or before 5 p.m. of the next regular work day for all other classes.

**B. Zero percent** refund for students withdrawing after the second week of a regular term or after the first week of a summer or 8-week mini-term. For courses shorter in duration than eight weeks, there is no refund if the student drops the class after 5 p.m. on the second day of class for Internet classes or after 5 p.m. of the next regular work day for all other classes.

*NOTE: Financial aid recipients who complete a full withdrawal from the institution should refer to the Return of Title IV funds policy in the "Financial Aid Probation and Suspension" section of this catalog.*

## **II. Enrolling and Dropping from Classes**

- Students may enroll in courses during the published dates in the Academic Calendar.
- It is the student's responsibility to be sure unwanted courses are dropped by the scheduled deadline.
- Students may drop classes using MYTCC or in person by contacting any Enrollment Services Office. See Refund Policy for more information.

### **Withdrawing from Classes**

See the Course Withdrawal Section for more details.

- After Schedule Adjustment, students may withdraw from a credit course, however, no refund will be administered. To withdraw, students must adhere to the following requirements:
- Students may withdraw from a credit course within the first 75 percent of the course. Students cannot withdraw from Continuing Education courses.
- To initiate the withdrawal process, students should visit any campus Advisement Center.
- Students' financial aid may be placed in jeopardy when they withdraw from any course. Students should contact the Student Financial Services Office and/or the Veterans' Services Office (if applicable) before completing a withdrawal form.

### **Concurrent High School Student Schedule Adjustment and Withdrawal Policy**

- Students must fill out Concurrent Adjustment Schedule Form and have it signed by the high school counselor. Forms will be available online and in any TCC Enrollment Services Office.

*The Academic Calendar shows relevant dates for withdrawal.*

## **III. Refund Policy for Continuing Education (non-credit classes)**

**100 percent** refund will be given if a written, telephone, faxed, or in-person request is made to the Continuing Education office **two full business days (M-F) before the first scheduled class meeting**. Refunds cannot be issued for non attendance. All fees will be refunded if class is cancelled due to insufficient enrollment. Refunds may require up to 30 days to process. The Continuing Education Department reserves the right to amend this policy for specialized events and programs.

## **IV. Refund Policy for Students Entering Military Service**

If a student enters military service during the term in which he/she is enrolled and he/she has not completed sufficient work for receiving his/her grades, but is in good standing academically, Tulsa Community College will refund to the student the full amount of his/her fees paid. The student must forward a copy of the induction orders with a written request for a refund directed to the Enrollment Services Office on any campus.

### **Fees Applicable Only Current Term**

Fees are applicable only for the current semester or term. If a student withdraws and is entitled to a refund, the amount of the refund cannot be carried forward as a credit to a subsequent term.

## **COSTS AND PAYMENTS**

### **Student Financial Responsibility**

Tulsa Community College corresponds electronically with students using their TCC webmail address. I understand that I am responsible for regularly reading important information sent to my TCC webmail account and for taking action on any important correspondence sent to this address and adequate email space is available to ensure that correspondence is received.

- I understand that enrollment at Tulsa Community College constitutes a contractual financial obligation to pay tuition and fees for classes in which I am enrolled. I further understand my financial obligations are due by the College set due date each semester.
- I understand that I will receive an email notification when my billing statement is available to view online.

- I understand that my account information can only be released to me. It is my responsibility to notify my parents/legal guardian of my account balance.
- I understand that in the event I have a return check on my account I will be charged a \$25 return check fee. I understand that I am responsible for all dishonored payments which have been presented on my behalf.
- I understand financial aid funds only pay tuition/fees and bookstore charges.
- I understand that once all my financial aid is applied to my bursar account, I am responsible to pay any new or unpaid charges I incur prior to end of the semester.
- If my federal or institutional financial aid is either not received by Tulsa Community College or I lose my eligibility to retain financial aid for the semester, I assume responsibility for paying all student obligations.
- I understand that if I enroll prior to the enrollment hold being placed on my account, my enrollment is subject to possible cancellation if my balance is not paid to current. I also understand that if I am participating in the Payment Option Plan and my payments are not current, my enrollment is also subject to cancellation.
- I understand failure to pay my account prior to the 15th of the month will result in my account being assessed a 1.5% monthly (19.56 APY) finance charge on any past due balance. In addition on the last day of the semester if I still have a past due balance, I will be assessed a \$50 late fee.
- It is my responsibility to know the College's drop and withdraw policy including deadlines. It is also my responsibility to drop or withdraw myself from my classes. My failure to drop or withdraw in a timely manner does NOT relieve me from my financial responsibility to the College for tuition and fees.
- I also understand that if I enroll in classes and I do not attend these classes, I am still held responsible to pay the required tuition and fees if I fail to withdraw by the designated dates.
- I understand that if I drop, withdraw, graduate, or do not return to the College, it is my responsibility to update my address, phone number, and email address.
- I understand that if I have a student Direct Subsidized/Unsubsidized Loan that I am responsible for completing the required exit counseling upon leaving the College.
- I understand that if I have a College outstanding balance, holds are placed on my account and I will not be able to enroll in future semesters nor receive an academic transcript or diploma.
- I consent to being contacted on my cell phone if provided to the College as a source of contact.
- I understand if I leave the College with an unpaid balance and do not make satisfactory payment arrangements, my account will be placed with an external collection agency. I will be assessed collection costs (up to 33% of the original debt), legal costs and attorney fees. This will result in endangering my credit rating on a local and/or national level by being reported to all three credit bureau's (Equifax, TransUnion, Experian). The College will also exercise the right to request an Oklahoma State Tax refund intercept to offset the outstanding debt.

### **Student Account Payment Policy**

It is the policy of Tulsa Community College that students must make college approved payment arrangements at the time of enrollment. The following are the options available for enrollment.

#### **Option 1: Pay In Full or Payment Plan**

- Students can sign-up online to pay in full or pay cash in person at any Campus Bursar Office. There is no administrative fee if the student is paying in full.
- Students can go online and choose a payment plan. There is a \$35 non-refundable service fee for students who select a payment plan.

#### **Payment Plans**

These plans are detailed on the website and vary with each term. Students can also pick up information regarding payment plans in any bursar office.

A \$35 non-refundable setup fee is required at the time of enrollment in the Tuition Option Plan (TOP). This payment will automatically be debited from your payment method at the time of enrollment in the Tuition Option Plan.

When students make a scheduled adjustment or if charges and/or payments are applied to a student's account, the student's TOP installment amounts will change.

Students using a credit card as the payment method for TOP should be aware of the card's expiration date. It is the student's responsibility to update this information, if applicable. If this is not done, it could result in a late fee assessed to the student's account.

#### **Option 2: Financial Aid**

- Students who have met priority financial aid deadlines by turning in all requested documents and are qualified to receive financial aid will be able to secure enrollment without making payment arrangements.

**FA Priority Deadlines**

- June 1: Fall Term
- November 1: Spring Term
- April 1: Summer Term

**Option 3: Third Party Payments**

- Students can use third party method of payment under the conditions that the college can verify the payment source or that the student can provide acceptable documentation of the payment source.

**TCC Verified 3rd Party Payments**

- General Tuition Waiver
- Tulsa Achieves Program
- Oklahoma's Promise/OHLAP\*
- Grants (Tribal, Veterans, Voc Rehab)\*
- ACE Waiver (Concurrent Senior Citizen Waiver)

**Student Verified 3rd Party Payments**

- Employee Reimbursement
- Scholarships
- Other

\*Student must present evidence of scholarship, etc., to the bursar office in order to use this option prior to enrollment.

There will be a 1.5 percent monthly service charge (50 cent minimum) assessed to the student's account on the 15th of each month for any unpaid balance based upon enrollment for those not in payment plan. Service charges will continue to be assessed to the student's account at the end of the term if all current charges are not paid in full.

**BOOKS**

**Course Books**

- Students should purchase course books at the campus they will be attending or at [tccstores.com](http://tccstores.com).
- Internet course books may be purchased at [tccstores.com](http://tccstores.com) or at the Northeast Campus Store.
- Community Campus course books may be purchased at [tccstores.com](http://tccstores.com) or at the sponsoring Campus Store.

**Campus Store Refund Policy**

Campus Stores may grant course book refunds to students with a current semester TCC sales receipt and who meet the following criteria:

**Course Book Refund Deadlines**

- The end of the first week of an 8 or 16 week term.
- The end of the second week of the 16 week term to students who have dropped the class.
- Until the first class meeting of a class lasting less than 8 weeks.
- Course books purchased after these deadlines must be returned within 24 hours for a refund.

**Merchandise Condition for Refund**

- Merchandise must be in resalable condition.
- A (100%) refund may be granted on a new course book that is clean, complete, with shrink wrap unopened or eBooks that have not been activated.
- If a new course book has been marked in or is not in new condition, it may be refunded at (50%) of the new course book price.
- Used books in resalable condition may be refunded at (100%) of the price paid at the time of purchase.
- Non-refundable items include: electronics, computers, computer software, opened computer supplies, and clearance items.

**Campus Stores Course Books Buyback Information**

Buyback is presented as a service to the TCC student. It is an opportunity afforded to the student to reap some benefit from those course books no longer wanted or needed. Buyback dates and times may be found at [tccstores.com](http://tccstores.com). A photo I.D. is required.

**FINANCIAL AID AND SCHOLARSHIPS\***

The Financial Aid and Scholarships office at Tulsa Community College (TCC) is available to assist qualified students to meet the costs of their education. Financial aid is designed to supplement the financial resources of the student and student's parent(s).

Financial aid is available through grants, scholarships, loans, and part-time employment from federal, state, institutional and private sources. Grants and scholarships are a part of financial aid students do not have to pay back. Loans are borrowed money that must be repaid with interest. Work-study allows students to work and earn money for school expenses. The types and amounts of aid awarded are determined by financial need, availability of funds, student classification, and academic performance.

The Higher Education Act of 1965, as amended, requires each recipient of funds under the Federal Pell Grant, Federal Supplemental Educational Opportunity Grant (FSEOG), Federal Work-Study, Oklahoma Tuition Aid Grant (OTAG), Oklahoma's Promise, Direct Student Loans, or PLUS programs to maintain satisfactory progress in his/her course of study. The following policy does not preclude a recipient from continuing to enroll as a student or to receive other types of financial aid. In order to receive financial aid at the institution to which he/she is applying according to the guidelines set forth by the Department of Education the applicant must have:

- a high school diploma;
- a GED; or
- completed homeschooling at the secondary level as defined by state law.

**Some additional requirements for financial aid are:**

- Students must maintain a cumulative 1.70 grade point average (GPA) for the first 30 credit hours attempted; and a cumulative 2.00 GPA for all hours attempted thereafter (See Satisfactory Academic Progress Policy).
- Students must successfully complete at least 67 percent of all attempted course hours, regardless of whether financial aid has been received for those hours. Withdrawals, I, F, and other unsatisfactory grades are examples of grades that will be counted against this completion rate (See Satisfactory Academic Progress Policy).
- Audit grades do not qualify for financial aid. A student who receives financial aid for any classes, or hours, which are later changed to an audit (AU), will be required to repay any applicable financial aid funds.
- Students attempting 95 or more college hours will be required to justify the applicability of all coursework by submitting a(n) Request for Extension of Excessive Hours and an evaluated degree audit, which will be submitted to the Financial Aid and Scholarships office. The appeal will be reviewed by the Satisfactory Academic Progress (SAP) Appeals Committee and the determination posted on the student's MyTCC portal account in the Financial Aid Dashboard. Students may appeal once a semester and all decisions by the appeals committee are final (See Satisfactory Academic Progress Policy).
- Students who do a complete withdraw, stops attending all courses, is dismissed or takes a leave of absence, prior to completion of 60 percent of a term will be subject to the return of Title IV funds. The student will be required to return to the federal aid program the amount of aid received that is in excess of aid "earned" for the time period the student remained enrolled. Students who receive any Title IV funds (Pell, FSEOG, OTAG and Direct Student Loans) should consult with their financial aid counselor before completing a full withdrawal.
- Students operating "under appeal" will be suspended from financial aid their next entering term, if they fail to meet the requirements of their Academic Plan which was submitted with their financial aid appeal.
- Students must be degree-seeking, enrolled, and making satisfactory academic progress toward the completion of their course of study.

*\* Please note that financial aid eligibility and processing at TCC are subject to change based upon changes in federal regulations and guidelines.*

**Financial Aid Programs Requiring the Free Application for Federal Student Aid (FAFSA)**

There are a number of financial aid programs available at Tulsa Community College. Some scholarships are need based and require the FAFSA application. The FAFSA application is used to apply for the following TCC programs:

- Federal Pell Grant
- Federal Supplemental Education Opportunity Grant (FSEOG)
- Oklahoma Tuition Aid Grant (OTAG)
- Federal Work-Study (FWS)
- Direct Subsidized Loan
- Direct Unsubsidized Loan
- Direct Parent PLUS Loan (PLUS)

Other programs available through TCC's Financial Aid and Scholarships office that require a separate application:

- State Regents Tuition Waiver (Academic or Need Base)
- TCC Honors Scholar Tuition Waiver
- TCC Foundation & Trust Scholarship
- TCC Provost Scholarship
- Need Based Grants (Tribal, Voc-Rehab, etc.)



Based on eligibility, the student may qualify for a combination of award programs. Some programs are need based. Need is the difference between expected educational expenses and available family financial resources. The student and parent(s) should be prepared to verify information reported on the FAFSA. Students will be notified via college email (MyTCC) of requests for documentation. The specific document request(s) will be viewable through the student's MYTCC portal account in the Financial Aid Dashboard. Students will be packaged for all award programs by TCC's Financial Aid and Scholarships office. Failure to provide the requested documentation may result in a delay or the termination of the financial aid application process. When the awards are determined, an award notification is sent to the student via college email (MyTCC). The award notification will direct the student to their Financial Aid Dashboard account view and/or accept the awards. To ensure that financial aid will be available by the start of the term, students MUST have their FAFSA application completed, and all requirements satisfied on or before the financial aid priority consideration deadline. Financial aid priority consideration deadlines are June 1 for fall term, November 1 for spring term and April 1 for summer term. Early application is encouraged as some funds are limited.

## **GRANTS**

### **Federal Pell Grant**

The Federal Pell Grant, unlike a loan, does not have to be repaid. An undergraduate student, who has not received a bachelor's degree, is a U.S. citizen, or eligible non-citizen, may be eligible for a Pell Grant. Eligibility to receive a Federal Pell Grant is determined by the U. S. Department of Education based upon a standard formula, established by Congress, using family financial information submitted on the FAFSA and reported on the Student Aid Report (SAR). The formula produces an Expected Family Contribution (EFC) number. Your Student Aid Report will contain this number.

### **Oklahoma Tuition Aid Grant (OTAG)**

OTAG is a grant based on need for up to 75 percent of tuition and fees to Oklahoma resident students making satisfactory academic progress. To apply, submit the FAFSA by March 1 for priority consideration, as funds are limited. This program is administered by the Oklahoma State Regents for Higher Education.

### **Federal Supplemental Educational Opportunity Grant (FSEOG)**

FSEOG provides grants to students with the greatest financial need as determined from the SAR analysis and on the availability of funds. The grant may not exceed \$4,000 a year. Students must be making satisfactory academic progress.

### **Tribal Grants**

Tribal grants are for Native American students. Application procedures are initiated in the appropriate Tribal Education Office and by submitting the FAFSA application.

## **SCHOLARSHIPS**

Tulsa Community College offers many scholarships to students with scholastic achievement and/or economic need. Students may apply for scholarships of varying amounts which are generally for specific educational costs. A current descriptive list is available in any TCC campus Financial Aid and Scholarships office. Recipients are selected by the TCC Scholarship Committee during the spring term for the following academic year. To apply, submit the TCC Scholarship Application (available online in the student's MYTCC portal account) to the Financial Aid and Scholarships office by the announced deadline(s). New scholarship opportunities become available throughout every term. Check the Scholarship Opportunities Bulletin Board at any Financial Aid and Scholarships office and the TCC Connection for new scholarships. Scholarships are also listed at [www.tulsacc.edu](http://www.tulsacc.edu) under the Financial Aid section.

## **TUITION WAIVERS**

### **TCC State Regents Tuition Waiver**

Tulsa Community College offers an annual waiver of tuition up to \$1200 for Oklahoma residents. Recipients are determined by their cumulative grade point average and completion rate, with 70 percent of the scholarships awarded to students with financial need. Students who are awarded based on financial need are required to have only a 2.50 cumulative grade point average. Students who are awarded based on scholastics are required to have a 3.00 cumulative GPA. To apply and receive priority consideration, submit the Free Application for Federal Student Aid (FAFSA) annually by March 15th.

### **TCC Honors Scholar State Regents Tuition Waiver**

Tulsa Community College offers a waiver of tuition of 3 to 18 credit hours per term for students who are TCC Honors Scholars in good standing. To apply, submit the TCC Honors Scholar application to any TCC campus Honors Office. To remain eligible for the waiver, students are required to maintain a TCC grade point average of at least 3.5 and complete a minimum of three credit hours each term, including at least one Honors course each term until minimum Honors Scholars are fulfilled.



TCC State Regents Tuition Waivers are also available for Oklahoma residents who are 65 years of age or older, former POW/MIA; dependents (children) of POW/MIA; and, dependents of Oklahoma peace officers and firefighters who have given their lives in the line of duty. Students should contact campus Director of Enrollment Services for more information.

### **TCC State Regents Leadership Scholarship**

Tulsa Community College offers a waiver of tuition only for 3 to 18 credit hours per academic year for Oklahoma High School Valedictorians, Salutatorians, and some Honor students. To apply, have your high school counselor submit a Leadership Scholarship Application by April 3 to any TCC Financial Aid and Scholarships Office. Students are required to complete three credit hours in the fall to maintain eligibility in the spring.

### **TCC Provost Scholarship**

Each year campus Provosts will nominate up to ten (10) students from their campus for the Provost Scholarship. This award waives up to 18 credit hours of tuition each term. This award is based on scholarship, leadership, and community service involvement. Students should contact the campus Dean of Student Affairs Office for criteria and application information. Students are required to complete six credit hours in the fall to maintain eligibility in the spring.

### **TCC ACE Tuition Waiver Scholarships**

Concurrently enrolled high school students who take three to six credit hours per semester may be eligible for ACE Tuition Waiver Scholarship. ACE is Attend College Early and ACE Tuition Waiver Scholarships are awarded on a first-come, first-serve basis as funds are available. Concurrently enrolled students should contact the Enrollment Services Office for more information about the ACE Tuition Waiver Scholarship.

## **WORK STUDY**

### **Federal Work-study Program (FWS)**

Students may earn up to \$9.11 an hour, depending on the position, for up to 20 hours a week during the academic year, which includes breaks between terms. Placement may be either on or off campus with public or private non-profit agencies. Maximum earnings are determined from the estimated family contribution as determined by the FAFSA and the availability of funds. Applicants must be enrolled, complete a TCC work- study employment application, and be interviewed for placement. Students seeking Federal work-study employment should visit the TCC FWS web site for more information at: <https://careers.tulsacc.edu>.

## **LOANS**

### **Direct Loan Program (DLP)**

The DLP offers subsidized, unsubsidized and PLUS loans through the federal treasury for students enrolled at least half-time in an eligible program. Dependent undergraduate students can borrow up to \$5,500, if they are first-year students enrolled in a program of study that is at least a full academic year, and \$6,500, if they have completed their first year of study and the remainder of their program is at least a full academic year. The maximum for an independent undergraduate student loan is up to \$9,500 for the first year and up to \$10,500 for the second year. A student completing prerequisites for an approved program of study may receive up to \$2,625 for one academic year.

The aggregate amount a student may qualify for is \$31,000 for a dependent undergraduate and \$57,500 for an independent undergraduate (only \$23,000 of this amount may be in subsidized loans). According to federal guidelines, all student loans must come in two disbursements per loan period, and delivery to TCC for first year, first time borrowers must be delayed for thirty days. Students must also complete the Master Promissory Note (MPN) at [www.studentloans.gov](http://www.studentloans.gov).

Regardless of the type of loan students borrow, they must complete entrance counseling, before they can be given their first loan disbursement. A student dropping below half-time status, through withdrawal, transfer or graduation, must complete exit counseling. These counseling sessions are available online at [www.studentloans.gov](http://www.studentloans.gov) and provide student borrowers with important information about their loan, borrower rights, and repayment.

### **Federal Direct Stafford Loans**

A subsidized loan is awarded on the basis of financial need. Student borrowers will not be charged any interest, before they begin repayment or during authorized periods of deferments. The federal government "subsidizes" the interest during these periods.

An unsubsidized loan is not awarded on the basis of need. Interest is charged from the time the loan is disbursed until it

is paid in full. If interest is allowed to accumulate, it will be capitalized—that is, the interest will be added to the principal amount of the loan and additional interest will be based upon the higher amount. Both a subsidized loan and an unsubsidized loan may be received for the same enrollment period.

### **Federal Direct Parent PLUS Loan**

PLUS loans enable parents with good credit histories to borrow funds to pay the educational expenses of each child, who is a dependent undergraduate student enrolled at least half-time. The yearly limit on a PLUS Loan is equal to the student's cost of attendance at TCC minus any other financial aid he or she receives. Interest is charged on the loan from the date the first disbursement is made until the loan is paid in full. Parents will be notified by lender or service provider of interest rate changes throughout the life of their loan. Loan funds are sent to TCC by the U.S. Department of Education in two installments..

## **Financial Aid Application Procedure and Process**

The 2016-2017 FAFSA application is for the fall 2016, spring 2017, and summer 2017 terms.

1. Complete the TCC Application for Admission through the college's website at [www.tulsacc.edu](http://www.tulsacc.edu). To receive financial aid, a student must be admitted as a degree-seeking student in an eligible degree or certificate program.
2. Students must file their FAFSA application electronically. Students may access "FAFSA on the Web" at <http://www.fafsa.ed.gov>. Be sure to use the 2016-2017 FAFSA on the Web.
3. After the FAFSA application is sent to the federal processor, the student will receive a Student Aid Report (SAR) in approximately one to six weeks from the U. S. Department of Education. The student must carefully review the instructions on the SAR. If the SAR is incorrect, refer to the instructions on the SAR for correction information.

Students may monitor the progress of their financial aid application through the Financial Aid Dashboard by logging on to the MYTCC portal account using their CWID and pin number. The Financial Aid and Scholarships office will notify the student via email of any additional information needed. The email will instruct the student to check their Financial Aid Dashboard for the additional information requested.

Once all requirements are complete and the student meets all of the eligibility requirements, the Financial Aid and Scholarships office will complete the file. The student will receive an email notifying them of the update to their application. The email will instruct the student to log into their MYTCC portal account and view their awards in the Financial Aid Dashboard. The awards will list the types and amounts of financial aid the student has been awarded.

4. Other applications for financial aid, including BIA or Tribal Grants, outside agency scholarships, or Vocational Rehabilitation should be submitted by their individual application deadlines. Each agency will have its own application forms and deadlines. Follow the instructions carefully, as funds are limited.
5. Request official academic transcripts from previously attended schools, post-secondary schools, colleges, and universities. All transcripts must be on file to receive financial aid.
6. Respond quickly to requests for additional information by all TCC offices to avoid delays. To ensure that financial aid will be available by the start of the term, students MUST have their FAFSA application completed, and all requirements satisfied on or before the financial aid priority consideration deadline. Financial aid priority consideration deadlines are June 1 for fall term, November 1 for spring term and April 1 for summer term. Early application is encouraged as some funds are limited.
7. All first-time student loan borrowers at TCC are required to participate in entrance counseling. Students will need to complete the Master Promissory Note in addition to entrance counseling. Online entrance counseling and the Master Promissory Note may be completed at [www.studentloans.gov](http://www.studentloans.gov).
8. According to federal guidelines, student loans must always come in two disbursements per loan period, and delivery to first-year, first-time borrowers must be delayed for at least 30 days. Additional information is available on our website: [www.tulsacc.edu/finaid](http://www.tulsacc.edu/finaid).

## **FINANCIAL AID SATISFACTORY ACADEMIC PROGRESS POLICY**

Federal regulations (CRF 668.34) require that a student maintain satisfactory academic progress (SAP) in the course of study being pursued, according to the standards and practices of the institution in which he/she is enrolled, in order to receive aid under the Higher Education Act. The programs at TCC include Federal Pell Grant, Federal Work-Study, Federal Supplemental Educational Opportunity Grant (FSEOG), Oklahoma Tuition Aid Grant (OTAG), Oklahoma's Promise, Federal Direct Stafford Loans (subsidized and unsubsidized) and the Federal Direct Parent PLUS Loan Program.

The student is encouraged to become familiar with this satisfactory academic progress policy and any policy that may govern outside sources of financial aid for which the student may have qualified for, such as: Vocational Rehabilitation, Job Training Partnership Act, Department of Veterans Affairs Educational Benefits, etc.

### **I. Qualitative and Quantitative Requirements**

Both qualitative and quantitative standards for satisfactory academic progress shall be applied uniformly to ALL students whether or not the student has previously participated in a Title IV program. In order to satisfy both qualitative and quantitative requirements, ALL students must satisfy the minimum standards as described below:  
For financial aid purposes, grades of F, W, AW, WP, WF, I, U, etc. shall be considered hours attempted. However, these are NOT considered hours satisfactorily completed. Audit grades do not qualify for financial aid. Should a student receive financial aid for any classes or hours that are later changed to audit, the student will be required to repay any applicable financial aid funds. Cumulative grade point average and hours attempted shall be used to determine a student's eligibility to participate in the Title IV programs.

### **II. Transfer and Continuing Students**

ALL transfer students entering Tulsa Community College and ALL continuing TCC students who apply for financial aid, must have one of the following: HS transcript, GED, or Home School Diploma (including ACT scores). Continuing students must meet the minimum qualitative and quantitative requirements described below in order to receive federal aid. Transfer students, who do not meet minimum requirements, will be reviewed at the end of their first semester at TCC. If the student is not meeting minimum requirements, they will be placed on a 'warning' for the next entering semester. Progress will be reviewed upon completion of the term to update the student's satisfactory academic progress status accordingly. A student, who is violating the maximum hours, does not get a 'warning' semester. Credit from an institution without recognized accreditation will not be used to calculate a student's academic progress; however, students who have a bachelor's degree - even from an unaccredited institution - will not receive Pell, OTAG, or SEOG funds.

### **III. Evaluation Increment Period**

ALL students participating in the Title IV programs will be evaluated at the end of EACH term (summer term included, if applicable) to determine if satisfactory academic progress is being maintained.

### **IV. Financial Aid Warning and Suspension**

In the event a student fails to meet minimum requirements, as described in the table below, the student will be placed on 'warning' for the subsequent term, during which time the student may continue to receive Title IV aid. At the end of the 'warning' term, if the student fails to meet minimum criteria, they will be suspended from participating in ALL Title IV programs, until such time as eligibility is reestablished. Students who receive Title IV financial aid and complete a full withdrawal, drop out, or are dismissed prior to completion of the term will be subject to the Department of Education Return of Title IV Funds policy.

Hours Attempted: 1-30 credit hours / Cumulative GPA: 1.70 / Percentage of Total Hours: 67% successful completion  
Hours Attempted: 31 or more credit hours / Cumulative GPA: 2.00 / Percentage of Total Hours: 67% successful completion

### **V. Re-Establishing Eligibility**

A student may re-establish eligibility to participate in the Title IV programs by completing sufficient hours to meet both qualitative and quantitative standards in the applicable category as described in the table above.

### **VI. Appeal of Financial Aid Suspension**

If there are extenuating circumstances, students may appeal their suspension. EXTENUATING CIRCUMSTANCES INCLUDE, BUT ARE NOT LIMITED TO: DEATH IN THE FAMILY, ILLNESS AND HOSPITALIZATION. The appeal letter must be typed and submitted to the Financial Aid and Scholarships office. The student is advised to provide supporting documentation. The student will be notified, by college email, of the Satisfactory Academic Progress (SAP) Appeals Committee's decision. The decision of the appeal committee is final. Any student whose suspension status has been appealed and previously approved must follow the terms and conditions of that appeal to continue receiving Title IV financial aid. Any student unable to adhere to the requirements of the approval will be suspended.

### **VII. Limitation of Student Eligibility**

All students enrolled in an eligible degree program may receive Title IV aid up to 150% of the hours required in pursuit of a degree or certificate. The total number of hours allowed at Tulsa Community College to receive Title IV aid is ninety-five (95). It is the option of the Financial Aid Appeal Committee to grant an extension to the 150% maximum hours allowed. Reasons for approval include, but are not limited to, change of major, transfer between institutions, or new degree program. Students, who exceed the maximum time frame for degree completion because they have not completed a sufficient percentage of coursework or are putting off completion to continue to receive aid, will not be approved. Students with a prior bachelor's degree are prohibited by regulation from receiving Pell Grants, OTAG, or SEOG. If approved, students who have exceeded the 150% maximum will be eligible for aid only for 150% of the hours necessary

to complete the approved program of study. When those hours are completed, a student will have exhausted his or her aid eligibility at TCC.

Students are responsible for knowing their eligibility status at the end of each term. If in need of assistance or clarification, students are encouraged to come to any campus Financial Aid and Scholarships' Office for verification and eligibility.

### **VIII. Student Record and Financial Aid Holds**

According to federal guidelines, it is the option of the College to place a hold on the release of a student's record for failure to comply with a requirement or meet an obligation of the offices of Admission and Records, Bursar, Library, Counseling and Testing, Student Life, and Financial Aid Office.

It is part of the regular office procedure of the Financial Aid and Scholarships office to place a hold on a student's academic record for various reasons. Examples for a hold being placed on an academic record include, but are not limited to, an institutional, state, or federal financial aid overpayment due to be repaid by the student.

Resolution of the infraction must occur before release of the academic records. A student may make a written request to the Financial Aid and Scholarships office for release of an unofficial record prior to resolution.

### **IX. Default Management Plan**

There are consequences for schools with official cohort default rates that exceed certain thresholds and in some cases an institution may be ineligible to participate in financial aid programs. As required by The Department of Education, Tulsa Community College has implemented and practices a strict Default Management Plan. In part, this Default Management Plan includes requiring an entrance interview for all student borrowers, and exit interviews for students in less than halftime enrollment, whether due to withdrawal or graduation.

### **X. Misrepresentation, Forgery, Fraud and Abuse**

The TCC Financial Aid and Scholarships office is required to report any suspected fraud or misrepresentation to the Inspector General's Office. Whenever a staff member becomes aware that a student and/or a student's parent or spouse may have allegedly misrepresented facts relevant to the student's financial aid application, or have committed forgery or fraud, the staff member must report this promptly to the Director of the Financial Aid office for appropriate follow-up. The Director will contact the student to attempt to determine if the misrepresentation was unintentional and to explain the consequences of the action. Should resolution not occur, the case will be referred to the Inspector General's Office for appropriate action(s). A hold will be placed on the student's record and financial aid until resolution has occurred.

## **VETERANS SERVICES**

Tulsa Community College maintains a full-time office of Veterans Services at Metro Campus, room MC1003, for the convenience of veterans and their dependents attending school. We at TCC are very proud of the service you, our veterans, have given and the sacrifices you and your family have made. We have set aside space on each campus for a study area designed for you, the veteran. There are many brochures with information on veterans services in our community. The staff in the Veterans Services office is eager to help you in any way we can.

### **Entitlement Programs**

1. Chapter 30, Title 38, U.S.C. - Montgomery GI Bill
2. Chapter 31, Title 38, U.S.C. - Disabled Veterans, Vocational Rehabilitation Program
3. Chapter 33, Title 38, U.S.C. - Post 911 Persons serving active since September 11, 2001
4. Chapter 35, Title 38, U.S.C.
  - a. Spouse of 100% and Permanently and Totally Disabled Veteran
  - b. Spouse of a Deceased Veteran (Service Connected)
  - c. Children of a or b,
5. Chapter 1606, Title 38, U.S.C. - Selected Reserve Educational Assistance Program Policies
6. Chapter 1607, Title 38, U.S.C. - Reserve or National Guard with active duty employment (REAP)

The Department of Veterans Affairs (DVA) requires all veterans to abide by the policies and regulations of the College concerning academic standing and progress, class attendance, and conduct. The TCC Veterans Services Office will monitor compliance with these policies and is required to report any deviations to the DVA. All school policies are stated elsewhere in this catalog. Concurrent with school policies, the DVA requires the following.

- A.** Academic program. A recipient of DVA benefits must select and designate the academic program under which he or



she will be receiving educational benefits. Any change of academic program must be acceptable to the DVA.

**B. Course work.** Educational benefits will be paid only on courses applicable toward the academic program. Any course substitution, i.e., a course outside the catalog listing for a particular program, must be verified as an approved substitution. The DVA will not award educational benefits for repeated courses in which a passing grade has already been received or for courses in which an incomplete "I" is earned.

**C. Previous or transfer credit.** Applicants for benefits having earned college credit at another institution must submit transcripts from each institution he or she has attended before the TCC Veterans Services Office can certify enrollment to the DVA.

**D. Class attendance.** The DVA requires the institution to report all excessive absences from classes. Failure to attend classes while receiving benefits will result in an overpayment and the student is liable for repayment to the DVA.

**E. All persons applying for education benefits must submit Military Transcripts for evaluation.**

## **Procedures**

**A. Apply for admission to the College in the Enrollment Services Office, or online at [www.tulsacc.edu](http://www.tulsacc.edu).**

**B. First time veteran students at TCC need to contact the Advisement Center and acquire a Program Curriculum Plan. Take a copy to the Veterans Services Office at Metro Campus. Returning students may verify applicability of courses toward graduation by reviewing their Program Curriculum Plan on file in the Advisement Center or the Veterans Services Office.**

**C. Go to the TCC Veterans Services Office at Metro Campus and request certification for benefits. The following documents must be presented by veterans enrolling under the Veterans Educational program for the first time.**

1. Chapter 30 and 32. Verification of service on VA form 22-1990V, or copy #4 or certified true copy of DD-214 (Report of Separation).
2. Chapter 31. Approved VA Form 22-1905 from DVA Vocational Rehabilitation counselor.
3. Chapter 33 - Certificate of Eligibility from DVA
4. Chapter 35 - Disabled veteran's claim number
5. Chapter 1606 - Approved DD214, Notice of Basic Eligibility (NOBE) from reserve unit and, if eligible, a copy of the kicker contract.
6. Chapter 1607 - Approved DD214 and if eligible, a copy of the kicker contract

**D. Register for classes.**

**E. All campuses' certifications for veteran's benefits will be processed through the Veterans Services Office on the Metro Campus. Students taking courses at locations other than the four principal campuses must contact the Metro Campus Veterans Services Office for information and certification.**

**F. Veterans pursuing concurrent enrollment at more than one college or university may do so, but must coordinate with the Veterans Services Office at both institutions to insure proper certification. All courses taught by TCC, regardless of campus, are approved by TCC and are not concurrent enrollments.**

## **ACADEMIC POLICIES AND PROCEDURES**

### **I. Grade and Record Policies**

#### **A. Recording of Grades**

Final grades and grade points for each term are recorded and preserved on the student's permanent record as follows:

##### **Grades/Definition/Grade points**

**A** / Excellent / 4

**B** / Good / 3

**C** / Average / 2

**D** / Below Average / 1

**F** / Failure / 0

**I** / Incomplete Grade / GPA Neutral

**AU** / Audit Status / GPA Neutral

**W** / Withdrawal / GPA Neutral

**AW** / Administrative Withdrawal / GPA Neutral

**SU** / Satisfactory-Unsatisfactory / GPA Neutral

**N** / Grade Not Reported / GPA Neutral

"I" grades may be assigned provided the student is passing the course and has completed a substantial portion of the coursework for the term. The instructor and student complete and sign an "I Grade Completion Form" and agree on the work to be performed and a deadline for completion. The "I" is changed by the instructor through the grade change procedure. An "I" grade not changed by the end of the next long (fall or spring - sixteen week) term will remain a permanent "I" and will become grade point neutral.

“W” - A grade of “W” is assigned when a student completes the withdrawal process by the published withdrawal deadline. The deadline to withdraw shall not exceed three-fourths of the duration of any term. See catalog calendar or contact any Enrollment Services Office.

An “AW” is assigned when a student is administratively withdrawn from a course. The reason for such a withdrawal could be financial, disciplinary, non-attendance/non-participation, inadequate attendance/inadequate participation, or extenuating circumstances (see Class Attendance/Participation on page 40). During the last quarter of the regular term, the assignment of the AW is the responsibility of the instructor of the class; however, in emergency situations, the AW may be assigned by the appropriate Associate Dean. The time during which a student may be administratively withdrawn extends from the end of the schedule adjustment period through the last day of classes. This policy will be adjusted proportionately to fit any other term.

An “AU” - Assigned when a student not seeking to obtain course credit. Students must meet curricular and proficiency requirements and must obtain the instructor’s approval by completing the Audit Form and submitting it to the Enrollment Services Office. The time in which a student may change from credit to audit is the same as the student withdrawal period. A student may change from audit to credit only during the schedule adjustment period for the term. This option is not available to Financial Aid students. See Audit of a Course.

### **B. Grade Changes**

Questions regarding the student’s grades assigned must be directed to the student’s instructor. This procedure must be initiated by the end of the fourth week of the term immediately following the term in which the grade was assigned. Students must follow the grade appeal process outlined in the Student Handbook and Code of Conduct. The appropriate Associate Dean, or designate, must approve any change to this record. Once the grade change has been processed, students may request an official transcript reflecting the change.

### **C. Student Grades and Transcripts**

- Grades are available to students one week after the course ends via the TCC website at [www.tulsacc.edu](http://www.tulsacc.edu) (click on MyTCC).
- The College will send an official TCC transcript upon the student’s signed request to any college or agency named.
- Transcripts will be withheld if the student has not paid financial obligations to the College.

## **II. Academic Forgiveness**

Academic forgiveness refers to ways in which a student may recover from prior academic challenges without permanently jeopardizing the student’s academic standing, and include Repeated Courses, Academic Reprieve, and Academic Renewal.

### **A. Circumstances for Academic Forgiveness:**

1. For pedagogical reasons, a student will be allowed to repeat a course.
2. When a student has performed poorly in an entire enrollment due to extraordinary circumstances, all courses and grades will be reflected on a student’s transcript, but those courses that are forgiven will not be used in calculating the student’s retention and graduation GPAs.
3. A student may be returning to college after an extended absence and/or under circumstances that warrant a fresh academic start.

**B. Repeated Courses:** Students can retake courses, in which the original grade earned was a “D” or “F,” and have only the second grade earned count in the retention/graduation GPA calculation up to a maximum of four courses, not to exceed 18 hours. Forgiveness applies to the first four courses repeated.

**C. Academic Reprieve:** The provision allows a student who has experienced extraordinary circumstances to disregard up to two consecutive semesters in the calculation of his or her GPA under the following guidelines:

1. At least three years have elapsed between the time grades were earned and the reprieve request;
2. Prior to requesting the reprieve, the student must have earned a GPA of 2.00 or higher with no grade lower than a “C” in all regularly graded course work (minimum of 12 hours) excluding activity or performance courses;
3. A student must petition for a reprieve according to institution policy; and
4. A student cannot receive more than one reprieve in his/her academic career.

**D. Academic Renewal:** This provision allows a student who has had academic trouble in the past and who has been out of higher education for a number of years to recover without penalty and have a fresh start. Under academic renewal, course work taken prior to a date specified by Tulsa Community College is not counted in the student’s GPA. A student



may request to be considered for academic renewal under the following guidelines:

1. At least five years have elapsed between the last term being renewed and the renewal request;
2. The student must have earned a GPA of 2.00 or higher with no grade lower than a "C" in all regularly graded course work (minimum of 12 hours) excluding activity or performance courses;
3. All of the courses completed before the date specified in the request for renewal will be included;
4. The student must petition for academic renewal according to institutional policy;
5. Neither the content nor credit hours of forgiven renewal coursework may be used to fulfill any degree or graduation requirements.

All forgiven courses remain on the student's transcript, and are not calculated in the student's retention and graduation GPA, but are calculated in the student's cumulative GPA and will appear on the student's transcript. Academic reprieve and renewal once granted may or may not be recognized by other colleges and universities.

For further details concerning or to initiate Academic Repeat, Academic Reprieve or Academic Renewal contact any Advisement Office.

## **Policy for Continued Enrollment**

### **A. Retention GPA Requirements for Continued Enrollment**

A student will be placed on academic notice or probation if he/she fails to meet the following requirements:

**Credit Hours: 0 through 30 semester credit hours / Retention GPA Requirement: 1.7**

**Credit Hours: Greater than 30 semester credit hours / Retention GPA Requirement: 2.0**

All courses in which a student has a recorded grade will be counted in the calculation of the overall grade point average for retention purposes excluding any courses repeated or reprieved, any zero-level course, and any physical education activity and performance course as detailed in the State Regents' Grading Policy. Any student not maintaining the required progress as indicated in the chart will be placed on probation for one semester. At the end of that semester, he/she must have an overall term GPA of 2.0 or higher in regularly graded course work, not to include activity or performance courses, or meet the minimum retention GPA standard required to continue as a student. Students not meeting either of these criteria will be suspended and may not be reinstated until one regular semester (fall or spring) has elapsed.

### **B. Academic Notice, Probation and Suspension Definitions**

- Academic Notice: Freshman students, 30 or fewer credit hours, with a cumulative GPA of 1.7 to less than 2.0 will be placed on academic notice.
- Academic Probation: Any student whose retention GPA falls below those designated in the Retention GPA chart at the end of a given term is on academic probation.
- Academic Suspension: Any student who was on academic probation and fails to raise his/her GPA to the required retention level or to achieve a 2.0 in regularly graded course work, not to include activity or performance courses, in any term following academic probation, will be suspended from the institution.
- Good Standing: Eligible for re-enrollment.

\* Students placed on Academic Notice, Probation, or Academic Suspension will be notified via their College email account.

### **C. Re-admission of Suspended Students**

Students who are academically suspended by the College will not be allowed to reenter the suspending institution for at least one regular term (fall or spring). Suspended students may be admitted only one time. Students re-admitted on probationary status must maintain a 2.0 grade point average each semester attempted while on probation, not to include activity or performance courses, or raise their retention GPA to the designated level. Should a reinstated student be suspended a second time, he/she cannot return to the suspending school until such time as he/she has demonstrated, by attending another institution, the ability to succeed academically by raising his/her retention GPA to a 2.0 or higher.

Students suspended from other institutions may transfer without the lapse of one term. Such admission would be at the discretion of the receiving institution and such admission would be probationary.

## **IV. Recommended Academic Load**

Students who are in good academic standing may enroll in up to 18 semester credit hours in a regular 16-week term. In an eight-week or shorter term of enrollment, the maximum number of hours of enrollment is proportionate to the 16-week term. Students may enroll in up to nine (9) semester credit hours in a regular eight-week summer term. Exceptions to course credit hour limits per term may be considered and granted by permission of an authorized counselor.

Students who are employed while being enrolled are encouraged to use the following guide to course load during any academic semester or term: Work 40 hours per week, carry three to six semester credit hours; work 30 hours per week, carry six to nine semester hours; work 20 hours per week, carry nine to 12 semester credit hours; work 15 hours per week, carry 12 to 15 semester credit hours.

## **V. Class Attendance/Participation**

Students are expected to regularly attend and participate in all classes in which they are enrolled. Class attendance/participation is the responsibility of the student. It is also the responsibility of the student to consult with the Instructor when an absence must be excused. Instructors have the responsibility of determining whether an absence is excused or unexcused and may initiate an administrative withdrawal (AW) for non-attendance/non-participation. Students receiving benefits from government agencies must adhere to attendance policies stipulated by the specific agency.

## **VI. High Scholastic Achievement**

Tulsa Community College has numerous ways of recognizing superior scholastic achievement. They include the President's Honor Roll, the Dean's Honor Roll, the Honors Scholar program, and Phi Theta Kappa, the international honor society for two-year colleges.

### **A. Honor Roll**

1. The President's Honor Roll includes the names of students who have a term grade point average of 4.0.
2. The Dean's Honor Roll includes the names of students who have a term grade point average of 3.0 to 3.99.

### **B. Graduation**

The College recognizes scholastic achievement at the annual Commencement for students achieving a cumulative grade point average of 3.5 or higher at the end of their last completed term.

1. "Honors" — Graduating with a 3.5-3.99 cumulative grade point average.
2. "Highest Honors" — Graduating with a 4.0 cumulative grade point average.

Recognition for "Honors" or "Highest Honors" does not appear on the official transcript or diploma.

Students who successfully complete the Honors Scholar program receive the designation "Honors Scholar" on their official transcripts and wear pewter medallions at commencement.

## **VII. Access to Student Records**

Student records at Tulsa Community College are maintained in compliance with the Family Educational Rights and Privacy Act of 1974 (FERPA) as Amended in 1995. The Act affords students certain rights with respect to their educational records. These rights include the right of students to request access to their personal records and also the right to request the amendment of the student's education records that the student believes are inaccurate. The student must submit in writing a request precisely noting the record for review. Additionally, students have the right to consent to disclosures of personally identifiable information contained in the student's education records, except to the extent that FERPA authorizes disclosure without consent. Upon request, the College discloses education records without consent to officials of another school in which a student seeks or intends to enroll.

The Act affords students the right to file a complaint with the U.S. Department of Education concerning alleged failures by the College to comply with the requirements of FERPA. The name and address of the Office that administers FERPA:

**Family Policy Compliance Office, U. S. Department of Education**  
**400 Maryland Avenue, SW**  
**Washington, DC 20202-4605**

### **Directory Information**

The Family Educational Rights and Privacy Act (FERPA) further provides that certain portions of a student record may be deemed directory information and be released to a third party without the written consent of the student. TCC designates student name, mailing address, degrees or certificates earned, major, last term of attendance, and honor awards as directory information. The College may release a student's directory information without the written release of the student as allowed by FERPA. The College is authorized to obtain or provide educational records as allowed by law.

One exception which permits disclosure without prior consent is disclosure to school officials with "legitimate educational interest." A school official has legitimate educational interest if the official has a "need to know" information from your educational record to fulfill his or her official responsibilities. Examples of people who may have access, depending on their official duties, and only within the context of these duties, include academic program administrators, and staff and agencies under contract with the College.

A directory is printed each term listing student name, city, and state, to comply with the Oklahoma Records Act. The College receives inquiries for Directory Information from a variety of sources, including educational partners, new media, and prospective employers.

A student may request the College not to release directory information. The request must be in writing, signed by the student, and submitted to the Enrollment Services Office prior to the end of the fourth week of a term or the end of the second week of a summer term. Students registering after this deadline may sign an information withholding request at the time of enrollment.

### **VIII. Right to Know Graduation/Completion Rates**

Graduation/completion rates are available at [pir.tulsacc.edu](http://pir.tulsacc.edu). This information is available to be in compliance with the Student Right-To-Know Act of 1990. (Public Law 101 -542)

### **IX. Annual Notification of Jeanne Clery Disclosure of Campus Security Policy and Campus Crime Statistics Act**

Tulsa Community College, through the Department of Public Safety/Campus Police, complies with the Jeanne Clery Disclosure of Campus Security Policy and Campus Crime Statistics Act by publishing an annual campus security report in the Student Handbook. The report is a compilation of crime statistics, as well as procedures and programs for preventing and dealing with incidents of sexual assault, sexual harassment, and substance abuse. The report also contains security policy statements regarding timely notification of criminal activity, including sexual assault policies which assure basic victim's rights, details about the law enforcement authority of campus security officers, and where students should go to report crimes. Paper copies are made available through the Campus Police Office and the Office of Student Life on each campus. This report is available on the Web at [www.tulsacc.edu/campuspolice](http://www.tulsacc.edu/campuspolice).

### **Drug and Alcohol Free Environment**

The Federal Drug-Free Workplace Act of 1988 became effective March 18, 1989, and by Executive Proclamation of the Governor of Oklahoma, dated March 31, 1989, all Oklahoma agencies, boards and commissions are directed to adopt and issue policies implementing its provisions. In addition, the Drug-Free Schools and Communities Act (DFSCA) and Part 86 of the Department of Education's General Administrative Regulations require each institution of higher education to certify that it has developed and implemented a drug and alcohol abuse education and prevention program.

The Tulsa Community College Board of Regents has complied by enacting the following policy:

- The unlawful manufacture, distribution, dispensation, possession or use of drugs or alcohol in the workplace, on College property, or as part of College-sponsored activities is strictly prohibited. Provided however, the use of alcohol may be permitted by the College at College-sponsored or College-authorized activities as approved by the Vice President and Chief Academic Officer and the Vice President for Administration.
- Students or employees who violate this policy are subject to both the institution's sanctions and to criminal sanctions provided by federal, state, and local law.

The Board of Regents directs the President to develop procedures and programs to ensure compliance for the College community.

Legal References:

Executive Proclamation of Governor of Oklahoma dated March 31, 1989

Drug-Free Schools and Communities Act

Part 86 of the Department of Education's General Administrative Regulations

Drug and Alcohol Prevention Program (DAPP)

Information related to the Drug and Alcohol Prevention Program is distributed annually to employees and students; is available online through MyTCC; included in the student and employee handbooks; and is available for review in the following offices: Student Life, Student Health Services, Human Resources and Campus Police.

### **Tobacco Free Environment Policy**

Tulsa Community College prohibits smoking or the use of tobacco products on all property owned, leased or contracted for use by Tulsa Community College. This includes both indoor and outdoor areas such as, but not limited to, classrooms, laboratories, offices, work areas, vestibules, hallways, enclosed walkways, restrooms, elevators, stairwells, sidewalks, parking lots, and green spaces, etc. This policy also includes vehicles owned, leased, or rented for College business.

The prohibition includes, but is not limited to, cigarettes, cigars, chewing tobacco, pipes, hookahs, e-cigarettes, vaping devices, dip, snuff, smokeless pouches, or any form of loose leaf or rolled tobacco.

This policy can be found in its entirety online in the TCC Student Handbook & Code of Conduct.

## **GRADUATION AND DEGREES**

### **GRADUATION**

Tulsa Community College recognizes the successful completion of program requirements by awarding an associate degree or a certificate of achievement. The associate degree is granted in programs requiring at least 60 academic credit hours and the certificate of achievement is granted in programs requiring less than 60 academic credit hours.

#### **General Policies**

- Specific course requirements in a degree or certificate program must be completed.
- To meet residency requirements, one-fourth of the total credit hour requirements must be earned at Tulsa Community College. Advanced standing credit, zero-level, correspondence, and/or extension courses may not be used toward the TCC resident credit-hour requirements.
- A 2.0 overall grade point average is required to meet graduation requirements (see specific degree requirements for AA/AS degree and AAS degree). Effective January 1992, zero-level courses are not included in any GPA calculation. Physical education "activity" and any rerieved or repeated courses may not be utilized for credit toward the credit hour requirement of any program.
- An additional associate degree may be granted by completing all the requirements for that degree with at least an additional 15 credit hours of course work in residence at Tulsa Community College.

#### **Degree Plan Procedures**

Students should request assistance from the Advisement Center in planning their programs of study, particularly if planning to transfer to a four-year college or university. Close, early coordination between TCC academic advisors and advisors from selected four-year institutions can streamline the transfer process.

Degree-seeking students should declare a major and follow the degree plan for the major listed in the catalog in effect at the time of entry or re-entry. The degree requirements remain in effect while a student is continuously enrolled. When a student does not enroll for two (2) consecutive semesters (excludes summer), the student must file a degree plan specified by the current academic year catalog. Students who wish to change their major should meet with an advisor. Any substitution of course requirements listed for the associate degree should be requested through the Advisement Center.

#### **Graduation Candidacy Procedure**

Students seeking a certificate or a degree should prepare for graduation as follows:

- Final official transcripts from all schools attended must be on file at TCC before an official degree plan can be prepared.
- Students are expected to file for graduation in the Advisement Center during the semester in which they will meet all graduation requirements.
- Students admitted to the Honors Scholar program should also complete a graduation check in the Honors Office at the beginning of their final fall or spring term.
- After signing graduation paperwork, students will turn in their Declaration of Candidacy for Graduation form to the Student Completion Center.
- All declared candidates will be contacted by the Enrollment Services Office and the College graduation marshal with information about the graduation.
- Once grades are recorded for the final term of enrollment, a final review will take place and students will be contacted as to their status.
- Degree notes are recorded on the graduate's TCC transcript, and diplomas and certificates of completion are issued by the Student Completion Center.

Formal commencement will be scheduled at the end of the spring semester of each academic year.

### **DEGREES**

Degrees awarded to students planning to continue to a bachelor's degree program are the Associate in Arts or the Associate in Science. The degree awarded to a student completing a workforce development program is the Associate in Applied Science.

### **I. Associate in Arts/Science**

**A.** Required Point Average: Students recommended for the Associate in Arts or Associate in Science degrees must achieve a grade point average of 2.0 as a minimum on all course work attempted (a minimum of 60 hours) excluding any courses repeated or reprimed as detailed in the State Regents' Grading Policy and excluding physical education activity courses.

**B.** General Education Core Courses: A total of 37 credit hours of General Education courses, as listed in the General Education Goals and Requirements, are required for each Associate in Arts or Associate in Science degree and include the following core courses. Requirements may vary depending on the student's major.

**1.** Communication: A minimum of nine credit hours that must include ENGL 1113, ENGL 1213, and COMM 1113.

**2.** U.S. History and U.S. Government: A minimum of six credit hours that must include HIST 1483 or 1493 and POLS1113.

**3.** Science: A minimum of seven credit hours. At least one course must be a laboratory science.

**4.** Humanities: A minimum of six credit hours chosen from courses designated as Humanities.

**5.** Mathematics: A minimum of three credit hours.

**6.** Required Electives: One three-hour course from one of the following disciplines: psychology, social sciences, foreign language, fine arts (music, art, theatre).

**7.** Additional liberal arts and sciences courses needed to meet the minimum total of 37 credits.

**C.** The remaining minimum of 23 semester credit hours of academic work shall be applicable to the student's major objective, including any prerequisite courses necessary for his/her anticipated upper-division program. A majority of such student credit hours should be taken in courses classified as liberal arts and sciences. Requirements are listed in specific degree patterns.

**D.** As required by State Regents policy, to receive an A.A. or A.S. degree from TCC, students must demonstrate computer proficiency, including a basic knowledge of operating systems, word processing, and the ethical use of Internet research capabilities. See Computer Proficiency Requirements.

### **II. Associate in Applied Science**

To earn the Associate in Applied Science degree students must achieve a minimum 2.0 ("C") grade point average on a minimum of 60 credit hours of course work listed in the curriculum pattern for the degree (excludes P.E. activity course).

### **III. Certificate of Achievement**

To earn a Certificate of Achievement in a specific field of study, students must achieve a minimum 2.0 ("C") grade point average on the courses listed in the curriculum pattern for the certificate.

## **STUDENT AFFAIRS**

### **Call 2000**

By calling the TCC First Stop Help Desk, students and potential students can find information about financial aid, enrollment, advisement and more. Our goal is to serve students as best we can with one call. **To contact Call2000, please call: (918) 595-2000.**

### **Academic Advising**

The Advising office on each TCC campus provides services designed for student success. Professional Advisors help students with choice of major, degree planning, course selection, prerequisite and placement requirements for courses, final graduation checks and transfer college information. Academic Advising is required and available on campus as well as online for distance learning students.

### **Bursar Office**

Any student needing assistance with their student account can contact the bursar office on any campus. This would include refunds, payment plans, and any questions regarding student accounts.

### **Testing Services**

The Testing staff administers and interprets a wide variety of tests which can help students in numerous ways. For a complete list of testing services, visit [www.tulsacc.edu/testing](http://www.tulsacc.edu/testing). Some of the testing programs available through the Testing Centers include:

#### **ACT Assessment**

ACT Assessment results may be used by TCC Academic Advisors to place students in courses appropriate to their skill level.



Also, certain programs at TCC require the ACT as part of their application process. The National ACT test is administered on specific dates, open to anyone, and the scores can be reported to other colleges other than Tulsa Community College. The Residual ACT Test is administered on-campus for enrolled and admitted TCC students who were unable to test on a national test date. Results are reported only to TCC. Information about the ACT and a testing schedule is available from the Northeast Campus Testing Center by telephone at (918) 595-7534 or online at [www.tulsacc.edu/Testing](http://www.tulsacc.edu/Testing).

### **Advanced Standing Credit by Exam**

Students who believe they are qualified to earn college credit as a result of previous training or experience may do so by taking either the College-Level Examination Program (CLEP) subject exams or TCC departmental exams. CLEP may not be used for foreign language except Spanish and French. Additional information is stated in this catalog under the heading of Credit by Advanced Standing and at [www.tulsacc.edu/testing](http://www.tulsacc.edu/testing).

### **ESL Placement Examination**

Students for whom English is a second language and who do not meet the required TOEFL scores, may study English as a Second Language after taking the TCC ESL Placement test. To schedule a free testing appointment, please call (918) 595-8411, Multi-Cultural Language Center, Northeast Campus, [www.tulsacc.edu/esl](http://www.tulsacc.edu/esl).

### **General Educational Development Test (GED)**

The GED is administered at the Northeast Campus to provide Certificates of High School Equivalency.

### **Test of English as a Foreign Language (TOEFL)**

The TOEFL is administered monthly at the Testing Center on the Northeast Campus at the beginning of each semester to meet state guidelines for the admission of students for whom English is a second language. Information about the TOEFL and a testing schedule is available from the NEC Testing Center, by telephone at (918) 595-7534 or online at [www.tulsacc.edu/Testing](http://www.tulsacc.edu/Testing).

### **Campus Information**

There are many ways in which the student can keep abreast of the various programs and activities on campus. They include announcements made by faculty members in class, information on bulletin boards scattered throughout each of the campuses, and the TCC Connection newspaper. In addition, the Student Handbook and Activities Calendar are posted on the TCC website ([tulsacc.edu](http://tulsacc.edu)). Monthly activities calendars are available in the Student Life Office on each campus.

### **Campus Store**

The TCC Campus Stores are owned and operated by Tulsa Community College. Each campus has its own Campus Store. We are proud to be your source for course books and a variety of other items such as study aids, school supplies, backpacks, computer software, snacks, and gift merchandise. Each Campus Store also distributes caps and gowns for Commencement and coordinates orders for graduation announcements. Stop in and see for yourself everything your Campus Stores have to offer.

### **Career Services**

Whether you are choosing a major, exploring occupations, or needing help with the job search process, Career Services can help! We have a wide variety of resources available free of charge to current TCC students or graduates, including career planning tools to assist you in making a better informed career decision. You will have the opportunity to explore your interests, abilities, goals, and work-related values in addition to gathering information on various occupations. If you need assistance with any part of the job search process, including resumes, interviewing skills, cover letters, etc., our staff are here to help. More information about Career Services is available online at [www.tulsacc.edu/careerservices](http://www.tulsacc.edu/careerservices).

### **Student Email and Portal ([tulsacc.edu/mytcc](http://tulsacc.edu/mytcc))**

This email address and account must be used for all college academic and business written correspondence, including applications, enrollment, financial aid, etc. All official correspondence with students about TCC and classroom assignments will be to your TCC email or to the MyTCC Student Portal.

### **Education Outreach Center**

TCC has opened the Education Outreach Center at 21st and Garnett to serve as a convenient, neighborhood bridge to college for anyone wishing to pursue higher education. At the center, students can apply to TCC, complete college placement testing, enroll in TCC classes, and learn about financial aid.

### **Student Employment**

The Student Employment program is a free service designed to assist students, TCC graduates, and employers with their employment needs. Services include resume writing, interview preparation, and job search assistance. Student Employment services are located within Career Services on each campus. More information is available online at [www.tulsacc.edu/careerservices](http://www.tulsacc.edu/careerservices).

### **New Student Orientation**

New student orientation (NSO) is the first step to becoming a successful college student at TCC. The more knowledgeable students are with TCC, the more likely they are to succeed. After new students complete the application for admission, they will receive an email directing them to sign up for NSO. Students who submit all required items (see below) prior to attending NSO will enroll in classes during orientation. All new degree-seeking students are required to attend NSO. For more information visit [tulsacc.edu/orientation](http://tulsacc.edu/orientation).

Before attending New Student Orientation, please complete the following:

1. Complete a TCC Application for Admissions and turn in all official transcripts or GED Scores and ACT Scores to Enrollment Services on any campus.
2. Take a placement test, if necessary (if you have not taken the ACT or if you scored below a 19 in ACT Reading or English, or below a 20 in ACT Math.) If you think you need to take a placement test, visit with an Academic Advising Office on any campus.
3. Secure Payment:
  - If you plan on applying for student grants or loans, please complete the FAFSA and check your MyTCC Financial Aid Dashboard for outstanding documents.
  - If you will be paying out of pocket, ensure that you come to the NSO session with the ability to pay in full or to set up a payment arrangement.
  - If you are a Tulsa Achieves Student, complete the Tulsa Achieves Program Agreement form and your FAFSA.

### **Tutorial Assistance**

Any student needing academic assistance outside the classroom may inquire in the instructional labs on each campus.

### **Educational and Co-Curricular Programs**

Special workshops and interest sessions are periodically offered throughout the each term. These activities are coordinated through the various Student Services offices. They include such topics as "Study Skills," "Test-Taking Techniques," "Stress Management," and other areas of student interest.

### **Campus Police**

Campus Police functions primarily to protect life and property of TCC students and staff and provides numerous services to students as a routine part of the College operation. Included in these services are personal escorts to the student's vehicle. The Campus "Lost and Found" is located in the Campus Police Office. Campus Police makes its annual Campus Security Report available in the Student Policies & Resources Handbook. This report is a compilation of crime statistics, as well as procedures and programs for preventing and dealing with incidents of sexual harassment, assault, and substance abuse. The codebook and aforementioned procedures and programs are provided annually to all current students and staff via the Dean of Student Services Office or College computer network in compliance with the Higher Education Amendments of 1998 and the Jeanne Clery Disclosures of Campus Security Policy and Crime Statistics Act (20USC1092f). To receive your own copy of the report, stop by any TCC Campus Police Office or view the posting electronically on the web at [www.tulsacc.edu/campuspolice](http://www.tulsacc.edu/campuspolice).

### **Disability Resources**

Tulsa Community College partners with students to provide access to educational opportunities in pursuit of academic success on all campuses through individualized accommodations. A variety of academic support resources are available to qualified students in compliance with the Americans with Disabilities Amendments Act and Section 504 of the Rehabilitation Act. To request accommodations contact the Education Access Center or the Resource Center for the Deaf and Hard of Hearing listed below.

### **Education Access Center**

Tulsa Community College  
Metro Campus  
909 S. Boston Avenue, Room MC 331B  
Tulsa, OK 74119-2095  
(918) 595-7115 - Voice  
Email: eac@tulsacc.edu

### **Resource Center for the Deaf and Hard of Hearing**

Tulsa Community College  
Northeast Campus  
3727 E. Apache, Room 2163  
Tulsa, OK 74115-3151  
(918) 595-7428 - Voice  
(918) 595-7434 - TTY  
(918) 894-5724 - VP  
(918) 809-1864 - Text  
Email: rcdhh@tulsacc.edu

### **Fitness Centers**

The Fitness Centers at Tulsa Community College, located inside the Student Unions at the Metro, Northeast, Southeast, and West campuses, are available to all TCC students, full-time faculty, and staff. Currently enrolled credit students on all campuses may participate at any site at no charge.

Fitness Centers are open Monday through Friday and on Saturday at selected campuses, early morning to evening (although they will be closed when the College is closed). These centers feature basketball/volleyball courts, an indoor track, an aerobics room, a free weight room, as well as cardio and strength exercise areas. Operating hours are reduced between terms and during summer term.

Professional staff members are dedicated to assisting users as they work toward personal fitness goals. A wide variety of group fitness classes will be available to all users. For additional information, contact the Metro Fitness Center at **(918) 595-7FIT (595-7348)**, Northeast Campus Fitness Center at **(918) 595-8GYM (595-8496)**, Southeast Campus Fitness Center at **(918) 595-8640** and West Campus Fitness Center **(918) 595-8225**.

### **Food Services**

Tulsa Community College offers a variety of food services for the convenience of TCC students and employees. Food and drink vending machines are also available in various locations on each campus.

### **Housing**

Tulsa Community College does not operate residence halls or maintain listings of available housing for students. Students who do not reside in the area must make their own arrangements for housing.

### **Parking**

Tulsa Community College attempts to provide adequate parking facilities for all of its students and staff. Parking is provided on each campus and is generally accessible during normal operating hours of the College. Parking is available for currently enrolled students for a nominal parking fee which is assessed on the basis of the number of credit hours in which a student is enrolled during a given term. Parking on any TCC lot is available on a first-come, first-served basis and is intended for use by the student or staff member only while he/she is attending class or conducting college-related business on campus. Students are required to display a valid parking decal. Information about parking services and regulations is available in the Department of Public Safety/Campus Police Office located on each campus. Public transportation is also available for student use in most cases.

### **Student Life**

The Student Life program is designed to provide each student the opportunity to participate in significant educational and developmental programs designed with intentional outcomes of supporting students' achievement of their educational goals. Opportunities are available for students to develop leadership, responsibility, and social skills through participation in numerous programs and events at the College. The students, faculty, and staff are kept aware of these activities via calendars, social media, the TCC website, and bulletin boards. Information is also available at each Student Life Office.

### **Educational and Entertainment Programs**

A variety of activities such as films, music presentations, various entertainers, lectures, exhibits, trips, contests, discussions, workshops, and family-oriented programs are presented throughout the year by the Office of Student Life. They are scheduled with input from both students and faculty members. Anyone wishing to suggest programs should contact the Office of Student Life on any campus.

### **Fitness Programs and Activities**

The recreational program is designed to meet the needs of TCC students regardless of age, skill or ability. It offers students the opportunity to participate in team and individual sports and enjoy the benefits of physical activity, group cooperation, and spirit. Intramural sports offered during the year include basketball, soccer, volleyball, billiards, table tennis, and others, as interest dictates. Both intramural leagues and tournaments are planned in these various sports. Dates, times, locations, and entry requirement information is available in any Student Life Office. Questions concerning the recreational program should be referred to the Student Life Office or Fitness Center at the Metro, Northeast, Southeast, or West Campus.

### **Discounts and Services**

A variety of discounts and services is available in the Office of Student Life on each campus. Although not all items are available on all campuses, items offered include discount tickets for area movie theatres, athletic event tickets, area theme park tickets, and memberships to the Philbrook Museum of Art, and Gilcrease Museum.

### **Sponsored Programs**

#### **TRIO Educational Opportunity Center**

The Tulsa Community College Educational Opportunity Center is funded through the United States Department of Education and is a sponsored program also identified as a TRIO program. The EOC was first funded at Tulsa Community College in September 2002. The purpose of the program is to promote postsecondary education by providing information and assistance on educational and career opportunities and available financial aid options to eligible adults in a three-county area.

The EOC staff works out of a central campus-based office and satellite offices in the surrounding counties. The staff helps adults, who wish to continue their education, select and apply to schools suited to their abilities and career interests. They also provide assistance with identifying grants and loans to help pay for educational expenses, and help with the completion of admissions and financial aid applications. Additional information may be obtained from the program director or by visiting the program website: [www.tulsacc.edu/eoc](http://www.tulsacc.edu/eoc).

#### **TRIO Student Support Services Program**

The TRIO Student Support Services Program at the Metro Campus of Tulsa Community College invites students to apply for selection to the program. The TRIO SSS Program promotes student persistence from one educational level to the next by fostering an institutional climate supportive of student success. TRIO SSS is committed to the academic success of students who demonstrate an academic need and meet at least one of the following criteria:

- 1. First Generation** (neither parent has earned a baccalaureate degree)
- 2. Low Income** (as determined by federal guidelines)
- 3. Students with documented disabilities**, registered with the Education Access Center (located in 331B Metro Campus, call (918) 595-7115 for assistance)

The TRIO SSS Program assists selected students with navigating the college through the following services:

- Academic advising
- Tutoring, available with professional tutors and peer tutors
- Access to the TRIO SSS Learning Center, which includes a computer lab and study space
- Financial aid application assistance
- Assistance with college transfer plans, including campus visits
- Informational workshops on various topics, including study skills, test anxiety, time management and technology
- Career exploration
- Personal counseling
- Cultural activities
- Membership in the TRIO Student Association (TSA)

Selection to the program includes an application and interview process. Program services are offered at no cost to students through a federal Title IV grant from the U.S. Department of Education.

For more information, or to request an application, please call (918) 595-8970 or visit the TRIO SSS Main Office at Metro Campus, MC 1020, located on the first floor. Our application can also be found online at [tulsacc.edu/trio](http://tulsacc.edu/trio).

### **Student Government Association**

Each student who enrolls at TCC, full time or part time in credit courses, automatically becomes a member of the student body. This entitles a student to vote in student elections and to take part in student activities. The representative governing group of the student body is the Student Government Association (SGA). All students enrolled in at least six credit hours who are in good standing with the College are eligible for SGA membership. The SGA represents the students at TCC in matters related to campus life. The SGA also coordinates various programs for the student body. All students are encouraged to take an active part in Student Government Association and campus activities. Questions concerning SGA activities or elections should be referred to the campus Student Life Office.

### **Student Unions**

The Student Union on each campus meets a variety of student needs. The Campus Store, dining facility ("Campus Cafe"), and Office of Student Life in each Union are available along with student lounges and meeting areas.

### **Health Promotions and Wellness**

Student Health Services offices are available on each campus to provide health care and health education to students and staff. Each is staffed by a registered nurse who will evaluate and treat injuries and advise treatment for illness. Students with health concerns are referred to their personal physicians or to agencies in the Tulsa area. Supplemental literature and student health insurance information is available in the pamphlet racks in the hallway adjacent to the Health Center or from the nurse.

Each term a variety of health-related workshops or programs is presented allowing individuals a chance to participate. A few topics include: chemical dependency, holiday blues, coping with stress, and physical fitness. Student Health Services also sponsors a Red Cross Blood Drive each term. Blood pressure, diabetes, hearing, vision, cholesterol, and triglyceride screenings are done periodically or by appointment. Temporary parking permits for temporarily disabled students and staff may be obtained from the Student Health Services office. Information and applications for permanent state handicap parking decals are available.

### **Student Organizations**

Student organizations provide opportunities for students to broaden their experiences, develop leadership abilities, provide a sense of responsibility, and give service to the College and community. Individuals interested in starting a student organization should contact the Student Life Office on any campus.

#### **Metro Campus:**

African American Student Association (AASA) • American Dental Hygienist's Association • Chinese Language Association • Diagnostic Medical Sonography Student Organization • French Language Association • Hispanic Student Association • Japanese Language Association • Journalism & Mass Communications Student Organization (JMCSO) • Phi Beta Lambda • Phi Theta Kappa (Omega Alpha Chapter) • Russian Language Association • Student Art Association • Student Association of Respiratory Therapy (SART) • Student Association of Paralegals & Legal Assistants (SAPLA) • Student Government Association (SGA) • Student Nurse Association • Student Nurse Christian Fellowship • Students of Occupational Therapy Assistant Club (SOTA) • Students of Physical Therapy Assistant Club • Student Radiologic Technologist Association (SRTA) • Student Veterans Association • TRIO Student Association • TCC Swing Dance Club

#### **Northeast Campus:**

African American Student Association (AASA) • Amateur Radio Club • American Sign Language (ASL) Club • Baptist Collegiate Ministry (BCM) • Behavioral Science Association (BSA) • Fire Protection Association • Horticulture Association • International Association • Italian Association • Phi Beta Lambda • Phi Theta Kappa (Alpha Zeta Alpha Chapter) • Silent Friends Club • Spanish Club • Speech/Forensics Club • Student Government Association (SGA) • Total Addiction Counseling & Knowledge from Life Experiences (TACKLE) • Student Veterans Association

#### **Southeast Campus:**

Baptist Collegiate Ministry • Chi Alpha • Christians in Action • Club of Medical & Natural Sciences • Future Medical Technologist's Club • German Club • Hispanic Student Association • Interior Design Club • International Student Support Coalition • Japanese



Language Club • Living Poets Society • Muslim Student Association • Phi Beta Lambda • Psychology Club • Phi Theta Kappa • Secular Student Alliance • Spanish Club • Student Firm Association • Student Music Association • Student Theatre Association • Student Government Association (SGA) • Student Veterans Association • Gamers of TCC • Phi Beta Lambda • Student Historical Society • Speech/Forensics Club

**West Campus:**

Baptist Collegiate Ministries (BCM) • Hispanic Student Association (HSA) • Native American Student Association (NASA) • Phi Beta Lambda (PBL) • Phi Theta Kappa (Beta Theta Epsilon Chapter) (PTK) • Professional Association of Childhood Educators (PACE) • Sci-Pi Scientist Club • Student Government Association (SGA) • Student Veterans Association (SVA) • Veterinary Technology Student Association (VTSA)

## **ACADEMIC SUPPORT SERVICES**

### **Communications Centers**

Students may find immediate help with reading, writing, and study skills by visiting the Communications Centers. Individual tutoring and a wide range of materials in a friendly, personalized setting make the Centers a popular place with students. Open both day and evening hours, the Centers assist students with a particular class assignment or with an entire skill development program. Many students also enjoy the Centers' atmosphere for studying between classes.

### **Computer Instructional Labs**

The Computer Instructional Labs are designed to provide many services to students. These services include computers to support courses where microcomputer technology is used, computer-aided instruction packages to supplement classroom work for certain courses, assistance for students with programming problems, instructional assistance for equipment and software usage, and a centralized workspace for students. The labs are staffed with personnel to assist in these areas.

### **Computer Lab**

Each campus has a variety of computer labs, many of which are open for general use. Staff in the open labs provide free assistance to students in using computers and software.

### **Dental Hygiene Clinic**

Dental hygiene care is provided by dental hygiene students under the supervision of licensed faculty. This service consists of cleaning, fluoride treatment, oral health education, x-rays and sealants. Fillings, extractions and prosthetic appliances are not available through the Clinic. Appointments can be made by calling (918) 595-7022. The Dental Hygiene Clinic is located in the Metro Philips Building, Room MP300.

### **Developmental Programs for the Deaf and Hard of Hearing**

The Resource Center for the Deaf and Hard of Hearing's developmental courses are designed for students with a hearing loss to improve basic English, reading, math, study, sign language, computer science and personal development skills. The courses enable students with a hearing loss to achieve the skills necessary to proceed through the Developmental Studies Program and on through a planned college program. The specific courses offered through the Resource Center for the Deaf and Hard of Hearing are:

CARS	0811	Orientation to College for the Deaf and Hard of Hearing
CSCI	0802	Computer Concepts for the Deaf and Hard of Hearing
CSCI	0811	Computer Exploration for the Deaf and Hard of Hearing
ENGL	0813	Reading and Vocabulary Skills for the Deaf and Hard of Hearing
ENGL	0823	Writing Skills for the Deaf and Hard of Hearing
ASLE	0612	Conversational Sign Language for the Deaf and Hard of Hearing
ASLE	0802	Sign Language for the Deaf and Hard of Hearing I
MATH	0803	Mathematics Skills for the Deaf and Hard of Hearing
MATH	0822	Consumer Math for the Deaf and Hard of Hearing

For more detailed information on each course, please refer to the course descriptions in the back of this catalog. Each course is listed within its own discipline heading and course prefix number. For more information on the Resource Center for the Deaf and Hard of Hearing, please see the "Disability Resources" listing in this catalog.

**Developmental Studies**

Tulsa Community College Developmental Studies are designed to help students improve in reading, writing, mathematics, and study skills. The courses enable students, especially those who have been out of school for a period of time, to achieve skills necessary to succeed in college-level courses. Specific courses in Developmental Studies include:

**Mathematics:**

MATH	0003	Basic Mathematics
MATH	0013	Beginning Algebra
MATH	0055	Basic Mathematics & Beginning Algebra
MATH	0123	Intermediate Algebra
MATH	0105	Beginning & Intermediate Algebra

**Reading:**

ENGL	0903	Reading I
ENGL	0913	Reading II

**Student Success:**

ENGL	0963	College Survival
ENGL	1003	Academic Strategies
ENGL	1091	College Orientation

**Writing:**

ENGL	0923	Writing I
ENGL	0933	Writing II
ENGL	0990	Selected Topics in Developmental English

**Self-Paced Developmental Studies Courses:**

ENGL	0601	Basic Grammar
ENGL	0611	Sentence Improvement
ENGL	0621	Punctuation
ENGL	0631	Spelling and Phonics
ENGL	0641	Basic Vocabulary
ENGL	0651	Study Skills
ENGL	0661	Writing Skills

Additional developmental courses in specific areas are described under English course descriptions.

The reading classes are highly individualized. Primary emphasis is placed on developing interest in reading, improving comprehension of coursebook materials, identifying main ideas, and building vocabulary. Students begin at their own reading levels and move at their own rates of speed.

The writing classes are designed to help students improve skills in sentence, paragraph and essay writing so that they may proceed successfully through college-level courses. Students gain practical skills they can apply in all their academic, business, and personal writing. These courses include individualized practice in sentence structure, punctuation, grammar, spelling, and diction.

The Academic Strategies course is an integral component of Developmental Studies, designed to assist students in successfully completing their college classes. The curriculum emphasizes study skills strategies and familiarizes students with college resource areas such as the Career Center, the Learning Resource Center, and the Reading, Writing, and Mathematics labs.

Mathematics courses are designed for students who need further development of mathematical skills. The basic course covers the four fundamental operations: addition, subtraction, multiplication, and division of whole numbers, fractions, and decimal fractions. The course also covers percentage, interest, and simple equations. The beginning algebra course provides an introduction to algebra.

Contact the Advisement Centers for additional information concerning Developmental Studies. The Oklahoma State Regents for Higher Education requirements state that credits and grades earned in classes with a course number beginning with "0" cannot be used for purposes of admission, retention, or graduation.

**English as a Second Language**

(See Course Descriptions for English as a Second Language, ESLG. Please call (918) 595-8411 for more information.

**Fast Track Program**

The Fast Track Program provides courses for day and evening students in four-week blocks. The opportunity to begin a class every four weeks allows students flexibility in managing work, home and educational commitments. The four-week format also allows a student to focus on one or two subjects at a time rather than four or five subjects with conflicting deadlines. Credit earned in the Fast Track Program format will apply to any degree plan. Students may enroll in one or two courses per block. Those taking two courses each four-week block will complete an associate degree in liberal arts or business in approximately one year. Students taking one course each block will complete the degree in approximately two academic years. Students can obtain a degree even sooner by supplementing the blocks with other options available (i.e., Internet, May Intersession, other short courses, CLEP or Advanced Standing Credit).

The Fast Track program is attractive to goal-oriented day and evening students who wish to earn a degree in a short period of time, whether their goal is job promotion or a four-year degree. Some students may want only a few accelerated courses, but not an associate degree. Those students may take Fast Track general education requirements in order to reach their goals more quickly. The Fast Track courses have been designed to transfer to most four-year colleges and universities as well as meet the general education requirements for workforce development degrees. Those students who have already begun their degree programs will find the accelerated pace of the Fast Track classes allows them to finish their degree sooner than through the traditional semester format. Whether students take only Fast Track courses or take Fast Track courses in combination with other classes, they will be able to build a schedule convenient for them.

**Honors Program**

The Honors Program at TCC offers academically motivated students an exciting and stimulating option to satisfy their graduation requirements. All interested students, both full-time and part-time, regardless of age or previous educational background, are welcome to take Honors classes. No formal application process is required; however, a 3.0 grade point average is expected.

Participants in Honors courses enjoy lively interaction in small class settings, as each class is limited to 20 enrollments. Faculty are able to take a more creative approach to the design of class curriculum, often including greater depth of investigation into the subject matter, wider breadth of reading, and stronger emphasis upon critical thinking, discussion, and writing. Students may also have opportunities to pursue topics of special interest and work closely with faculty. The purpose of all Honors classes is to allow students to be more active participants in their own learning.

Qualified students may be interested in applying to become TCC Honors Scholars. Applications are available from the Honors coordinator on any TCC campus. Once accepted, the Scholar proceeds through a curriculum of 24 credit hours of Honors classes (or 21 Honors credit hours with an approved, student-proposed project). Successful completion of the program with a grade point average of at least 3.5 leads to the designation of Honors Scholar on the student's TCC transcript. Special scholarship opportunities, such as the TCC Honors Scholar State Regents Tuition Waiver, are among the benefits available to TCC Honors Scholars.

Honors offerings include courses in the sciences, mathematics, liberal arts, and business. Because the Honors schedule changes each semester, students should check for class titles preceded by the letters "HONORS," for example, HONORS Composition I I or HONORS Speech Communication. This same designation appears on student transcripts once the class is completed. For more information about specific courses or the Honors Scholar Program, contact the Honors Program at (918) 595-7378.

**International Campus**

A major component of the International Studies program, the International Campus allows students to earn credit for TCC coursework taught in a foreign country by TCC faculty. It promotes an awareness of global issues, languages, and cultures.

**International Language Center**

Presently fourteen languages are available to students: Arabic, Chinese, ESL, French, German, Greek, Italian, Hebrew, Japanese, Latin, Portuguese, Russian, and Spanish, as well as American Sign Language. The associate degree, applied science degree, and certificate programs include languages and cultures. Electronic computerized laboratories are an important component of the International Language Center on each campus. Available to day and evening students, these labs provide video as well as audio samples to facilitate language learning. Special maps, international clocks, foreign periodicals, foreign language videos, and foreign language music are available to students.

### **International Student Services**

International Student Services, located on Northeast Campus, provides information, programs and services that help to make the international student's U.S. experience productive and positive. Services provided include admission processing, academic advising, immigration assistance, and cultural activities. The staff helps in creating an international educational environment at Tulsa Community College for all students, faculty, and staff. Contact International Student Services at (918) 595-7478 or [www.tulsacc.edu/iss](http://www.tulsacc.edu/iss).

### **International Studies**

The programs (Associate in Applied Science Degree and Certificate of Achievement) in International Language Studies or International Business are designed to prepare future workers for the international marketplace. Also, the Associate in Arts/Science Degrees in Business and Liberal Arts increase awareness of the 21st century's global interdependence.

### **Internet/Online**

See Distance Learning

### **Library**

The Library is a college-wide academic support service which contributes to teaching and learning at Tulsa Community College. The libraries are enriched environments of knowledge resources where intellectual curiosity is inspired and nurtured by helpful staff.

There is a library on each campus. The book, periodical, and online collections contain materials that support coursework and the pleasure of reading. Collections college-wide total over 100,000 volumes, 80,000 eBooks, over 50 databases, and 12 professional librarians that teach over 3500 students a year. The Library receives over 225,000 in-person visits, and answers over 5100 reference questions each year at their four physical locations.

Each library offers comfortable reading and study areas, computers, and Wi-Fi access. The Library website provides access to eBooks, searchable academic databases, and research guides to help students navigate more easily to the information they need. Last year there were over 350,000 visits to the Library website. Connect with us online at <http://library.tulsacc.edu> to explore this and a wealth of other information. Resources are available 24/7.

Information about the Library, including our policies and procedures, is available on the library's website.

### **Mathematics Laboratories**

The campus Mathematics Laboratories offer complete mathematical assistance to any TCC student. The purposes of the labs are 1) to continue the learning process that begins in the classroom by providing individual instruction, computer tutorial software, and videotape tutorials, and 2) to provide a relaxing, friendly, and encouraging atmosphere in which to help students learn and understand mathematics. Additionally, the labs provide informal counseling and advisement on the sequence of mathematical studies. All services are free to TCC students.

### **Reading Laboratories**

See Communications Centers.

### **Service Learning**

Students enrolled in classes with a service-learning component have the opportunity to apply academic theory learned in the classroom directly to a practical service experience in their community. Through service-learning, students develop intellectual, personal, career, and civic skills and assume a more active role in their education. Service-learning classes may be stand-alone classes in which students spend most of their time in the community, or they may be short-term projects that are either required or offered as options. Students reflect on their experiences to illustrate to their instructor what they have learned from the project and how it affected their knowledge and thinking about the people and situations involved in the experience.

Faculty service learning coordinators on each campus are available to assist students and instructors with service-learning information. The office of Engaged Student Programming located on the Northeast Campus, 918-595-7595, can also provide with more information to students, faculty, staff, and community partners about service-learning classes on all TCC campuses.

### **Writing Laboratories**

See Communications Centers

## **DISTANCE LEARNING**

### **Online Courses**

Tulsa Community College offers students the flexibility to take classes anytime day or night - 7 days a week through the Internet. Online courses are offered in a variety of disciplines and may include requirements such as on-campus orientations or proctored exams.

Online classes are recommended for students who are highly self-motivated and disciplined. The rewards of online courses include flexibility of schedule and availability of course materials anywhere at any time via the Internet. Many degree and certificate programs offer courses online. For current information, please go to TCC's website at <http://www.tulsacc.edu/dl>.

### **Blended (Hybrid) Courses**

Tulsa Community College offers students the flexibility to take classes in a blended (hybrid) format. This format replaces some on-campus seat time with Internet/online activities. TCC's blended courses are offered in four formats: 1/4 online, 1/3 online, 1/2 online, and 2/3 online.

In a blended format, students have regular face-to-face contact with their instructor with the flexibility allowed by online activities. Blended courses are offered in a variety of disciplines. For current blended course offerings, please go to TCC's website at <http://www.tulsacc.edu/dl>.

### **Interactive TV**

Tulsa Community College ITV classrooms feature live video conferencing using state of the art video technologies. ITV classrooms are located at all TCC campuses and allow each site to serve as either the Host (Teaching) site or Receive (Student) site.

This highly interactive and visual medium is great for group discussions, presentations and live lecture format classes. ITV allows the capability to interact with colleges and high schools throughout Oklahoma and the world. ITV is also used as a tool to cut down on travel nationally and internationally by hosting videoconference meetings. For more information about ITV classrooms or to schedule a teleconference meeting, see current information at <http://www.tulsacc.edu/dl> or call the Office of Distance Learning at (918) 595-8999.

## **ARMY ROTC at TCC**

The US Army Reserve Officer Training Corps (ROTC) program prepares individuals for careers as professional military officers in the United States Army, US Army Reserves, or the Army National Guard.

By agreement with the United States Army, eligible full-time students at Tulsa Community College may participate in Army ROTC and receive an officer's commission in the United States Army upon completion of a baccalaureate degree. Students enroll in the Army ROTC program at Northeastern State University-Broken Arrow but they remain students at TCC until ready for upper division classes.

### **Eligibility**

Freshman and sophomore foundational courses are available to students in all majors who may earn six hours academic credit in Military Science and Leadership.

### **Financial Assistance**

Financial assistance is available to qualified students. All uniforms, equipment, and most textbooks are furnished at no cost to the student.

### **Obligation**

No military obligation is incurred by non-scholarship students who enroll in or complete TCC courses. A student who successfully completes the Advanced Course in the Army ROTC program at NSU and receives a bachelor's degree may be accepted for a regular or reserve commission in one of the sixteen branches of the Army.

### **The Army ROTC Curriculum**

Course work covered includes leadership, ethics, management, physical fitness, and adventure/outdoor skills. In addition to academic studies, all students attend a weekly leadership laboratory. Military Science courses consist of foundational



courses, advanced military science instruction, and optional elective courses. Advanced standing credit for foundational courses is available for students completing basic training in any service branch. To learn more about Army ROTC visit: [www.tulsacc.edu/ROTC](http://www.tulsacc.edu/ROTC)

## **CONTINUING EDUCATION AND WORKFORCE DEVELOPMENT**

### **(Non-Credit Classes/Programs)**

Non-Credit Continuing Education courses at TCC are offered to support life-long learning and compliment business and industry needs. The training opportunities through Continuing Education are developed in cooperation with business and industry partners for their specific needs to improve talent.

**Customized Training** - TCC can customize training for your business or industry. We can help you assess your area of need and design a program to help take your business to the next level. Call 918-595-7976 for more information.

**Personal Growth** - Open enrollment classes to help you gain knowledge and help you develop a hobby or skill.

**Test Preparation** - Preparing for the ACT, SAT, GED, or other standardized test? We have classes to help you prepare for these important exams.

**Credit/Noncredit classes** - You can now take credit classes as a noncredit student. No lengthy application process and you may decide at a later date to convert these classes to credit (certain requirements apply).

**For further information, contact a Continuing Education Office at (918) 595-7200 or visit [www.tulsacc.edu/ce](http://www.tulsacc.edu/ce)**

## **TCC DUAL ADMISSION AGREEMENTS**

The Dual Admission program will allow students who are fully admissible to Langston University, Oklahoma State University, or Northeastern State University either as high school seniors or as transfers, to gain admission to Tulsa Community College and either selected institution at the same time. Dually admitted students are able to take full advantage of academic and student development programs and resources at TCC and on all campuses of the selected educational partner. Admission to the dual enrollment program is contingent upon meeting the admission requirements of LU, NSU or OSU. Applications are available through the Office of Admissions and Recruitment at LU Langston or Tulsa, Office of Undergraduate Admissions at OSU Stillwater, Northeastern State University, at the Enrollment Services Office on any Tulsa Community College campus, or via each institution's Website.

## **TIME TO COMPLETE A DEGREE**

Students should plan on the time required to complete a certificate or degree at Tulsa Community College based on the number of credit hours in the programs as follows:

### **Certificates**

1-15 credit hours	one semester
16-30 credit hours	one year
31-45 credit hours	one and one-half years

### **Associate Degrees (AA/AS/AAS)**

60 credit hours	two years
61-75 credit hours	two and one-half years
76-94 credit hours	three years

## **ARTICULATION AND TRANSFER**

A principle function of Tulsa Community College is to provide general education courses, associate degrees for university transfer, and workforce development programs for students who want direct entry into the workforce. TCC has made "articulation agreements" with both public and private, (in-state and out-of-state) institutions to provide many transfer options for TCC students. These agreements include both on-campus and Internet courses and programs. Students are cautioned to work closely with an academic advisor to ensure transferability of their courses, as requirements often differ among four-year institutions.

Some of the institutions with which TCC has developed articulated transfer agreements are: Oklahoma State University, the University of Oklahoma, Langston University, Northeastern State University, Southern Nazarene University, The University of Tulsa, Oral Roberts University, the University of Phoenix, and Oklahoma City University. Current articulation and transfer guides to these universities are located online at [www.tulsacc.edu](http://www.tulsacc.edu) (select Programs and Courses.)

**PROGRAMS DESIGNED TO TRANSFER TO SENIOR COLLEGES & UNIVERSITIES**

Students may take freshman and sophomore level courses at Tulsa Community College which lead to a baccalaureate degree or professional degree in practically any field of study. All of TCC's Associate in Arts and Associate in Sciences degrees are designed to transfer to other Oklahoma colleges and universities. Fields of study in which TCC has signed articulation (transfer) agreements with other institutions are listed below. The absence of a degree from this list does not indicate that courses within the degree will not transfer. To determine whether courses within any of TCC's university transfer degree programs will transfer for degree credit at another institution, work closely with an academic advisor. Students should consult the catalog and/or advisor of the college or university to which they are planning to transfer and carefully select courses that will meet requirements for the baccalaureate degree program. Copies of signed articulation agreements are available at [www.tulsacc.edu/programs-and-courses](http://www.tulsacc.edu/programs-and-courses). Select "University Transfer General Information".

<b>Tulsa Community College Degree</b>	<b>Transfer Institution/Degree</b>
Art, A.A.	Northeastern State University • Art Education, B.A. Ed,
Aviation Sciences Technology, A.S.	Oklahoma State University • Aerospace Education, B.S.
Biology , A.S.	Oklahoma State University • Aerospace Administration & Operations, B.S.
Biotechnology, A.S.	Oral Roberts University • Biology, B.S., Biotechnology concentration  Northeastern State University • Biology, B.S., Molecular Biology option
American Sign Language Education Interpreter Education, AA.	University of Arkansas, Little Rock • Interpretation: ASL/English, B.A.  William Wood University • Interpretation Studies in ASL-English, B.S.
ASL Studies, A.A	Northeastern State University • Speech Pathology, B.S.
Deaf Education, A.A.	Tulsa University • Deaf Education, B.S.  Northeastern State University • Speech Pathology, B.S.  University of Science and Arts of Oklahoma • Deaf Education, B.A.
Interpreter Education, A.A	Northeastern State University • Speech Pathology, B.S.

Business-Related Fields of Concentration, A.S., Accounting, Business Administration, Economics, and Management options

- Oklahoma State University
- General Business, B.S./B.A.
  - Management, B.S., /B.A.
  - Management/Sports Management, B.S./B.A
  - Management/Human Resources Management
  - Finance, B.S., B.A.
  - International Business, B.S., B.A.
  - Marketing, B.S., B.A.

- Northeastern State University
- Accounting, BBA
  - Business Administration, BBA
  - Finance, BBA, Financial Management and Financial Planning options
  - Human Resource Management, BBA
  - International Business, BBA
  - Management, BBA
  - Marketing, BBA
  - Health Care Administration, B.S.
  - Entrepreneurship, BBA
  - Hospitality and Tourism, BBA
  - Organizational Leadership, B.S.
  - Supply Chain Management , B.B.A.

- Langston University
- Accounting, B.S.
  - Business Administration, B.S.

- Rogers State University
- Business Administration, B.S., Accounting
  - Business Administration, B.S., Entrepreneurship
  - Business Administration, B.S., Forensic Accounting
  - Business Administration, B.S., Human Resource Management
  - Business Administration, B.S., Management
  - Business Administration, B.S., Marketing
  - Business Administration, B.S., Supply Chain Management
  - Sport Management, B.S., Sport Business

- St. Gregory's University
- Business Administration, B.S.

Business-Related Fields of Concentration, A.S., Hospitality Management option

- Northeastern State University
- Hospitality and Tourism Management, B.B.A.

- Oklahoma State University
- Hotel & Restaurant Administration, B.S.

<p>Business-Related Fields of Concentration, A.S., Management Information Systems option</p>	<p>Langston University • Business Administration, B.S.</p> <p>Oklahoma State University • Management Information Systems, B.S., B.A.</p>
<p>Chemistry , A.S.</p>	<p>Northeastern State University • Chemistry, B.S.</p> <p>Oral Roberts University • Chemistry, B.S. • Biomedical Chemistry, B.S., Premedicine concentration</p>
<p>Child Development A.S., Child &amp; Family option</p>	<p>Oklahoma State University • B.S., Human Environmental Sciences Child &amp; Family Services option</p>
<p>Child Development, A.S. Early Care option</p>	<p>Oklahoma State University • B.S., Human Environmental Sciences, Child &amp; Family Services option, Early Care specialty track</p>
<p>Child Development, A.S., Early Childhood Education option</p>	<p>Northeastern State University • B.S., Early Childhood Education</p> <p>Oklahoma State University • Child &amp; Family Services, Early Childhood Education option, HDFS option, B.S.</p> <p>University of Oklahoma • Early Childhood Education, B.S., Early Childhood major</p>
<p>Computer Information Systems, A.S.</p>	<p>Northeastern State University • Computer Science, B.S.</p> <p>Oklahoma State University • Computer Science, B.S.</p> <p>Rogers State University • B.S., Business Information Technology, Computer Network Admin option • B.S., Business Information Technology, Software Development and Multimedia option • B.S., Game Development • B.T., Applied Technology</p>

<p>Criminal Justice, A.A.</p>	<p>Northeastern State University  <ul style="list-style-type: none"> <li>• Criminal Justice, B.S., Homeland Security option, Legal Studies option</li> </ul> <p>Rogers State University  <ul style="list-style-type: none"> <li>• Justice Administration, B.S.</li> </ul> </p> </p>
<p>Pre-Education, A.A.</p>	<p>Oklahoma State University  <ul style="list-style-type: none"> <li>• B.S., Elementary Education</li> </ul> <p>Northeastern State University  <ul style="list-style-type: none"> <li>• B.S. Ed, Elementary Education Major</li> <li>• B.S. Ed, Science Education, Earth Space emphasis</li> <li>• B.S. Ed, Science Education, Chemistry Emphasis</li> <li>• B.S. Ed, Science Education, Biology emphasis</li> <li>• B.S. Ed, Science Education, Chemistry Emphasis</li> <li>• B.S., Ed, Mathematics Education</li> <li>• B.A., Ed, Social Studies Education</li> <li>• B.S., Ed, Special Education</li> </ul> <p>Oral Roberts University  <ul style="list-style-type: none"> <li>• B.S., Elementary Education, B.S., English as a Second Language option and Early Childhood option</li> </ul> <p>Langston University  <ul style="list-style-type: none"> <li>• Elementary Education</li> <li>• Special Education</li> </ul> </p></p></p></p>
<p>Engineering, A.S., Computer, Electrical, and Mechanical Engineering options</p>	<p>Oklahoma State University  <ul style="list-style-type: none"> <li>• B.S. CP, Computer Engineering</li> <li>• B.S., Electrical Engineering</li> <li>• B.S., Mechanical Engineering</li> </ul> <p>Oral Roberts University  <ul style="list-style-type: none"> <li>• Engineering, B.S. with concentrations in: Computer, Electrical, and Mechanical</li> </ul> </p></p>
<p>English, A.A.</p>	<p>Northeastern State University  <ul style="list-style-type: none"> <li>• Education, B.A., English option</li> <li>• English, B.A.</li> </ul> <p>Oral Roberts University  <ul style="list-style-type: none"> <li>• English, B.A.</li> <li>• Writing, B.A.</li> </ul> <p>Rogers State University  <ul style="list-style-type: none"> <li>• Liberal Arts, B.A.</li> </ul> </p></p></p>



Health and Human Performance, A.S.	<p>Oklahoma State University</p> <ul style="list-style-type: none"> <li>• B.S., Health Education and Promotion</li> </ul> <p>Rogers State University</p> <ul style="list-style-type: none"> <li>• B.S., Sport Management, Fitness Management option</li> </ul> <p>Northeastern State University</p> <ul style="list-style-type: none"> <li>• B.S., Ed, Health and Physical Education</li> <li>• B.S., Health and Human Performance</li> </ul>
History, A.A.	<p>Northeastern State University</p> <ul style="list-style-type: none"> <li>• B.A. History</li> </ul> <p>Rogers State University</p> <ul style="list-style-type: none"> <li>• B.A., Military History</li> <li>• B.A., Public Administration</li> </ul>
Information Technology, A.A.S.	<p>Oklahoma State University Institute of Technology</p> <ul style="list-style-type: none"> <li>• B.T., Bachelor of Technology, Network Infrastructure, Information Assurance and Forensics, Software Development, IT Enterprise Management</li> </ul>
Human Services, A.S., Child & Family Services	<p>Oklahoma State University</p> <ul style="list-style-type: none"> <li>• Human Environmental Sciences, B.S., Child and Family Services option, Human Services specialty track</li> </ul>
Human Services, Pre-Social Work option, A.A.	<p>Northeastern State University</p> <ul style="list-style-type: none"> <li>• Social Work, BSW</li> </ul> <p>Langston University</p> <ul style="list-style-type: none"> <li>• B.S., Rehabilitative Services</li> </ul>
Journalism and Mass Communication, A.A.	<p>Northeastern State University</p> <ul style="list-style-type: none"> <li>• Mass Communication, B.A., with options in Advertising, Journalism/Broadcasting, and Public Administration</li> </ul> <p>Rogers State University</p> <ul style="list-style-type: none"> <li>• B.A., Communications</li> </ul> <p>Oklahoma State University</p> <ul style="list-style-type: none"> <li>• B.A.,B.S., Strategic Communications</li> </ul>
Liberal Arts, A.A.	<p>Langston University</p> <ul style="list-style-type: none"> <li>• B.A., Liberal Education</li> </ul>
Liberal Arts, General Emphasis, A.A.	<p>Northeastern State University</p> <ul style="list-style-type: none"> <li>• Geography, B.A.</li> <li>• General Studies, B.G.S.</li> </ul> <p>Oklahoma State University</p>
Liberal Arts, Native American emphasis, A.A.	<p>Northeastern State University</p> <ul style="list-style-type: none"> <li>• American Indian Studies, B.A.</li> </ul>

Mathematics, A.S.	Northeastern State University • Education, B.S., Mathematics Education option
Environmental Science and Natural Resources	Rogers State University • Biology, B.S., Environmental Conservation
Pre-Nursing, AS	Rogers State University • B.S., Nursing  Northeastern State University • B.S.N. Langston University • B.S.N.
Nutritional Sciences, A.S., with options in: Allied Health, Community Nutrition, Dietetics	Oklahoma State University • Nutritional Sciences, B.S., with options in: Allied Health, Community Nutrition, Dietetics, Dietetics & Exercise, and Nutrition & Exercise  Northeastern State University • Human and Family Sciences Major, Dietetics/Nutrition, B.S.  Rogers State University • Nutritional Sciences, Sport Management/Fitness Management, B.S.
Paralegal, A.A.	Northeastern State University • Criminal Justice, Paralegal Studies option, B.S.
Physics, A.S.	Oral Roberts University • Engineering, Physics Concentration, B.S.  Northeastern State University • Science Education, B.S., Ed
Political Science, A.A.	Northeastern State University • Political Science, B.A.,  Rogers State University • Social Science, B.A  Oklahoma State University • Political Science, B.A., B.S.
Pre-professional Health Sciences	Rogers State University • Biology, B.S., Medical Molecular Biology
Psychology, A.A.	Northeastern State University • Psychology, B.A.  Oklahoma State University • Psychology, B.A., B.S.  Rogers State University • Community Counseling, B.S. • Social Science, B.S.

<p>Sociology, A.A.</p>	<p>Langston University • Sociology, B.A.</p> <p>Northeastern State University • Sociology, B.A.</p> <p>Oklahoma State University • Applied Sociology, B.A., B.S.</p> <p>Rogers State University • Social Science, B.S.</p>
<p>Spanish, A.A.</p>	<p>Northeastern State University • Spanish, B.A. • Spanish Education, B.A.</p> <p>Oral Roberts University • Spanish, B.A.</p>
<p>Speech, A.A.</p>	<p>Northeastern State University • Communication Studies, B.A.</p>
<p>Theatre, A.A.</p>	<p>Northeastern State University • Theatre, B.A.</p>

## WORKFORCE DEVELOPMENT PROGRAMS by CAMPUS

These degree and certificate programs are designed to prepare students for direct entry into the workforce. They may advance students within their current career positions or open doors to new career opportunities. Coursework may apply towards a degree at a four-year university; check with an advisor for further information. The number of hours that apply to a degree will vary from one university to another.

### A: ASSOCIATE IN APPLIED SCIENCE DEGREE

### C: CERTIFICATE OF ACHIEVEMENT

DEGREE PROGRAM/OPTION	METRO	NORTHEAST	SOUTHEAST	WEST	OWASSO
<b>Accounting</b>					
Accounting Assistant	C	C	C	C	
Accounting Specialist	A/C	A/C	A/C	A/C	
Accounting Software Applications Specialist	A/C	A/C	A/C	A/C	
Income Tax Specialist	C		C		
Payroll Administration Specialist	C				
<b>Allied Health</b>					
Cardiovascular Technology					A
Dental Hygiene	A				
Diagnostic Medical Sonography					A/C
Medical Laboratory Technician			A		
Phlebotomy			C		
Occupational Therapy Assistant	A				
Pharmacy Technology	C				
Physical Therapist Assistant	A				
Radiography	A				
Respiratory Care	A				
<b>American Sign Language Education</b>					
Interpreter Education		A/C			
<b>Aviation Sciences Technology</b>		A			
Air Traffic Control		A			
Aircraft Dispatch		C			
Management		A			
Professional Pilot		A			
<b>Biotechnology</b>			C		
<b>Business</b>	A				
Administrative Careers	A				C
Health Care Business Operations	A			A	
<b>Child Development</b>					
Center Director				A	
Certificate of Mastery				C	

Credential Preparation (CDA)				C	
<b>DEGREE PROGRAM</b>	<b>METRO</b>	<b>NORTHEAST</b>	<b>SOUTHEAST</b>	<b>WEST</b>	<b>OWASSO</b>
Early Childhood				A	
Early Childhood Certificate of Mastery				C	
Infant/Toddler				A	
Infant/Toddler Certificate of Mastery				C	
CDA Credential Preparation				C	
<b>Digital Media</b>	C				
Adobe Master Design Specialist	A				
Broadcast Production Specialist	A				
Digital Media Specialist	A				
Multimedia Reporting Specialist	A				
Radio Production Specialist	A				
Web Design Specialist	A				
<b>Electronics Technology</b>		A/C			
Biomedical Equipment Technology		A/C			
Electrical Substation Technology		A/C			
<b>Engineering Technology</b>					
Drafting & Design Engineering Technology		A/C			
Geographic Information Systems	A/C				
Manufacturing Engineering Technology		A			
Manufacturing Production Technician		A/C			
Process Technology		A			
Quality Technology		A/C			
Surveying Technology		A			
<b>Fire and Emergency Medical Services</b>					
Firefighter/EMT		A/C			
Healthcare Specialist/Paramedic		A/C			
<b>Health Information Technology</b>					
Medical Records	A				
Coding & Reimbursement Specialist	C				



<b>DEGREE PROGRAM</b>	<b>METRO</b>	<b>NORTHEAST</b>	<b>SOUTHEAST</b>	<b>WEST</b>	<b>OWASSO</b>
<b>Human Resources</b>			A/C		
<b>Human Services</b>		A/C			
<b>Information Technology</b>					
Business Application Professional	A	A	A	A	
Business Application Specialist	C	C	C	C	
Business Computer User				C	
Information Technology		A			
Networking and Cloud Computing		A/C	A/C		
Programming	A/C	A/C	A/C	A/C	
System Support Technician		A/C	A/C		
Web Development	A/C				
Website Management			A/C		
<b>Interior Design</b>			A		

<b>DEGREE PROGRAM</b>	<b>METRO</b>	<b>NORTHEAST</b>	<b>SOUTHEAST</b>	<b>WEST</b>	<b>OWASSO</b>
<b>International Language Studies</b>					
French	C		C	C	
Italian		C			
Japanese	C		C	C	
Spanish	C	C	C	C	
Spanish Interpreting Skills	C				
Spanish Translating Skills	C	C			
<b>Management</b>		A	A		
Management Internship		A	A		
<b>Marketing</b>			A		
<b>Nursing</b>	A		A		A
<b>Paralegal</b>	A				
<b>Project Management</b>				C	
<b>Veterinary Technology</b>				A	

## GENERAL EDUCATION GOALS FOR ALL DISCIPLINES AND PROGRAMS

Tulsa Community College graduates value cultural diversity, ethical behavior, and the unique role of public education in sustaining a free society. The following general education goals function independently and in concert. TCC graduates demonstrate:

**Communication Skills** - effective written, oral, visual, technological, and interpersonal interactions.

**Critical Thinking** - aesthetic and qualitative reasoning for creative inquiry, analysis, synthesis, and evaluation of information, both abstract and concrete.

**Empirical Skills** - problem solving and quantitative reasoning in support of scientific and mathematical concepts.

**Teamwork** - the ability to collaborate in support of shared purposes and goals.

**Personal Responsibility** - choices and actions that recognize consequences and exhibit ethical decision-making.

**Social Responsibility** - the ability to evaluate one's own ethics and traditions in relation to others and to embrace the diversity of human experience while engaging local, regional, and global communities.

# General Education Requirements: 37 Hours

The following is a list of General Education Requirements for students pursuing a University Transfer degree. These requirements may vary depending on your major and/or the requirements of the college to which you plan to transfer. Please refer to your specific degree plan and consult an academic advisor for details.

## Communication.....9 Hours

\*ENGL 1113 Composition I, \*ENGL 1213 Composition II and COMM 1113 Public Speaking

## U.S. History.....3 Hours

HIST 1483 U.S. History 1492-Civil War Era or HIST 1493 U.S. History Civil War Era-Present

## U.S. Government.....3 Hours

POLS 1113 American Federal Government

## Science (One course must be a laboratory science (L)).....7 Hours

ASTR 1104 General Astronomy

(L) BIOL 1114 General Biology for Non-Majors

(L) \*BIOL 1224 Intro to Biology for Majors

(L) \*BIOL 1404 General Botany

BIOL 1383 Nutrition

BIOL 1423 Microbes and Society

(L) \*BIOL 1604 Zoology

BIOL 2123 Environmental Inquiry

(L) \*BIOL 2134 Human Anatomy

\*BIOL 2143 Marine Biology

(L) \*BIOL 2154 Human Physiology

(L) \*BIOL 2164 Microbiology

\*BIOL 2213 Brain and Behavior

BIOL 2313 Principles of Ecology

(L) \*CHEM 1114 Principles of Chemistry

(L) \*CHEM 1315 General Chemistry I

(L) \*CHEM 1415 General Chemistry II

(L) \*CHEM 2145 Organic Chemistry I

(L) \*CHEM 2245 Organic Chemistry II

(L) GEOG 1014 Geography (Physical)

GEOG 2013 Meteorology

(L) GEOL 1014 General Geology (Physical)

(L) GEOL 1024 General Geology (Historical)

GEOL 1113 Introduction to Oceanography

(L) PHYS 1014 Conceptual Physics

(L) \*PHYS 1114 General Physics I

(L) \*PHYS 1214 General Physics II

(L) \*PHYS 2034 Engineering Physics I

(L) \*PHYS 2124 Engineering Physics II

(L) \*PHSC 1114 General Physical Science

## Humanities.....6 Hours

(H,I) AFRS 2713 Survey of African Civilizations

(H) ART 1053 Art History Survey I

(H) ART 1063 Art History Survey II

(H) ART 1113 Art Appreciation

(H) ASNS 1103 East Asian Philosophy and Culture

(H) \*ENGL 2393 Introduction to Drama

(H) \*ENGL 2413 Introduction to Literature

(H) \*ENGL 2543 British Literature I

(H) \*ENGL 2653 British Literature II

(H) \*ENGL 2673 World Literature I

(H) \*ENGL 2683 World Literature II

(H) \*ENGL 2773 American Literature I

(H) \*ENGL 2883 American Literature II

(H,I) GEOG 1043 Introduction to Cultural Geography

(H,I) GEOG 2033 World Regional Geography

(H) HIST 1053 Ancient & Medieval Western Civilization

(H) HIST 1063 Modern Western Civilization

(H,I) HIST 1073 Twentieth Century World History

(H) HIST 1083 Survey of English History to 1688

(H) HIST 1093 Survey of English History from 1688

(H,I) HIST 2023 Modern Eastern Civilization

(H,D) HIST 2043 Contemporary Affairs

(H) HIST 2333 African American History

(H) HIST 2353 Hispanic American History

(H) HUMN 2113 Humanities I

(H) HUMN 2223 Humanities II

(H) HUMN 2323 20th Century Humanities

(H) HUMN 2333 Humanities: Literature & Film

(H) HUMN 2443 Art of Film

(H) HUMN 2553 American Humanities

(H,I) HUMN 2613 International Film

(H) HUMN 2663 Hollywood's America

(H) HUMN 2773 American Popular Culture

(H) HUMN 2883 Art & Identity Cultural Encounters in America

(H) MUSC 1113 Music Appreciation

(H) MUSC 1153 American Popular Music

(H) NAMS 2113 Native American Cultures

(H) PHIL 1113 Introduction to Philosophy

(H) PHIL 1133 Philosophy in Literature

(H) PHIL/BUSN 1143 Introduction to Ethics: Business Issues

(H,I) PHIL/RELG 1213 Religions of the World: Eastern Tradition

(H) PHIL/RELG 1223 Religions of the World: Western Tradition

(H) PHIL 2133 Introduction to Ethical Thinking

(H) PHIL 2143 Introduction to Social & Political Philosophy

(H) PHIL 2153 Medical Ethics

(H) PHIL/HIST 2163 Introduction to History & Philosophy of Science

(H) RELG 1113 Introduction to Religious Studies

(H) RELG 2113 Old Testament

(H) RELG 2123 New Testament

(H) RELG/SOCI 2173 Religion and Society

(H) RELG 2233 Religion in America

(H) RELG 2243 Christian Ethics and Social Thought

(H) RELG 2313 Religion in Film

(H,I) COMM/BUSN 2053 Intercultural Communication

(H) THEA 1093 Introduction to Theatre

## Mathematics.....3 Hours

(A) \*MATH 1473 Math For Critical Thinking

(A) \*MATH 1483 Mathematical Functions and Their Uses

(A) \*MATH 1513 College Algebra

(A) \*MATH 1613 Plane Trigonometry

(A) \*MATH 1715 College Algebra and Trigonometry

(A) \*MATH 2114 Analytic Geometry and Calculus I

(A) \*MATH 2124 Analytic Geometry and Calculus II

## Required Electives .....3 Hours

At least one course from the following disciplines: Psychology, Social Sciences, Foreign Languages, Fine Arts (Art, Music, and Theatre).

## Recommended Electives.....3 Hours

CSCI 1203 Computer Concepts and Applications - To receive an Associate in Arts or Associate in Science degree from TCC, students must demonstrate computer proficiency, including basic knowledge of operating systems, word processing, and the ethical use of Internet research capabilities.

Or select three credit hours from the list of Liberal Arts and Science Electives.

## Total Hours.....37 Hours

\*Course has prerequisite (see course description section of catalog).

## Liberal Arts & Sciences Electives\*

African Studies  
ALL AFRS courses

Allied Health  
ALDH 1323 only

American Sign Language  
ALL ASLE courses except ASLE 1603,  
2023, 2243

Arabic  
All ARBC courses

ART  
All ART courses

Asian Studies  
All ASNS courses

Astronomy  
All ASTR courses

Aviation Sciences  
AVST 2113 only

Biology  
All BIOL courses

Chemistry  
All CHEM courses

Chinese  
All CHNS courses

Communications  
All COMM courses

Computer Information Systems  
CSCI 1203 only

Criminal Justice  
CRIM 1013 only

Economics  
All ECON courses

English  
All ENGL courses

French  
All FREN courses

Geography  
All GEOG courses

Geology  
All GEOL courses

German  
All GRMN courses

Greek  
All GREE courses

Hebrew  
All HEBR courses

History  
All HIST courses

Human Services  
All HSVC courses

Humanities  
All HUMN courses  
Interpreter Education  
All INED courses except INED 1603,2023, 2243

Italian  
All ITAL courses

Japanese  
All JAPN courses

Journalism & Mass Communications  
JRMC 1013, 1103, 1113, 1123, 1143, 2153 only

Latin  
All LATN courses

Management  
MGMT 2123, 2323, 2403, 2443

Mathematics  
All MATH courses

Music  
All MUSC courses except MUSC 1541, 1563,  
1651, 1711, 1721, 1731, 1761, 1771, 1781, 1791,  
1802, 2181

Native American Studies  
All NAMS courses

Philosophy  
All PHIL courses

Physical Education  
PHED 1143, 2212, 2263, 2513, 2533, 2603,  
2653, 2662 only

Physical Science  
All PHSC courses

Physics  
All PHYS courses

Political Science  
All POLS courses

Portuguese  
All PORT courses

Psychology  
All PSYC courses

Religious Studies  
All RELG courses

Russian  
All RUSS courses

Sociology  
All SOCI courses

Spanish  
All SPAN courses

Theatre  
THEA 1053, 1093, 1241, 1242, 1343, 1353,  
1563, 2313, 2323, 2333, 2453, 2463 only

\*Zero-level courses may not be used as Liberal Arts & Sciences electives.





**TULSA  
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## **ACCOUNTING**

Workforce Development Certificate



### **Program Description:**

This program is designed to develop the marketable skills necessary to function in a variety of positions in the field of accounting. The program provides upgraded training for those people already employed in the area of accounting who desire advancement. There are five certificate options available, varying from 21-30 credit hours of which 12-21 are in accounting.

### **Degree Awarded: Certificate of Achievement**

#### **Common Course Requirements Credit Hours: 15**

#### **Accounting 6 hours**

- \*ACCT 2213 Financial Accounting
- \*ACCT 2223 Managerial Accounting

#### **Computer Information Systems 9 hours**

- CSCI 1203 Computer Concepts and Applications
- \*CSCI 2033 Excel
- \*CSYS 2073 MS Office

#### **Select one of the following five (5) certificate options:**

- 1) Accounting Assistant
- 2) Accounting Specialist
- 3) Accounting Software Application Specialist
- 4) Income Tax Specialist
- 5) Payroll Administration Specialist

#### **1) Accounting Assistant Option: 12 hours**

- \*ACCT2523 Accounting Software Applications
- \*BUSN 2213 Small Business Management
- \*ENGL 1113 Composition I
- \*ENGL 2343 Business Communication 1

#### **2) Accounting Specialist Option: 15 hours**

- \*ACCT 2313 Intermediate Accounting I
- \*ACCT 2323 Intermediate Accounting II
- \*ACCT 2333 Cost Accounting
- \*ACCT 2363 Income Tax I
- \*ACCT 2393 Accounting Information Systems

#### **3) Accounting Software Application Specialist Option: 15 hours**

- \*ACCT 2243 Payroll Administration
- \*ACCT 2253 Peachtree
- \*ACCT 2263 QuickBooks Pro Comprehensive
- \*ACCT 2433 Computerized Business Income Tax
- \*ACCT 2523 Accounting Software Applications

#### **4) Income Tax Specialist Option: 9 hours**

- \*ACCT 2363 Income Tax I
- \*ACCT 2403 Income Tax II
- \*ACCT 2433 Computerized Business Income Tax

#### **5) Payroll Administration Specialist Option: 6 hours**

- \*ACCT 2243 Payroll Administration
- \*ACCT 2393 Accounting Information Systems

#### **Total Credit Hours: 21-30**

\*Course has prerequisite (See course description section of catalog).



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## **ACCOUNTING ASSOCIATE**

Workforce Development Degree

### **Program Description**

This program is designed to provide the student with an effective working knowledge of the various accounting principles and accounting practices. The student will develop the skills necessary to communicate in a business environment utilizing Generally Accepted Accounting Principles (GAAP), double entry accounting, accounts receivable, and accounts payable management, reconciling, budgeting, cost accounting, and compiling and analyzing reports. This program also provides training for those people who need accounting for effective business operations such as owners, managers, or employees. The degree requires a total of 60 credit hours of which 27-30 are in accounting.

### **Degree Awarded: Associate in Applied Science**

### **General Education Requirements Credit Hours: 18**

#### **Economics 3 hours**

ECON 2013 Principles of Macroeconomics

#### **English 6 hours**

\*ENGL 1113 Composition I

#### **And select one course from the following:**

\*ENGL 1213 Composition II

\*ENGL 2333 Technical/Professional Writing

\*ENGL 2343 Business Communication I

#### **Mathematics 3 hours**

\* \*\*MATH 1513 College Algebra

#### **Social Science 6 hours**

POLS 1113 American Federal Government

#### **And select one course from the following:**

HIST 1483 U.S. History 1492 to Civil War Era

HIST 1493 U.S. History Civil War Era to Present

### **Specialized Course Requirements Credit hours: 42**

#### **Accounting 15 hours**

\*ACCT 2213 Financial Accounting

\*ACCT 2223 Managerial Accounting

\*ACCT 2243 Payroll Administration

\*ACCT 2363 Income Tax I

\*ACCT 2393 Accounting Information Systems

#### **Computer Information Systems 9 hours**

CSCI 1203 Computer Concepts and Applications

\*CSCI 2033 Excel

\*CSYS 2073 MS Office

### **Select one of the following options:**

1) Accounting Specialist

2) Accounting Software Application Specialist

#### **1) Accounting Specialist Option 18 hours**

##### **Accounting 12 hours**

\*ACCT 2313 Intermediate Accounting I

\*ACCT 2323 Intermediate Accounting II

\*ACCT 2333 Cost Accounting

\*ACCT 2403 Income Tax II

##### **Business 6 hours**

BUSN 2313 Business Law I

\*BUSN 2213 Small Business Management

#### **2) Accounting Software Application Specialist Option 18 hours**

##### **Accounting 15 hours**

\*ACCT 2253 Peachtree

\*ACCT 2263 QuickBooks Pro Comprehensive

\*ACCT 2523 Accounting Software Applications

ACCT 2433 Computerized Business Income Taxes

\*ACCT 2563 Accounting Internship

##### **Business 3 hours**

\*BUSN 2213 Small Business Management

### **Total Credit Hours: 60**

\*Course has prerequisite (see course description section of catalog).

\*\* Recommended to be taken during first term.



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## **AMERICAN SIGN LANGUAGE EDUCATION**

### **Program Description**

The American Sign Language Education (ASLE) program at Tulsa Community College is designed to provide education and training for individuals seeking careers to work with Deaf and hard of hearing people. Each student will acquire American Sign Language skills and an appreciation of Deaf culture, the Deaf Community and the language. Job titles vary: novice interpreter, paraprofessional, teacher assistant, social services staff and counselors with a specialization in working with the Deaf Community. Students have internship opportunities to gain hands-on experience in working with Deaf and hard of hearing people at community agencies and within school programs. This degree will transfer to four-year institutions specializing in professional interpreting, counseling, Deaf education and ASL teaching.

### **Program Options:**

#### University Transfer - Associate in Arts (AA)

- ASL Studies
- Deaf Education
- Interpreter Education
- Services to the Deaf

#### Workforce Development - Associate in Applied Science (AAS) and Certificate:

- Interpreter Education

### **For More Information Contact:**

Liberal Arts and Communication Division: Northeast Campus (918) 595-7496

### **University Transfer (2+2) Options**

Degree options are available to provide seamless transfer to four-year degrees in ASL Studies, Deaf Education, Interpreter Education and Services to the Deaf. Articulation agreements between Tulsa Community College and the designated universities provide for a seamless transition toward a baccalaureate or advanced degree in an American Sign Language-related field. Students complete general education requirements for the bachelor's degree and also complete core courses within the American Sign Language Education program, which complement upper division coursework within the major field at the four-year university. Students are strongly encouraged to seek faculty advisement to ensure they are completing the correct option for their academic goals and intended course of study beyond the associate degree.

Transfer credit varies among colleges. Students should consult both the catalog of the specific college/university to which they plan to transfer and the signed transfer agreement or the current transfer planning guide posted at [www.tulsacc.edu/transfer](http://www.tulsacc.edu/transfer) to select courses that will meet both the associate and baccalaureate degree program.



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# **AMERICAN SIGN LANGUAGE EDUCATION**

## **ASL Studies Option**

University Transfer Degree

### **Program Description:**

The ASL Studies option at Tulsa Community College gives students an opportunity to acquire an understanding of the Deaf community as a part of human diversity and acquire American Sign Language skills. The courses are designed to emphasize the acquisition of American Sign Language and knowledge with appreciation of deaf culture and the language. This option complements upper division course work related to ASL teaching, ASL research and ASL linguistics at a four-year university.

### **Degree Awarded: Associate in Arts**

#### **For More Information Contact:**

Liberal Arts & Communication Division  
Northeast Campus: (918) 595-7496

### **General Education Requirements Credit Hours: 33-34**

#### **English 6 hours**

\*ENGL 1113 Composition I  
\*ENGL 1213 Composition II

#### **Humanities 6 hours**

ART 1113 Art Appreciation  
ENGL 2413 Introduction to Literature

#### **Mathematics 3 hours**

##### **Select one course from the following:**

\*MATH 1473 Mathematics for Critical Thinking  
\*MATH 1513 College Algebra

Other higher level MATH course substitutions may be permitted for college transfer. Select a course that will transfer to the college/university you plan to attend.

#### **Science 7 hours**

BIOL 1114 General Biology for Non-Majors  
Select three (3) credit hours from courses that will transfer to the college/university you plan to attend. See General Education Requirements for complete list.

#### **Social Science 6 hours**

POLS 1113 American Federal Government  
**and select one course from the following:**  
HIST 1483 U.S. History 1492 to Civil War Era  
HIST 1493 U.S. History Civil War Era to Present

#### **Controlled Electives 5-6 hours**

##### **Select from the following courses for a total of 5-6 hours:**

CSCI 1203 Computer Concepts and Applications  
Courses from the Liberal Arts and Sciences Electives list

### **Specialized Course Requirements Credit Hours: 27**

#### **American Sign Language Education 17 hours**

ASLE 1363 American Sign Language I  
\*ASLE 1373 American Sign Language II  
ASLE 1413 Deaf Culture and History  
\*ASLE 2414 American Sign Language III  
\*ASLE 2524 American Sign Language IV

#### **Computer Science 4 hours**

CSYS 1211 Introduction to MAC OS  
\*CSCI 2263 Digital Video I/Final Cut Pro

#### **Geography 3 hours**

GEOG 1043 Introduction to Cultural Geography

#### **Philosophy 3 hours**

PHIL 2143 Introduction to Social and Political Philosophy

### **Total Credit Hours: 60-61**

\*Course has prerequisite (See course description section of catalog).  
To receive an A.A. or A.S. Degree, students must demonstrate computer proficiency.





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# AMERICAN SIGN LANGUAGE EDUCATION

**Deaf Education Option**

University Transfer Degree

## Program Description:

The Deaf Education option at Tulsa Community College emphasizes the acquisition of American Sign Language, the appreciation of Deaf culture, and the foundations of child development. This option complements upper division coursework related to Deaf Education, K-12 teaching and ASL Teaching at a four-year university.

## Degree Awarded: Associate in Arts

### For More Information Contact:

Liberal Arts & Communication Division  
Northeast Campus: (918) 595-7496

## General Education Requirements Credit Hours: 34

### English 6 hours

\*ENGL 1113 Composition I  
\*ENGL 1213 Composition II

### Humanities 6 hours

ART 1113 Art Appreciation  
\*ENGL 2413 Introduction to Literature

### Mathematics 3 hours

#### Select one course from the following:

\*MATH 1473 Mathematics for Critical Thinking  
\*MATH 1513 College Algebra

Other higher level MATH course substitutions may be permitted for college transfer. Select a course that will transfer to the college/university you plan to attend.

### Science 7 hours

BIOL 1114 General Biology for Non-Majors  
Select three (3) credit hours from courses that will transfer to the college/university you plan to attend. See General Education Requirements for complete list.

### Social Science 6 hours

POLS 1113 American Federal Government  
**and select one course from the following:**  
HIST 1483 U.S. History 1492 to Civil War Era  
HIST 1493 U.S. History Civil War Era to Present

### Controlled Electives 6 hours

#### Select from the following for a total of six (6) credit hours:

CSCI 1203 Computer Concepts and Applications  
Courses from Liberal Arts and Sciences Electives list

## Specialized Course Requirements Credit Hours: 26

### American Sign Language Education 17 hours

ASLE 1363 American Sign Language I  
\*ASLE 1373 American Sign Language II  
ASLE 1413 Deaf Culture and History  
\*ASLE 2414 American Sign Language III  
\*ASLE 2524 American Sign Language IV

### Child Development 3 hours

CHLD 2243 Language and Cognitive Development: Birth to Eight

### Psychology 6 hours

PSYC 1113 Introduction to Psychology  
\*PSYC 2023 Developmental Psychology

## Total Credit Hours: 60

\*Course has prerequisite (See course description section of catalog).  
To receive an A.A. or A.S. Degree, students must demonstrate computer proficiency.





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## **AMERICAN SIGN LANGUAGE EDUCATION**

**Interpreter Education Option**

**University Transfer Degree**

### **Program Description:**

The Interpreter Education option at Tulsa Community College is designed to provide education and training for individuals seeking careers in interpreting settings. Students gain basic knowledge, skills, and values necessary to communicate and interact with Deaf people. This program emphasizes the acquisition of American Sign language, the appreciation of deaf culture, the appreciation of diversity in deaf and hearing communities, and the process of interpreting. This option complements upper division coursework related to ASL interpreting at a four-year university.

### **Degree Awarded: Associate in Arts**

#### **For More Information Contact:**

Liberal Arts & Communication Division  
Northeast Campus: (918) 595-7496

### **General Education Requirements Credit Hours: 28**

#### **English 6 hours**

\*ENGL 1113 Composition I  
\*ENGL 1213 Composition II

#### **Humanities 6 hours**

HUMN 2113 Humanities I  
HUMN 2223 Humanities II

#### **Mathematics 3 hours**

##### **Select one course from the following:**

\*MATH 1473 Mathematics for Critical Thinking  
\*MATH 1513 College Algebra

Other higher level MATH course substitutions may be permitted for college transfer. Select a course that will transfer to the college/university you plan to attend.

#### **Science 7 hours**

BIOL 1114 General Biology for Non-Majors  
Select three credit hours from courses that will transfer to the college/university you plan to attend. See General Education Requirements for course list.

#### **Social Science 6 hours**

POLS 1113 American Federal Government  
**and select one course from the following:**  
HIST 1483 U.S. History 1492 to Civil War Era  
HIST 1493 U.S. History Civil War Era to Present

### **Specialized Course Requirements Credit Hours: 41 hours**

#### **American Sign Language Education 17 hours**

ASLE 1363 American Sign Language I  
\*ASLE1373 American Sign Language II  
ASLE 1413 Deaf Culture and History  
\*ASLE 2414 American Sign Language III  
\*ASLE 2524 American Sign Language IV

#### **Interpreter Education 24 hours**

INED 1423 Introduction to Interpreting  
\*INED 2213 ASL to English Interpreting I  
\*INED 2233 ASL to English Interpreting II  
\*INED 2393 Interpreting I  
\*INED 2403 Interpreting II  
\*INED 2443 Interpreting in Specialized Settings  
\*INED 2613 Interpreting III  
\*INED 2643 Interpreting Internship

#### **Total Credit Hours: 69**

\*Course has prerequisite (See course description section of catalog).  
To receive an A.A. or A.S. Degree, students must demonstrate computer proficiency.



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## **AMERICAN SIGN LANGUAGE EDUCATION**

**Services to the Deaf Option**

University Transfer Degree

### **Program Description:**

The Services to the Deaf option is designed to provide education and training for individuals seeking to work with deaf people within the public and private sectors of the federal, state and local agencies. Students gain basic knowledge, skills, and values necessary to communicate and interact with deaf people. This program emphasizes the acquisition of American Sign Language, the appreciation of deaf culture, and the social sciences. This option complements upper division coursework related to counseling and rehabilitation services for the deaf at a four-year university.

### **Degree Awarded: Associate in Arts**

#### **For More Information Contact:**

Liberal Arts & Communication Division

Northeast Campus: (918) 595-7496

### **General Education Requirements Credit Hours: 34**

#### **Computer Science 3 hours**

CSCI 1203 Computer Concepts and Applications

#### **Communication 9 hours**

COMM 1113 Public Speaking

\*ENGL 1113 Composition I

\*ENGL 1213 Composition II

#### **Humanities 6 hours**

HIST 1063 Modern Western Civilization

Select three (3) credit hours from Humanities courses listed in the General Education requirements.

#### **Mathematics 3 hours**

##### **Select one course from the following:**

\*MATH 1473 Mathematics for Critical Thinking

\*MATH 1513 College Algebra

Other higher level MATH course substitutions may be permitted for college transfer. Select a course that will transfer to the college/university you plan to attend.

#### **Science 7 hours**

BIOL 1114 General Biology for Non-Majors

Select three credit hours from courses that will transfer to the college/university you plan to attend. See General Education Requirements for complete list.

#### **Social Science 6 hours**

POLS 1113 American Federal Government

##### **and select one course from the following:**

HIST 1483 U.S. History 1492 to Civil War Era

HIST 1493 U.S. History Civil War Era to Present

### **Specialized Course Requirements Credit Hours: 29**

#### **American Sign Language Education 17 hours**

ASLE 1363 American Sign Language I

\*ASLE 1373 American Sign Language II

ASLE 1413 Deaf Culture and History

\*ASLE 2414 American Sign Language III

\*ASLE 2524 American Sign Language IV

#### **Behavioral Sciences 6 hours**

PSYC 1113 Introduction to Psychology

SOCI 1113 Introduction to Sociology

#### **Human Services 6 hours**

HSVC 1213 Basic Counseling Skills

HSVC 2003 Family Relationships

### **Total Credit Hours: 63**

\*Course has prerequisite (See course description section of catalog).  
To receive an A.A. or A.S. Degree, students must demonstrate computer proficiency.



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# AMERICAN SIGN LANGUAGE EDUCATION

## Interpreter Education

### Workforce Development Degree

#### Program Description:

This program is designed to provide education and training for individuals seeking careers in interpreting settings. Students gain basic knowledge, skills, and values necessary to communicate and interact with deaf people. This program emphasizes the acquisition of American Sign Language, the appreciation of deaf culture and the process of interpreting and transliterating. The courses are designed to prepare the student to take interpreter certification tests and to work in entry-level positions as a teacher's assistant, substitute interpreter and/or tutor in the public schools.

#### Degree Awarded: Associate in Applied Science

#### For More Information Contact:

Liberal Arts & Communication Division  
Northeast Campus: (918) 595-7496

#### General Education Requirements Credit Hours: 15

(Additional General Education requirements are satisfied in Specialized Course Requirements.)

#### Communication 3 hours

##### Select one course from the following:

COMM 1013 Fundamentals of Listening  
COMM 1113 Public Speaking  
COMM 2103 Interpersonal Communication

#### English 6 hours

\*ENGL 1113 Composition I

##### and select one course from the following:

\*ENGL 1213 Composition II  
\*ENGL 2333 Technical/Professional Writing

#### Social Science 6 hours

POLS 1113 American Federal Government

##### and select one course from the following:

HIST 1483 U.S. History 1492 to Civil War Era  
HIST 1493 U.S. History Civil War Era to Present

#### Specialized Course Requirements Credit Hours: 45

#### American Sign Language Education 17 hours

ASLE 1363 American Sign Language I  
\*ASLE 1373 American Sign Language II  
ASLE1413 Deaf Culture and History  
\*ASLE 2414 American Sign Language III  
\*ASLE 2524 American Sign Language IV

#### Interpreter Education 24 hours

INED 1423 Introduction to Interpreting

\* INED 2213 ASL to English Interpreting I

\*INED 2233 ASL to English Interpreting II

\*INED 2393 Interpreting I

\*INED 2403 Interpreting II

\* INED 2443 Interpreting in Specialized Settings

\*INED 2613 Interpreting III

\*INED 2643 Interpreting Internship

#### Controlled Electives 3 hours

ENGL 1083 Grammar and Mechanics

PSYC 1113 Introduction to Psychology

PSYC 1313 Human Relations

SOCI 2113 Social Problems in America

#### Recommended Electives 1 hour

Select one credit hour from any discipline

#### Total Credit Hours: 60

\*Course has prerequisite (See course description section of catalog)



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## **AMERICAN SIGN LANGUAGE EDUCATION**

### **Interpreter Education**

#### **Workforce Development Certificate**

#### **Program Description:**

This certificate option is designed for students to take the courses specific to the American Sign Language and interpreting fields. This option is for students to gain the technical skills necessary for employment prior to obtaining general education requirements for an academic degree or for students with academic degrees in unrelated fields who desire to change careers

#### **Degree Awarded: Certificate of Achievement**

#### **For More Information Contact:**

Liberal Arts & Communication Division  
Northeast Campus: (918) 595-7496

#### **American Sign Language Education 17 hours**

ASLE 1363 American Sign Language I  
\*ASLE 1373 American Sign Language II  
ASLE 1413 Deaf Culture and History  
\*ASLE 2414 American Sign Language III  
\*ASLE 2524 American Sign Language IV

#### **Interpreter Education 24 hours**

INED 1423 Introduction to Interpreting  
\*INED 2213 ASL to English Interpreting I  
\*INED 2233 ASL to English Interpreting II  
\*INED 2393 Interpreting I  
\*INED 2403 Interpreting II  
\*INED 2443 Interpreting in Specialized Settings  
\*INED 2613 Interpreting III  
\*INED 2643 Interpreting Internship

#### **Total Credit Hours: 41**

\*Course has prerequisite (See course description section of catalog).





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## **ART**

### University Transfer Degree

#### **University Transfer Degree Information:**

Students should work closely with an academic advisor each semester to make certain you are enrolled in the correct courses for your degree program, especially if you are planning to transfer to a four-year college or university. Students are encouraged to begin a dialogue with their intended transfer schools as early as possible. Early coordination between TCC academic advisors and advisors from selected four-year institutions can streamline the transfer process. It is the student's responsibility to ensure that he/she understands the program/admission/transfer requirements for the transfer school.

#### **Program Description:**

Throughout history, no culture has ever persisted without some form of art. The fine arts - painting, sculpture and architecture - express our culture. The applied arts touch an infinite list of things in our environment from packaging, magazines, web design, and television to interior design. A liberal education that does not include familiarity with the history and language of art is lacking. The primary purpose of TCC's art program is to develop a basic historical, conceptual, and technical education in art. Believing that the artist's success is dependent on both creative vision and technical expertise, the program encourages excellence, critical inquiry, and experimentation.

#### **Degree Awarded: Associate in Arts**

##### **For More Information Contact:**

Visual and Performing Arts Division  
Southeast: (918) 595-7752

#### **General Education Requirements Credit Hours: 37**

##### **Communication 9 hours**

COMM 1113 Public Speaking

\*ENGL 1113 Composition I

\*ENGL 1213 Composition II

##### **Humanities 6 hours**

See the General Education Requirements page for the course list.

##### **Mathematics 3 hours**

See the General Education Requirements page for the course list.

##### **Science 7 hours**

See the General Education Requirements page for the course list.  
One course must be a laboratory science (L).

##### **Social Science 6 hours**

POLS 1113 American Federal Government

and select one course from the following:

HIST 1483 U.S. History 1492 to Civil War Era

HIST 1493 U.S. History Civil War Era to Present

##### **Recommended Electives 3 hours**

CSCI 1203 Computer Concepts and Applications

or

Select three (3) credit hours from the list of Liberal Arts and Science Electives

##### **Required Electives 3 hours**

Select one three-hour course from one of the following:

Psychology, Social Sciences, Foreign Language, or Fine Arts (Art, Music, Theatre).

#### **Specialized Course Requirements Credit Hours: 23-24**

##### **Art**

##### **Lecture 9 hours**

ART 1053 Art History Survey I

\*ART 2503 Professional Practice

**and select one course from the following**

ART 1063 Art History Survey II

ART 2053 Art History Survey III

##### **Studio 12 hours**

ART 1013 Fundamentals of Art I

\*ART 1023 Painting I

\*ART 1033 Painting II

ART 1083 Fundamentals of Art II

\*ART 1123 Drawing I

\*ART 1133 Drawing II

\*ART 2063 Watercolor I

\*ART 2073 Watercolor II

\*ART 2083 Sculpture I

\*ART 2093 Sculpture II

\*ART 2143 Figure Drawing I

\*ART 2153 Figure Drawing II

\*ART 2223 Printmaking I

\*ART 2233 Printmaking II

\*ART 2263 Introduction to Ceramics

\*ART 2313 Jewelry I

\*ART 2323 Jewelry II

\*ART 2403 Illustration I

\*ART 2413 Typography I

\*ART 2423 Graphic Design I

ART 2853 Photography



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## **ART**

University Transfer Degree

### **Recommended Electives 2-3 hours**

\*ART 2530 Field Studies in Art  
HIST 1053 Ancient and Medieval Western Civilization  
HUMN 2113 Humanities I  
HUMN 2223 Humanities II  
MUSC 1113 Music Appreciation  
PSYC 1113 Introduction to Psychology  
SOCI 1113 Introduction to Sociology  
SOCI 2123 Introduction to Cultural Anthropology  
THEA 1093 Introduction to Theatre

### **Total Credit Hours: 60-61**

\*Course has prerequisite (See course description section of catalog).

To receive an A.A. or A.S. Degree, students must demonstrate computer proficiency.

Physical Education activity classes do not count toward the associate degree requirements in this curriculum at TCC.





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## **AVIATION SCIENCES TECHNOLOGY**

Air Traffic Control

Workforce Development Degree

### **Program Mission Statement:**

The Aviation Center at Tulsa Community College is dedicated to an academic environment where learning is applied through critical thinking. Our mission is to educate with a strong emphasis on safety and professionalism to elevate our students in their aviation career.

### **Program Description:**

This program option provides training in the application of tower and terminal radar approach control procedures. The training curriculum is provided through use of Adacel's high-fidelity control tower and radar approach simulation incorporating state-of-the-art training to meet the changing needs of the air traffic control industry. Tulsa Community College's approved ATC-CTI program is designed to prepare the student with the necessary training and skills in order to gain admittance into the FAA Academy. Most Air Traffic Control courses are offered during the daytime hours.

Students must make a minimum grade of a "C" or better within the specialized course requirements prior to being awarded permission in the next sequential specialized course. Completion of this program does not guarantee admission to the FAA Academy. Admission to Tulsa Community College does not guarantee admittance into the Air Traffic Control Program.

### **Procedures for enrolling in Aviation Courses:**

1. All prospective air traffic control students must meet with the TCC aviation academic counselor at the Riverside Community Campus and Aviation Center. Located at 112 W. Beechcraft Drive. Contact: 918-595-3717
2. Potential air traffic control students must provide the following documents to the aviation counselor:
  - a. Proof of U.S. citizenship in form of:
    - i. An original birth certificate with raised seal documenting birth in the United States or one of its territories.
    - ii. A valid, unexpired United States passport.
    - iii. An original U.S. Naturalization Certificate with raised seal, Form N-550 or Form N-570.
    - iv. An original certification of birth abroad, Form FS-545 or Form DS-1350, or
    - v. An original Certificate of U.S. Citizenship, Form N-560 or Form N-561.
  - b. Valid Class II FAA Medical with audiogram.

### **Degree Awarded: Associate in Applied Science**

### **General Education Requirements Credit Hours: 18**

#### **Communication/Psychology 3 hours**

##### **select one course from the following:**

COMM 1113 Public Speaking

PSYC 1113 Introduction to Psychology

#### **English 6 hours**

\*ENGL 1113 Composition I

##### **and select one course from the following:**

\*ENGL 1213 Composition II

\*ENGL 2333 Technical/Professional Writing

#### **Mathematics 3 hours**

\*MATH 1513 College Algebra

#### **Social Science 6 hours**

POLS 1113 American Federal Government

##### **and select one course from the following:**

HIST 1483 U.S. History 1492 to Civil War Era

HIST 1493 U.S. History Civil War Era to Present

### **Specialized Course Requirements Credit Hours: 42**

#### **Aviation Sciences Technology 42 hours**

AVST 1113 Private Pilot Ground School

\*AVST 1232 Air Traffic Control Flight Training Lab

\*AVST 1343 Introduction to Air Traffic Control

\*AVST 1354 Air Traffic Control Tower Operations I

\*AVST 1364 Air Traffic Control Radar Operations I

AVST 2113 History of Aviation

AVST 2213 Instrument Pilot Ground School

\*AVST 2226 Air Traffic Control Tower Operations II

\*AVST 2246 Air Traffic Control Tower Operations III

\*AVST 2253 Aviation Meteorology

\*AVST 2262 Air Traffic Control Enroute and Non-Radar

\*AVST 2273 Air Traffic Control Career Prep

### **Total Credit Hours: 60**

\*Course has prerequisite (See course description section of catalog).



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## **AVIATION SCIENCES TECHNOLOGY**

Management

University Transfer Degree

### **Program Mission Statement:**

The Aviation Center at Tulsa Community College is dedicated to an academic environment where learning is applied through critical thinking. Our mission is to educate with a strong emphasis on safety and professionalism to elevate our students in their aviation career.

### **Program Description:**

This option is designed to educate future managers for the aviation industry. The curriculum stresses scientific principles, the human side of management, computer knowledge, critical thinking, cognitive and analytical skills, and communication skills, in addition to mathematics, science and technology. Upon successful completion the student will be awarded an Associate in Applied Science degree.

**Students should consult with the Tulsa Community College aviation academic counselor at the Riverside Community Campus and Aviation Center. before enrolling in this option. Contact: 918-595-3717**

**Degree Awarded: Associate in Applied Science**

**General Education Requirements Credit Hours: 41**

### **Economics 3 hours**

\*ECON 2023 Principles of Microeconomics

### **Communication 9 hours**

COMM 1113 Public Speaking

\*ENGL 1113 Composition I

\*ENGL 1213 Composition II

### **Geography 3 hours**

GEOG 1043 Introduction to Cultural Geography

### **Humanities 3 hours**

**Select one course from the following:**

HUMN 2113 Humanities I

HUMN 2223 Humanities II

PHIL 1113 Introduction to Philosophy

PHIL 1143 Introduction to Business Ethics: Business Issues

### **Mathematics 6 hours**

\*MATH 1513 College Algebra

\*MATH 2193 Elementary Statistics

### **Psychology 3 hours**

PSYC 1113 Introduction to Psychology

### **Sciences 8 hours**

**Select two courses from the following:**

ASTR 1104 General Astronomy

BIOL 1114 General Biology for Non-Majors

\*CHEM 1114 Principles of Chemistry

\*PHYS 1114 General Physics I

### **Social Science 6 hours**

POLS 1113 American Federal Government

**and select one course from the following:**

HIST 1483 U.S. History 1492 to Civil War Era

HIST 1493 U.S. History Civil War Era to Present

**Specialized Course Requirements Credit Hours: 21**

### **Accounting 6 hours**

\*ACCT 2213 Financial Accounting

\*ACCT 2223 Managerial Accounting

### **Aviation Sciences Technology 6 hours**

AVST 1113 Private Pilot Ground School

AVST 2113 History of Aviation

### **Computer Information Systems 3 hours**

CSCI 1203 Computer Concepts and Applications

### **Economics 3 hours**

ECON 2013 Principles of Macroeconomics

### **Management 3 hours**

MGMT 1353 Management Essentials

### **Total Credit Hours: 62**

\*Course has prerequisite (See course description section of catalog).



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## **AVIATION SCIENCES TECHNOLOGY**

Professional Pilot Option

University Transfer Degree

### **Program Mission Statement:**

The Aviation Center at Tulsa Community College is dedicated to an academic environment where learning is applied through critical thinking. Our mission is to educate with a strong emphasis on safety and professionalism to elevate our students in their aviation career.

### **Program Description:**

The Aviation Center at Tulsa Community College (TCC) is a FAA approved Part 141 flight training facility with a FAA approved Restricted Airline Transport Pilot training program. The Professional Pilot option at TCC is designed to provide the required ground and flight training in order to obtain the necessary Federal Aviation Administration (FAA) Certificates and Ratings for students seeking various careers as a professional pilot. At the completion of the degree option, the student will earn an Associate of Applied Science Degree from TCC and obtain the necessary FAA certificates and ratings to be certificated as a commercial pilot. Transferring of specialized course credit varies by institution. Students should consult with the Academic Counselor or college catalog at the specific college/university they plan to attend in order to confirm the transfer of collegiate credit. All enrolled Professional Pilot students must adhere to and comply with all published FAA, Transportation Security Administration, and TCC collegiate policies, procedures, and regulations.

The FAA Part 141 approval allows students to meet their Commercial Pilot minimum flight hour requirement in 190 hours instead of 250 flight hours therefore, reducing potential flight training costs. The flight training lab times are listed in the course description requirements. It is extremely important to note that national flight time averages are documented significantly above published FAA minimums. Students must commit a substantial amount of time and effort within their flight training labs in order to reduce extended cost expenditures for their flight training. Students that remain current and proficient by dedicating time for study and flight training will position themselves to meeting the published total flight times in order to complete their flight labs in a cost effective and timely manner.

Additional direct costs apply based on hourly aircraft rates and flight instruction.

Single-Engine aircraft rental rates including fuel are \$189.00 per hour Dual and \$164.00 per hour Solo. Multi-Engine aircraft rental rates including fuel are \$320.00 per hour Dual. Additional Instruction rates are \$25.00 per hour. Prices subject to change with notification of addendum.

### **Procedures for enrolling in Aviation Courses:**

1. All prospective flight students must meet with the TCC Aviation Academic Counselor at the Riverside Community Campus Aviation Center in order to receive authorization for enrollment in flight and ground training courses.  
Contact: 918-595-3717
2. Tulsa Community College's Professional Pilot Program requires that all Professional Pilot students enrolling for the first time in a flight training lab course or flight training ground school course obtain a criminal background check at their own expense. The Aviation Academic Counselor prior to enrollment will provide detailed instructions on the criminal background check testing procedures. A professional pilot will be required to clear a criminal background check and drug/alcohol testing procedures within their professional career field. The safe operation of flight is of the highest priority at the Aviation Center where TCC maintains a zero tolerance policy for drug and alcohol abuse. The FAA's regulatory guidance on drug and alcohol reporting and usage is strictly adhered to at the Aviation Center.
3. A current valid FAA Medical Certificate is required for all students prior to enrolling in any flight training lab course. A list of approved FAA Aviation Medical Examiners (AME) is published on the faa.gov website.
4. Professional Pilot students must provide the following documents to the Aviation Academic Counselor prior to enrollment for Transportation Security Administration and FAA clearance. All students who are not U.S. Citizens must meet all TSA clearance requirements before being enrolled in the aviation courses.
  - a. Proof of U.S. citizenship in form of:
    - i. Original birth certificate with raised seal documenting birth in the United States or one of its territories,
    - ii. Valid, unexpired United States Passport,
    - iii. Original U.S. Naturalization Certificate with raised seal, Form N-550 or Form N-570,
    - iv. Original certification of birth abroad, Form FS-545 or Form DS-1350, or
    - v. Original Certificate of U.S. Citizenship, Form N-560 or Form N-561
  - b. Valid government issued photo identification
5. Students must make a minimum grade of "C" or higher within the specialized course requirements and must comply with Tulsa Community College's FAA approved Training Course Outline prior to advancement into the next sequential course.
6. This degree option requires that the Instrument Rating and the Commercial Pilot Certificate be completed in residence in TCC aircraft with TCC instructors.





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## **AVIATION SCIENCES TECHNOLOGY**

Professional Pilot Option

University Transfer Degree

**Degree Awarded: Associate in Applied Science**

**General Education Requirements Credit Hours: 37**

**Economics 3 hours**

ECON 2023 Principles of Microeconomics

**Communication 9 hours**

COMM 1113 Public Speaking

\*ENGL 1113 Composition I

\*ENGL 1213 Composition II

**Geography 3 hours**

GEOG 1043 Introduction to Cultural Geography

**Humanities 3 hours**

**Select one course from the following:**

HUMN 2113 Humanities I

HUMN 2223 Humanities II

PHIL 1113 Introduction to Philosophy

PHIL 1143 Introduction to Business Ethics: Business Issues

**Mathematics 6 hours**

\*MATH 1513 College Algebra

\*MATH 1613 Plane Trigonometry

**Psychology 3 hours**

PSYC 1113 Introduction to Psychology

**Sciences 4 hours**

\*PHYS 1114 General Physics I

**Social Science 6 hours**

POLS 1113 American Federal Government

**and select one course from the following:**

HIST 1483 U.S. History 1492 to Civil War Era

HIST 1493 U.S. History Civil War Era to Present

**Specialized Course Requirements Credit Hours: 25**

**Aviation Sciences Technology 25 hours**

\*\*AVST 1113 Private Pilot Ground School

AVST 1222 Private Pilot Flight Lab

\*\*/\*AVST 1403 Advanced Theory of Flight

\*\*AVST 2113 History of Aviation

\*\*/\*AVST 2132 Instrument Flight Lab

\*\*AVST 2152 Multi-Engine Flight Lab

+\*\*/\*AVST 2162 Commercial Cross-Country Flight Lab

**or**

+\*AVST 2172 Commercial Multi-Engine Cross-Country Flight Lab

+\*\*/\*AVST 2182 Commercial Flight Lab

**or**

+\*AVST 2192 Commercial Multi-Engine Flight Lab

\*\*/\*AVST 2213 Instrument Pilot Ground School

\*\*/\*AVST 2313 Commercial Pilot Ground School

**Additional Recommended Courses**

(not required for degree)

\*\*AVST 1343 Introduction to Air Traffic Control

\*\*AVST 2253 Aviation Meteorology

\*\*AVST 1354 Air Traffic Control Tower Operations I

**Total Credit Hours: 62**

\*Course has prerequisite (See course description section of catalog).

+Students choosing AVST 2162 must select AVST 2182. Students choosing AVST 2172 must select AVST 2192.

\*\*May be required for an Airline Transport Pilot Certificate with Reduced Aeronautical Experience authorization. See TCC Aviation Academic Counselor for more information.

NOTE - All students who are not U.S. Citizens must meet all Transportation Safety Administration clearance requirements before being enrolled in the aviation courses.



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## **AVIATION SCIENCES TECHNOLOGY**

Aircraft Dispatch

Workforce Development Certificate

### **Program Description:**

The Aircraft Dispatch Certificate program is designed for students who desire to become a licensed FAA Aircraft Dispatcher. The program prepares students with the required FAA knowledge and training in order to test for the FAA Aircraft Dispatch Certificate.

Students must make a minimum grade of a "C" or better in each course certificate requirements prior to being awarded permission into the next sequential course.

### **Procedures for enrolling in Aviation Courses:**

1. All prospective flight students must meet with the TCC Aviation Academic Counselor at the Riverside Community Campus and Aviation Center. Contact: 918-595-3717
2. Potential Aircraft Dispatch students must provide the following documents to the TCC Aviation Academic Counselor. Proof of U.S. citizenship in form of:
  - i. An original birth certificate with raised seal documenting birth in the United States or one of its territories,
  - ii. A valid, unexpired United States passport,
  - iii. Original U.S. Naturalization Certificate with raised seal, Form N-550 or Form N-570,
  - iv. Original certification of birth abroad, Form FS-545 or Form DS-1350, or
  - v. Original Certificate of U.S. Citizenship, Form N-560 or Form N-561.

### **Degree Awarded: Certificate of Achievement**

#### **Aviation Sciences Technology 16 hours**

AVST 1113 Private Pilot Ground School

\*AVST 2213 Instrument Pilot Ground School

\*AVST 2253 Aviation Meteorology

\*AVST 2413 Aircraft Dispatch I

\*AVST 2454 Aircraft Dispatch II

#### **Total Credit Hours: 16**

\*Course has prerequisite (See course description section of catalog).



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## **BIOLOGY**

University Transfer Degree



### **University Transfer Degree Information:**

Students should work closely with an academic advisor each semester to make certain you are enrolled in the correct courses for your degree program, especially if you are planning to transfer to a four-year college or university. Students are encouraged to begin a dialogue with their intended transfer schools as early as possible. Early coordination between TCC academic advisors and advisors from selected four-year institutions can streamline the transfer process. It is the student's responsibility to ensure that he/she understands the program/admission/transfer requirements for the transfer school.

### **Program Description:**

Majoring in the biological sciences is a likely choice for the student who is curious about life, creative, highly motivated, and interested in solving biological problems. Biologists are involved in agriculture, forestry, wildlife management, environmental science and other fields that make the world a healthier and safer place to live. The biological sciences will also prepare the student for entry into one of a variety of

### **Degree Awarded: Associate in Science**

#### **For More Information Contact:**

Science and Mathematics Division: Metro: (918) 595-7334,  
Northeast: (918) 595-7542, Southeast: (918) 595-7742,  
West: (918) 595-8193

### **General Education Requirements Credit Hours: 26**

(Mathematics and Science requirements are satisfied through specialized courses.)

#### **Communication 9 hours**

COMM 1113 Public Speaking  
\*ENGL 1113 Composition I  
\*ENGL 1213 Composition II

#### **Humanities 6 Hours**

See the General Education Requirements page for course list.

#### **Social Science 6 hours**

POLS 1113 American Federal Government  
and select one course from the following:  
HIST 1483 U.S. History 1492 to Civil War Era  
HIST 1493 U.S. History Civil War Era to Present

#### **Recommended Electives 2 hours**

Students should select courses that will transfer to the college/university they plan to attend. See the University Transfer Degree Information above.

#### **Required Electives 3 hours**

Select one three-hour course from one of the following:  
Psychology, Social Sciences, Foreign Language,  
or Fine Arts (Art, Music, Theatre).

### **Specialized Course Requirements Credit Hours: 34**

#### **Biology 16 hours**

\*BIOL 1224 Introduction to Biology for Majors  
\*BIOL 1404 General Botany  
\*BIOL 1604 Zoology  
\*BIOL 2134 Human Anatomy

\*BIOL 2154 Human Physiology

\*BIOL 2164 Microbiology

#### **Chemistry 15 hours**

\*CHEM 1315 General Chemistry I

\*CHEM 1415 General Chemistry II

\*CHEM 2145 Organic Chemistry I

\*CHEM 2245 Organic Chemistry II

#### **Mathematics 3 hours**

\*MATH 1513 College Algebra

\*MATH 1613 Plane Trigonometry

\*MATH 1715 College Algebra and Trigonometry

\*MATH 2114 Analytic Geometry and Calculus I

\*MATH 2124 Analytic Geometry and Calculus II

\*MATH 2134 Analytic Geometry and Calculus III

#### **Additional Recommended Courses**

(Not required for degree. Three credit hours may be utilized for General Education Recommended Electives)

CSCI 1203 Computer Concepts and Applications

\*MATH 2193 Elementary Statistics

PSYC 1113 Introduction to Psychology

+\*PHYS 1114 General Physics I

+\*PHYS 1114 General Physics II

#### **Total Credit Hours: 60**

\*Course has prerequisite (See course description section of catalog).

+ Courses highly recommended for transfer to baccalaureate programs. See University Transfer Degree Information above. To receive an A.A. or A.S. Degree, students must demonstrate computer proficiency.





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## **BIOTECHNOLOGY**

University Transfer Degree

### **University Transfer Degree Information:**

Students should work closely with an academic advisor each semester to make certain you are enrolled in the correct courses for your degree program, especially if you are planning to transfer to a four-year college or university. Students are encouraged to begin a dialogue with their intended transfer schools as early as possible. Early coordination between TCC academic advisors and advisors from selected four-year institutions can streamline the transfer process. It is the student's responsibility to ensure that he/she understands the program/admission/transfer requirements for the transfer school.

### **Program Description:**

Students will be educated in the fundamentals of biology, chemistry and biochemistry with heavy emphasis on a wide range of laboratory procedures. The topics of lab safety, protein isolation and separation techniques, cell culture, molecular biology and recombinant DNA, and quality control will be addressed as they apply to both a manufacturing and research environment.

### **Degree Awarded: Associate in Science**

#### **For More Information Contact:**

Science and Mathematics Division, Southeast Campus  
(918) 595-7742

**Contact the Science and Mathematics Division or see an advisor for recommended course sequence.**

### **General Education Requirements Credit Hours: 24**

Mathematics, Science and Recommended Electives requirements are satisfied through specialized courses.

#### **English 6 hours**

- \*ENGL 1113 Composition I
- \*ENGL 1213 Composition II

#### **Social Science 6 hours**

POLS 1113 American Federal Government  
**and select one course from the following:**  
HIST 1483 U.S. History 1492 to Civil War Era  
HIST 1493 U.S. History Civil War Era to Present

#### **Humanities 6 hours**

See General Education Requirement page for complete list.  
PHIL 2153 Medical Ethics recommended.

#### **Mathematics 3 hours**

- \*MATH 1513 College Algebra

#### **Required Electives 3 hours**

Select one 3-hour course from one of the following:  
Psychology, Social Sciences, Foreign Language, or Fine Arts.  
(Art, Music, Theatre)

### **Specialized Course Requirements Credit Hours: 42**

#### **Biology 8 hours**

- BIOL 1224 Introduction to Biology for Majors
- \*BIOL 2164 Microbiology

#### **Biotechnology 24 hours**

- BIOT 1113 Introduction to Biotechnology
- \*BIOT 1315 Biotechnology Laboratory Methods & Techniques
- \*BIOT 1534 Cell Culture Techniques
- \*BIOT 2246 Molecular Biology and Techniques
- \*BIOT 2335 Proteomics and Instrumentation
- \*BIOT 2101 Biotechnology Quality Assurance

#### **Chemistry 10 hours**

- \*CHEM 1315 General Chemistry I
- \*CHEM 1415 General Chemistry II

#### **Additional Recommended Courses**

- (not required for degree)
- \*ENGL 2333 Technical Professional Writing
- \*MATH 2193 Elementary Statistics
- \*CHEM 2145 Organic Chemistry I
- \*CHEM 2353 Introduction to Biochemistry

### **Total Credit Hours: 66**

\*Course has prerequisite (See course description section of catalog).  
To receive an A. A. or A. S. Degree, students must demonstrate computer proficiency. See page 22 for complete requirements.



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## **BIOTECHNOLOGY**

Workforce Development Certificate

### **Program Description:**

This program is for students who desire to acquire or upgrade their skills in the area of biotechnology. It is assumed that students will have the required background in the biological sciences and chemistry prior to entering this program. Students will be trained in the practices and procedures of biotechnology as well as in the theory behind the procedures so that they will be prepared to extrapolate present knowledge to solve problems faced in the future. There will be a heavy emphasis on a wide range of laboratory procedures. The topics of lab safety, protein isolation and separation techniques, cell culture, molecular biology and recombinant DNA, and quality control will be addressed as they apply to both a manufacturing and research environment.

### **Degree Awarded: Certificate of Achievement**

#### **For More Information Contact:**

Science and Mathematics Division  
Southeast Campus (918) 595-7742

**Please contact the Science and Mathematics Division or see an advisor for recommended course sequence.**

#### **Biotechnology 26 hours**

- BIOT 1113 Introduction to Biotechnology
- \*BIOT 1315 Biotechnology Laboratory Methods and Techniques
- \*BIOT 1534 Cell Culture Techniques
- \*BIOT 2246 Molecular Biology and Techniques
- \*BIOT 2335 Proteomics and Instrumentation
- \*BIOT 2101 Biotechnology Quality Assurance
- \*BIOT 2512 Biotechnology Apprenticeship

#### **Total Credit Hours: 26**

\*Course has prerequisite (See course description section of catalog.)



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## **BUSINESS**

### Workforce Development Degree

#### **Program Description**

The Business program provides students with the skills and knowledge needed to work effectively in a variety of business settings. Each option provides students with a solid foundation in the area of business for their chosen field. In addition, students should develop an appreciation for the social, political and economic environment in which business operates.

#### **Degree Awarded: Associate in Applied Science**

#### **General Education Requirements Credit Hours: 18**

##### **Economics 3 hours**

ECON 2013 Principles of Macroeconomics

##### **English 6 hours**

\*ENGL 1113 Composition I

##### **and select 3 credit hours from the following courses:**

\*ENGL 1213 Composition II

\*ENGL 2333 Technical/Professional Writing

\*ENGL 2343 Business Communication I

##### **Philosophy/Psychology 3 hours**

\*\*PHIL/BUSN 1143 Introduction to Ethics: Business Issues

PSYC 1313 Human Relations

##### **Social Science 6 hours**

POLS 1113 American Federal Government

##### **and select one course from the following:**

HIST 1483 U.S. History 1492 to Civil War Era

HIST 1493 U.S. History Civil War Era to Present

#### **Specialized Course Requirements Credit Hours: 42**

##### **Core Business Courses 18 hours**

##### **Accounting 3 hours**

\*ACCT 2213 Financial Accounting

##### **Business 9 hours**

BUSN 1053 Introduction to Business

BUSN 1353 Business Mathematics

BUSN 2313 Business Law I

##### **Computer Information Systems 3 hours**

CSCI 1203 Computer Concepts and Applications

##### **Economics 3 hours**

ECON 1353 Personal Finance

#### **Choose from one of the following three (3) degree options:**

1) Administrative Careers

2) General Business

3) Health Care Business Operations

#### **1) Administrative Careers Option 24 hours**

The Administrative Career option provides a broad selection of understanding and skills necessary to succeed in the many diverse environments. Developing skills sets in accounting, business computers, and digital media as well as general education classes will prepare the student for today's workforce.

##### **Business 9 hours**

\*BUSN 2173 Skillbuilding and Document Processing

\*BUSN 2643 Procedures for Administrative Careers

\*BUSN 2683 Administrative Careers Internship

##### **Computer Information Systems 12 hours**

\*CSCI 2013 Word

\*CSCI 2033 Excel

\*CSYS 1033 Adobe Photoshop

\*CSYS 1043 Adobe Acrobat

##### **Controlled Electives 3 hours**

##### **Select one course from the following:**

ALDH 1323 Medical Terminology

MGMT 2363 Principles of Management

\*PLGL 2413 Law Office Systems and Procedure

#### **2) General Business Option 24 hours**

##### **Accounting 3 hours**

\*ACCT 2223 Managerial Accounting

##### **Business 3 hours**

\*BUSN 2213 Small Business Management

##### **Economics 3 hours**

ECON 2023 Principles of Microeconomics

##### **Management 3 hours**

MGMT 2363 Principles of Management

##### **Marketing 3 hours**

MKTG 2423 Principles of Marketing

##### **Computer Information Systems 3 hours**

##### **Select one course from the following:**

\*CSYS 2073 MS Office

\*CSCI 2033 Excel

General education requirements can be found at:  
[www.tulsacc.edu/gened](http://www.tulsacc.edu/gened)



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**BUSINESS**

Workforce Development Degree



**Controlled Electives 6 hours**

**Select two courses from the following:**

- BUSN 1153 Intro to Hospitality - Hotels, Restaurants and Tourism
- BUSN/COMM 2053 Intercultural Communication
- ECON 2123 International Economic Issues
- \*MGMT 2103 Workforce Development Internship
- MGMT 2123 Leadership Development
- MGMT 2323 Organizational Behavior
- \*MGMT 2353 Business Policy
- MKTG 2343 Customer Service

**3) Health Care Business Operations Option 24 hours**

This option is designed to prepare students for careers in health care business operations found in physicians' offices, managed practices, health insurance companies, hospitals, geriatric care facilities, public health entities, clinics, as well as many other health care-related organizations. Students will acquire the knowledge and skills necessary for employment and career building within the health care industry. Emphasis will be on health care business skills and accounting.

**Accounting 6 hours**

- ACCT 2533 Fundamentals of Health Care Accounting
- \*ACCT 2543 Management Accounting for Health Care Organizations

**Allied Health 3 hours**

- ALDH 1323 Medical Terminology

**Business 6 hours**

- BUSN 1173 Introduction to Health Care Business Operations
- \*BUSN 2483 Health Care Law

**Computer Information Systems 9 hours**

- CSYS 1022 MS Word for Medical Documents
- CSCI 1171 Introduction to Web Page Design
- \*CSCI 2033 Excel
- \*CSYS 2073 MS Office

**Total Credit Hours: 60**

\*Course has prerequisite (See course description section of catalog).

\*\*Students can enroll in either PHIL or BUSN if this option is chosen.





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## **BUSINESS**

Accounting, Business Administration, Business Education, Economics, Aviation Logistics, Management, and Management Information Systems Options  
University Transfer Degree

### **University Transfer Degree Information:**

Students should work closely with an academic advisor each semester to make certain you are enrolled in the correct courses for your degree program, especially if you are planning to transfer to a four-year college or university. Students are encouraged to begin a dialogue with their intended transfer schools as early as possible. Early coordination between TCC academic advisors and advisors from selected four-year institutions can streamline the transfer process. It is the student's responsibility to ensure that he/she understands the program/admission/transfer requirements for the transfer school.

### **Degree Awarded: Associate in Science**

#### **For More Information Contact:**

Business and Information Technology Divisions:  
Metro: (918) 595-7039, Southeast: (918) 595-7639,  
Northeast: (918) 595-7439, West: (918) 595-8033

### **General Education Requirements Credit Hours: 33**

#### **Communication 9 hours**

COMM 1113 Public Speaking  
\*ENGL 1113 Composition I  
\*ENGL 1213 Composition II

#### **Humanities\*\* 6 hours**

See the General Education Requirements page for complete list.

#### **Mathematics 3 hours**

\*MATH 1513 College Algebra

#### **Science\*\* 7 hours**

See the General Education Requirements page for complete list. One course must be a laboratory science (L).

#### **Social Science 6 hours**

POLS 1113 American Federal Government  
**and select one course from the following:**  
HIST 1483 U.S. History 1492 to Civil War Era  
HIST 1493 U.S. History Civil War Era to Present

#### **Recommended Electives\*\* 2 hours**

**\*\*Students should select courses that will transfer to the college/university they plan to attend. See the University Transfer Degree Information above.**

### **Specialized Course Requirements Credit Hours: 27-30**

#### **Core Courses 15 hours**

##### **Accounting 6 hours**

\*ACCT 2213 Financial Accounting  
\*ACCT 2223 Managerial Accounting

##### **Economics 6 hours**

ECON 2013 Principles of Macroeconomics  
ECON 2023 Principles of Microeconomics

#### **Computer Information Systems 3 hours**

CSCI 1203 Computer Concepts and Applications

### **Choose from one of the following three (3) degree options:**

- 1) Accounting, Business Administration, Business Education, Economic, and Management
- 2) Aviation Logistics
- 3) Management Information Systems

#### **1) Accounting, Business Administration, Business Education, Economics, and Management Options 12 hours**

##### **Controlled Electives\*\* 12 hours**

\*ACCT 2243 Payroll Administration  
\*ACCT 2393 Accounting Information Systems  
BUSN 1053 Introduction to Business  
\*BUSN 2213 Small Business Management  
BUSN 2313 Business Law I  
\*CSCI 2033 Excel  
\*CSYS 2073 MS Office  
MGMT 2123 Leadership Development  
\*MGMT 2323 Organizational Behavior  
MGMT 2363 Principles of Management  
\*MGMT 2453 Human Resources Management  
MKTG 2423 Principles of Marketing  
\*MATH 1613 Plane Trigonometry  
\*MATH 2193 Elementary Statistics  
\*MATH 2513 Finite Mathematics  
\*MATH 2523 Calculus for Business, Life, and Social Sciences  
**\*\*Students should select courses that will transfer to the college/university they plan to attend. See the University Transfer Degree Information above.**

#### **2) Aviation Logistics Option\*\* 12 hours**



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## **BUSINESS**

Accounting, Business Administration, Business Education, Economics, Aviation Logistics,  
Management, and Management Information Systems Options  
University Transfer Degree

### **Aviation Sciences Technology 6 hours**

AVST 1113 Private Pilot Ground School

AVST 2113 History of Aviation

### **Mathematics 3 hours**

\*MATH 2193 Elementary Statistics

### **Controlled Electives 3 hours**

BUSN 2503 Principles of Project Management

ENGT 1263 Productivity Planning and Inventory Control

**\*\*Students planning to seek a degree in the Aviation Logistics option must meet with the TCC aviation counselor at the Riverside Campus located at 801 East 91st Street.**

### **3) Management Information Systems Option 15 hours**

#### **Mathematics\*\* 3-6 hours**

\*MATH 2193 Elementary Statistics

\*MATH 2513 Finite Mathematics

\*MATH 2523 Calculus for Business, Life and Social Science

**\*\*Students should select courses that will transfer to the college/university they plan to attend. See the University Transfer Degree Information above.**

#### **Computer Information Systems\*\* 9-12 hours**

\*CSYS 1203 Introduction to Computer Programming

\*CSYS 1013 HTML and CSS

\*CSYS 2033 Scripting

\*CSYS 2463 PHP Programming

\*CSYS 2613 C# Programming

\*CSCI 2133 Introduction to Java

\*CSCI 2333 Systems Analysis and Design

\*CSCI 2473 C Language

#### **Total Credit Hours: 60-63**

\*Course has prerequisite (See course description section of catalog).

To receive an A.A. or A.S. Degree, students must demonstrate computer proficiency.





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# CARDIOVASCULAR TECHNOLOGY

Workforce Development Degree

## Program Description:

The Cardiovascular Technology (CVT) Associate in Applied Science degree is designed to prepare individuals with the knowledge, skills and behaviors that are required for the performance of a successful cardiovascular technologist. Cardiovascular technologists are health care professionals who, under the direction of a qualified physician, are concerned with the diagnosis and treatment of patients with congenital and acquired heart and blood vessel disease. The invasive cardiovascular technologist is a member of the cardiac catheterization team and assists with coronary angiography, percutaneous coronary intervention, right heart catheterizations, and the implantation of arrhythmia management devices. The studies performed in these areas are used by the cardiologist to evaluate patients for cardiovascular disease and develop comprehensive treatment plans.

## Procedure for Application:

1. Applications are available through [tulsacc.edu/healthscienceapply](http://tulsacc.edu/healthscienceapply). For more information, contact the Allied Health division office at (918) 595-7002.
2. All prospective Cardiovascular Technology students must complete an application for enrollment to the College and submit their high school transcripts, ACT scores, and previous college transcripts to the Metro Campus Registrar at 909 South Boston, Tulsa, OK 74119. Incomplete submissions will not be considered for admission into the Cardiovascular Technology Program. Acceptance to Tulsa Community College does not guarantee admission to the Cardiovascular Technology Program.
3. Submit completed program application form and required materials by March 1 to the Allied Health Services Division located in the Alfred M. Philips Building, room MP458, 909 South Boston, Tulsa, OK 74119.
4. A selection committee will review all applications and eligible applicants will be granted an interview with the Cardiovascular Technology Program admissions committee.
5. Qualified students will be ranked based on admission requirements and awarded admission to the program accordingly. All interviewed applicants will be notified by mail regarding their selection.
6. An extensive criminal background check, including but not limited to a seven-year county of residence nationwide criminal history check, national sexual predator screening, Social Security check, and Medicare/Medicaid fraud screening is required by all clinical affiliates. All Allied Health Service students participating in clinicals are required to complete these background checks and a drug screening test by the Allied Health Division office deadline prior to the first clinical rotation. Any positive findings may be subject to review by the clinical affiliates and could prevent the student from completing clinical requirements.

**Degree Awarded: Associate in Applied Science**

## For More Information Contact:

Allied Health Services Division, Metro: (918) 595-7002

**General Education Requirements Credit Hours: 21**

**Communication 9 hours**

COMM 1113 Public Speaking

\*ENGL 1113 Composition I

\*ENGL 1213 Composition II

**Mathematics 3 hours**

\*MATH 1473 Math for Critical Thinking

**Psychology 3 hours**

PSYC 1113 Introduction to Psychology

**Social Science 6 hours**

POLS 1113 American Federal Government

**and select one course from the following:**

HIST 1483 U.S. History 1492 to Civil War Era

HIST 1493 U.S. History Civil War Era to Present

**Specialized Course Requirements Credit Hours: 47**

**Core Courses 11 hours**

**Allied Health 3 hours**

+ALDH 1323 Medical Terminology

**Biology 4 hours**

+BIOL 1314 Human Anatomy and Physiology

**Chemistry 4 hours**

\*CHEM 1114 Principles of Chemistry

**Cardiovascular Technology Core Courses 20 hours**

\*CVTC 1003 Introduction to Cardiovascular Technology

\*CVTC 1013 Cardiovascular Anatomy and Physiology

\*CVTC 1023 Cardiovascular Pharmacology

\*CVTC 1034 Cardiovascular Skills Practicum

\*CVTC1044 Cardiovascular Pathophysiology

\*CVTC 1063 Clinical Practicum I

**Invasive Cardiology Emphasis 16 hours**

\*CVTC 2103 Invasive Procedures I

\*CVTC 2125 Clinical Practicum II

\*CVTC 2133 Invasive Procedures II

\*CVTC 2145 Clinical Practicum III

**Total Credit Hours: 68**

\*Course has prerequisite (See course description section of catalog).

+ Prerequisite for program admission.



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## **CHEMISTRY**

University Transfer Degree



### **University Transfer Degree Information:**

Students should work closely with an academic advisor each semester to make certain you are enrolled in the correct courses for your degree program, especially if you are planning to transfer to a four-year college or university. Students are encouraged to begin a dialogue with their intended transfer schools as early as possible. Early coordination between TCC academic advisors and advisors from selected four-year institutions can streamline the transfer process. It is the student's responsibility to ensure that he/she understands the program/admission/transfer requirements for the transfer school.

### **Program Description:**

Since chemistry deals with the composition, structure and interactions of matter, the study of chemistry is basic to all sciences. This degree prepares the student to enter the allied health and other medical fields such as nursing, pre-med, and medical laboratory technology. This degree also prepares the student to enter programs in aerospace, agriculture, biology, engineering, environmental science, and petroleum engineering.

### **Degree Awarded: Associate in Science**

#### **For More Information Contact:**

Science and Mathematics Division: Metro: (918) 595-7334,  
Northeast: (918) 595-7542, Southeast: (918) 595-7742,  
West: (918) 595-8193

#### **General Education Requirements Credit Hours: 27**

(Mathematics and Science Requirements are satisfied through specialized courses.)

#### **Communication 9 hours**

COMM 1113 Public Speaking  
\*ENGL 1113 Composition I  
\*ENGL 1213 Composition II

#### **Humanities 6 Hours**

See the General Education Requirements page for course list.

#### **Social Science 6 hours**

POLS 1113 American Federal Government  
**and select one course from the following:**  
HIST 1483 U.S. History 1492 to Civil War Era  
HIST 1493 U.S. History Civil War Era to Present

#### **Recommended Electives 3 hours**

#### **Required Electives 3 hours**

Select one three-hour course from one of the following:  
Psychology, Social Sciences, Foreign Language,  
or Fine Arts (Art, Music, Theatre).

### **Specialized Course Requirements Credit Hours: 33-37**

#### **Chemistry 20 hours**

\*CHEM 1315 General Chemistry I  
\*CHEM 1415 General Chemistry II  
\*CHEM 2145 Organic Chemistry I  
\*CHEM 2245 Organic Chemistry II

#### **Mathematics 5-9 hours**

\*MATH 1513 College Algebra  
\*MATH 1613 Plane Trigonometry  
\*MATH 1715 College Algebra and Trigonometry  
\*MATH 2114 Analytic Geometry and Calculus I  
\*MATH 2124 Analytic Geometry and Calculus II  
\*MATH 2134 Analytic Geometry and Calculus III

#### **Physics 8 hours**

\*PHYS 1114 General Physics I  
**and**  
\*PHYS 1214 General Physics II  
**or**  
\*PHYS 2034 Engineering Physics I  
**and**  
\*PHYS 2124 Engineering Physics II

#### **Total Credit Hours: 60-64**

\*Course has prerequisite (See course description section of catalog).  
To receive an A.A. or A.S. Degree, students must demonstrate computer proficiency.



## CHILD DEVELOPMENT

The Child Development academic program at Tulsa Community College is accredited by the National Association for the Education of Young Children Associate Degree program (NAEYC).

Child Development programs will prepare students for a variety of careers working with young children and their families. Whether students choose to pursue an Associate of Science degree (AS), Associate of Applied Science degree (AAS) or Certificate program, they will receive the skills and knowledge necessary to achieve their child development career goals.

Completion of the Associate of Science degree prepares graduates for jobs such as Early Head Start and Head Start teacher assistant, preschool teacher assistant, parent educator, family support professional, child care center administrator and state agency employee. The Associate of Science degree will transfer to four year institutions for students who wish to obtain a bachelor's degree and/or Oklahoma teacher certification.

The following Child Development academic programs are available:

### Associate of Science:

- Child and Family, OSU transfer
- Early Childhood Education, NSU transfer
- Early Childhood Education, OU transfer

### Associate of Applied Science:

- Center Director
- Early Childhood
- Infant Toddler

### Certificates:

- Child Development, CDA Preparation
- Child Development Certificate of Mastery
- Early Childhood Certificate of Mastery
- Infant Toddler Certificate of Mastery

### Before Enrolling in Child Development Courses:

1. Child Development students enrolling in a child development laboratory course must receive a clearance on a criminal background check and a sex offender registry at their own expense. Contact Kay Shelton at (918)595-8077 for background check information.
2. To ensure success in the Child Development program, students are *highly encouraged* to:
  - Formally declare the appropriate Child Development major by completing an online Child Development Major Declaration form at <https://tulsacc.wufoo.com/forms/child-development-program>
  - Schedule a phone or on-campus conference with a Child Development faculty member within 30 days after being admitted to the Child Development Program to review degree plan. Contact Kay Shelton at (918) 595-8077 or Lisa Leifield at (918) 595-8730 to schedule a phone or on-campus conference.

**For more information contact: Child Development Division, West Campus: (918) 595-8077**



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## **CHILD DEVELOPMENT**

Child and Family  
OSU Transfer Option

### **Program Description:**

This option is for students wanting a professional career working in community agencies and programs providing services to children and families. Career paths include child and parenting practitioner, family life educator, pre-medicine, pre-law, child policy and advocacy and other options. Students should consult the Oklahoma State University transfer catalog and carefully select courses that will meet the requirements for both the baccalaureate and associate degree programs. Suggested courses for Oklahoma State University are listed in the curriculum.

**NOTE:** Tulsa Community College's Child Development Academic Program requires that all child development students enrolling in a child development laboratory course obtain a criminal background check at their own expense. Students must fill out and submit a Background Student Information Form along with Background Check Consent Form to the West Campus Child Development Academic Program office (S 128) or West Campus Liberal Arts office (L 144).

### **Degree Awarded: Associate in Science**

#### **For More Information Contact:**

Liberal Arts Division, Child Development Division,  
West Campus: (918) 595-8077

### **General Education Requirements Credit Hours: 37**

#### **Communication 9 hours**

COMM 1113 Public Speaking  
\*ENGL 1113 Composition I  
\*ENGL 1213 Composition II

#### **Humanities 6 hours**

GEOG 1043 Introduction to Cultural Geography

#### **And select one course designated Humanities**

See General Education Requirement page for complete list.

#### **Mathematics 6 hours**

\*MATH 1513 College Algebra  
\*MATH 2193 Elementary Statistics

#### **Science 7 hours**

BIOL 1114 General Biology for Non-Majors  
BIOL 1383 Nutrition

#### **Psychology or Sociology 3 hours**

#### **Select one course from the following:**

PSYC 1113 Introduction to Psychology  
SOC 1113 Introduction to Sociology

#### **Social Science 6 hours**

POLS 1113 American Federal Government

#### **and select one course from the following:**

HIST 1483 U.S. History 1492 to Civil War Era  
HIST 1493 U.S. History Civil War Era to Present

### **Specialized Course Requirements Credit Hours: 26**

#### **^Child Development 20 hours**

CHLD 2003 Child Development in the Lifespan  
CHLD 2032 Early Field Experience in Teaching: Early Childhood  
CHLD 2203 Child and Family in the Community  
CHLD 2213 Children with Special Needs  
CHLD 2233 Physical Development and Creative Expression:  
Birth to Eight  
CHLD 2413 Professionalism & Leadership in Early Care &  
Education  
\*CHLD 2513 Programming for Infants and Toddlers

#### **Sociology 6 hours**

\*SOCI 2013 Marriage and Family  
\*SOCI/PSYC 2813 Human Sexuality

### **Total Credit Hours: 63**

\*Course has prerequisite (See course description section of TCC catalog).  
^Courses must be completed with a "C" or better.  
Physical education activity courses do not count toward the associate degree requirements in this curriculum.  
To receive an A.A. or A.S. Degree, students must demonstrate computer proficiency.





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## **CHILD DEVELOPMENT**

Early Childhood Education

NSU Transfer Option

### **Program Description:**

This option is for students who want to teach infants through third grade children. Students should consult the Northeastern State University transfer catalog and work with an academic counselor at TCC or NSU to carefully select courses that will meet the baccalaureate and associate degree programs. Students in this program should plan to take the Oklahoma General Education Test during the last semester at TCC. Upon completion of the four-year curriculum at NSU, students will be prepared to apply for an Oklahoma Teacher's Certificate in Early Childcare. A grade of "C" or better is required in the coursework for this curriculum and students must maintain a 2.75 GPA to graduate from Northeastern State University.

**NOTE:** Tulsa Community College's Child Development Academic Program requires that all child development students enrolling in a child development laboratory course obtain a criminal background check at their own expense. Students must fill out and submit a Background Student Information Form along with Background Check Consent Form to the West Campus Child Development Division office (L144).

### **Degree Awarded: Associate in Science**

#### **For more information, contact:**

Child Development Division, West Campus: (918) 595-8077

### **General Education Requirements Credit Hours: 38**

#### **Communication 9 hours**

COMM 1113 Public Speaking

\*ENGL 1113 Composition I

\*ENGL 1213 Composition II

#### **Humanities 6 hours**

\*ENGL 2413 Introduction to Literature

GEOG 2033 World Regional Geography

#### **Mathematics 3 hours**

\*MATH 1513 College Algebra

\*MATH 1473 Mathematics for Critical Thinking (may substitute)

#### **Psychology 3 hours**

PSYC 1113 Introduction to Psychology

#### **Science 11 hours**

BIOL 1114 General Biology for Non-Majors

BIOL 1383 Nutrition

\*PHSC 1114 General Physical Science

#### **Social Science 6 hours**

POLS 1113 American Federal Government

**and select one course from the following:**

HIST 1483 U.S. History 1492 to Civil War Era

HIST 1493 U.S. History Civil War Era to Present

### **Specialized Course Requirements Credit Hours: 23**

#### **^Child Development 14 hours**

CHLD 2003 Child Development in the Lifespan

CHLD 2032 Early Field Experience in Teaching: Early Childhood

\*CHLD 2103 Child Guidance

CHLD 2233 Physical Development and Creative Expression:  
Birth to Eight

\*CHLD 2513 Programming for Infants and Toddlers

#### **Computer Science 3 hours**

CSCI 1203 Computer Concepts and Applications

#### **Foreign Language 3 hours**

Select one 3 credit hour course in any foreign language.

#### **Sociology 3 hours**

SOCI 1113 Introduction to Sociology

#### **Total Credit Hours: 61**

\*Course has prerequisite (See course description section of catalog).

^Courses must be completed with a "C" or better.

Physical education activity courses do not count toward the associate degree requirements in this curriculum.

To receive an A.A. or A.S. Degree, students must demonstrate computer proficiency.



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## **CHILD DEVELOPMENT**

Early Childhood Education  
OU Transfer Option

### **Program Description:**

This option is for students who want to teach infants through third grade children. Students should consult the University of Oklahoma transfer catalog and work with an academic counselor at TCC or OU to carefully select courses that will meet the baccalaureate and associate degree programs. Students in this program should plan to take the Oklahoma General Education Test during the last semester at TCC. Upon completion of the four-year curriculum at OU, students will be prepared to apply for an Oklahoma Teacher's Certificate in Early Childhood Education. A grade of "C" or better is required in the coursework for this curriculum and students must maintain a 2.75 GPA to graduate from the University of Oklahoma.

**NOTE:** Tulsa Community College's Child Development Academic Program requires that all child development students enrolling in a child development laboratory course obtain a criminal background check at their own expense. Students must fill out and submit a Background Student Information Form along with Background Check Consent Form to the West Campus Child Development Division Office (L 144).

### **Degree Awarded: Associate in Science**

#### **For more information, contact:**

Child Development Division,  
West Campus: (918) 595-8077

### **General Education Requirements Credit Hours: 48-50**

#### **Communication 9 hours**

COMM 1113 Public Speaking  
\*ENGL 1113 Composition I  
\*ENGL 1213 Composition II

#### **Humanities 6 hours**

\*ENGL 2413 Introduction to Literature

#### **and select one course from the following:**

PHIL 1113 Introduction to Philosophy  
PHIL 1223 Religions of the World: The Western Tradition  
PHIL 2133 Introduction to Ethical Thinking  
PHIL 2153 Medical Ethics

#### **Mathematics 12 hours**

\*MATH 1473 Mathematics for Critical Thinking  
\*MATH 2423 Mathematics Concepts for Educators  
\*MATH 2553 Geometry and Measurements  
**and select one course from the following:**  
\*MATH 1483 Mathematics Functions and their Uses  
\*MATH 1513 College Algebra  
\*MATH 1613 Plane Trigonometry

#### **Science 12-14 hours**

BIOL 1114 General Biology for Non-Majors  
BIOL 1383 Nutrition  
\*PHSC 1114 General Physical Science

#### **And choose one course from the following:**

PHSC 2151 The Nature of Science  
\*BIOL 2213 Brain and Behavior

**May substitute 2000 level Lab Science course from the General Education list.**

#### **Social Science 6 hours**

POLS 1113 American Federal Government  
**and select one course from the following:**  
HIST 1483 U.S. History 1492 to Civil War Era  
HIST 1493 U.S. History Civil War Era to Present

#### **Psychology or Sociology 3 hours**

**Select one course from the following:**  
PSYC 1113 Introduction to Psychology  
SOCI 1113 Introduction to Sociology

### **Specialized Course Requirements Credit Hours: 13**

#### **^Child Development 11 hours**

+CHLD 2003 Child Development in the Lifespan  
+CHLD 2032 Early Field Experience in Teaching:  
Early Childhood  
+CHLD 2233 Physical Development and Creative Expression:  
Birth to Eight  
+CHLD 2513 Programming for Infants and Toddlers

#### **Physical Education 2 hours**

PHED 2212 First Aid

### **Total Credit Hours: 61-63**

\*Course has prerequisite (See course description section of catalog).

^Courses must be completed with a "C" or better.

+CHLD 2513 and CHLD 2003 for OU EDEC 3413, CHLD 2233 for OU EDEC 2203, CHLD 2032 for 2 hours of elective credit at OU.

Foreign Language: Students must meet the university requirement of two college-level courses in a single foreign language.

Physical education activity courses do not count toward the associate degree requirements in this curriculum.

To receive an A.A. or A.S. Degree, students must demonstrate computer proficiency. Students may take CSCI 1203 Computer Concepts and Applications or pass the TCC Proficiency examination.

General education requirements can be found at:  
[www.tulsacc.edu/gened](http://www.tulsacc.edu/gened)





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## **CHILD DEVELOPMENT**

Center Director, Early Childhood, and Infant Toddler Options  
Workforce Development Degree

### **Program Description:**

This degree is for students choosing a career in programs providing services to children and families. Students will complete 24 hours of General Education courses and 27 hours of Child Development courses and will select one of the following three options to complete their degree.

- 1. Center Director Option**
- 2. Early Childhood Option**
- 3. Infant Toddler Option**

**NOTE:** Tulsa Community College's Child Development Academic Program requires that all child development students enrolling in a child development laboratory course obtain a criminal background check at their own expense. Students must fill out and submit a Background Student Information Form along with Background Check Consent Form to the West Campus Child Development Division Office (L 144).

### **Degree Awarded: Associate in Applied Science**

#### **For More Information Contact:**

Child Development Division,  
West Campus: (918) 595-8077

### **General Education Requirements Credit Hours: 18**

#### **Biology 3 hours**

BIOL 1383 Nutrition

#### **English 6 hours**

\*ENGL 1113 Composition I

#### **and select one course from the following**

\*ENGL 1213 Composition II

\*ENGL 2333 Technical Professional Writing

#### **Social Science 6 hours**

POLS 1113 American Federal Government

#### **and select one course from the following:**

HIST 1483 U.S. History 1492 to Civil War Era

HIST 1493 U.S. History Civil War Era to Present

#### **Communication 3 hours**

#### **Select one course from the following:**

COMM 1113 Public Speaking

COMM 2103 Interpersonal Communication

### **Specialized Course Requirements Credit Hours: 42**

#### **^Child Development Core Courses 30 hours**

CHLD 2003 Child Development in the Lifespan

CHLD 2023 Child Development and Parenting

\*CHLD 2103 Child Guidance

CHLD 2203 Child and Family in the Community

CHLD 2213 Children with Special Needs

\*CHLD 2233 Physical Development and Creative Expression: Birth to Eight

\*CHLD 2243 Language and Cognitive Development: Birth to Eight

\*CHLD 2253 Child Development Practicum

\*CHLD 2263 Social and Emotional Development: Birth to Eight

CHLD 2613 Health, Safety and Nutrition: Birth to Eight

#### **1) Center Director Option 12 hours**

This option is for individuals who want to become a director of a child care center. It is also for those who are already employed as a director and who want to upgrade their knowledge and skills to perform their duties more effectively or to advance to a position of more responsibility. The course of study combines instruction in child development, business, management, and accounting to provide students the diverse training and preparation needed to be a center director. Students should check with the Oklahoma Department of Human Services Child Care Licensing Unit prior to enrollment in the program to see if they have the necessary work experience to qualify as a candidate for director of a small or large child care center.

#### **Accounting 3 hours**

ACCT 1003 Introduction to Accounting

#### **^Child Development 9 hours**

CHLD 2113 Introduction to Child Care Management

\*CHLD 2223 Early Childhood Foundations

CHLD 2413 Professionalism & Leadership in Early Care & Education

#### **2) Early Childhood Option 12 hours**

This degree plan is designed to prepare students to work in programs serving preschool children. The curriculum provides a framework for understanding the physical, social, emotional, and



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## **CHILD DEVELOPMENT**

Center Director, Early Childhood, and Infant Toddler Options  
Workforce Development Degree

intellectual development of young children. Students will learn to design and implement developmentally appropriate programs and activities for preschool children. Students gain practical knowledge and skills necessary for effective communication, teaching, guidance, and motivation of young children as well as for interacting with parents.

### **^Child Development 3 hours**

\*CHLD 2223 Early Childhood Foundations

### **Controlled Electives 9 hours**

Select courses from Controlled Electives list below.

### **3) Infant Toddler Option 12 hours**

This option is designed to prepare students to work with infants and toddlers. Courses focus on the social, emotional, physical, intellectual, and language development of children birth to three years of age. Students learn developmentally appropriate program design and activities for infants and toddlers. Students gain practical knowledge and skills necessary for effective communication, nurturing, and facilitating optimal development for infants and toddlers

### **^Child Development 3 hours**

\*CHLD 2513 Programming for Infants and Toddlers

### **Controlled Electives 9 hours**

Select courses from list below.

### **Controlled Electives**

ACCT 1003 Introduction to Accounting  
ASLE 1363 American Sign Language I  
ASLE 1413 Deaf Culture  
^ CHLD Select any courses  
BUSN 2213 Small Business Management  
BUSN 2313 Business Law I  
COMM 1113 Public Speaking  
COMM 2103 Interpersonal Communication  
CSCI/CSYS Select Any Courses  
HSVC 1113 Principles of Human Services  
HSVC 1213 Basic Counseling Services  
HUMN 2113 Humanities I  
HUMN 2223 Humanities II  
MUSC 1002 Fundamentals of Music  
MUSC 1113 Music Appreciation  
PHED 2212 First Aid  
PSYC 1113 Introduction to Psychology  
PSYC 1313 Human Relations  
\*PSYC 2023 Developmental Psychology  
\*PSYC 2523 Child Psychology  
SOC 1113 Introduction to Sociology

\*SOCI 2013 Marriage and Family  
SPAN Select Any Courses

### **Total Credit Hours: 60**

\*Course has prerequisite (See course description section of catalog).

^Course must be completed with a "C" or better.

Students who have completed CHLD 1102, CHLD 1202, CHLD 1302, and CHLD 1402 with a grade of "C" or better may apply these credits toward the Controlled Electives.

Students who have earned a CDA credential may be awarded nine credit hours of advanced standing credit that may be applied to the Controlled Electives. Students should contact the West Campus Enrollment Services office for more information.

Students wanting to transfer to a four-year college or university should contact a counselor in the West Campus Counseling Center.



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## **CHILD DEVELOPMENT**

Certificate of Mastery

Workforce Development Certificate

### **Program Description:**

This curriculum is designed for students who are currently working in child care to advance in their employment in either early childhood or infant-toddler or family child care programs. This curriculum addresses the national Child Development Associate (CDA) competencies and functional areas. As part of this curriculum plan, students complete the application and assessment process for the CDA National Credential administered by the Council for Early Childhood Professional Recognition, [www.cdacouncil.org](http://www.cdacouncil.org). Students must have completed 480 hours of experience working with children within the past three years to apply for the CDA Credential. Students who achieve a grade of "C" or better in the CDA preparation courses may apply the credits toward any TCC Child Development Associate in Applied Science degree as controlled electives.

**NOTE:** It is required that students selecting this option be currently working in child care as infant, toddler, preschool, or family child care home providers.

### **Degree Awarded: Certificate of Achievement**

#### **For More Information Contact:**

Child Development Division  
West Campus: (918) 595-8077

#### **Child Development 15 hours**

+CHLD 1101 CDA: Application and Assessment Preparation

\*+CHLD 1102 CDA: Competencies 1 & 4

\*+CHLD 1202 CDA: Competency 3

\*+CHLD 1302 CDA: Competency 2

\*+CHLD 1402 CDA: Competencies 5 & 6

#### **Select two courses from the following:**

^CHLD 2003 Child Development in the Lifespan

^CHLD 2023 Child Development and Parenting

\*^CHLD 2103 Child Guidance

^CHLD 2203 Child and Family in the Community

^CHLD 2213 Children with Special Needs

#### **English 3 hours**

\*ENGL 1113 Composition I

#### **Total Credit Hours: 18**

\*Course has prerequisite (See course description section of catalog).

^Course must be completed with a "C" or better.

+Course must be completed with a "C" or better to apply credits toward an AAS in Child Development as a Controlled Elective.



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## **CHILD DEVELOPMENT**

Infant/Toddler Certificate of Mastery

Workforce Development Certificate

### **Program Description:**

Oklahoma has more infants and toddlers needing licensed child care than there are available providers to care for them. This curriculum is designed to address Oklahoma's critical need for child care providers with specialized training and skills in infant and toddler development. As part of this curriculum plan, students complete three courses that address infant and toddler programming and care. This curriculum is intended to prepare students not currently working in child care for positions in programs serving infants and toddlers, or help current infant and toddler providers advance on their career ladder.

### **Degree Awarded: Certificate of Achievement**

#### **For More Information Contact:**

Child Development Division  
West Campus: (918) 595-8077

#### **Child Development 15 hours**

^CHLD 2233 Physical Development and Creative Expression:

Birth to Eight

^CHLD 2513 Programming for Infant Toddlers

#### **Select one course from the following:**

^CHLD 2243 Language and Cognitive Development: Birth to Eight

^CHLD 2263 Social and Emotional Development: Birth to Eight

#### **Select two courses from the following:**

^CHLD 2003 Child Development in the Life Span

^CHLD 2023 Child Development and Parenting

^\*CHLD 2103 Child Guidance

^CHLD 2203 Child and Family in the Community

^CHLD 2213 Children with Special Needs

#### **English 3 hours**

\*ENGL 1113 Composition I

#### **Total Credit Hours: 18**

\*Course has prerequisite (See course description section of catalog).

^Course must be completed with a "C" or better.





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## **CHILD DEVELOPMENT**

Credential Preparation (CDA) Option  
Workforce Development Certificate

### **Program Description:**

As part of this curriculum plan, students complete the application and assessment process for the Child Development Associate (CDA) National Credential administered by the Council for Early Childhood Professional Recognition. The program provides an introduction to the physical, social, emotional, and intellectual development of infants and young children. Courses address the CDA competencies and functional areas designed to prepare students for positions in either early childhood or infant-toddler or family child care programs. The Council has approved this CDA instructional program. Students must have completed 480 hours of experience working with children within the past 3 years to apply for the CDA Credential. Students who achieve a grade of "C" or better in these courses may apply the credits toward any TCC Child Development Associate in Applied Science degree as controlled electives. See the TCC Child Development Associate in Science degrees for credits that may be applied toward university transfer degrees.

**NOTE:** Tulsa Community College's Child Development Academic Program requires that all child development students enrolling in a child development laboratory course obtain a criminal background check at their own expense. Students must fill out and submit a Background Student Information Form along with Background Check Consent Form to the West Campus Child Development Office (L 144).

**NOTE:** Persons convicted of a crime should check with the Oklahoma State Department of Human Services Child Care Licensing Unit prior to enrollment in this program.

### **Degree Awarded: Certificate of Achievement**

#### **For More Information Contact:**

Child Development Division  
West Campus: (918) 595-8077

#### **Child Development 9 hours**

CHLD 1101 CDA: Application and Assessment Preparation

\*CHLD 1102 CDA: Competencies 1 & 4

\*CHLD 1202 CDA: Competency 3

\*CHLD 1302 CDA: Competency 2

\*CHLD 1402 CDA: Competencies 5 & 6

#### **Total Credit Hours: 9**

\*Course has prerequisite (See course description section of catalog).





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## **CHILD DEVELOPMENT**

Early Childhood Certificate of Mastery  
Workforce Development Certificate

### **Program Description:**

This curriculum prepares students not currently working in child care to qualify to gain employment in either early childhood or infant-toddler or family child care programs. This curriculum can also be chosen by students who are currently working in child care that do not elect to pursue the national CDA Credential as described in the Child Development Certificate of Mastery. As part of this curriculum plan, students complete three teaching methodology courses designed to give them hands-on experiences working with young children from birth to age eight.

### **Degree Awarded: Certificate of Achievement**

#### **For more information, contact:**

Child Development Division  
West Campus: (918) 595-8077

#### **^Child Development 15 hours**

+CHLD 2233 Physical Development and Creative Expression:

Birth to Eight

+ CHLD 2243 Language and Cognitive Development: Birth to

Eight

CHLD 2263 Social and Emotional Development: Birth to Eight

#### **And select two courses from the following:**

CHLD 2003 Child Development in the Life Span

CHLD 2023 Child Development and Parenting

\*CHLD 2103 Child Guidance

CHLD 2203 Child and Family in the Community

CHLD 2213 Children with Special Needs

#### **English 3 hours**

\*ENGL 1113 Composition I

### **Total Credit Hours: 18**

\*Course has prerequisite (See course description section of catalog.)

^Courses must be completed with a "C" or better.

+Students who complete these courses with a grade of "C" or better may apply the credits as controlled electives toward certain Child Development Associate in Applied Science degree options. Contact the division office for more information.



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# Communication Arts and Technologies

University Transfer Degree

## University Transfer Information:

Students should work closely with an academic advisor each semester to make certain you are enrolled in the correct courses for your degree program, especially if you are planning to transfer to a four-year college or university. Students are encouraged to begin a dialogue with their intended transfer schools as early as possible. Early coordination between TCC academic advisors and advisors from selected four-year institutions can streamline the transfer process. It is the student's responsibility to ensure that he/she understands the program/admission/transfer requirements for the transfer school.

## Program Outcomes:

The Communication Arts and Technology degree plan provides integrated learning in written, oral, relational, and digital communication. TCC graduates will encounter academic and professional opportunities requiring a multi-disciplinary background in communication arts and technologies. Graduates will:

- demonstrate ethical, critical, creative, and effective communication in written, oral, digital, mediated, and relational systems
- integrate practical skills and theory in one or more of these options: literature or creative writing; strategic communication or broadcast and electronic communication; oral communication or debate/forensics
- evaluate similarities and differences among the various communication arts and technologies.

## Students may select from one of the following degree options:

1. **Communication**
2. **English**
3. **Journalism and Mass Communications: Strategic Communication**
4. **Journalism and Mass Communications: Electronic and Broadcast Communication**

## Degree Awarded: Associate in Arts

### For More Information Contact:

Liberal Arts and Communication Division  
Metro: (918) 595-7064 • Northeast: (918) 595-7496  
Southeast: (918) 595-7694 • West: (918) 595-8079

## General Education Requirements Credit Hours: 34

(Three hours of General Education requirements are satisfied through the Specialized Course Requirements.)

### Communication 9 hours

COMM 1113 Public Speaking  
\*ENGL 1113 Composition I  
\*ENGL 1123 Composition II

### Humanities 6 Hours

See the General Education Requirements page for course list.

### Mathematics 3 hours

See the General Education Requirements page for complete list.

### Science 7 hours

See the General Education Requirements page for complete list. One course must be a laboratory science (L).

### Social Science 6 hours

POLS 1113 American Federal Government  
**and select one course from the following:**  
HIST 1483 U.S. History 1492 to Civil War Era  
HIST 1493 U.S. History Civil War Era to Present

## Required Electives 3 hours

Select one three-hour course from one of the following:  
Foreign Language, Fine Arts (Art, Music, Theatre), Psychology, or Social Sciences

## Specialized Course Requirements Credit Hours: 26-27

### Common Courses 9 hours

(Required for all options)  
COMM 2103 Interpersonal Communication  
\*ENGL 2413 Introduction to Literature  
JRMCM 1013 Introduction to Mass Communication

## Students should select from one of the following four degree options:

The Associate of Arts in Communication option prepares students for a Baccalaureate degree exploring oral communication and related fields of study. Students in this program can explore topics such as interpersonal communication, small group and intercultural; public communication and rhetoric; debate and forensics; non-verbal, and other topics of importance within academic and business settings. Graduates of the program enjoy careers in public relations, business management, public policy, law, and corporate training among other communication - intensive careers and fields of study.

### 1) Communication Option 17-18 hours

#### Select 15 hours from the following:

COMM 2043 Advanced Public Speaking  
COMM 2053 Intercultural Communication  
COMM 2073 Oral Interpretation  
\*COMM 2093 Business and Professional Communication  
COMM 2243 Small Group Communication  
COMM 2333 Forensics  
COMM 2343 Forensics Performance Competition

General education requirements can be found at:  
[www.tulsacc.edu/gened](http://www.tulsacc.edu/gened)



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## **Communication Arts and Technologies**

University Transfer Degree

COMM 2351 Forensics Competition Practicum  
COMM 2353 Forensics II  
COMM 2363 Forensics III  
COMM 2373 Forensics IV  
\*COMM 2503 Communication Theory  
COMM 2553 Introduction to Rhetorical Theory

### **Recommended Electives 2-3 hours**

CSCI 1203 is recommended for those students who have not met computer proficiency.

Foreign Language 3 hours

### **2) English Option 17-18 hours**

ENGL 2493 Creative Writing: Introduction

#### **And select two courses (6 hours) from the following:**

\*ENGL 2543 British Literature I  
\*ENGL 2653 British Literature II  
\*ENGL 2673 World Literature I  
\*ENGL 2683 World Literature II  
\*ENGL 2773 American Literature I  
\*ENGL 2883 American Literature II

#### **And select two courses (6 hours) from the following:**

ENGL 1083 Grammar and Mechanics  
\*ENGL 2333 Technical/Professional Writing  
\*ENGL 2343 Business Communication I  
\*ENGL 2383 Advanced Composition  
\*ENGL 2393 Introduction to Drama  
ENGL 2433 Novel Writing  
ENGL 2443 Poetry Writing  
ENGL 2453 Scriptwriting  
ENGL 2463 Nonfiction Writing  
ENGL 2473 Short Story Writing  
\*ENGL 2483 Novel Writing Workshop  
\*ENGL 2533 Short Story Writing Workshop  
\*ENGL 2543 British Literature I  
\*ENGL 2653 British Literature II  
\*ENGL 2663 The Novel  
\*ENGL 2673 World Literature I  
\*ENGL 2683 World Literature II  
\*ENGL 2773 American Literature I  
\*ENGL 2883 American Literature II  
ENGL 2893 Minority Literature

### **Recommended Electives 2-3 hours**

CSCI 1203 is recommended for those students who have not met computer proficiency.

Foreign Language 3 hours

### **3) JRMC: Strategic Communication Option 18 hours**

ENGL 1083 Grammar and Mechanics  
\*JRMC 1113 Writing for Mass Media  
\*JRMC 1123 News Writing and Reporting  
\*JRMC 2013 Principles of Advertising  
\*JRMC 2183 Principles of Public Relations  
\*JRMC 2023 Electronic Communication

### **4) JRMC: Electronic and Broadcast Communication Option 18 hours**

ENGL 1083 Grammar and Mechanics  
\*JRMC 1113 Writing for Mass Media  
JRMC 1103 Introduction to Broadcasting  
\*JRMC 1123 News Writing and Reporting  
\*JRMC 2173 Advanced Broadcasting  
\*JRMC 2573 Videography

### **Total Credit Hours: 60-61**

\*Course has prerequisite (See course description section of catalog).  
To receive an A.A. or A.S. degree, students must demonstrate computer proficiency.  
Physical education activity courses do not count toward the associate degree requirements in this curriculum.



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# COMPUTER INFORMATION SYSTEMS

University Transfer Degree

## University Transfer Degree Information:

Students should work closely with an academic advisor each semester to make certain you are enrolled in the correct courses for your degree program, especially if you are planning to transfer to a four-year college or university. Students are encouraged to begin a dialogue with their intended transfer schools as early as possible. Early coordination between TCC academic advisors and advisors from selected four-year institutions can streamline the transfer process. It is the student's responsibility to ensure that he/she understands the program/admission/transfer requirements for the transfer school.

## Degree Awarded: Associate in Science

### General Education Requirements Credit Hours: 37

#### Communication 9 hours

COMM 1113 Public Speaking

\*ENGL 1113 Composition I

\*ENGL 1213 Composition II

#### Humanities 6 hours

See the General Education Requirements page for the course list.

#### Mathematics 3 hours

See the General Education Requirements page for the course list.

#### Science 7 hours

See the General Education Requirements page for the course list.  
One course must be a laboratory science (L).

#### Social Science 6 hours

POLS 1113 American Federal Government

and select one course from the following:

HIST 1483 U.S. History 1492 to Civil War Era

HIST 1493 U.S. History Civil War Era to Present

#### Recommended Electives 3 hours

CSCI 1203 Computer Concepts and Applications

or

Select three (3) credit hours from the list of Liberal Arts and Science Electives

#### Required Electives 3 hours

Select one three-hour course from one of the following:

Psychology, Social Sciences, Foreign Language, or Fine Arts

(Art, Music, Theatre).

## Specialized Course Requirements Credit Hours: 23-24

### English\*\* 0-3 hours

\*ENGL 2333 Technical/Professional Writing

### Mathematics\*\* 0-12 hours

\*MATH 2114 Analytic Geometry and Calculus I

\*MATH 2124 Analytic Geometry and Calculus II

\*MATH 2134 Analytic Geometry and Calculus III

\*MATH 2193 Elementary Statistics

\*MATH 2653 Discrete Mathematics

### Computer Information Systems 12-24 hours

CSCI 1203 Computer Concepts and Applications

\*CSCI 1483 Introduction to UNIX (Linux)

\*CSCI 2133 Introduction to Java

CSCI 2283 Visual Basic

\*CSCI 2473 C Language

\*CSCI 2683 Data Structures

\*CSCI 2843 C++ Programming Language

\*CSYS 1203 Introduction to Computer Programming

\*CSYS 1013 HTML and CSS

\*CSYS 2413 Advanced Java

### Total Credit Hours: 60

\*Course has prerequisite and/or requisite (see course description section of catalog).

To receive an A.A. or A.S. Degree, students must demonstrate computer proficiency.

**\*\*Students should select courses that will transfer to the specific college/university they plan to attend. See the University Transfer Degree Information above.**

General education requirements can be found at:  
[www.tulsacc.edu/gened](http://www.tulsacc.edu/gened)





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## **CRIMINAL JUSTICE**

University Transfer Degree

### **University Transfer Degree Information:**

Students should work closely with an academic advisor each semester to make certain you are enrolled in the correct courses for your degree program, especially if you are planning to transfer to a four-year college or university. Students are encouraged to begin a dialogue with their intended transfer schools as early as possible. Early coordination between TCC academic advisors and advisors from selected four-year institutions can streamline the transfer process. It is the student's responsibility to ensure that he/she understands the program/admission/transfer requirements for the transfer school.

### **Program Description:**

Students who are interested in pursuing a course of study leading to a baccalaureate degree in Criminal Justice may complete the freshman and sophomore general education and prerequisite courses at TCC. Criminal justice agencies have various strenuous entrance, background and physical requirements. This program will assist in preparing students for employment in criminal justice if other criteria established by employer/agency are met.

### **Degree Awarded: Associate in Arts**

#### **For More Information Contact:**

Liberal Arts and Communication Division:  
Northeast: (918) 595-7089

### **General Education Requirements Credit Hours: 37**

#### **Communication 9 hours**

COMM 1113 Public Speaking  
\*ENGL 1113 Composition I  
\*ENGL 1213 Composition II

#### **Humanities 6 hours**

See the General Education Requirements page for the course list.

#### **Mathematics 3 hours**

See the General Education Requirements page for the course list.

#### **Science 7 hours**

See the General Education Requirements page for the course list.  
One course must be a laboratory science (L).

#### **Social Science 6 hours**

POLS 1113 American Federal Government  
and select one course from the following:  
HIST 1483 U.S. History 1492 to Civil War Era  
HIST 1493 U.S. History Civil War Era to Present

#### **Recommended Electives 3 hours**

CSCI 1203 Computer Concepts and Applications  
or

Select three (3) credit hours from the list of Liberal Arts and Science Electives

#### **Required Electives 3 hours**

Select one three-hour course from one of the following:  
Psychology, Social Sciences, Foreign Language, or Fine Arts  
(Art, Music, Theatre).

### **Specialized Course Requirements Credit Hours: 23-24**

#### **Criminal Justice 15 hours**

CRIM 1013 Introduction to Criminal Justice  
CRIM 2103 Criminal Evidence  
CRIM 2123 Criminal Law I  
\*CRIM 2143 Criminal Law II  
CRIM 2223 Criminal Procedures I

#### **Recommended Electives 8-9 hours**

CRIM 1213 Police Fundamentals  
CRIM 1253 Police Methods and Equipment  
\*CRIM 2023 Traffic Investigation  
CRIM 2063 Law Enforcement Supervision  
\*CRIM 2113 Criminalistics  
CRIM 2183 Police Equipment and Weapons  
CRIM 2213 Interrogation Techniques  
\*CRIM 2333 Criminal Procedures II

### **Total Credit Hours: 60**

\*Course has prerequisite (See course description section of catalog).  
To receive an A.A. or A.S. Degree, students must demonstrate computer proficiency.  
Physical education activity courses do not count toward the associate degree requirements in this curriculum.





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## **DENTAL HYGIENE**

Workforce Development Degree

### **Program Description:**

Dental Hygiene is an allied health program which emphasizes the prevention of oral health disease. The program prepares the individual to be a dental hygienist. The primary functions of the clinical dental hygienist are the assessment of patients' overall health, formulating evidence-based patient centered treatment care plans, and performing the clinical procedures outlined in the individual treatment care plans. Additional roles of the dental hygienist include participating in community health programs, research, sales and education. The dental hygiene student will perform procedures which include, but are not limited to: exposing radiographs; applying cavity-preventive agents; providing oral health education; administering local anesthetics, nitrous oxide and antimicrobial agents; performing oral prophylaxis, periodontal therapy, and risk assessments. The graduate will receive an Associate Degree in Applied Science and will be eligible to take national, regional, and state licensing examinations.

Individuals who have:

1. been addicted to narcotics or alcohol;
  2. received treatment for the habitual use of narcotics or alcohol;
  3. been convicted for a narcotics-related offense;
  4. been reprimanded, disciplined, disqualified or suspended from the practice of dentistry or another health-related field;
  5. been a patient in a sanitarium or institution for the treatment of mental illness;
  6. been arrested/convicted of any felony offense, including a deferred sentence
- may not be eligible for dental hygiene licensure in the state of Oklahoma. If any of these circumstances exist, it is advised that the prospective student is advised to discuss this with the Oklahoma Board of Dentistry, (405) 524-3592, prior to making application to the program.

**Accreditation:** The Dental Hygiene Program is accredited by the Commission on Dental Accreditation, Chicago, Illinois.

### **Procedures for Application:**

1. Applications are available through [tulsacc.edu/healthscienceapply](http://tulsacc.edu/healthscienceapply). For more information, contact the Allied Health division office at (918) 595-7002.
2. Submit ALL materials by the March 1st deadline to the Allied Health Services Division, room MP458, 909 South Boston, Tulsa, OK 74119.
3. All prospective Dental Hygiene students must complete an application for enrollment to the College, submit their high school transcripts, ACT scores and previous college transcripts to the Metro Campus Registrar at 909 South Boston, Tulsa, OK 74119. Incomplete submissions will not be considered for admission into the Dental Hygiene program.
4. Acceptance to Tulsa Community College does not guarantee admission to the Dental Hygiene program.
5. BIOL 1314 Human Anatomy and Physiology and CHEM 1134 General, Organic, and Biological Chemistry must be completed the semester before the application deadline. The other prerequisite coursework must be completed before the end of the spring term in which the application is reviewed.

#### **These prerequisites are:**

BIOL 1314 Human Anatomy and Physiology  
 \*BIOL 1324 Basic Microbiology  
 CHEM 1134 General, Organic, and Biological Chemistry  
 ENGL 1113 Composition I  
 HIST 1483 U.S. History 1492 to Civil War Era

**or**

HIST 1493 U.S. History Civil War Era to Present  
 POLS 1113 American Federal Government

6. Eligible applicants to be interviewed for consideration for

admission into the Dental Hygiene program will be notified through their email. All interviewed applicants will also be notified through their TCC email regarding their selection status.

7. In order to enroll in courses that include a clinical component and are part of the program degree plan, students must receive clearance on a criminal background check, including sex offender registry. Potential students need to be aware that drug testing is a requirement for participation in clinical components.

### **Degree Awarded: Associate in Applied Science**

#### **For More Information Contact:**

Allied Health Services Division at Metro Campus: (918) 595-7002

### **General Education Requirements Credit Hours: 30**

#### **Biology 8 hours**

°+BIOL 1314 Human Anatomy and Physiology

°+BIOL 1324 Basic Microbiology

#### **Chemistry 4 hours**

°+\*CHEM 1134 General, Organic, and Biological Chemistry

#### **Communication 6 hours**

° COMM 1113 Public Speaking

+\*ENGL 1113 Composition I



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## **DENTAL HYGIENE**

Workforce Development Degree

### **Psychology 3 hours**

°PSYC 1113 Introduction to Psychology

### **Social Science 6 hours**

+POLS 1113 American Federal Government

**and select one course from the following:**

+HIST 1483 U.S. History 1492 to Civil War Era

+HIST 1493 U.S. History Civil War Era to Present

### **Sociology 3 hours**

°SOCL 1113 Introduction to Sociology

### **Specialized Course Requirements Credit Hours: 55**

#### **Dental Hygiene 55 hours**

°\*DHYG 1012 Dental and Oral Anatomy

°\*DHYG 1022 Head and Neck Anatomy

°\*DHYG 1302 Oral Embryology and Histology

°\*DHYG 1333 Pathology, Etiology, and Immunology

°\*DHYG 1353 Periodontology

°\*DHYG 1363 Dental Hygiene Theory I

°\*DHYG 1373 Dental Hygiene Theory II

°\*DHYG 1384 Clinical Dental Hygiene I

°\*DHYG 1394 Clinical Dental Hygiene II

°\*DHYG 1412 Dental Radiography Foundation

°\*DHYG 1421 Dental Radiography Techniques

°\*DHYG 1512 Dental Pain Management

°\*DHYG 1532 Dental Hygiene Pharmacology

°\*DHYG 2022 Special Needs / Geriatrics

°\*DHYG 2312 Community Dental Health I

°\*DHYG 2321 Community Dental Health II

°\*DHYG 2343 Dental Materials Techniques and Supportive Services

°\*DHYG 2362 Dental Hygiene Theory III

°\*DHYG 2382 Ethics, Law and Dental Practice Management

°\*DHYG 2385 Clinical Dental Hygiene III

°\*DHYG 2395 Clinical Dental Hygiene IV

### **Total Credit Hours: 85**

\*Course has prerequisite (See course description section of catalog).

+Prerequisite to Dental Hygiene Curriculum schedule. (21 hours).

°Course must be completed with a "C" or above.

NOTE: Higher level course of the same subject matter may be substituted for the required prerequisites. For example: BIOL 2134 Human Anatomy and BIOL 2154 Human Physiology may be substituted for BIOL 1314 Human Anatomy and Physiology



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# DIAGNOSTIC MEDICAL SONOGRAPHY

Workforce Development Degree

## Program Description:

The DMS AAS degree program is designed to prepare students with the necessary skills to be employed as a sonographer in a variety of clinical settings. Instructional methodologies will be based on the latest technology and will reflect current professional practice standards, and once eligible the student will sit for the American Registry of Diagnostic Medical Sonography examinations.

The field of diagnostic ultrasound, or medical sonography, utilizes high frequency sound waves to image and evaluate organs and soft tissue structures of the body. The diagnostic medical sonographer is a skilled person qualified by academic and clinical education to perform sonographic examinations under the supervision of a qualified physician. The sonographer performs a variety of diagnostic examinations to include evaluations of the brain, abdomen, peripheral blood vessels, and studies of the pregnant and nonpregnant female patient, and has a unique and vital role in the diagnostic process. The profession continues to offer many excellent opportunities for employment.

## Procedure for Application:

1. Applications are available through [tulsacc.edu/healthscienceapply](http://tulsacc.edu/healthscienceapply). For more information, contact the Allied Health division office at (918) 595-7002.
2. Submit completed program application form and required materials by April 1 to the Allied Health Services Division located in the Alfred M. Philips Building, room MP458, 909 South Boston, Tulsa, OK 74119.
3. All prospective Diagnostic Medical Sonography program students must complete an application for enrollment to the College, submit their high school transcripts, ACT scores and previous college transcripts to the Metro Campus Registrar at 909 South Boston, Tulsa, OK 74119. Incomplete submissions will not be considered for admission into the Diagnostic Medical Sonography Program.
4. Acceptance to Tulsa Community College does not guarantee admission to the Diagnostic Medical Sonography Program.
5. All program prerequisites must be completed by the end of the spring semester in which the student is applying. These prerequisites are:
  - BIOL 1314 Anatomy and Physiology
  - \*ENGL 1113 Composition I
  - \*MATH 1513 College Algebra
  - ALDH 1013 Applied Medical Physics or \*PHYS 1114 General Physics I
6. Eligible applicants to be interviewed for consideration for admission into the Diagnostic Medical Sonography Program will be notified by email. All interviewed applicants will be notified by email regarding their selection status.
7. In order to enroll in courses that include a clinical component and are part of the program degree plan, students must receive clearance on a criminal background check, including sex offender registry. Potential students need to be aware that drug testing and immunization clearance is a requirement for participation in all clinical components.

**Degree Awarded: Associate in Applied Science**

## For More Information Contact:

The Allied Health Services Division, 918-595-7002

**General Education Requirements Credit Hours: 18**

### Communication 6 hours

COMM 1113 Public Speaking

+\*ENGL 1113 Composition I

### Mathematics 3 hours

+\*MATH 1513 College Algebra

### Psychology 3 hours

**Select one course from the following:**

PSYC 1113 Introduction to Psychology

PSYC 2323 Conflict Resolution

### Social Science 6 hours

POLS 1113 American Federal Government

**and select one course from the following:**

HIST 1483 U.S. History 1492 to Civil War Era

HIST 1493 U.S. History Civil War Era to Present

**Specialized Course Requirements Credit Hours: 54-55**

### Biology 4 hours

+BIOL 1314 Human Anatomy and Physiology

### Diagnostic Medical Sonography 44 hours

^\*DMS 1002 Introduction to Diagnostic Medical Sonography

^\*DMS 1103 Acoustical Physics and Instrumentation I

^\*DMS 1213 Acoustical Physics and Instrumentation II

^\*DMS 1223 Abdominal Sonography I

^\*DMS 1233 OB/GYN Sonography I

^\*DMS 1242 Sonography Clinical Practice I

^\*DMS 1252 Sonography Clinical Practice II

^\*DMS 1263 Neurosonography and Small Parts Sonography

^\*DMS 2035 Sonography Clinical Practice III

^\*DMS 2123 Abdominal Sonography II

^\*DMS 2131 Ultrasound Seminar

^\*DMS 2133 OB/GYN Sonography II

^\*DMS 2148 Sonography Clinical Practice IV

^\*DMS 2153 Vascular Ultrasound

### Medical Terminology 3

ALDH 1323 Medical Terminology

### Physics 3-4 hours

+ALDH 1013 Applied Medical Physics or

+PHYS 1114 General Physics I

### Total Credit Hours: 72-73

\*Course has prerequisite (See course description section of catalog).

^Course must be completed with a "C" or above

+ Prerequisite to Diagnostic Medical Sonography Program.





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## **DIGITAL MEDIA**

Workforce Development Degree



### **Program Description:**

Digital Media is an interdisciplinary area of study combining computer science, art, video, music, journalism/mass communications, and design. Through the Center for Creativity, digital media specialists prepare for careers in graphic design, advertising, print media, digital photography, animation, digital character development, virtual cinematography, digital video, special effects, print and online reporting, television broadcast production, interactive media, web site development, online instructional technologies and business related to digital arts and entertainment.

### **Degree Awarded: Associate in Applied Science**

#### **For More Information Contact:**

Visual and Performing Arts Division,  
Southeast Campus: 918-595-7752

### **General Education Requirements Credit Hours: 18-19**

#### **English 6 hours**

\*ENGL 1113 Composition I

#### **and select one course from the following:**

\*ENGL 1213 Composition II

\*ENGL 2333 Technical/ Professional Writing

\*ENGL 2343 Business Communication I

#### **Mathematics 3-4 hours**

\*MATH 1454 Technical Mathematics

\*MATH 1513 College Algebra

#### **Social Science 6 hours**

POLS 1113 American Federal Government

#### **and select one course from the following:**

HIST 1483 U.S. History 1492 to Civil War Era

HIST 1493 US History Civil War Era to Present

#### **Communication 3 hours**

#### **Select one course from the following:**

COMM 1113 Public Speaking

COMM 2103 Interpersonal Communications

### **Specialized Course Requirements Credit Hours: 49-50**

#### **Core Courses 16 hours (required for all options)**

#### **Computer Information Systems 16 hours**

CSCI 1203 Computer Concepts and Applications

CSYS 1033 Adobe Photoshop

\*CSYS 1043 Adobe Acrobat

\*CSYS 1073 Advanced Photoshop

CSYS 1211 Introduction to Mac OS

CSYS 2763 Digital Photography

### **Select from one of the following six (6) degree options**

1) Adobe Master Design Specialist

2) Broadcast Production Specialist

3) Digital Media Specialist

4) Multimedia Reporting Specialist

5) Radio Production Specialist

6) Web Design Specialist

#### **1) Adobe Master Design Specialist Option 34 hours**

\*ART 2413 Typography I

\*ART 2423 Graphic Design I

\*CSCI 1283 2D Animation

\*CSYS 1013 HTML and CSS

\*CSYS 1153 Adobe Dreamweaver

\*CSYS 2673 Adobe Illustrator

\*CSYS 2683 Adobe InDesign

\*CSYS 2713 Adobe Premiere

\*CSYS 2733 Adobe Audition

\*CSYS 2753 Adobe After Effects

\*CSCI 2972 Digital Media Capstone

\*CSCI 2982 Digital Media Internship

#### **2) Broadcast Production Specialist Option 33 hours**

JRMC 1103 Introduction to Broadcasting

\*JRMC 1713 Voice and Articulation

JRMC 2103 Principles of Broadcasting and Electronic Media

\*JRMC 2143 Studio Production

\*JRMC 2173 Advanced Broadcasting

\*CSCI/JRMC 2263 Digital Video I Final Cut Pro

\*CSCI/JRMC 2273 Digital Video II Final Cut Pro

\*JRMC 2373 Broadcast Laboratory

\*JRMC 2433 Field Production

\*CSYS/JRMC 2573 Videography

\*JRMC 2973 Journalism and Mass Communication Internship I



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## **DIGITAL MEDIA**

Workforce Development Degree

### **3) Digital Media Specialist Option 34 hours**

- \*ART 2413 Typography I
- \*ART 2423 Graphic Design I
- \*CSCI 1123 3D Graphics Using Lightwave
- \*CSCI 1283 2D Animation
- \*CSCI 1293 3D Animation Using Lightwave
- \*CSCI/JRMC 2263 Digital Video I / Final Cut Pro
- \*CSCI/JRMC 2273 Digital Video II / Final Cut Pro
- \*CSYS/JRMC 2573 Videography
- \*CSYS 2733 Adobe Audition
- \*CSYS 2753 Adobe After Effects
- \*CSCI 2972 Digital Media Capstone
- \*CSCI 2982 Digital Media Internship

### **4) Multimedia Reporting Specialist Option 33 hours**

- JRMC 1103 Introduction to Broadcasting
- \*JRMC 1113 Writing for the Mass Media
- \*JRMC 1123 News Writing and Reporting
- \*JRMC 1713 Voice and Articulation
- \*JRMC 2023 Electronic Communication
- JRMC 2103 Principles of Broadcasting and Electronic Media
- \*JRMC 2173 Advanced Broadcasting
- \*CSCI/JRMC 2263 Digital Video I/Final Cut Pro
- \*JRMC 2433 Field Production
- \*CSYS/JRMC 2573 Videography
- \*JRMC 2973 Journalism and Mass Communication Internship I

### **5) Radio Production Specialist Option 33 hours**

- \*CSYS 2733 Adobe Audition
- JRMC 1103 Introduction to Broadcasting
- \*JRMC 1113 Writing for the Mass Media
- \*JRMC 1613 Radio Production I
- \*JRMC 1713 Voice and Articulation
- JRMC 2103 Principles of Broadcasting and Electronic Media
- \*JRMC 2173 Advanced Broadcasting
- \*JRMC 2623 Radio Laboratory
- \*JRMC 2633 Radio Announcing
- \*JRMC 2973 Journalism and Mass Communication Internship I
- MKTG 2423 Principles of Marketing

### **6) Web Design Specialist Option 34 hours**

- \*ART 2413 Typography I
- \*ART 2423 Graphic Design
- \*CSCI 1283 2D Animation
- \*CSYS 1013 HTML and CSS
- \*CSYS 1153 Adobe Dreamweaver
- \*CSYS 2033 Scripting
- \*CSYS 2463 PHP Programming
- \*CSYS 2603 Mobile Web Design
- \*CSYS 2673 Adobe Illustrator
- \*CSYS 2713 Adobe Premiere
- \*CSCI 2972 Digital Media Capstone
- \*CSCI 2982 Digital Media Internship

### **Total Credit Hours: 67-69**

\*Course has prerequisite (see course description section of catalog).





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## **DIGITAL MEDIA**

### Workforce Development Certificate

#### **Program Description:**

Digital Media is an interdisciplinary area of study combining computer science, art, video, music, journalism/mass communications, and design. Through the Center for Creativity, digital media specialists prepare for careers in graphic design, advertising, print media, digital photography, animation, digital character development, virtual cinematography, digital video, special effects, print and online reporting, television broadcast production, interactive media, web site development, online instructional technologies and business related to digital arts and entertainment.

#### **Degree Awarded: Certificate of Achievement**

#### **For More information Contact:**

Visual and Performing Arts Division,  
Southeast Campus: 918-595-7752

#### **Computer Information Systems 16 hours**

CSCI 1203 Computer Concepts and Applications

CSYS 1033 Adobe Photoshop

\*CSYS 1043 Adobe Acrobat

\*CSYS 1073 Advanced Photoshop

CSYS 1211 Introduction to Mac OS

\*CSYS 2763 Digital Photography

#### **Controlled Electives 6 hours**

\*ART 2423 Graphic Design

\*CSCI 1283 2D Graphics

\*CSYS 1013 HTML and CSS

\*CSYS 1153 Adobe Dreamweaver

\*CSYS 2673 Adobe Illustrator

\*CSYS 2683 Adobe InDesign

\*CSYS 2573/JRMC 2573 Videography

JRMC 1103 Introduction to Broadcasting

\*JRMC 1113 Writing for the Mass Media

\*JRMC 1613 Radio Production I

#### **Total Credit Hours: 22**

\*Course has prerequisite (See course description section of catalog).



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## **PRE-EDUCATION PROGRAMS**

### **Elementary and Secondary Education**

#### **General Information for Education Majors:**

Tulsa Community College provides the first two years of the four-year degree required to enter the career of teaching in an Oklahoma public/private common school. The Pre-K through grade 12 certification is overseen by the Oklahoma State Department of Education whose definition of grade certification is important to determine your program of study. Early Childhood is defined as Pre-K through 3rd grade, Elementary is grades 3 through 8 and Secondary encompasses both middle school and high school or grades 6-12.

After an Education major has completed all required general education courses, he/she must take the OGET (Oklahoma General Education Test), prior to admission to a College of Teacher Education at a four-year university. Visit with a TCC Advisement Office on any campus for information about the OGET.

National Council for Accreditation of Teacher Education (NCATE) is the national accrediting association for teacher education. The Council requires that students in teacher education programs at four-year universities complete a portfolio regarding experiences they have had in the classroom and/or laboratory settings. Though each four-year university's requirements are similar, it is best to check with your transfer university about their specific requirements. Information about portfolios will be discussed in CHLD 2042 or 2052 Early Field Experience in Teaching, required for all Pre-Education majors.

Before enrolling in CHLD 2042 or 2052 students must pass a Criminal Background Investigation. Students are responsible for obtaining the Criminal Background Investigation packet from the Child Development Division Office at West Campus, following the instructions provided within the packet, and paying the required fee. Once the Child Development Division at West Campus has been notified that a student has received Criminal Background and Sex Offender clearance, the division office will notify the student by mail that he/she may enroll in CHLD 2042 or 2052.

To receive an A.A. or A.S. Degree, students must demonstrate computer proficiency.

Prior to graduation from a four-year university, students majoring in Elementary and Secondary Education must complete with a "C" or better a minimum of :

- 12 hours of Communication Arts,
- 12 hours of Social Science,
- 12 hours of Math,
- 12 hours of Science, and
- Demonstrate proficiency in a language other than English.

Students should work with an academic counselor at TCC's West Campus to carefully select courses that will meet the requirements of both the TCC associate degree program and the baccalaureate program at the four-year university you plan to attend.

#### **For more information, contact:**

Child Development Division, West Campus: 918-595-8077

***See Child Development for Early Childhood Education degrees.***



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## Elementary and Secondary Education

University Transfer Degree

### University Transfer Degree Information:

Students should work closely with an academic advisor each semester to make certain you are enrolled in the correct courses for your degree program, especially if you are planning to transfer to a four-year college or university. Students are encouraged to begin a dialogue with their intended transfer schools as early as possible. Early coordination between TCC academic advisors and advisors from selected four-year institutions can streamline the transfer process. It is the student's responsibility to ensure that he/she understands the program/admission/transfer requirements for the transfer school.

### Degree Awarded: Associate in Arts

### General Education Requirements Credit Hours: 35

#### Communication 9 hours

COMM 1113 Public Speaking  
\*ENGL 1113 Composition I  
\*ENGL 1213 Composition II

#### Humanities 6 hours

See the General Education Requirements for course list.

#### Mathematics 3 hours

See the General Education Requirements to select 3 hours of Mathematics.

#### Psychology 3 hours

PSYC 1113 Introduction to Psychology

#### Science 8 hours

BIOL 1114 General Biology for Non-Majors  
\*PHSC 1114 General Physical Science  
(Courses in Physics, Chemistry, Zoology may be substituted. One of the courses must have a lab.)

#### Social Science 6 hours

POLS 1113 American Federal Government  
**and select one course from the following:**  
HIST 1483 U.S. History 1492 to Civil War Era  
HIST 1493 U.S. History Civil War Era to Present

### Specialized Course Requirements Credit Hours: 25

#### Child Development 2 hours

°CHLD 2042 Early Field Experience in Teaching - Elementary  
**or**  
°CHLD 2052 Early Field Experience in Teaching - Secondary

#### Recommended Electives 23 hours

The courses below are recommended. Students should consult the specific college/university to which they plan to transfer when selecting courses. At least 12 hours must come from courses designated as Liberal Arts & Sciences courses.

ART 1113 Art Appreciation  
BIOL 1383 Nutrition  
\*CHEM 1114 Principles of Chemistry

\*CHEM 1315 General Chemistry I  
CSCI 1203 Computer Concepts and Applications  
ENGL 1123 Writing for the OGET  
\*ENGL 2383 Advanced Composition  
\*ENGL 2413 Introduction to Literature  
\*ENGL 2683 World Literature II  
GEOG 1043 Introduction to Cultural Geography  
GEOG 2033 World Regional Geography  
HIST 1053 Ancient and Medieval Western Civilization  
HIST 2523 History of Oklahoma  
\*MATH 1473 Mathematics for Critical Thinking  
\*MATH 1483 Mathematical Functions and Their Uses  
\*MATH 1513 College Algebra  
\*MATH 2553 Geometry and Measurement  
PHED 2212 First Aid  
PHED 2603 Total Wellness  
PHYS 1014 Conceptual Physics  
PHYS 1114 General Physics I  
\*PSYC 2023 Developmental Psychology  
SOC 1113 Introduction to Sociology  
\*\*3-6 credit hours from one Foreign Language.  
3 credit hours from any COMM, ENGL, GEOG, HIST, SOCI, POLS, PSYC, or ECON course.

### Total Credit Hours: 60

\*Course has prerequisite (See course description section of catalog).  
\*\*Check catalog for advanced standing credit. Language proficiency at the novice high level required. Call (918) 595-7851 for proficiency certification.  
Note: Foreign Language is necessary and the number of hours will vary depending on the transfer university requirements.  
° Background investigation required.  
Physical education activity courses do not count toward the associate degree requirements in this curriculum.  
To receive an A.A. or A.S. Degree, students must demonstrate computer proficiency.

General education requirements can be found at:  
[www.tulsacc.edu/gened](http://www.tulsacc.edu/gened)



**TULSA  
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## **PHYSICAL EDUCATION**

University Transfer Degree

### **University Transfer Degree Information:**

Students should work closely with an academic advisor each semester to make certain you are enrolled in the correct courses for your degree program, especially if you are planning to transfer to a four-year college or university. Students are encouraged to begin a dialogue with their intended transfer schools as early as possible. Early coordination between TCC academic advisors and advisors from selected four-year institutions can streamline the transfer process. It is the student's responsibility to ensure that he/she understands the program/admission/transfer requirements for the transfer school.

### **Program Description:**

This suggested curriculum includes TCC degree requirements and courses generally completed in the first two years of a four-year curriculum. This degree is for the student who has interests in sports and fitness, exercise physiology, health and wellness, and the leisure services. Teaching is only one facet of this major. The choices are as broad as coaching to directing outdoor sports activities, trainer, or sports director in professional athletics. Students considering this major should consult the catalog of the college or university to which they are planning to transfer and carefully select courses that will meet requirements for both the baccalaureate and associate degree programs.

### **Degree Awarded: Associate in Arts**

#### **For More Information Contact:**

Science and Mathematics Division: Metro: (918) 595-7334,  
Northeast: (918) 595-7542, Southeast: (918) 595-7742, West: (918) 595-8193

### **General Education Requirements Credit Hours: 35-36**

#### **Behavioral Sciences 6 hours**

PSYC 1113 Introduction to Psychology  
SOC 1113 Introduction to Sociology

#### **English 6 hours**

\*ENGL 1113 Composition I  
\*ENGL 1213 Composition II

#### **Humanities 6 Hours**

See the General Education Requirements page for course list.

#### **Mathematics 3 hours**

\*MATH 1513 College Algebra

#### **Science 8-9 hours**

BIOL 1114 General Biology for Non-Majors

#### **and select one course from the following:**

GEOG 1014 Geography (Physical)  
\*CHEM 1315 General Chemistry I

#### **Social Science 6 hours**

POLS 1113 American Federal Government

#### **and select one course from the following:**

HIST 1483 U.S. History 1492 to Civil War Era  
HIST 1493 U.S. History Civil War Era to Present

### **Specialized Course Requirements Credit Hours: 25**

#### **Physical Education 11 hours**

PHED 1143 Foundations of Physical Education  
BIOL 1383 Nutrition  
PHED 2603 Total Wellness  
PHED 2212 First Aid

### **Controlled Electives Credit Hours: 14**

\*CHEM 1415 General Chemistry II  
CSCI 1203 Computer Concepts and Applications  
GEOG 1043 Introduction to Cultural Geography  
\*MATH 1613 Plane Trigonometry  
\*PHYS 1114 General Physics I  
\*PHYS 1214 General Physics II  
COMM 1113 Public Speaking

### **Total Credit Hours: 60-61**

\*Course has prerequisite (See course description section of catalog).  
Physical education activity courses do not count toward the associate degree requirements in this curriculum. To receive an A.A. or A.S. Degree, students must demonstrate computer proficiency.





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## **ELECTRONICS TECHNOLOGY**

Biomedical Equipment, Electrical Substation Technology,  
and Electronics Technologist Options  
Workforce Development Degree

### **Program Description:**

This program prepares the student with the necessary knowledge and skills to gain employment in the field of electronics and to be able to advance to a position of increasing responsibility in their career. Three different program options are available.

### **Degree Awarded: Associate in Applied Science**

#### **For more information, contact:**

Engineering and Applied Technologies Division  
Northeast Campus: 918-595-7439

### **General Education Requirements Credit Hours: 20-22**

#### **English 6 hours**

\*ENGL 1113 Composition I

#### **and select one course from the following:**

\*\*ENGL 1213 Composition II

\*ENGL 2333 Technical/Professional Writing

#### **Mathematics 4-6 hours**

\*MATH 1454 Technical Mathematics

#### **or the following two courses:**

\*\*MATH 1513 College Algebra

\*\*MATH 1613 Plane Trigonometry

#### **Science 4 hours**

#### **Select one course from the following:**

\*PHYS 1114 General Physics

\*PHSC 1114 General Physical Science

#### **Social Science 6 hours**

POLS 1113 American Federal Government

#### **and select one course from the following:**

HIST 1483 U.S. History 1492 to Civil War Era

HIST 1493 U.S. History Civil War Era to Present

### **Specialized Course Requirements Credit Hours: 39-50**

#### **Core Courses 19 hours**

#### **Computer Information Systems 3 hours**

CSCI 1203 Computer Concepts and Applications

#### **Drafting and Design 4 hours**

DRFT 1324 Engineering Drawing with CAD

#### **Electronics Technology 12 hours**

\*ELET 1212 Introduction to Electricity

\*ELET 1303 DC Circuit Analysis

\*ELET 1313 AC Circuit Analysis

\*ELET 2244 Amplifiers I

### **Select from one of the following three (3) degree options:**

#### **1) Biomedical Equipment Technology Option 31 hours**

This program prepares the student with the necessary knowledge and skills to gain employment as a biomedical equipment technician. The biomedical equipment technician is qualified for positions in medical research and development, operation calibration, and maintenance of medical equipment for hospitals, equipment suppliers, and manufacturers. Upon completion of the program, the graduate may apply for the certification test given by the board of examiners for the International Certification Commission for the Certified Biomedical Equipment Technician (CBET).

#### **Biomedical Equipment 13 hours**

\*BMET 1304 Introduction to Biomedical Electronics

\*BMET 2343 Biomedical Electronics Theory I

\*BMET 2353 Biomedical Electronics Theory II

\*BMET 2373 Biomedical Electronics Clinical

#### **Computer Information Systems 6 hours**

\*CSCI 1263 Networking Fundamentals

\*ITCV 2023 Wireless Networking

#### **Electronics Technology 12 hours**

\*ELET 2215 Digital Circuits

\*ELET 2525 Wireless Communication

\*ELET/NANT 2632 Introduction to Nanotechnology

#### **2) Electrical Substation Technology Option 22 hours**

This program will train technicians to work in the electrical substation environment. Students will learn about high voltage safety, operations, testing of power components such as transformers, relays, and control systems operation and programming. Upon completion, the student will have the background to work for a power utility company or the many companies that support the power industry with equipment, testing and installation, and industry specific software.

#### **Alternative Energy 4 hours**

\*ALTE 1464 Wind and Solar Energy Systems

#### **Electronics Technology 18 hours**

\*ELET 1232 Introduction to Substation Safety

\*ELET 1442 Introduction to Alternative Energy





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## ELECTRONICS TECHNOLOGY

Biomedical Equipment, Electrical Substation Technology,  
and Electronics Technologist Options  
Workforce Development Degree

- \*ELET 1503 Programmable Control
- \*ELET 2533 Automation Control
- \*ELET 2112 Substation Breaker Circuits
- \*ELET 2132 Substation Relay Circuits
- \*ELET 2152 Substation Transformer Circuits
- \*ELET 2172 Substation Relay Circuits II

### 3) Electronics Technologist Option 22 hours

This program prepares the student with the necessary knowledge and skills to gain employment as an engineering technician, field service technician, research and development technician, or production technician in the field of electronics and be able to advance to positions of increasing responsibility. This program will help the graduate prepare to take the examination to become a Certified Engineering Technician given by the Institute for Certification of Engineering Technicians. **This program also allows incoming credit from approved Military Electronics Training Facilities.**

### Electronics Technology 20 hours

- \*ELET 1503 Programmable Control
- \*ELET 2215 Digital Circuits
- \*ELET 2333 Amplifiers II
- \*ELET 2514 Microprocessors
- \*ELET 2525 Wireless Communications

### Engineering Technology 2 hours

- ENGT 1212 Introduction to Fabrication Lab

### Total Credit Hours: 61-72

\*Course has prerequisite (See course description section of the catalog).

\*\*Recommended for students who plan to transfer to a four-year program.



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## **ELECTRONICS TECHNOLOGY**

Workforce Development Certificate

### **Program Description:**

This program prepares the student with the necessary knowledge and skills to gain employment as an engineering technician, field service technician, research and development technician, or production technician in the field of electronics and be able to advance to positions of increasing responsibility. This program will help the graduate prepare to take the examination to become a Certified Engineering Technician given by the Institute for Certification of Engineering Technicians.

### **Degree Awarded: Certificate of Achievement**

#### **For more information, contact:**

Engineering and Applied Technologies Division  
Northeast Campus: 918-595-7439

#### **Mathematics 4-6 hours**

\*MATH 1454 Technical Mathematics

#### **or the following two courses:**

\*\*\*MATH 1513 College Algebra

\*\*\*MATH 1613 Plane Trigonometry

#### **Electronics Technology 12 hours**

\*ELET 1212 Introduction to Electricity

\*ELET 1303 DC Circuit Analysis

\*ELET 1313 AC Circuit Analysis

\*ELET 2244 Amplifiers I

#### **Controlled Electives 3-5 hours**

ELET 1223 Hydraulics and Pneumatics

ELET 1503 Programmable Control

\*ELET 2215 Digital Circuits

\*ELET 2333 Amplifiers II

\*ELET 2525 Wireless Communications

ELET 2533 Automation Control

#### **Total Credit Hours 19-23**

\* Course has prerequisite. (See course description section of catalog).



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## **ELECTRONICS TECHNOLOGY**

Biomedical Equipment Technology Option

Workforce Development Certificate

### **Program Description:**

This program is designed to prepare students who have already obtained an associate or bachelor's degree in science to work in the medical electronic field.

### **Degree Awarded: Certificate of Achievement**

#### **For more information, contact:**

Engineering and Applied Technologies Division  
Northeast Campus: 918-595-7439

#### **Mathematics 4-6 hours**

\*MATH 1454 Technical Mathematics

**or the following two courses:**

\*\*\*MATH 1513 College Algebra

\*\*\*MATH 1613 Plane Trigonometry

#### **Biomedical Equipment 10 hours**

\*BMET 1304 Introduction to Biomedical Electronics

\*BMET 2343 Biomedical Electronics Theory I

\*BMET 2353 Biomedical Electronics Theory II

#### **Electronics Technology 17 hours**

\*ELET 1212 Introduction to Electricity

\*ELET 1303 DC Circuit Analysis

\*ELET 1313 AC Circuit Analysis

\*ELET 2215 Digital Circuits

\*ELET 2244 Amplifiers I

#### **Total Credit Hours: 31-33**

\*Course has prerequisite (See course description section of catalog).

\*\*\*It is highly recommended that students select this course as part of this program.



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## **ELECTRONICS TECHNOLOGY**

Electrical Substation Technology Option

Workforce Development Certificate

### **Program Description:**

This program will train technicians to work in the electrical substation environment. Students will learn about high voltage safety, operations, testing of power components such as transformers, relays, and control systems operation and programming. Upon completion, the student will have the background to work for a power utility company or the many companies that support the power industry with equipment, test and installation, and industry specific software.

### **Degree Awarded: Certificate of Achievement**

#### **For More Information Contact:**

Engineering and Applied Technologies Division  
Northeast Campus: 918-595-7439

#### **Electronics 21 hours**

- \*ELET 1212 Introduction to Electricity
- \*ELET 1232 Introduction to Substation Safety
- \*ELET 1303 DC Circuit Analysis
- \*ELET 1313 AC Circuit Analysis
- \*ELET 2533 Automation Control
- \*ELET 2112 Substation Breaker Circuits
- \*ELET 2132 Substation Relay Circuits
- \*ELET 2152 Substation Transformer Circuits
- \*ELET 2172 Substation Relay Circuits II

#### **Total Credit Hours: 21**

\*Course has prerequisite (See course description section of catalog).



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## **ENGINEERING**

General Engineering Option  
University Transfer Degree

### **University Transfer Degree Information:**

Students should work closely with an academic advisor each semester to make certain you are enrolled in the correct courses for your degree program, especially if you are planning to transfer to a four-year college or university. Students are encouraged to begin a dialogue with their intended transfer schools as early as possible. Early coordination between TCC academic advisors and advisors from selected four-year institutions can streamline the transfer process. It is the student's responsibility to ensure that he/she understands the program/admission/transfer requirements for the transfer school.

### **Degree Awarded: Associate in Science**

#### **For More Information Contact:**

Engineering and Applied Technologies Division  
Northeast Campus: 918-595-7439

#### **General Education Requirements Credit Hours: 21**

Additional General Education Requirements are satisfied through Specialized Course Requirements.

#### **Communication 9 hours**

\*ENGL 1113 Composition I  
\*ENGL 1213 Composition II  
COMM 1113 Public Speaking

#### **Humanities 6 Hours**

See the General Education Requirements page for course list.

#### **Social Science 6 hours**

POLS 1113 American Federal Government  
**and select one course from the following:**  
HIST 1483 U.S. History 1492 to Civil War Era  
HIST 1493 U.S. History Civil War Era to Present

#### **Specialized Course Requirements Credit Hours: 45**

#### **Chemistry 5 hours**

\*CHEM 1315 General Chemistry I

#### **Engineering 17 hours**

\*ENGR 1132 Engineering Design with Computer Aided Design  
\*ENGR 2103 Engineering Statics  
\*ENGR 2143 Engineering Strength of Materials  
\*ENGR 2213 Thermodynamics  
\*ENGR 2523 Elementary Dynamics  
\*ENGR 2613 Introduction to Electrical Science

#### **Mathematics 15 hours**

\*MATH 2114 Analytic Geometry and Calculus I  
\*MATH 2124 Analytic Geometry and Calculus II  
\*MATH 2134 Analytic Geometry and Calculus III

\*MATH 2613 Elementary Differential Equations

#### **Physics 8 hours**

\*PHYS 2034 Engineering Physics I  
\*PHYS 2124 Engineering Physics II

#### **Additional Recommended Courses**

(not required for degree)

+\*CHEM 1415 General Chemistry II  
CSCI 1203 Computer Concepts and Applications  
\*\*ENGR 1111 Introduction to Engineering  
\*\*ENGR 1242 Introductory Engineering Computer Programming

#### **Total Credit Hours: 66**

\*Course has prerequisite (See course description section of catalog).

\*\*Recommended for all engineering majors.

+Recommended for students wishing to complete a BS degree in chemical or environmental engineering.

To receive an A.A. or A.S. Degree, students must demonstrate computer proficiency.





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## **ENGINEERING**

Electrical Engineering Option  
University Transfer Option

### **University Transfer Degree Information:**

Students should work closely with an academic advisor each semester to make certain you are enrolled in the correct courses for your degree program, especially if you are planning to transfer to a four-year college or university. Students are encouraged to begin a dialogue with their intended transfer schools as early as possible. Early coordination between TCC academic advisors and advisors from selected four-year institutions can streamline the transfer process. It is the student's responsibility to ensure that he/she understands the program/admission/transfer requirements for the transfer school.

### **Degree Awarded: Associate in Science**

#### **For More Information Contact:**

Engineering and Applied Technologies Division  
Northeast Campus: 918-595-7439

### **General Education Requirements Credit Hours: 21**

Additional General Education Requirements are satisfied through the specialized course requirements.

#### **English 6 hours**

- \*ENGL 1113 Composition I
- \*ENGL 1213 Composition II

#### **Humanities 6 Hours**

See the General Education Requirements page for course list.

#### **Social Science 6 hours**

POLS 1113 American Federal Government  
**and select one course from the following:**  
HIST 1483 U.S. History 1492 to Civil War Era  
HIST 1493 U.S. History Civil War Era to Present

#### **Required Electives 3 hours**

Select one three-hour course from one of the following:  
Psychology, Social Sciences, Foreign Language,  
or Fine Arts (Art, Music, Theatre).

### **Specialized Course Requirements Credit Hours: 48**

#### **Chemistry 10 hours**

- \*CHEM 1315 General Chemistry I
- \*CHEM 1415 General Chemistry II

#### **Engineering 9 hours**

- ENGR 1111 Introduction to Engineering
- \*ENGR 1132 Engineering Design with Computer Aided Design
- \*ENGR 2103 Engineering Statics
- \*ENGR 2613 Introduction to Electrical Science

#### **Mathematics 15 hours**

- \*MATH 2114 Analytic Geometry and Calculus I
- \*MATH 2124 Analytic Geometry and Calculus II
- \*MATH 2134 Analytic Geometry and Calculus III
- \*MATH 2613 Elementary Differential Equations

#### **Physics 8 hours**

- \*PHYS 2034 Engineering Physics I
- \*PHYS 2124 Engineering Physics II

#### **Computer Information Systems 6 hours**

- \*CSCI 2473 C Language
- \*CSCI 2843 C++ Programming Language

#### **Total Credit Hours: 69**

\*Course has prerequisite (See course description section of catalog).  
To receive an A.A. or A.S. Degree, students must demonstrate computer proficiency.



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## **ENGINEERING**

Computer Engineering Option  
University Transfer Degree

### **University Transfer Degree Information:**

Students should work closely with an academic advisor each semester to make certain you are enrolled in the correct courses for your degree program, especially if you are planning to transfer to a four-year college or university. Students are encouraged to begin a dialogue with their intended transfer schools as early as possible. Early coordination between TCC academic advisors and advisors from selected four-year institutions can streamline the transfer process. It is the student's responsibility to ensure that he/she understands the program/admission/transfer requirements for the transfer school.

### **Degree Awarded: Associate in Science.**

#### **For More Information Contact:**

Engineering and Applied Technologies Division  
Northeast Campus: 918-595-7439

### **General Education Requirements Credit Hours: 21**

Additional General Education Requirements are satisfied through Specialized Course Requirements.

#### **English 6 hours**

\*ENGL 1113 Composition I  
\*ENGL 1213 Composition II

#### **Humanities 6 Hours**

See the General Education Requirements page for course list.

#### **Social Science 6 hours**

POLS 1113 American Federal Government  
**and select one course from the following:**  
HIST 1483 U.S. History 1492 to Civil War Era  
HIST 1493 U.S. History Civil War Era to Present

#### **Required Electives 3 hours**

Select one three-hour course from one of the following:  
Psychology, Social Sciences, Foreign Language,  
or Fine Arts (Art, Music, Theatre).

### **Specialized Course Requirements Credit Hours: 46**

#### **Chemistry 10 hours**

\*CHEM 1315 General Chemistry I  
\*CHEM 1415 General Chemistry II

#### **Engineering 6 hours**

ENGR 1111 Introduction to Engineering  
\*ENGR 1132 Engineering Design with Computer Aided Design  
\*ENGR 2613 Introduction to Electrical Science

#### **Mathematics 15 hours**

\*MATH 2114 Analytic Geometry and Calculus I  
\*MATH 2124 Analytic Geometry and Calculus II  
\*MATH 2134 Analytic Geometry and Calculus III  
\*MATH 2613 Elementary Differential Equations

#### **Physics 8 hours**

\*PHYS 2034 Engineering Physics I  
\*PHYS 2124 Engineering Physics II

#### **Computer Information Systems 7 hours**

\*CSCI 1901 Beginning UNIX (LINUX)  
\*CSCI 2473 C Language  
\*CSCI 2843 C++ Programming Language

#### **Total Credit Hours: 67**

\*Course has prerequisite (See course description section of catalog).  
To receive an A.A. or A.S. Degree, students must demonstrate computer proficiency.



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## **ENGINEERING**

Electrical Engineering Technology Option  
University Transfer Degree

### **University Transfer Degree Information:**

Students should work closely with an academic advisor each semester to make certain you are enrolled in the correct courses for your degree program, especially if you are planning to transfer to a four-year college or university. Students are encouraged to begin a dialogue with their intended transfer schools as early as possible. Early coordination between TCC academic advisors and advisors from selected four-year institutions can streamline the transfer process. It is the student's responsibility to ensure that he/she understands the program/admission/transfer requirements for the transfer school.

### **Degree Awarded: Associate in Science**

#### **For More Information Contact:**

Engineering and Applied Technologies Division  
Northeast Campus: 918-595-7439

**General Education Requirements Credit Hours: 42**  
(Additional General Education Requirements are satisfied through the specialized course requirements)

#### **Chemistry 5 hours**

\*CHEM 1315 General Chemistry I

#### **Communication 9 hours**

COMM 1113 Public Speaking

\*ENGL 1113 Composition I

\*ENGL 1213 Composition II

#### **Humanities 6 hours**

See the General Education Requirements page for complete list

#### **Mathematics 8 hours**

\*MATH 2114 Analytic Geometry and Calculus I

\*MATH 2124 Analytic Geometry and Calculus II

#### **Physics 8 hours**

\*PHYS 1114 General Physics I

\*PHYS 1214 General Physics II

#### **Social Science 6 hours**

POLS 1113 American Federal Government

**and select one course from the following:**

HIST 1483 U.S. History 1492 to Civil War Era

HIST 1493 U.S. History Civil War Era to Present

**Specialized Course Requirements Credit Hours: 23**

#### **Computer Information Systems 3 hours**

\*CSCI 2473 C Language

#### **Electronics Technology 20 hours**

\*ELET 1303 DC Circuit Analysis

\*ELET 1313 AC Circuit Analysis

\*ELET 1212 Introduction to Electricity

\*ELET 2215 Digital Circuits

\*ELET 2244 Amplifiers I

\*ELET 2333 Amplifiers II

#### **Total Credit Hours: 65**

\*Course has prerequisite (See course description section of catalog).  
To receive an A.A. or A.S. Degree, students must demonstrate computer proficiency.



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## **ENGINEERING**

Mechanical Engineering Option  
University Transfer Option

### **University Transfer Degree Information:**

Students should work closely with an academic advisor each semester to make certain you are enrolled in the correct courses for your degree program, especially if you are planning to transfer to a four-year college or university. Students are encouraged to begin a dialogue with their intended transfer schools as early as possible. Early coordination between TCC academic advisors and advisors from selected four-year institutions can streamline the transfer process. It is the student's responsibility to ensure that he/she understands the program/admission/transfer requirements for the transfer school.

### **Degree Awarded: Associate in Science**

#### **For More Information Contact:**

Engineering and Applied Technologies Division  
Northeast Campus: 918-595-7439

### **General Education Requirements Credit Hours: 21**

Additional General Education Requirements are satisfied through Specialized Course Requirements.

#### **English 6 hours**

- \*ENGL 1113 Composition I
- \*ENGL 1213 Composition II

#### **Humanities 6 Hours**

See the General Education Requirements page for course list.

#### **Social Science 6 hours**

POLS 1113 American Federal Government

**and select one course from the following:**

HIST 1483 U.S. History 1492 to Civil War Era

HIST 1493 U.S. History Civil War Era to Present

#### **Required Electives 3 hours**

Select one three-hour course from one of the following:

Psychology, Social Sciences, Foreign Language,  
or Fine Arts (Art, Music, Theatre).

### **Specialized Course Requirements Credit Hours: 48**

#### **Chemistry 5 hours**

- \*CHEM 1315 General Chemistry I

#### **Engineering 20 hours**

ENGR 1111 Introduction to Engineering

\*ENGR 1132 Engineering Design with Computer Aided Design

\*\*ENGR 1242 Introductory Engineering Computer Programming

\*ENGR 2103 Engineering Statics

\*ENGR 2143 Engineering Strength of Materials

\*ENGR 2213 Thermodynamics

\*ENGR 2523 Elementary Dynamics

\*ENGR 2613 Introduction to Electrical Science

#### **Mathematics 15 hours**

\*MATH 2114 Analytic Geometry and Calculus I

\*MATH 2124 Analytic Geometry and Calculus II

\*MATH 2134 Analytic Geometry and Calculus III

\*MATH 2613 Elementary Differential Equations

#### **Physics 8 hours**

\*PHYS 2034 Engineering Physics I

\*PHYS 2124 Engineering Physics II

#### **Total Credit Hours: 69**

\*Course has prerequisite (See course description section of catalog).

\*\*Recommended for all engineering majors.

To receive an A.A. or A.S. Degree, students must demonstrate computer proficiency.





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## **ENGINEERING TECHNOLOGY**

Drafting and Design, Geographic Information Systems, Manufacturing, Process Technology,  
Quality Technology, and Surveying Technology Options  
Workforce Development Degree

### **Program Description:**

Tulsa Community College provides several Engineering Technology options for students to prepare them for employment after receiving their Workforce Development Associate in Applied Science degree. These programs include General Education courses, common core classes (part of all of the Engineering Technology programs listed below) and specialized classes for each technology area. These programs are intended to give the student the knowledge and skills necessary to meet the needs of today's technology workplace.

The Engineering Technology options available include:

- 1) Drafting & Design Engineering Technology
- 2) Geographic Information Systems
- 3) Manufacturing Engineering Technology
- 4) Process Technology
- 5) Quality Technology
- 6) Surveying Technology

### **Degree Awarded: Associate in Applied Science**

#### **For More Information Contact:**

Engineering and Applied Technologies Division  
Northeast Campus: 918-595-7439

### **General Education Requirements Credit Hours: 18**

#### **Communication 6 hours**

\*ENGL 1113 Composition I

#### **and select one course from the following:**

COMM 1113 Public Speaking

\*ENGL 1213 Composition II

\*ENGL 2333 Technical/Professional Writing

\*ENGL 2343 Business Communication I

#### **Mathematics 6 hours**

\*MATH 1513 College Algebra

\*MATH 1613 Plane Trigonometry

#### **Social Science 6 hours**

POLS 1113 American Federal Government

#### **and select one course from the following:**

HIST 1483 U.S. History 1492 to Civil War Era

HIST 1493 U.S. History Civil War Era to Present

### **Specialized Course Requirements Credit Hours: 43-46**

#### **Core Courses 16 hours**

#### **Business 3 hours**

BUSN 1053 Introduction to Business

#### **Computer Science 3 hours**

CSCI 1203 Computer Concepts and Applications

#### **Drafting and Design Engineering Technology 4 hours**

DRFT 1324 Engineering Drawing with CAD

#### **Engineering Technology 2 hours**

ENGT 2462 Project Engineering and Management

#### **Science 4 hours**

GEOG 1014 Physical Geography (Surveying and GIS)

\*PHYS 1114 General Physics I (Drafting, Manufacturing, Process Technology, and Quality Control)

#### **Select from one of the following six degree options:**

#### **1) Drafting & Design Engineering Technology Option 29 hours**

This program provides the student with a general education in mathematics, physics, English, engineering drawing, and design as well as specific training in Computer Aided Design Drafting (CADD). Those completing this option will be prepared for exciting careers in the fields of mechanical, structural, electrical, or other graphics communication technologies. Upon completion of this program, the graduate may apply for the ADDA National Examination for certification.

#### **Drafting 18 hours**

\*DRFT 1442 Descriptive Geometry

DRFT 2204 AutoCad 2

\*DRFT 2223 Mechanical Design I (CAD)

DRFT 2293 Survey of CAD Applications

#### **and select 6 credit hours from the following:**

\*DRFT 1363 Civil Drafting and Design

\*DRFT 2023 Pro/Engineer Modeling

\*DRFT 2043 CATIA Fundamentals

DRFT 2233 Autodesk Inventor

\*DRFT 2393 Basic Solid Works





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## **ENGINEERING TECHNOLOGY**

Drafting and Design, Geographic Information Systems, Manufacturing, Process Technology, Quality Technology, and Surveying Technology Options

### **Electronics Technology 2 hours**

\*ELET 1212 Introduction to Electricity

### **Engineering Technology 6 hours**

ENGT 1313 Manufacturing Processes

\*ENGT 1443/QCTT 1443 Geometric Dimensioning and Tolerancing

### **Quality Technology 3 hours**

QCTT 1223 Blueprint Reading

### **2) Geographic Information Systems Option 27 hours**

This program is designed to provide students with a foundational knowledge in English, math, surveying, and drafting combined with the specific training in Geographic Information Systems (GIS) required for employment as a GIS, Surveying, or Mapping Technician. GIS, Surveying and Mapping Technicians collect and manipulate geospatial data using computer programs in order to produce maps and databases. Students completing the GIS option under the Engineering Technology degree can simultaneously earn a GIS Certificate.

### **Computer Information Systems 3 hours**

CSYS 1203 Introduction to Computer Programming

or

CSYS 1113 Oracle: Introduction to SQL

### **Drafting 3 hours**

DRFT 1363 Civil Drafting and Design

### **Geography 4 hours**

GEOG 2354 Computer Cartography

### **Geographic Information Systems 13 hours**

GIS/GEOG 2344 Introduction to Geographic Information Systems

\*GIS 2373 Data Acquisition and Management

\*GIS 2383 Advanced Geographic Information Systems

\*GIS 2393 Geographic Information Systems Practicum

### **Surveying Technology 4 hours**

\*SURV 1324 Surveying I

### **3) Manufacturing Engineering Technology Option 30 hours**

This option provides the student with solid knowledge and skills in the area of applied engineering. Manufacturing Engineers create and implement the manufacturing build plan in order to take engineering designs from the drawing board to product delivery. The manufacturing build plan includes defining the requirements for facilities, equipment, special machinery, tooling, materials, manpower, and processes required to produce all of the detail parts and assemblies to make the final product. Manufacturing Engineering takes a leading role in the creation, maintenance, and improvement of the processes used in the production of every manufactured product in industry today.

### **Engineering Technology 21 hours**

ENGT 1313 Manufacturing Processes

ENGT 1363 Metallurgy

\*ENGT/QCTT 1443 Geometric Dimensioning and Tolerancing

ENGT 1463 Composite Materials

ENGT/QCTT 2153 Lean, Six Sigma Quality Systems

\*ENGT 2543 Manufacturing Engineering I

\*ENGT 2643 Manufacturing Engineering II

### **Quality Technology 9 hours**

QCTT 1223 Blueprint Reading

QCTT 1313 Introduction to Quality

\*QCTT 2333 Inspection Principles

### **4) Process Technology Option 29 hours**

This program is designed to provide students with the concepts and skills needed to enter careers as Process Technicians in the petro-chemical industry.

### **Process Technology 26 hours**

PRCT 1123 Introduction to Process Technology

PRCT 1133 Safety, Health & Work Practices

\*PRCT 1134 Process Organic Chemistry

\*PRCT 2024 Process Tech I (Equipment)

\*PRCT 2034 Industrial Instrumentation

\*PRCT 2134 Process Tech II (Systems)

\*PRCT 2224 Process Tech III (Operations)

### **Quality 3 hours**

QCTT 1313 Introduction to Quality



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## **ENGINEERING TECHNOLOGY**

Drafting and Design, Geographic Information Systems, Manufacturing, Process Technology, Quality Technology, and Surveying Technology Options

### **5) Quality Technology Option 30 hours**

This option is designed to prepare the student with no previous experience in quality technology for an entry level position as a quality technology professional. Students having previous quality technology experience will be able to upgrade their skills and knowledge in order to qualify for advancement in their chosen field. This program will help the graduate prepare to sit for the examination to become a Certified Quality Technician administered through the American Society for Quality, P.O. Box 3005, Milwaukee, WI 53201-3005, 1-800-248-1946.

#### **Engineering Technology 9 hours**

ENGT 1313 Manufacturing Processes  
ENGT 1363 Metallurgy  
ENGT 1463 Composite Materials

#### **Quality Technology 21 hours**

QCTT 1223 Blueprint Reading  
QCTT 1313 Introduction to Quality  
\*ENGT /QCTT 1443 Geometric Dimensioning and Tolerancing  
ENGT /QCTT 2153 Lean, Six Sigma Quality Systems  
\*QCTT 2333 Inspection Principles  
\*QCTT 2383 Statistical Process Control, Quality Costs & Audits  
\*QCTT 2423 Quality Standards, Specifications, & ISO 9000

### **6) Surveying Technology Option 28 hours**

Surveying Technology graduates work for a variety of employers, including consulting firms, government agencies, construction, and utility companies. The program provides a broad based knowledge of surveying fundamentals. Graduates of the program may become licensed as a Land Surveying Intern after passing the Fundamentals of Land Surveying examination administered by the Oklahoma State Board of Registration for Professional Engineers and Land Surveyors. After gaining qualified experience, a Land Surveying Intern may apply to take the Principles and Practices of Land Surveying exam. After successfully completing this second exam, a Land Surveying Intern will become registered as a Professional Licensed Surveyor.

#### **Drafting 3 hours**

\*DRFT 1363 Civil Drafting and Design

#### **Geographic Information Systems 4 hours**

GIS/GEOG 2344 Introduction to Geographic Information Systems

### **Surveying Technology 21 hours**

\*SURV 1324 Surveying I  
\*SURV 2334 Surveying II  
SURV 2363 Land Law I  
\*SURV 2373 Land Law II  
\*SURV 2393 Survey Exam Topics  
SURV 2224 Route Surveying and Residential Subdivision Design

#### **Total Credit Hours: 61-64**

\*Course has prerequisite (See course description section of catalog).



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## **ENGINEERING TECHNOLOGY**

Manufacturing Production Technician Option  
Workforce Development Degree

### **Program Description:**

This program is designed to provide students with the skills necessary to enter the manufacturing workforce as an entry-level worker and prepare students to sit for the examination to become a Certified Production Technician administered through the Manufacturing Skills Standards Council.

### **Degree Awarded: Associate in Applied Science**

#### **For More Information Contact:**

Engineering and Applied Technologies Division  
Northeast Campus: 918-595-7439

### **General Education Requirements Credit Hours: 18**

#### **Communication 6 hours**

\*ENGL 1113 Composition I

#### **and select one course from the following:**

COMM 1113 Public Speaking

\*ENGL 1213 Composition II

\*ENGL 2333 Technical/Professional Writing

\*ENGL 2343 Business Communication I

#### **Mathematics 4 hours**

\*MATH 1454 Technical Mathematics

(Higher level MATH may be substituted.)

#### **Social Science 6 hours**

POLS 1113 American Federal Government

#### **and select one course from the following:**

HIST 1483 U.S. History 1492 to Civil War Era

HIST 1493 U.S. History Civil War Era to Present

#### **Recommended Electives 2 hours**

### **Specialized Course Requirements Credit Hours: 43**

#### **Business 3 hours**

BUSN 1053 Introduction to Business

#### **Computer Science 3 hours**

CSCI 1203 Computer Concepts and Applications

#### **Drafting and Design Engineering Technology 4 hours**

DRFT 1324 Engineering Drawing with CAD

### **Engineering Technology 20 hours**

ENGT 2462 Project Engineering and Management

\*ENGT/QCTT 1443 Geometric Dimensioning and Tolerancing

ENGT/QCTT 2153 Lean, Six Sigma Quality Systems

ENGT 1513 Manufacturing Safety

ENGT 1523 Manufacturing Quality

ENGT 1533 Manufacturing Procedures

ENGT 1543 Manufacturing Maintenance

### **Quality Technology 9 hours**

QCTT 1313 Introduction to Quality

\*QCTT 2333 Inspection Principles

\*QCTT 2383 Statistical Process Control, Quality Costs & Audits

### **Science 4 hours**

PHYS 1114 General Physics I

### **Total Credit Hours: 61**

\*Course has prerequisite (See course description section of catalog).



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## **ENGINEERING TECHNOLOGY**

Drafting and Design Engineering Technology  
Workforce Development Certificate

### **Program Description:**

The Certificate of Achievement in Drafting Engineering Technology is designed to recognize the accomplishment of students who have completed the technical coursework required for the Associate in Applied Science degree in Engineering Technology, but not the general education requirements. This certificate is a logical goal for students seeking the technical skill level of the associate degree, but whose circumstances impose a more limited time frame than the degree requires. It also provides documentation of exposure to both basic Drafting and more advanced design theory and practice.

### **Degree Awarded: Certificate of Achievement**

#### **For More Information Contact:**

Engineering and Applied Technologies Division  
Northeast Campus: 918-595-7439

#### **Drafting and Design Engineering Technology 8 hours**

+DRFT 1324 Engineering Drawing with CAD  
+\*DRFT 2204 AutoCad 2

#### **Engineering 3 hours**

\*ENGT 1443 Geometric Dimensioning and Tolerancing

#### **Mathematics 4-6 hours**

\*MATH 1454 Technical Mathematics

#### **or the following two courses:**

\*MATH 1513 College Algebra  
\*MATH 1613 Plane Trigonometry

#### **Quality Control 3 hours**

\*QCTT 1223 Blueprint Reading

#### **Controlled Electives 8-9 hours**

\*DRFT 1363 Civil Drafting and Design  
\*DRFT 2023 Pro/Engineer Modeling  
\*DRFT 2033 Pro/Engineer Manufacturing  
DRFT 2043 CATIA Fundamentals  
\*DRFT 2223 Mechanical Design I (CAD)  
+DRFT 2233 Autodesk Inventor  
+DRFT 2393 Basic Solid Works  
\*ELET 1212 Introduction to Electricity  
\*ENGT 1132 Engineering Design with Computer-Aided Design

#### **Total Credit Hours: 26-29**

\*Course has prerequisite (See course description section of catalog).

**Note: Students completing all courses marked with a "+" may apply for an institutional certificate of completion in drafting technology from the Business, Information and Engineering Technologies division at Northeast Campus.**





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## **ENGINEERING TECHNOLOGY**

Quality Technology

Workforce Development Certificate

### **Program Description:**

This certificate is designed to prepare the student with no previous experience in quality technology for an entry level position as a quality technology professional. Students having previous quality technology experience will be able to upgrade their skills and knowledge in order to qualify for advancement in their chosen field. This program will help the graduate prepare to sit for the examination to become a Certified Quality Technician administered through the American Society for Quality, P.O. Box 3005, Milwaukee, WI 53201-3005, 1-800-248-1946.

### **Degree Awarded: Certificate of Achievement**

#### **For More Information Contact:**

Engineering and Applied Technologies Division  
Northeast Campus: 918-595-7439

#### **Computer Information Systems 3 hours**

Select any three credit hours of Computer Information Systems (CSCI/CSYS) Courses

#### **English 3 hours**

\*ENGL 1113 Composition I

#### **Management 3 hours**

MGMT 1353 Management Essentials

#### **Mathematics 3-4 hours**

\*MATH 1454 Technical Mathematics

\*MATH 1513 College Algebra

#### **Quality Technology 18 hours**

QCTT 1223 Blueprint Reading

QCTT 1313 Introduction to Quality

\*ENGT/QCTT 1443 Geometric Dimensioning and Tolerancing

\*QCTT 2333 Inspection Principles

\*QCTT 2383 Statistical Process Control, Quality Cost and Audits

\*QCTT 2423 Quality Standards, Specifications and ISO 9000

### **Total Credit Hours: 30-31**

\*Course has prerequisite (See course description section of catalog).





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## **ENGINEERING TECHNOLOGY**

Manufacturing Production Technician  
Workforce Development Certificate

### **Program Description:**

This certificate is designed to prepare the student with no previous experience in manufacturing for an entry level position. Students having previous manufacturing experience will be able to upgrade their skills and knowledge in order to qualify for advancement. This program will help the graduate prepare to sit for the examination to become a Certified Production Technician administered through the Manufacturing Skills Standards Council.

### **Degree Awarded: Certificate of Achievement**

#### **For More Information Contact:**

Engineering and Applied Technologies Division  
Northeast Campus: 918-595-7439

#### **Mathematics 4 hours**

\*MATH 1454 Technical Mathematics

#### **Engineering Technology 12 hours**

ENGT 1513 Manufacturing Safety

ENGT 1523 Manufacturing Quality

ENGT 1533 Manufacturing Processes

ENGT 1543 Manufacturing Maintenance

#### **Total Credit Hours: 16**

\*Course has prerequisite (See course description section of catalog).



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## **ENTERPRISE DEVELOPMENT**

Business Administration and General Studies Options  
University Transfer Degree

**Program Description:** This degree is designed for working adults who want to finish an associate degree. Students must have completed at least 18 hours of college credit through any accredited college or university, have a minimum 2.0 GPA from previous college credits, and have completed any required remedial courses. Additional information is available at [www.tulsacc.edu/reachhigher](http://www.tulsacc.edu/reachhigher). Admission to this program is by special approval.

**Degree Awarded: Associate in Arts, Associate in Science**

**General Education Requirements Credit Hours: 37**

**Communication 9 hours**

COMM 1113 Public Speaking

\*ENGL 1113 Composition I

\*ENGL 1213 Composition II

**Humanities 6 hours**

See the General Education Requirements page for the course list.

**Mathematics 3 hours**

See the General Education Requirements page for the course list.

**Science 7 hours**

See the General Education Requirements page for the course list.

One course must be a laboratory science (L).

**Social Science 6 hours**

POLS 1113 American Federal Government

and select one course from the following:

HIST 1483 U.S. History 1492 to Civil War Era

HIST 1493 U.S. History Civil War Era to Present

**General Education Electives 6 hours**

Select two courses from the following:

CSCI 1203 Computer Concepts and Applications

PSYC 1113 Introduction to Psychology

SOCI 1113 Introduction to Sociology

Any foreign language - 3 credit hours

**Students may select from the following two degree options:**

1) Business Administration

2) General Studies

**1) Business Administration Option 24 hours**

**Accounting 6 hours**

\*ACCT 2213 Financial Accounting

\*ACCT 2223 Managerial Accounting

**Business 3 hours**

Select three credit hours from 2000-level BUSN courses

**Economics 6 hours**

ECON 2013 Principles of Macroeconomics

ECON 2023 Principles of Microeconomics

**Internship 3 hours**

Select three credit hours from any Internship/Practicum

**Marketing 3 hours**

MKTG 2423 Principles of Marketing

**Statistics 3 hours**

MATH 2193 Elementary Statistics

**2) General Studies Option 23 hours**

**Controlled Electives 12 hours**

Choose courses from Liberal Arts and Science electives.

**Recommended Electives 11 hours**

**Total Credit Hours: 60-61**

\*Course has prerequisite. (See course description section of catalog.)

To receive an A.A. or A.S. degree, students must demonstrate computer proficiency.

Physical education activity courses do not count toward the associate degree requirements in this curriculum.



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# ENVIRONMENTAL SCIENCE & NATURAL RESOURCES

University Transfer Degree

## University Transfer Degree Information:

Students should work closely with an academic advisor each semester to make certain you are enrolled in the correct courses for your degree program, especially if you are planning to transfer to a four-year college or university. Students are encouraged to begin a dialogue with their intended transfer schools as early as possible. Early coordination between TCC academic advisors and advisors from selected four-year institutions can streamline the transfer process. It is the student's responsibility to ensure that he/she understands the program/admission/transfer requirements for the transfer school.

## Program Description:

This degree is designed for students interested in pursuing a career in agriculture, conservation, environmental science, or natural resource management (such as forestry, range or wildlife sciences).

## Degree Awarded: Associate in Science

### For More Information Contact:

Science and Mathematics Division

Metro: (918) 595-7334 West (918) 595-8193

## General Education Requirements Credit Hours: 38

### Biology 8 hours

\*BIOL 1224 Introduction to Biology for Majors

\*BIOL 1604 Zoology

### Communication 9 hours

COMM 1113 Public Speaking

\*ENGL 1113 Composition I

\*ENGL 1213 Composition II

### Economics 3 hours

ECON 2023 Principles of Microeconomics

### Humanities 6 hours

See the General Education Requirements for course list. \*\*

### Mathematics 6 hours

\*MATH 1513 College Algebra

\*MATH 2193 Elementary Statistics

### Social Science 6 hours

POLS 1113 American Federal Government

**and select one course from the following:**

HIST 1483 U.S. History 1492 to Civil War Era

HIST 1493 U.S. History Civil War Era to Present

## Specialized Course Requirements Credit Hours: 24-25

### Chemistry 10 hours

\*CHEM 1315 General Chemistry I

\*CHEM 1415 General Chemistry II

## Environmental and Resource Sciences 11 hours

\*BIOL 1404 General Botany

GEOL 1014 General Physical Geology

**and select one course from the following:**

BIOL 2123 Environmental Inquiry

BIOL 2313 Principles of Ecology

## Controlled Electives\*\* 3-4 hours

\*MATH 1613 Plane Trigonometry

\*PHYS 1114 General Physics I

GIS/GEOG/SURV 2344 Introduction to Geographic Information Systems

## Total Credit Hours: 62-63

\*Course has prerequisites (See course description section of catalog). To receive an A.A. or A.S. degree, students must demonstrate computer proficiency.

**\*\* Students should select courses that will transfer to the specific college/university they plan to attend. See the University Transfer Degree Information above.**



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## **FIRE AND EMERGENCY MEDICAL SERVICES**

Fire and Emergency Medical Services Technology  
Workforce Development Degree

### **Program Description:**

This program is a National Fire Academy Fire and Emergency Services Higher Education Recognized Program. As such, the successful completion of designated FEMS courses by the student will result in valuable National Fire Academy Certificates. Additionally, students earn required state and national certifications necessary for securing employment with fire departments, industrial firms, governmental agencies, fire protection companies, healthcare agencies, and emergency medical services agencies. Individuals seeking employment in fire and emergency medical services departments will need certifications as a Firefighter/Emergency Medical Technician (FF/EMT).

### **Degree Awarded: Associate in Applied Science**

#### **Procedures for Application:**

Complete all Tulsa Community College application and entry requirements. Successful completion of the Fire and Emergency Services Certificate from Tulsa Community College is required for entry into the Program. Students with prior learning through academia or life learning may demonstrate that they have met the requirements of the Certificate through transcript review or Prior Learning Assessment. Prior learning students should contact Dr. "Chief" Brown. Students must complete a reading, writing, and math placement test at a successful level in the Testing Center or demonstrate adequate proficiency and have completed BIOL 1314 and CHEM 1114 with a grade of "C" or better to enroll in any additional FEMS courses.

#### **For More Information Contact:**

Northeast Campus:  
Fire and Emergency Medical Services Programs  
Dr. "Chief" D. Craig Brown; (918) 595-8408;  
craig.brown@tulsacc.edu

### **General Education Requirements Credit Hours: 20**

#### **Biology 4 hours**

BIOL 1314 Human Anatomy and Physiology

#### **Chemistry 4 hours**

CHEM 1114 Principles of Chemistry

#### **Communication 6 hours**

\*ENGL 1113 Composition I

#### **and select one course from the following:**

COMM 1113 Public Speaking

\*ENGL 1213 Composition II

\*ENGL 2333 Technical/Professional Writing

\*ENGL 2343 Business Communication I

#### **Social Science 6 Hours**

POLS 1113 American Federal Government

#### **and select one course from the following:**

HIST 1483 U.S. History 1492 to Civil War Era

HIST 1493 U.S. History Civil War Era to Present

### **Specialized Course Requirements Credit Hours: 47**

\*FEMS 1214 Principles of Fire and Emergency Medical Services

\*FEMS 1224 Emergency Services Safety and Survival

\*FEMS 1233 Fire Behavior and Combustion

\*FEMS 1243 Hazardous Materials Chemistry

\*FEMS 1253 Building Construction for Fire Protection

\*FEMS 1263 Fire Protection Hydraulics and Water Supply

\*FEMS 2213 Legal Aspects of Emergency Services

\*FEMS 2223 Fire Prevention

\*FEMS 2233 Code Enforcement

\*FEMS 2243 Fire Protection Systems

\*FEMS 2253 Fire Investigation

\*FEMS 2263 Fire and Emergency Services Administration

\*FEMS 2319 Emergency Medical Technician

### **Total Credit Hours: 67**

\*Course has prerequisite (See course description section of the catalog).





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## **FIRE AND EMERGENCY MEDICAL SERVICES**

Workforce Development Certificate

### **Program Description:**

This program is a National Fire Academy Fire and Emergency Services Higher Education Recognized Program. The program offers an entry level education in the principles and practical applications of fire and emergency medical services. Successful students can earn required state and national certifications necessary for securing employment with fire departments, industrial firms, governmental agencies, fire protection companies, healthcare agencies, and emergency medical services agencies. Individuals seeking entry level employment in municipal fire departments will need certification as a Firefighter/Emergency Medical Technician (FF/EMT). Successful completion of this Certificate Program is required for entry into the Associate of Applied Science Fire and Emergency Medical Services Technology degree.

### **Degree Awarded: Certificate of Achievement**

#### **Procedures for Application:**

Complete all Tulsa Community College application and entry requirements. Prospective students must pass an appropriate College placement test for Reading and Writing at a successful level as a prerequisite for enrolling in the Program courses. All other course prerequisites are indicated in the TCC catalog and must be satisfied before enrollment.

#### **For More Information Contact:**

Northeast Campus  
Fire and Emergency Medical Services Programs  
Dr. "Chief" D. Craig Brown: (918) 595-8408  
craig.brown@tulsacc.edu

#### **Fire and Emergency Medical Services 17 hours**

- +\*FEMS 1214 Principles of Fire and Emergency Medical Services
- +\*FEMS 1224 Emergency Services Safety and Survival
- +\*FEMS 2319 Emergency Medical Technician

#### **Total Credit Hours: 17**

- \*Course has prerequisite (See course description section of the catalog).
- + Courses must be passed with a grade of "C" or better





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## **FIRE AND EMERGENCY MEDICAL SERVICES**

Healthcare Specialist/Paramedic  
Workforce Development Degree

### **Program Description:**

This program offers a broad education in the principles and practical applications of fire and emergency medical services. Successful students will earn required state and national certifications necessary for securing employment with fire departments, industrial firms, governmental agencies, fire protection companies, healthcare agencies, and emergency medical services agencies. The degree will help prepare graduates for work in many roles in fire and health care agencies as well as other similar occupations.

### **Degree Awarded: Associate in Applied Science**

#### **Procedures for Application:**

Complete all Tulsa Community College application and entry requirements. Requires current National Registry of Emergency Medical Technician certification. Contact a Fire and Emergency Medical services representative for an interview and consultation.

#### **For More Information Contact:**

Northeast Campus  
Fire and Emergency Medical Services Programs:  
EMS Director Leaugey Barnes (918) 595-4746

### **Specialized Course Requirements Credit Hours: 40**

FEMS 1214 Principles of Fire and Emergency Medical Services  
\*EMSP 2115 Principles of Paramedic I  
\*EMSP 2129 Paramedic Theory and Application I  
\*EMSP 2214 Principles of Paramedic II  
\*EMSP 2229 Paramedic Theory and Application II  
\*EMSP 2314 Principles of Paramedic III  
\*EMSP 2325 Paramedic Theory and Application III

### **Total Credit Hours: 60**

\*Course has prerequisite (See course description section of the catalog).

### **General Education Requirement Credit Hours: 20**

#### **Biology 4 hours**

BIOL 1314 Human Anatomy and Physiology

#### **Chemistry 4 hours**

CHEM 1114 Principles of Chemistry

#### **Communication 6 hours**

\*ENGL 1113 Composition I

#### **and select one course from the following:**

COMM 1113 Public Speaking

\*ENGL 1213 Composition II

\*ENGL 2333 Technical/Professional Writing

\*ENGL 2343 Business Communication I

#### **Social Science 6 Hours**

POLS 1113 American Federal Government

#### **and select one course from the following:**

HIST 1483 U.S. History 1492 to Civil War Era

HIST 1493 U.S. History Civil War Era to Present



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## **GEOGRAPHY**

University Transfer Degree



### **University Transfer Degree Information:**

Students should work closely with an academic advisor each semester to make certain you are enrolled in the correct courses for your degree program, especially if you are planning to transfer to a four-year college or university. Students are encouraged to begin a dialogue with their intended transfer schools as early as possible. Early coordination between TCC academic advisors and advisors from selected four-year institutions can streamline the transfer process. It is the student's responsibility to ensure that he/she understands the program/admission/transfer requirements for the transfer school.

### **Program Description:**

Geography is the scientific study of Earth's surface and its immediate atmosphere. Geographers study the political, economic, social and environmental qualities of places and how these attributes interact. A geography graduate will possess the flexibility to pursue a career in urban and regional planning, international affairs, community development, location analysis in both the public and private sectors, resource planning and management, cartography and teaching.

### **Degree Awarded: Associate in Science**

#### **For More Information Contact:**

Science and Mathematics Division Metro: (918) 595-7334,

**General Education Requirements Credit Hours: 30**  
(Science Requirements are satisfied through specialized courses.)

#### **Communication 9 hours**

COMM 1113 Public Speaking  
\*ENGL 1113 Composition I  
\*ENGL 1213 Composition II

#### **Humanities 6 Hours**

See the General Education Requirements page for course list.

#### **Mathematics 3 hours**

See the General Education Requirements page for course list.

#### **Social Science 6 hours**

POLS 1113 American Federal Government  
**and select one course from the following:**  
HIST 1483 U.S. History 1492 to Civil War Era  
HIST 1493 U.S. History Civil War Era to Present

#### **Recommended Electives 3 hours**

#### **Required Electives 3 hours**

Select one three-hour course from one of the following:  
Psychology, Social Sciences, Foreign Language,  
or Fine Arts (Art, Music, Theatre).

### **Specialized Course Requirements Credit Hours: 30-31**

#### **Geography 10 hours**

+GEOG 1014 Geography (Physical)  
GEOG 1023 World Geography (Economic)  
GEOG 1043 Introduction to Cultural Geography  
GEOG 2013 Meteorology  
GEOG 2033 World Regional Geography

#### **Geology 8-9 hours**

GEOL 1014 General Geology (Physical)  
GEOL 1024 General Geology (Historical)  
GEOL 1113 Introduction to Oceanography  
GEOL 2021 Map and Airphoto Interpretations

#### **Recommended Electives \*\*11-12 hours**

\*BIOL 1404 General Botany  
\*BIOL 1604 Zoology  
\*CHEM 1315 General Chemistry I  
\*CHEM 1415 General Chemistry II  
GEOG/GIS/SURV 2344 Introduction to Geographic Information Systems  
GEOG 2354 Computer Cartography  
\*GIS 2373 GIS Data Acquisition and Management  
\*GIS 2383 Advanced Geographic Information Systems  
\*GIS 2393 Geographic Information Systems Practicum  
\*MATH 2114 Analytic Geometry and Calculus I  
\*MATH 2124 Analytic Geometry and Calculus II  
\*MATH 2134 Analytic Geometry and Calculus III  
SOC 2123 Introduction to Cultural Anthropology

#### **Total Credit Hours: 60**

\*Course has prerequisite (See course description section of catalog).  
+This course is required as part of the 10 hour program requirement.  
\*\*Students should select courses that will transfer to the college/university they plan to attend.  
To receive an A.A. or A.S. Degree, students must demonstrate computer proficiency.  
Physical education activity courses do not count toward the associate degree requirements in this curriculum.



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## **GEOGRAPHIC INFORMATION SYSTEMS**

Workforce Development Certificate

### **Program Description:**

This certificate is designed for individuals whose objective is to become qualified for employment as a Geographic Information Systems Technician. The certificate will also serve to enable students to pursue education in GIS supplemental to any major they have chosen. In addition, the certificate will provide additional training and education to individuals currently working in a GIS career.

### **Degree Awarded: Certificate of Achievement**

#### **For More Information Contact:**

Science and Mathematics Division,  
Metro Campus: (918) 595-7334

#### **Geography/Geographic Information Systems 17 hours**

GIS/GEOG 2344 Introduction to Geographic Information Systems

GEOG 2354 Computer Cartography

\*GIS 2373 GIS Data Acquisition and Management

\*GIS 2383 Advanced Geographic Information Systems

\*GIS 2393 Geographic Information Systems Practicum

#### **Total Credit Hours: 17**

\*Course has prerequisite (See course description section of catalog).



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## **GEOLOGY**

University Transfer Degree

### **University Transfer Degree Information:**

Students should work closely with an academic advisor each semester to make certain you are enrolled in the correct courses for your degree program, especially if you are planning to transfer to a four-year college or university. Students are encouraged to begin a dialogue with their intended transfer schools as early as possible. Early coordination between TCC academic advisors and advisors from selected four-year institutions can streamline the transfer process. It is the student's responsibility to ensure that he/she understands the program/admission/transfer requirements for the transfer school.

### **Program Description:**

Geology is the scientific study of the earth. This endeavor includes Earth's composition, history, surface processes and internal workings. A degree in geology will provide the graduate the skills to discover, recognize and use the earth's natural resources to promote the quality of human life. Because the geologist will be aware of the events that continually shape the earth's surface, the geology graduate will provide to society the knowledge to enable all of us to occupy this planet's physical environment more safely.

### **Degree Awarded: Associate in Science**

#### **For More Information Contact:**

Science and Mathematics Division,  
Metro Campus: (918) 595-7334

### **General Education Requirements\*\* Credit Hours: 27-29**

#### **Communication 9 hours**

COMM 1113 Public Speaking  
\*ENGL 1113 Composition I  
\*ENGL 1213 Composition II

#### **Humanities 6 Hours**

See the General Education Requirements page for course list.

#### **Social Science 6 hours**

POLS 1113 American Federal Government  
**and select one course from the following:**  
HIST 1483 U.S. History 1492 to Civil War Era  
HIST 1493 U.S. History Civil War Era to Present

#### **Recommended Electives 3 -5 hours\*\***

#### **Required Electives 3 hours**

Select one three-hour course from one of the following:  
Psychology, Social Sciences, Foreign Language,  
or Fine Arts (Art, Music, Theatre).

### **Specialized Course Requirements Credit Hours:**

#### **\*\*31-33**

#### **Chemistry 10 hours**

\*CHEM 1315 General Chemistry I  
\*CHEM 1415 General Chemistry II

#### **Geology 8-9 hours**

GEOL 1014 General Geology (Physical)  
GEOL 1024 General Geology (Historical)  
\*GEOL 2021 Map and Airphoto Interpretation

#### **Mathematics 5-6 hours**

\*MATH 1513 College Algebra  
**and**  
\*MATH 1613 Plane Trigonometry  
**or**  
\*MATH 1715 College Algebra and Trigonometry

#### **Physics 8 hours**

\*PHYS 1114 General Physics I and  
\*PHYS 1214 General Physics II

**or**

\*PHYS 2034 Engineering Physics I and  
\*PHYS 2124 Engineering Physics II

#### **Total Credit Hours: 60**

\*Course has prerequisite (See course description section of catalog).

\*\* Students must complete a total of 60 hours to graduate.

To receive an A.A. or A.S. Degree, students must demonstrate computer proficiency.





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## **HEALTH AND HUMAN PERFORMANCE**

University Transfer Degree

### **University Transfer Degree Information:**

Students should work closely with an academic advisor each semester to make certain you are enrolled in the correct courses for your degree program, especially if you are planning to transfer to a four-year college or university. Students are encouraged to begin a dialogue with their intended transfer schools as early as possible. Early coordination between TCC academic advisors and advisors from selected four-year institutions can streamline the transfer process. It is the student's responsibility to ensure that he/she understands the program/admission/transfer requirements for the transfer school.

### **Program Description:**

The Health and Human Performance program prepares students for careers in a variety of settings including corporate, hospital-based, community, government and private enterprises.

### **Degree Awarded: Associate in Science Degree**

#### **For More Information Contact:**

Science and Mathematics  
Northeast: (918) 595-7542

### **General Education Requirements Credit Hours: 40**

#### **Communication 9 Hours**

COMM 1113 Public Speaking  
\*ENGL 1113 Composition I  
\*ENGL 1213 Composition II

#### **Humanities 6 Hours**

See the General Education Requirements page for course list

#### **Mathematics 6 Hours**

\*MATH 1513 College Algebra  
\*MATH 2193 Elementary Statistics

#### **Social Science 6 Hours**

POLS 1113 American Federal Government  
**and select one course from the following:**  
HIST 1483 U.S. History 1492 to Civil War Era  
HIST 1493 U.S. History Civil War Era to Present

#### **Science 13 Hours**

\*BIOL 1224 Introduction to Biology for Majors  
+\*BIOL 2154 Human Physiology  
\*CHEM 1315 General Chemistry I

### **Specialized Course Requirements Credit Hours: 20**

#### **Behavioral Science 3 Hours**

##### **Select one course from the following:**

PSYC 1113 Introduction to Psychology  
SOCI 1113 Introduction to Sociology

#### **Economics 3 Hours**

##### **Select one course from the following:**

ECON 2013 Principles of Macroeconomics  
ECON 2023 Principles of Microeconomics

#### **Exercise Science Core 14 Hours**

+BIOL 1383 Nutrition  
^PHED 2212 First Aid  
+PHED 2263 Principles in Health Education and Human Promotion  
+PHED 2653 Applied Anatomy and Kinesiology  
+PHED 2603 Total Wellness

#### **Total Credit Hours: 60**

\*Course has prerequisite (see course description section of catalog).  
^ Advanced standing credit may be awarded for current certification.  
To receive an A.A. or A.S. degree, students must demonstrate computer proficiency.  
+ Grade of "C" or better may be required for transfer to baccalaureate institution.





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## **HEALTH INFORMATION TECHNOLOGY**

Medical Records

Workforce Development Degree

### **Program Description:**

This program of study prepares the student for employment in the field of health information management in a variety of health care settings including hospitals, physician's office or clinic, home health agencies, hospice, long term care facilities, rehabilitation facilities, psychiatric care settings, insurance companies, and pharmaceutical companies. Career options for the Health Information Technician include coding and reimbursement specialist; clinical data specialist (statistics, database research, and specialty registries); patient information coordinator (release of information, confidentiality, medical-legal aspects of documentation, health history management and information resources); data quality manager (quality improvement for data integrity, and quality care/service monitoring and audits); document and repository manager (retention and accessibility of health care data, and preparation and conversion to electronic health records); and health information manager (enterprise- or facility-wide line or staff manager for health information management services). This program is accredited by the Commission on Accreditation for Health Informatics and Information Management Education (CAHIIM). After graduation, students are eligible to apply to write the national qualifying examination for certification as a Registered Health Information Technician (RHIT).

### **Degree Awarded: Associate in Applied Science**

#### **Procedures For Application:**

1. Applications are available at [tulsacc.edu/healthscienceapply](http://tulsacc.edu/healthscienceapply). For more information, contact Allied Health division office at 918-595-7002.
2. Submit completed program application form and required materials by May 1 to the Allied Health Services Division located in the Alfred M. Philips Building, Room MP458, 909 South Boston, Tulsa, OK 74119.
3. All prospective Health Information Technology students must also complete an application for enrollment to the College, submit their high school transcripts or GED scores, ACT or SAT scores, and previous college transcripts to the Metro Campus Registrar at 909 South Boston, Tulsa, OK 74119. Incomplete submissions will not be considered for admission into the Health Information Technology program.
4. Acceptance to Tulsa Community College does not guarantee admission to the Health Information Technology program.
5. Eligible applicants to be for consideration for admission into the Health Information Technology program will be notified. All interviewed applicants will be notified by mail regarding their selection status.
6. In order to enroll in courses that include a clinical component and are a part of the program degree plan, students must receive clearance on a criminal background check, including the sex offender registry. Potential students need to be aware that drug testing is a requirement for participation in all clinical components.

#### **General Education Requirements Credit Hours: 16**

Remaining General Education Requirements are satisfied in Specialized Course Requirements.

#### **Biology 4 hours**

\*\*BIOL 1314 Human Anatomy and Physiology

#### **English 6 hours**

\*\* \*ENGL 1113 Composition I

**and select one course from the following:**

\*\* \*ENGL 1213 Composition II

\*\* \*ENGL 2333 Technical/Professional Writing

\*\* \*ENGL 2343 Business Communication I

#### **Social Science 6 hours**

POLS 1113 American Federal Government

**and select one course from the following:**

HIST 1483 U.S. History 1492 to Civil War Era

HIST 1493 U.S. History Civil War Era to Present

#### **Specialized Course Requirements Credit Hours: 53**

##### **Allied Health 3 hours**

\*ALDH 1323 Medical Terminology

##### **Computer Information Systems 3 hours**

\*\* \*CSYS 2073 MS Office

##### **Health Information Technology 47 hours**

\*\* \*HITC 1113 Introduction to Health Information Management

\*\* \*HITC 1131 Health Care Delivery, Systems and Trends

\*\* \*HITC 1213 Statistics and Research Methodology

\*\* \*HITC 1223 Electronic Health Record Systems

\*\* \*HITC 1231 Management of Medical Document Processing

\*\* \*HITC 1242 Health Information Management in Alternate Care Settings

\*\* \*HITC 1333 CPT and HCPCS Coding

\*\* \*HITC 1353 Legal Aspects of Health Records

\*\* \*HITC 1363 Classification Systems, Terminologies and Coding I

\*\* \*HITC 1412 Professional Practice Experience I

\*\* \*HITC 2053 Pathophysiology and Pharmacology I

\*\* \*HITC 2113 Management Techniques for Health Information Services

\*\* \*HITC 2121 Physician Billing and Reimbursement

\*\* \*HITC 2133 Reimbursement Systems and Revenue Cycle Management

\*\* \*HITC 2153 Pathophysiology and Pharmacology II

\*\* \*HITC 2213 Quality, Utilization and Risk Assessment

\*\* \*HITC 2342 Professional Practice Experience III - Coding

\*\* \*HITC 2403 Coding II

\*\* \*HITC 2412 Professional Practice Experience II

#### **Total Credit Hours: 69**

\*Course has prerequisite (See course description section of catalog).

\*\*Course must be completed with a "C" or better.



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## **HEALTH INFORMATION TECHNOLOGY**

**Coding and Reimbursement Specialist  
Workforce Development Certificate**

### **Program Description:**

This option is designed to prepare the student with the necessary skills to be employed as a coding and reimbursement specialist in a variety of health care settings including hospitals, physician's office or clinic, home health agencies, hospice, long-term care facilities, rehabilitation facilities, insurance companies, and pharmaceutical companies. ICD-9-CM and CPT coding guidelines will be examined in detail, as will insurance and reimbursement issues such as claims processing, case mix index, and reimbursement systems, (i.e., diagnosis related groups (DRGs), ambulatory patient classification (APCs), resource based relative value system (RBRVS), resource utilization groups (RUGs), case mix groups (CMG) and home health resource groups (HHRG). Students successfully completing the certificate may apply to sit for a national examination to become a Certified Coding Associate (CCA). After 2-3 years of recommended coding experience, the graduate may sit for the national Certified Coding Specialist (hospital based, CCS, physician based, CCS-P) examination. The Coding and Reimbursement Specialist Certificate program has been approved by the American Health Information Management Association (AHIMA).

### **Degree Awarded: Certificate of Achievement**

#### **Procedures For Application:**

1. Applications are available at [tulsacc.edu/healthscienceapply](http://tulsacc.edu/healthscienceapply). For more information, contact Allied Health division office at 918-595-7002.
2. Submit completed program application form and required materials by May 1 to the Allied Health Services Division located in the Alfred M. Philips Building, Room MP458, 909 South Boston, Tulsa, OK 74119.
3. All prospective Coding and Reimbursement Specialist Certificate students must also complete an application for enrollment to the College, submit their high school transcripts or GED scores, ACT or SAT scores, and previous college transcripts to the Metro Campus Registrar at 909 South Boston, Tulsa, OK 74119. Incomplete submissions will not be considered for admission into the Coding and Reimbursement Specialist Certificate program.
4. Acceptance to Tulsa Community College does not guarantee admission to the Health Information Technology Coding and Reimbursement Specialist Certificate program.
5. Eligible applicants to be interviewed for consideration for admission into the program will be notified. All interviewed applicants will be notified by mail regarding their selection status.
6. In order to enroll in courses that include a clinical component and are a part of the program degree plan, students must receive clearance on a criminal background check, including the sex offender registry. Potential students need to be aware that drug testing is a requirement for participation in all clinical components.

### **General Education Requirements Credit Hours: 4**

#### **Biology 4 hours**

\*\*BIOL 1314 Human Anatomy and Physiology

### **Specialized Course Requirements Credit Hours: 36**

#### **Allied Health 3 hours**

\*\*ALDH 1323 Medical Terminology

#### **Computer Information Systems 3 hours**

\* \*\*CSYS 2073 MS Office

#### **Health Information Technology 30 hours**

- \* \*\*HITC 1113 Introduction to Health Information Management
- \* \*\*HITC 1131 Health Care Delivery, Systems and Trends
- \* \*\*HITC 1223 Electronic Health Record Systems
- \* \*\*HITC 1242 Health Information Management in Alternate Care Settings
- \* \*\*HITC 1333 CPT and HCPCS Coding
- \*\* \*HITC 1363 Classification Systems, Terminologies and Coding I
- \* \*\*HITC 2053 Pathophysiology and Pharmacology I
- \* \*\*HITC 2133 Reimbursement Systems and Revenue Cycle Management
- \* \*\*HITC 2121 Physician Billing and Reimbursements
- \* \*\*HITC 2153 Pathophysiology and Pharmacology II
- \* \*\*HITC 2342 Professional Practice Experience III - Coding
- \* \*\*HITC 2403 Coding II

### **Total Credit Hours: 40**

\*Course has a prerequisite (See course description section of catalog).

\*\*Course must be completed with a "C" or better.



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## **HISTORY**

University Transfer Degree



### **University Transfer Degree Information:**

Students should work closely with an academic advisor each semester to make certain you are enrolled in the correct courses for your degree program, especially if you are planning to transfer to a four-year college or university. Students are encouraged to begin a dialogue with their intended transfer schools as early as possible. Early coordination between TCC academic advisors and advisors from selected four-year institutions can streamline the transfer process. It is the student's responsibility to ensure that he/she understands the program/admission/transfer requirements for the transfer school.

### **Program Description:**

To function in a particular society or in an international setting, it is crucial to gain an accurate historical understanding of a present situation or past event through the study of history. The study of history involves verifying events and ideas, exploring the causes and effects of events and ideas, reconciling various interpretations of them, and making informed judgments about how to utilize differing views to assert a conclusion. In addition, it is essential that the historical reasoning process be expressed in a clear and effective style of written communication.

### **Degree Awarded: Associate in Arts**

#### **General Education Requirements Credit Hours: 37**

See the General Education Requirements for the complete list.

#### **Specialized Course Requirements Credit Hours: 23-24**

#### **History 12 hours**

HIST 1044 Oklahoma History plus Research  
 HIST 1053 Ancient and Medieval Western Civilization  
 HIST 1063 Modern Western Civilization  
 HIST 1073 Twentieth Century World History  
 HIST 1083 Survey of English History to 1688  
 HIST 1093 Survey of English History 1688 to Present  
 HIST 1483 U.S. History 1492 to Civil War Era  
 or  
 HIST 1493 U.S. History Civil War Era to Present  
 HIST 2023 Modern Eastern Civilization  
 HIST 2043 Contemporary Affairs  
 HIST 2163 Introduction to the History and Philosophy of Science  
 HIST 2223 Modern Latin American History  
 HIST 2333 African-American History  
 HIST 2343 Native American History  
 HIST 2523 History of Oklahoma  
 HIST 2533 Survey of the American Frontier

#### **Recommended Electives\*\* 11-12 hours**

ECON 2013 Principles of Macroeconomics  
 \*ENGL 2413 Introduction to Literature  
 \*ENGL 2543 British Literature I  
 \*ENGL 2653 British Literature II  
 \*ENGL 2773 American Literature I  
 \*ENGL 2883 American Literature II  
 GEOG 1014 Geography (Physical)  
 PHIL 1113 Introduction to Philosophy  
 PHIL 2163 Introduction to the History and Philosophy of Science  
 POLS 1023 Introduction to State and Local Government

\*POLS 2013 Introduction to Comparative Governments  
 \*POLS 2023 Introduction to American Politics  
 \*POLS 2033 Introduction to Political Thought  
 \*POLS 2133 Introduction to Public Administration  
 \*POLS 2153 Introduction to the Constitution and Judicial Process  
 \*POLS 2203 Introduction to International Relations  
 PSYC 1113 Introduction to Psychology  
 \*PSYC 2053 Social Psychology  
 RELG 2233 Religion in America  
 SOCI 1113 Introduction to Sociology  
 SOCI 2123 Introduction to Cultural Anthropology

#### **Total Credit Hours: 60-61**

\*Course has prerequisite (See course description section of catalog).  
 \*\*Students should select courses that will transfer to the college/university they plan to attend.  
 Proficiency in a foreign language is recommended.  
 To receive an A.A. or A.S. Degree, students must demonstrate computer proficiency.  
 Physical education activity courses do not count toward the associate degree requirements in this curriculum.





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## **HUMAN RESOURCES**

Workforce Development Degree

### **Program Description:**

This program is designed to prepare students for a career in the human resources profession. Due to the fact that nearly all corporations have a human resources department, solid growth in this profession is predicted over the next ten years. This program is designed for both individuals starting out in human resources and those currently employed in human resources. Students gain a comprehensive knowledge in human resources along with the people skills greatly desired in today's business world.

### **Degree Awarded: Associate in Applied Science**

#### **For More Information Contact:**

Business and Information Technology Division:  
Southeast: (918) 595-7639

### **General Education Requirements Credit Hours: 18**

#### **English 6 hours**

\*ENGL 1113 Composition I

#### **and select one course from the following:**

\*ENGL 1213 Composition II

\*ENGL 2343 Business Communication I

#### **Psychology 6 hours**

PSYC 1113 Introduction to Psychology

PSYC 1313 Human Relations

#### **Social Science 6 hours**

POLS 1113 American Federal Government

#### **and select one course from the following:**

HIST 1483 U.S. History 1492 to Civil War Era

HIST 1493 U.S. History Civil War Era to Present

### **Specialized Course Requirements Credit Hours: 42**

#### **Accounting 6 hours**

\*ACCT 2213 Financial Accounting

\*ACCT 2223 Managerial Accounting

#### **Business 6 hours**

BUSN 1053 Introduction to Business

#### **and select 3 credit hours from the following:**

BUSN 2363 Supervisory Management

MGMT 2363 Principles of Management

#### **Computer Information Systems 3 hours**

\*\*Select 3 hours from any Computer Information Systems (CSYS/CSCI) courses.

#### **Human Resources 24 hours**

HRES 1313 Principles of Human Resources

\*HRES 1333 Benefits Management

\*HRES 1343 Compensation Management

\*HRES 2313 Human Resource Law I

\*HRES 2323 Employment and Evaluation Techniques

\*HRES 2333 Employee and Labor Relations

\*HRES 2343 Training and Development

\*HRES 2353 Human Resource Law II

#### **Controlled Electives 3 hours**

\*BUSN/PSYC 2633 Industrial and Organizational Psychology

COMM 1013 Fundamentals of Listening

COMM 1113 Public Speaking

COMM 2053 Intercultural Communication

COMM 2103 Interpersonal Communication

\*CSCI 2033 Excel

\*ECON 2123 International Economic Issues

HSVC 1213 Basic Counseling Skills

\*MGMT 2103 Workforce Development Internship

#### **Total Credit Hours: 60**

\*Course has prerequisite (See course description section of catalog).

\*\*Spreadsheet experience is highly recommended.

NOTE: A student may substitute PHR (Professional in Human Resources) or SPHR (Senior Professional in Human Resources)

certification for the course HRES 1313 Principles of Human Resources, if the student is current in the PHR or SPHR period of certification. (PHR or SPHR exams will not substitute for any other HRES courses).

NOTE: MGMT 2103 Workforce Development Internship is highly recommended for those with no experience in a Human Resources Department.



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## **HUMAN RESOURCES**

### Workforce Development Certificate

#### **Program Description:**

This program is designed to prepare students for a career in the human resources profession. Due to the solid growth in the human resources profession, this program is designed for both individuals wanting to enter the human resources profession, and those currently employed in human resources who desire advancement.

#### **Degree Awarded: Certificate of Achievement**

##### **Computer Information Systems 3 hours**

\*\* Select 3 credit hours from any of the Computer Information Systems (CSYS/CSCI) courses.

##### **Human Resources 24 hours**

HRES 1313 Principles of Human Resources

\*HRES 1333 Benefits Management

\*HRES 1343 Compensation Management

\*HRES 2313 Human Resource Law I

\*HRES 2323 Employment and Evaluation Techniques

\*HRES 2333 Employee and Labor Relations

\*HRES 2343 Training and Development

\*HRES 2353 Human Resource Law II

##### **Controlled Electives 3 hours**

\*BUSN/PSYC 2633 Industrial and Organizational Psychology

COMM 1013 Fundamentals of Listening

COMM 1113 Public Speaking

COMM 2053 Intercultural Communication

COMM 2103 Interpersonal Communication

\*ECON 2123 International Economic Issues

\*ENGL 2343 Business Communication I

\*HSVC 1213 Basic Counseling Skills

\*CSCI 2033 Excel

\*MGMT 2103 Workforce Development Internship

PHED 2212 First Aid

##### **Total Credit Hours: 30**

\*Course has prerequisite (See course description section of catalog).

\*\*Spreadsheet experience is highly recommended.

NOTE: A student may substitute PHR (Professional in Human Resources) or SPHR (Senior Professional in Human Resources) certification for the course HRES 1313 Principles of Human Resources, if the student is current in the PHR or SPHR period of certification. (PHR or SPHR exams will not substitute for any other HRES courses).

NOTE: MGMT 2103 Workforce Development Internship is highly recommended for those with no employment in a Human Resources Department.





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## **HUMAN SERVICES**

### **Program Description:**

Human service workers and assistants provide direct and indirect client services and serve to improve and enhance the lives of others in a variety of roles within social and human service delivery settings. Job titles vary: case management aide, social work assistant, alcohol or drug abuse counselor, mental health aide, community outreach worker, life skill counselor, crisis intervention counselor, intake worker, gerontology aide, family support worker, habilitation aide, residential counselor, and juvenile specialist.

The U.S. Department of Labor states, "Human services worker and assistant occupations are projected to be among the fastest growing. Job opportunities should be excellent [for qualified applicants]..." The Human Services program at Tulsa Community College is designed to provide education and training for individuals seeking careers in a wide range of helping profession settings. Students gain basic knowledge, skills, and values necessary to communicate and interact with persons experiencing personal and social problems in order to assess needs and provide appropriate intervention. Students have many opportunities to gain hands-on experience with community agencies and populations. In addition to general education requirements, all Human Service students complete core coursework in:

- Principles of Human Services
- Basic Counseling Skills
- Lifespan Development
- Human Services Applications/Case Management
- Internship

### **For More Information Contact:**

Liberal Arts and Community Services Division: Northeast Campus: (918) 595-7496

### **University Transfer (2 + 2) Options**

Degree options are available to provide seamless transfer to four-year degrees in Child and Family Services, Family Studies, Human Development, Pre-Social Work, Rehabilitation Services, and Therapeutic Recreation. Articulation agreements between Tulsa Community College and the designated universities provide for a seamless transition toward a baccalaureate or advanced degree in a human services-related field. Students complete general education requirements for the bachelor's degree and also complete core courses within the Human Services program, which complement upper division coursework within the major field at the four-year university.

Students are strongly encouraged to seek faculty advisement to ensure they are completing the correct option for their academic goals and intended course of study beyond the associate degree.

Transfer credit varies among colleges. Students should consult both the catalog of the specific college/university to which they plan to transfer and the signed transfer agreement or the current transfer planning guide posted at [www.tulsacc.edu/transfer](http://www.tulsacc.edu/transfer) to select courses that will meet both the associate and baccalaureate degree programs.

### **General Information**

The Human Services coursework is available in a variety of schedule alternatives, including traditional 16-week classes day and evening. Courses are also aligned with the FAST-TRACK program to allow degree completion to students desiring an accelerated schedule. The Human Services Institute offers special focus courses providing in-depth information on current issues in the human services field for students and community professionals in short-course formats. Students are strongly encouraged to enroll in core courses within the Human Services program early in their academic career along with general education requirements. Faculty advisement is available in this program. For more career and occupational information in the human services field, visit the following Web sites:

<http://bls.gov> and <http://stats.bls.gov/oco>



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## **HUMAN SERVICES**

Child and Family Services Option  
University Transfer Degree

### **Program Description:**

This option is designed for individuals seeking careers in the helping professions providing services to children, youth, elderly, and families in a variety of community-based settings. Specific career fields require varying levels of degree completion and include aging services, child and parenting practitioner, child life specialist, family policy and law, human service management, infant mental health specialist, international human services, marriage and family therapy, social welfare, and youth and family ministry/outreach. Students gain 27 credit hours of specialization in Human Services while earning the associate degree.

### **Degree Awarded: Associate in Science**

Semester plan available through faculty advisement. Students are strongly encouraged to seek faculty advisement to ensure they are completing the correct option for their academic goals and intended course of study beyond the associate degree.

### **General Education Requirements Credit Hours: 37**

#### **Communication 9 hours**

COMM 1113 Public Speaking

\*ENGL 1113 Composition I

\*ENGL 1213 Composition II

#### **Geography 3 hours**

GEOG 1043 Introduction to Cultural Geography

#### **Humanities 3 hours**

HUMN 2113 Humanities I

HUMN 2223 Humanities II

#### **Mathematics 6 hours**

\*MATH 1513 College Algebra

or

\*MATH 1473 Math for Critical Thinking

\*MATH 2193 Elementary Statistics

#### **Psychology/Sociology 3 hours**

#### **Select one course from the following:**

PSYC 1113 Introduction to Psychology

SOCI 1113 Introduction to Sociology

#### **Science 7 hours**

BIOL 1114 General Biology for Non-Majors

BIOL 1383 Nutrition

#### **Social Science 6 hours**

POLS 1113 American Federal Government

#### **and select one course from the following:**

HIST 1483 U.S. History 1492 to Civil War Era

HIST 1493 U.S. History Civil War Era to Present

### **Specialized Course Requirements Credit Hours: 27**

#### **^Human Services 21 hours**

HSVC 1113 Principles of Human Services

HSVC 1213 Basic Counseling Skills

HSVC 1413 Introduction to Developmental Disabilities

HSVC 2003 Family Relationships

HSVC 2023 Lifespan Development

\*HSVC 2053 Human Services Applications/Case Management

\*HSVC 2113 Internship

#### **Psychology/Sociology 3 hours**

PSYC/SOCI 2813 Human Sexuality

#### **Controlled Electives\*\* 3 hours**

CSCI/CSYS Any courses up to 3 credit hours

Foreign Language - Any skill-based courses

^HSVC 1313 Chemical Dependency and Treatment

^HSVC 2073 Issues in Human Services

^HSVC 2173 Service Learning in Human Services

HSVC 2991 Selected Topics in Human Services (up to 3 hours)

HSVC 2203 Parent-Child Relations

HSVC 2433/PHED 2533 Introduction to Therapeutic Recreation

HSVC 2513 Management of Community Programs

PSYC 2153 / SOCI 2153 Crisis Intervention and Experience

PSYC 2053 Social Psychology

Other HSVC electives and select CHLD courses may be allowed.

See Human Services faculty for advisement.

### **Total Credit Hours: 64**

\*Course has prerequisite (See course description section of catalog).

To receive an A.A. or A.S. Degree, students must demonstrate computer proficiency.

^Students must earn a "C" or better in HSVC courses (or gain permission of instructor or associate dean), in order to progress to advanced courses in the program.

\*\*Students should select courses that will transfer to the college/university of their plan to attend.



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## **HUMAN SERVICES**

Pre-Social Work Option  
University Transfer Degree

### **Program Description:**

This option is designed for individuals seeking careers in helping professions providing services to children, youth, elderly, and families in a variety of community-based settings with an academic goal of earning a bachelor's or master's degree in generalist social work practice. Articulation agreements between universities provide a seamless transition toward a baccalaureate degree or master's degree, which can be earned in five years in the greater Tulsa area. Students gain 21 credit hours of specialization in Human Services while earning the associate degree.

### **Degree Awarded: Associate in Science**

Semester plan available through faculty advisement. Students are strongly encouraged to seek faculty advisement to ensure they are completing the correct option for their academic goals and intended course of study beyond the associate degree.

### **General Education Requirements Credit Hours 37**

#### **Communication 9 hours**

COMM 1113 Public Speaking

\*ENGL 1113 Composition I

\*ENGL 1213 Composition II

#### **Humanities 6 hours**

GEOG 1043 Introduction to Cultural Geography

#### **and select one course from the following:**

HUMN 2113 Humanities I

HUMN 2223 Humanities II

#### **Mathematics 3 hours**

#### **Select one course from the following:**

\*MATH 1473 Mathematics for Critical Thinking

\*MATH 1513 College Algebra

#### **Psychology 3 hours**

PSYC 1113 Introduction to Psychology

#### **Science 7 hours**

BIOL 1114 General Biology for Non-Majors

BIOL 1383 Nutrition

#### **Social Science 6 hours**

POLS 1113 American Federal Government

#### **and select one course from the following:**

HIST 1483 U.S. History 1492 to Civil War Era

HIST 1493 U.S. History Civil War Era to Present

#### **Sociology 3 hours**

SOCI 1113 Introduction to Sociology

### **Specialized Course Requirements Credit Hours: 27**

#### **^Human Services 15 hours**

HSVC 1113 Principles of Human Services

HSVC 1213 Basic Counseling Skills

HSVC 2023 Lifespan Development

\*HSVC 2053 Human Services Applications/Case Management

\*HSVC 2113 Internship

#### **\*\*Controlled Electives 12 hours**

#### **Select one course from the following:**

\*MATH 2193 Elementary Statistics

\*PSYC 2223/SOCI 2223 Behavioral Statistics

#### **and select three courses from the following:**

CSCI 1203 Computer Concepts and Applications

^HSVC 1313 Chemical Dependency and Treatment

^\*HSVC 2073 Issues in Human Services

PSYC 2153 / SOCI 2153 Crisis Intervention and Experience

**Other HSVC electives may be allowed. See HSVC faculty advisors.**

### **Total Credit Hours: 64**

\*Course has prerequisite (See course description section of catalog).

^Students must earn a "C" or better in HSVC courses in order to progress to advanced courses in the program, or gain permission of instructor or associate dean.

To receive an A.A. or A.S. Degree, students must demonstrate computer proficiency.

**\*\* Students should select courses that will transfer to the college/university they plan to attend.**



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## **HUMAN SERVICES**

### Workforce Development Degree

Human Services workers and assistants provide direct and indirect client services and serve to improve and enhance the lives of others in a variety of roles within social and human service delivery settings. Job titles vary: case management aide, social work assistant, alcohol or drug abuse counselor, mental health aide, community outreach worker, life skill counselor, crisis intervention counselor, intake worker, gerontology aide, family support worker, habilitation aide, residential counselor, and juvenile specialist. The U.S. Department of Labor states: "Human services worker and assistant occupations are projected to be among the fastest growing. Job opportunities should be excellent [for qualified applicants]..." The Human Services program at Tulsa Community College is designed to provide education and training for individuals seeking careers in a wide range of helping profession settings. Students gain basic knowledge, skills, and values necessary to communicate and interact with persons experiencing personal and social problems in order to assess needs and provide appropriate intervention. Students have many opportunities to gain hands-on experience with community agencies and populations. In addition to general education requirements, all Human Service students complete core coursework in:

- Principles of Human Services
- Basic Counseling Skills
- Chemical Dependency and Treatment
- Lifespan Development
- Human Services Applications/Case Management
- Issues in Human Services
- Crisis Intervention
- Internship

Additional career and occupational information in the human services field can be found at:

<http://bls.gov> <http://stats.bls.gov/oco>

#### **Degree Awarded: Associate in Applied Science**

Semester plan available through faculty advisement

#### **General Education Requirements Credit Hours: 24**

##### **English 6 hours**

\*ENGL 1113 Composition I

**and select one course from the following:**

\*ENGL 1213 Composition II

\*ENGL 2333 Technical/Professional Writing

\*ENGL 2343 Business Communication I

##### **Psychology 3 hours**

PSYC 1113 Introduction to Psychology

##### **Social Science 6 hours**

POLS 1113 American Federal Government

**and select one course from the following:**

HIST 1483 U.S. History 1492 to Civil War Era

HIST 1493 U.S. History Civil War Era to Present

##### **Sociology 6 hours**

\*SOCI 1133 Crisis Intervention and Experience

**and select one course from the following:**

SOCI 1113 Introduction to Sociology

SOCI 2113 Social Problems in America

##### **Communication 3 hours**

COMM 1013 Fundamentals of Listening

COMM 1113 Speech Communication I

COMM 2103 Interpersonal Communication

#### **Specialized Course Requirements Credit Hours: 36**

##### **^Human Services 33 hours**

HSVC 1113 Principles of Human Services

HSVC 1213 Basic Counseling Skills

HSVC 1313 Chemical Dependency and Treatment

HSVC 2023 Lifespan Development

\*HSVC 2053 Human Services Applications/Case Management

\*HSVC 2073 Issues in Human Services

\*HSVC 2113 Internship

\*HSVC 2613 Gerontology in Human Services

**and select one course from the following:**

HSVC 1413 Introduction to Developmental Disabilities

HSVC 1423 Models for Supporting Persons with  
Developmental Disabilities

**and select one course from the following:**

HSVC 2003 Family Relationships

\*HSVC 2203 Parent-Child Relations

**and select one course from the following:**

\*HSVC 2513 Management of Community Programs

\*HSVC 1523 Volunteer Management in Human Services

##### **Computer Information Systems 3 hours**

Select three credit hours from any of the Computer Information Systems courses.

##### **Total Credit Hours: 60**

\*Course has prerequisite (See course description section of catalog).

^ Students must earn a grade of "C" or better in HSVC courses in order to progress to advanced courses in the program, or gain permission of instruction or associate dean.

General education requirements can be found at:  
[www.tulsacc.edu/gened](http://www.tulsacc.edu/gened)





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## **HUMANITIES**

University Transfer Degree

### **University Transfer Degree Information:**

Students should work closely with an academic advisor each semester to make certain you are enrolled in the correct courses for your degree program, especially if you are planning to transfer to a four-year college or university. Students are encouraged to begin a dialogue with their intended transfer schools as early as possible. Early coordination between TCC academic advisors and advisors from selected four-year institutions can streamline the transfer process. It is the student's responsibility to ensure that he/she understands the program/admission/transfer requirements for the transfer school.

### **Program Description:**

According to Socrates, "the unexamined life is not worth living." By studying the humanities, students will have the opportunity to examine the diverse expressions of human experience. The humanities can be understood as the systematic study of the human artistic/creative response to the circumstances of existence. Human creativity in all cultures has manifested itself in a variety of forms including, but not limited to the academic disciplines of: painting, sculpture, architecture, literature, poetry, drama, philosophy, music, dance, and film. Humanities courses approach this subject matter in a manner that encourages the cultivation of diverse cultural and analytical perspectives in an attempt to carefully reflect upon the wider implications of being human.

### **Degree Awarded: Associate in Arts**

### **General Education Requirements Credit Hours: 31**

See the General Education Requirements for course list.

Humanities requirements are met in Specialized Course Requirements.

### **Specialized Course Requirements Credit Hours: 29-30**

#### **Humanities 9 hours**

HUMN 2113 Humanities I

HUMN 2223 Humanities II

HUMN 2553 American Humanities

#### **Select 9 credit hours from the following:**

HUMN 2333 Humanities: Literature and Film

HUMN 2443 Art of Film

HUMN 2663 Hollywood's America

HUMN 2773 Popular Culture

HUMN 2883 Culture and Identity

#### **Select 3 credit hours from the following:**

HUMN 2613 International Film

GEOG 1043 Introduction to Cultural Geography

ASNS 2103 Survey of Asian Civilizations

AFRS 2713 Survey of African Civilizations

HIST 2223 Modern Latin American History

NAMS 2113 Native American Culture

NAMS 2213 Spiritualities of Native America

NAMS 2313 Introduction to Native American Literature, Drama, and

Film

RELG/PHIL 1213 Religions of the World: Eastern Tradition

RELG/PHIL 1223 Religions of the World: Western Tradition

#### **Controlled Electives 6 hours**

ART 1053 Art History Survey I

ART 1063 Art History Survey II

ART 2053 Art History Survey IV

\*ENGL 2543 British Literature I

\*ENGL 2653 British Literature II

\*ENGL 2673 World Literature I

\*ENGL 2683 World Literature II

\*ENGL 2773 American Literature I

\*ENGL 2883 American Literature II

HIST 1053 Ancient and Medieval Western Civilization

HIST 1063 Modern Western Civilization

MUSC 1113 Music Appreciation

PHIL 1113 Introduction to Philosophy

PHIL 2163 Introduction to the History and Philosophy of Science

RELG 1113 Introduction to Religious Studies

RELG 2243 Christian Ethics and Social Thought

RELG 2313 Religion in Film

SOCI 2123 Introduction to Cultural Anthropology

THEA 1093 Introduction to Theatre

#### **Recommended Electives 2-3 hours**

Foreign Languages strongly suggested

#### **Total Credit Hours: 60-61**

\*Course has prerequisite (See course description section of catalog).

Proficiency in foreign language is recommended.

To receive an A.A. or A.S. Degree, students must demonstrate computer proficiency.

Physical education activity courses do not count toward the associate degree requirements in this curriculum.

General education requirements can be found at:  
[www.tulsacc.edu/gened](http://www.tulsacc.edu/gened)





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## **INFORMATION TECHNOLOGY**

Workforce Development Degree

### **Program Description:**

The Information Technology program at Tulsa Community College provides students with the skills needed to work in today's rapidly changing Information technology environment. Students may earn an Associate in Applied Science degree in any of the following six (6) options:

- 1) Information Technology
- 2) Networking and Cloud Computing
- 3) Programming
- 4) Systems Support Technician
- 5) Web Development
- 6) Website Management

### **Degree Awarded: Associate in Applied Science**

#### **For More Information Contact:**

Business and Information Technology Division:

Metro Campus: (918) 595-7039

Southeast Campus: (918) 595-7639,

West Campus : (918) 595-8033

Northeast Campus: (918) 595-7439

### **General Education Requirements Credit Hours: 18**

#### **Communication 9 hours**

\*ENGL 1113 Composition I

**and select one course from the following:**

\*ENGL 1213 Composition II

\*ENGL 2333 Technical/Professional Writing

\*ENGL 2343 Business Communication I

**and select one course from the following:**

COMM1113 Public Speaking

COMM 2103 Interpersonal Communication

#### **Mathematics 3 hours**

**Select one course from the following:**

BUSN 1353 Business Mathematics

\*MATH 1513 College Algebra

#### **Social Science 6 hours**

POLS 1113 American Federal Government

**and select one course from the following:**

HIST 1483 U.S. History 1492 to Civil War Era

HIST 1493 U.S. History Civil War Era to Present

### **Specialized Course Requirements Credit Hours: 42**

#### **Core Courses 15 hours**

**(required for all options)**

#### **Business 3 hours**

**Select one course from the following:**

BUSN 1053 Introduction to Business

MGMT 2363 Principles of Management

#### **Computer Information Systems 12 hours**

CSCI 1203 Computer Concepts and Applications

\*CSCI 1263 Network Fundamentals

\*CSYS 1013 HTML and CSS

\*CSYS 1203 Introduction to Computer Programming

#### **Select from one of the six (6) degree options:**

##### **1) Information Technology Option 27 hours**

The Information Technology option seeks to provide maximum flexibility in designing a course curriculum through electives which meets the needs of students in the Information Technology field.

**Select 27 credit hours from any CSCI, CSYS or ITCV courses.**

##### **2) Networking and Cloud Computing Option 27 hours**

The Networking program is designed to provide skills needed to work in today's changing IT network environment. Many of these courses help prepare students to take industry certification exams.

\*CSCI 1483 Intro to UNIX (Linux)

\*CSYS 2063 Windows Server Administration

\*CSYS 2493 Principles of Information Assurance



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# INFORMATION TECHNOLOGY

## Workforce Development Degree

- \*ITCV 1033 Introduction to Voice & Data Networking
- \*ITCV 2293 Cloud Computing
- \*ITCV 2023 Wireless Networking
- \*ITCV 2033 Cisco/CCENT/ICND1
- \*ITCV 2203 Cisco CCNA Routing and Switching/ICND2
- \*CSYS 2563 Enterprise Security

### 3) Programming Option 27 hours

The Programming option is designed to provide graduates with the logic and programming skills needed to design and create computer programs in a wide range of programming languages that satisfy the needs of business and industry.

#### Information Systems 21 hours

- \*CSCI 2133 Introduction to JAVA
- CSCI 2283 Visual Basic
- \*CSCI 2473 C Language
- \*CSCI 2843 C++ Programming Language
- \*CSYS 2613 C# Programming
- \*CSYS 2643 Database Design and SQL

#### And select one course from the following:

- \*CSYS 2413 Advanced JAVA
- \*CSYS 2503 ASP.NET
- \*CSYS 2783 Advanced C# Programming

#### Controlled Electives 6 hours

##### Select two courses from the following:

- \*CSYS 2413 Advanced JAVA
- \*CSYS 2503 ASP.NET
- \*CSCI 2683 Data Structures
- \*CSYS 2783 Advanced C# Programming
- \*CSYS 2853 Ruby
- \*CSCI 2983 Information Technology Internship

### 4) Systems Support Technician Option 30 hours

This program is designed to provide graduates with the diversity of skills needed to troubleshoot and implement a course of action necessary to solve customer hardware, software, and networking problems.

#### Information Systems 18 hours

- \*CSCI 1273 Customer Support
- \*CSCI 1483 Introduction to UNIX (Linux)
- \*CSCI 2143 A+ II
- \*CSYS 2023 A+I
- \*CSYS 2063 Windows Server Administration
- \*CSYS 2943 Windows Server Advanced Administration
- \*CSYS 2493 Principles of Information Assurance
- \*CSYS 2953 Windows Server Advanced Services

- \*ITCV 2023 Wireless Networking
- \*ITCV 2293 Cloud Computing

### 5) Web Development Option 27 hours

This program is designed to provide graduates with the knowledge required to assume the role of a Web application developer. Completion of this program will allow a student to create interactive Website front ends using (X)HTML, JavaScript, and CSS and the student will be able to code server side components for delivering content to database driven Websites and Web applications.

#### Information Systems 24 hours

- CSCI 2283 Visual Basic
- \*CSYS 2033 Scripting
- \*CSYS 2463 PHP Programming
- \*CSYS 2503 ASP.NET
- \*CSYS 2603 Mobile Web Design
- \*CSYS 2643 Database Design and SQL
- \*CSYS 2853 Ruby
- \*CSYS 2863 Rails I

#### Controlled Electives 3 hours

- \*CSCI 1483 Introduction to UNIX (Linux)
- \*CSCI 2983 Information Technology Internship
- \*CSYS 1393/MKTG 1393 Web Design & Marketing
- CSYS 1443/MKTG 1443 Electronic Commerce
- \*CSYS 2873 Rails II

### 6) Website Management Option 27 hours

The Website Management option is designed to provide graduates with the skills needed to develop and promote a business through effective informational and e-business Websites.

#### Information Systems 18 hours

- \*CSYS 1393/MKTG 1393 Web Design and Marketing
- \*CSYS 1443/MKTG 1443 Electronic Commerce
- \*CSYS 2033 Scripting
- CSYS/MKTG 2293 Social Media
- \*CSYS 2463 PHP Programming
- \*CSYS 2603 Mobile Web Design

#### Controlled Electives 9 hours

- \*CSYS 1033 Adobe Photoshop
- \*CSCI 1483 Introduction to Unix (Linux)
- MKTG 2423 Principles of Marketing
- MKTG 2393 Advertising and Promotion Management

### Total Credit Hours 60

\*Course has prerequisite (See course description section of catalog).



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## **INFORMATION TECHNOLOGY**

### **Workforce Development Certificate**

#### **Program Description**

The Information Technology program at Tulsa Community College provides students with the skills needed to work in today's rapidly changing Information Technology environment. Students may earn a Certificate in any of the six (6) options listed below. These certificates range from 27 to 39 hours. Many of the courses help prepare students to take industry certification examinations. After earning a Certificate, students can earn an Associate in Applied Science degree by taking additional classes.

- 1) Business Application Specialist
- 2) Networking and Cloud Computing
- 3) Programming
- 4) System Support Technician
- 5) Web Development
- 6) Website Management

#### **Degree Awarded: Certificate of Achievement**

##### **For More Information Contact:**

Business and Information Technology Division:

Metro Campus: (918) 595-7039

Northeast Campus: (918) 595-7439

Southeast Campus: (918) 595-7639,

West Campus: (918) 595-8033

##### **Computer Information Systems 12 hours**

(required for all options)

CSCI 1203 Computer Concepts and Applications

\*CSCI 1263 Network Fundamentals

\*CSYS 1013 HTML and CSS

\*CSYS 1203 Introduction to Computer Programming

##### **1) Business Application Specialist Option 15 hours**

The Business Application Specialist Certificate is designed to prepare business professionals and information workers with the diversity of computer technology and applications software skills required to work in a collaborative environment to effectively complete business tasks using multiple applications effectively and to prepare for the Microsoft Certified Application Specialist Exam (MCAS).

\*CSCI 2013 Word

\*CSCI 2033 Excel

\*CSCI 2043 Access

\*CSCI 2163 Windows Operating Systems

\*CSCI 2483 PowerPoint/Multimedia

##### **2) Networking & Cloud Computing Option 21 hours**

This program is designed to provide skills needed to work in the environment of today's IT networking and cloud computing infrastructure. After earning this certificate, students can acquire an Associate in Applied Science degree in Networking and Cloud Computing by taking additional classes. Many of these courses help prepare students to take industry certification exams.

\*CSYS 2063 Windows Server Administration

\*CSYS 2493 Principles of Information Assurance

\*CSYS 2563 Enterprise Security

\*ITCV 1033 Introduction to Voice & Data Networking

\*ITCV 2023 Wireless Networking

\*ITCV 2033 Cisco/CCENT/ICND1

\*ITCV 2293 Cloud Computing

##### **3) Programming Option 27 hours**

The Programming certificate is designed to provide graduates with the logic and programming skills needed to design and create computer programs in a wide range of programming languages that satisfy the needs of business and industry.

\*CSCI 2133 Introduction to JAVA

CSCI 2283 Visual Basic

\*CSCI 2473 C Language

\*CSCI 2843 C++ Programming Language

\*CSYS 2613 C# Programming

\*CSYS 2643 Database Design and SQL

**Select one course from the following:**





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## **INFORMATION TECHNOLOGY**

### Workforce Development Certificate

- \*CSYS 2413 Advanced JAVA
- \*CSYS 2503 ASP.NET
- \*CSYS 2783 Advanced C# Programming

**And select two courses from the following:**

- \*CSYS 2413 Advanced JAVA
- \*CSYS 2503 ASP.NET
- \*CSYS 2783 Advanced C# Programming
- \*CSYS 2853 Ruby
- \*CSCI 2683 Data Structures
- \*CSCI 2983 Information Technology Internship

#### **4) Systems Support Technician Option 18 hours**

This program is designed for students who wish to acquire knowledge and skills needed to trouble shoot and implement a course of action necessary to solve customer hardware, software, and networking problems. Entry competencies include basic knowledge of PCs and familiarity with the Windows operating system. On completion of coursework, students may sit for certification exams from CompTIA and Microsoft.

- \*CSCI 1273 Customer Support
- \*CSCI 1483 Introduction to UNIX (Linux)
- \*CSCI 2143 A+II Technician
- \*CSYS 2023 A+I Essentials
- \*CSYS 2063 Windows Server Administration
- \*CSYS 2493 Principles of Information Assurance

#### **5) Web Development Option 27 hours**

This program is designed to provide graduates with the knowledge required to assume the role of a Web developer. Completion of this program will allow a student to create interactive Website front ends using (X)HTML, JavaScript, and CSS and the student will be able to code server side components for delivering content to database driven Websites and Web applications.

- CSCI 2283 Visual Basic
- \*CSYS 2033 Scripting
- \*CSYS 2463 PHP Programming
- \*CSYS 2503 ASP.NET
- \*CSYS 2603 Mobile Web Design
- \*CSYS 2643 Database Design and SQL

- \*CSYS 2853 Ruby
- \*CSYS 2863 Rails I
- \*CSYS 2873 Rails II

Students who complete the courses with a "+" above may apply for a Web Development Level I certificate of completion from the Business and Information Technology division.

#### **6) Website Management Option 18 hours**

The Website Management Certificate is designed to provide graduates with the skills needed to develop and promote a business through effective informational and e-business websites.

- \*CSYS 1393/MKTG 1393 Web Design and Marketing
- \*CSYS 1443/MKTG 1443 Electronic Commerce
- \*CSYS 2033 Scripting
- CSYS 2293/MKTG 2293 Social Media
- \*CSYS 2463 PHP Programming
- \*CSYS 2603 Mobile Web Design

#### **Total Credit Hours: 27-39 hours**

\*Course has prerequisite (See course description section of catalog).



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## **INFORMATION TECHNOLOGY**

**Business Computer User  
Workforce Development Certificate**

### **Program Description:**

This program is designed to produce a knowledgeable and proficient computer user, with the computer technology and applications software skills needed to collaborate with and connect to vital business resources, and to use desktop applications to complete business tasks and projects.

### **Degree Awarded: Certificate of Achievement**

#### **For More Information Contact:**

Business and Information Technology Division:  
West Campus: (918) 595-8033

#### **Computer Information Systems 6 hours**

CSCI 1203 Computer Concepts and Applications  
\*CSYS 2073 MS Office

#### **Total Credit Hours: 6**

\*Course has prerequisite (See course description section of catalog).





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## **INTERIOR DESIGN**

Workforce Development Degree

### **Program Description:**

Upon completion of the program the student will have skills in the following areas: cost estimating, purchase orders, display, drafting for interiors including floor plans, space planning, elevations, isometrics, one and two point perspective sketching, delineation techniques, historic periods of design, knowledge of fire, life safety and handicap codes, knowledge of lighting, textiles computer-aided design, and sales representation. These skills combined with field internships, market field trips, and customer service prepare student to enter the interior design field and combine their education with work experience.

### **Degree Awarded: Associate in Applied Science**

#### **For More Information Contact:**

Visual and Performing Arts Division:  
Southeast Campus: (918) 595-7752

**Semester plan available through faculty advisement.**

### **General Education Requirements Credit Hours: 18**

#### **English 6 hours**

\*ENGL 1113 Composition I

#### **and select one course from the following:**

\*ENGL 1213 Composition II

\*ENGL 2333 Technical/Professional Writing

#### **Interior Design 6 hours**

INTD 1433 History of Interiors I

\*INTD 1443 History of Interiors II

#### **Social Science 6 hours**

POLS 1113 American Federal Government

#### **and select one course from the following:**

HIST 1483 U.S. History 1492 to Civil War Era

HIST 1493 U.S. History Civil War Era to Present

### **Specialized Course Requirements Credit Hours: 54**

#### **Interior Design 48 hours**

+INTD 1303/MKTG 1313 Sales & Negotiations

INTD 1313 Interior Design Orientation

INTD 1473 Color Theory

\*INTD 1483 Design I

\*INTD 1493 Presentation Drawing

\*INTD 1513 Design II

\*INTD 1523 Introduction to CAD for Interior Design

\*INTD 1543 Professional Practice for Interior Design

\*INTD 2433 Textiles for Interior Design

\*INTD 2443 Materials & Finishes for Interior Design

\*INTD 2453 Advanced CAD for Interior Design

INTD 2463 Codes for Interior Design

\*INTD 2503 Computer Graphics

\*INTD 2513 Lighting for Interior Design

\*INTD 2523 Design III

\*INTD 2533 Design IV

150

### **Controlled Electives 6 hours**

\*INTD 1533 Photoshop for Interior Design

\* \*\*\*INTD 2343 Internship I

\* \*\*\*INTD 2353 Internship II

\* \*\*INTD 2403 Market Field Trip

\*INTD 2993 Selected Topics in Interior Design

### **Total Credit Hours: 72**

\*Course has prerequisite (See course description section of catalog).

\*\*Course may be taken twice.

\*\*\*These courses are highly recommended for students not employed in the field.

+ Students planning to sit for the NCIDQ exam should take this course as INTD 1303.

General education requirements can be found at:  
[www.tulsacc.edu/gened](http://www.tulsacc.edu/gened)



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## **INTERNATIONAL BUSINESS**

University Transfer Degree

### **University Transfer Degree Information:**

Students should work closely with an academic advisor each semester to make certain you are enrolled in the correct courses for your degree program, especially if you are planning to transfer to a four-year college or university. Students are encouraged to begin a dialogue with their intended transfer schools as early as possible. Early coordination between TCC academic advisors and advisors from selected four-year institutions can streamline the transfer process. It is the student's responsibility to ensure that he/she understands the program/admission/transfer requirements for the transfer school.

### **Degree Awarded: Associate in Science**

#### **For More Information Contact:**

Business and Information Technology Division:

Metro Campus: (918) 595-7039

Southeast Campus: (918) 595-7639,

West Campus: (918) 595-8033

Northeast Campus: (918) 595-7439

### **General Education Requirements Credit Hours: 37**

#### **English 6 hours**

\*ENGL 1113 Composition I

\*ENGL 1213 Composition II

#### **Foreign language 9 hours**

Select nine (9) credit hours from one foreign language

#### **Humanities+ 6 Hours**

See the General Education Requirements page for the course list.

#### **Mathematics+ 3 hours**

See the General Education Requirements page for the course list.

#### **Science+ 7 hours**

See the General Education Requirements page for the course list. One course must be a laboratory science (L).

#### **Social Science 6 hours**

POLS 1113 American Federal Government

**and select one course from the following:**

HIST 1483 U.S. History 1492 to Civil War Era

HIST 1493 U.S. History Civil War Era to Present

### **Specialized Course Requirements Credit Hours: 23**

#### **Accounting 6 hours**

\*ACCT 2213 Financial Accounting

\*ACCT 2223 Managerial Accounting

#### **Computer Information Systems 3 hours**

CSCI 1203 Computer Concepts and Applications

#### **Economics 9 hours**

ECON 2013 Principles of Macroeconomics

ECON 2023 Principles of Microeconomics

\*ECON 2123 International Economic Issues

#### **Communication 3 hours**

COMM/BUSN 2053 Intercultural Communication

#### **Recommended Electives 2 hours**

BUSN 1053 Introduction to Business

\*BUSN 2253 International Business Seminar/Field Study

CSYS 2563 Enterprise Security

GEOG 1023 World Geography (Economics)

GEOG 1043 Introduction to Cultural Geography

MGMT 2123 Leadership Development

MGMT 2363 Principles of Management

MKTG 2423 Principles of Marketing

\*MKTG 2813 International Marketing

\*MATH 2193 Elementary Statistics

MATH 2523 Calculus for Business, Life, and Social Studies

\*POLS 2013 Introduction to Comparative Governments

\*POLS 2203 Introduction to International Relations

### **Total Credit Hours: 60**

\*Course has prerequisites (See course description section of catalog).  
+Students should select courses that will transfer to the specific college/university they plan to attend. See the University Transfer Degree Information above.

To receive an A.A. or A.S. Degree, students must demonstrate computer proficiency.

Physical education activity courses do not count toward the associate degree requirements in this curriculum.



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## **INTERNATIONAL LANGUAGE STUDIES**

French Option

University Transfer Degree

### **University Transfer Degree Information:**

Students should work closely with an academic advisor each semester to make certain you are enrolled in the correct courses for your degree program, especially if you are planning to transfer to a four-year college or university. Students are encouraged to begin a dialogue with their intended transfer schools as early as possible. Early coordination between TCC academic advisors and advisors from selected four-year institutions can streamline the transfer process. It is the student's responsibility to ensure that he/she understands the program/admission/transfer requirements for the transfer school.

### **Degree Awarded: Associate in Arts**

### **General Education Requirements Credit Hours: 37**

#### **Communication 9 hours**

COMM 1113 Public Speaking

\*ENGL 1113 Composition I

\*ENGL 1213 Composition II

#### **Humanities 6 hours**

See the General Education Requirements page for the course list.

#### **Mathematics 3 hours**

See the General Education Requirements page for the course list.

#### **Science 7 hours**

See the General Education Requirements page for the course list.

One course must be a laboratory science (L).

#### **Social Science 6 hours**

POLS 1113 American Federal Government

and select one course from the following:

HIST 1483 U.S. History 1492 to Civil War Era

HIST 1493 U.S. History Civil War Era to Present

#### **Recommended Electives 3 hours**

CSCI 1203 Computer Concepts and Applications

or

Select three (3) credit hours from the list of Liberal Arts and

Science Electives

#### **Required Electives 3 hours**

Select one three-hour course from one of the following:

Psychology, Social Sciences, Foreign Language, or Fine Arts

(Art, Music, Theatre).

### **Specialized Course Requirements Credit Hours: 23**

#### **French 18 hours**

FREN 1103 French I

\*FREN 1213 French II

\*FREN 1313 French III

\*FREN 1413 French IV

\*FREN 2113 Intermediate French I

\*FREN 2213 Intermediate French II

### **Controlled Electives 5 hours\*\***

\*FREN 1001 French for Communication I

\*FREN 1031 French Pronunciation

\*FREN 1201 French for Communication II

\*FREN 1301 French for Communication III

\*FREN 1401 French for Communication IV

^FREN 2041 French - Introduction to the Arts

^FREN 2071 French History and Geography Introduction

\*FREN 2121 Intermediate French Communication

\*FREN 2143 French Civilization and Culture

\*FREN 2263 Intermediate French Literature

\*FREN 2320 International Work and/or Study Seminar

\*FREN 2330 French International Seminar and/or Field Studies

\*FREN 2413 French Translating

^FREN 2421 French Culture Comparisons

\*FREN 2433 French Cinema and Conversation

\*FREN 2523 Intermediate French Grammar and Composition

\*FREN 2533 Advanced French Conversation

### **Total Credit Hours: 60**

\*Course has prerequisite (See course description section of catalog). To receive an A.A. or A.S. Degree, students must demonstrate computer proficiency.

\*\*NOTE: The majority of the controlled electives must be courses taught in French. English based courses may only count for two hours toward the degree.

^Course conducted in English.



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## **INTERNATIONAL LANGUAGE STUDIES**

Italian Option

University Transfer Degree

### **University Transfer Degree Information:**

Students should work closely with an academic advisor each semester to make certain you are enrolled in the correct courses for your degree program, especially if you are planning to transfer to a four-year college or university. Students are encouraged to begin a dialogue with their intended transfer schools as early as possible. Early coordination between TCC academic advisors and advisors from selected four-year institutions can streamline the transfer process. It is the student's responsibility to ensure that he/she understands the program/admission/transfer requirements for the transfer school.

### **Degree Awarded: Associate in Arts**

### **General Education Requirements Credit Hours: 37**

#### **Communication 9 hours**

COMM 1113 Public Speaking

\*ENGL 1113 Composition I

\*ENGL 1213 Composition II

#### **Humanities 6 hours**

See the General Education Requirements page for the course list.

#### **Mathematics 3 hours**

See the General Education Requirements page for the course list.

#### **Science 7 hours**

See the General Education Requirements page for the course list.  
One course must be a laboratory science (L).

#### **Social Science 6 hours**

POLS 1113 American Federal Government

and select one course from the following:

HIST 1483 U.S. History 1492 to Civil War Era

HIST 1493 U.S. History Civil War Era to Present

#### **Recommended Electives 3 hours**

CSCI 1203 Computer Concepts and Applications

or

Select three (3) credit hours from the list of Liberal Arts and Science Electives

#### **Required Electives 3 hours**

Select one three-hour course from one of the following:

Psychology, Social Sciences, Foreign Language, or Fine Arts (Art, Music, Theatre).

### **Specialized Course Requirements Credit Hours: 23**

#### **Italian 18 hours**

ITAL 1103 Italian I

\*ITAL 1213 Italian II

\*ITAL 1313 Italian III

\*ITAL 1413 Italian IV

\*ITAL 2113 Intermediate Italian I

\*ITAL 2213 Intermediate Italian II

#### **Controlled Electives 5 hours\*\***

\*ITAL 1001 Italian for Communication I

\*ITAL 1201 Italian for Communication II

\*ITAL 1301 Italian for Communication III

\*ITAL 1401 Italian for Communication IV

\*ITAL 2121 Intermediate Italian Communication

\*ITAL 2143 Italian Civilization and Culture

\*ITAL 2263 Intermediate Italian Literature

\*ITAL 2320 International Work and/or Study Seminar

\*ITAL 2330 Italian International Seminar and/or Field Studies

^ITAL 2421 Italian Culture Comparisons

\*ITAL 2523 Intermediate Italian Grammar and Composition

\*ITAL 2533 Advanced Italian Conversation

#### **Total Credit Hours: 60**

\*Course has prerequisite (See course description section of catalog).

To receive an A.A. or A.S. Degree, students must demonstrate computer proficiency.

\*\*NOTE: The majority of the controlled electives must be courses taught in Italian. English based courses may only count for two hours toward the degree.

^Course conducted in English.





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## **INTERNATIONAL LANGUAGE STUDIES**

Japanese Option

University Transfer Degree

### **University Transfer Degree Information:**

Students should work closely with an academic advisor each semester to make certain you are enrolled in the correct courses for your degree program, especially if you are planning to transfer to a four-year college or university. Students are encouraged to begin a dialogue with their intended transfer schools as early as possible. Early coordination between TCC academic advisors and advisors from selected four-year institutions can streamline the transfer process. It is the student's responsibility to ensure that he/she understands the program/admission/transfer requirements for the transfer school.

### **Degree Awarded: Associate in Arts**

#### **General Education Requirements Credit Hours: 37**

##### **Communication 9 hours**

COMM 1113 Public Speaking

\*ENGL 1113 Composition I

\*ENGL 1213 Composition II

##### **Humanities 6 hours**

See the General Education Requirements page for the course list.

##### **Mathematics 3 hours**

See the General Education Requirements page for the course list.

##### **Science 7 hours**

See the General Education Requirements page for the course list.

One course must be a laboratory science (L).

##### **Social Science 6 hours**

POLS 1113 American Federal Government

and select one course from the following:

HIST 1483 U.S. History 1492 to Civil War Era

HIST 1493 U.S. History Civil War Era to Present

##### **Recommended Electives 3 hours**

CSCI 1203 Computer Concepts and Applications

or

Select three (3) credit hours from the list of Liberal Arts and

Science Electives

##### **Required Electives 3 hours**

Select one three-hour course from one of the following:

Psychology, Social Sciences, Foreign Language, or Fine Arts

(Art, Music, Theatre).

### **Specialized Course Requirements Credit Hours: 23**

#### **Japanese 18 hours**

JAPN 1103 Japanese I

\*JAPN 1213 Japanese II

\*JAPN 1313 Japanese III

\*JAPN 1413 Japanese IV

\*JAPN 2113 Intermediate Japanese I

\*JAPN 2213 Intermediate Japanese II

#### **Controlled Electives 5 hours\*\***

\*JAPN 1001 Japanese for Communication I

\*JAPN 1201 Japanese for Communication II

\*JAPN 1301 Japanese for Communication III

\*JAPN 1401 Japanese for Communication IV

^JAPN 2071 Japanese History and Geography Introduction

\*JAPN 2320 International Work and/or Study Seminar

^JAPN 2421 Japanese Culture Comparisons

\*JAPN 2523 Intermediate Japanese Grammar and Composition

### **Total Credit Hours: 60**

\*Course has prerequisite (See course description section of catalog).

To receive an A.A. or A.S. Degree, students must demonstrate computer proficiency.

\*\*NOTE: The majority of the controlled electives must be courses taught in Japanese. English based courses may only count for two hours toward the degree.

^Course conducted in English.





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## **INTERNATIONAL LANGUAGE STUDIES**

Spanish Option

University Transfer Degree

### **University Transfer Degree Information:**

Students should work closely with an academic advisor each semester to make certain you are enrolled in the correct courses for your degree program, especially if you are planning to transfer to a four-year college or university. Students are encouraged to begin a dialogue with their intended transfer schools as early as possible. Early coordination between TCC academic advisors and advisors from selected four-year institutions can streamline the transfer process. It is the student's responsibility to ensure that he/she understands the program/admission/transfer requirements for the transfer school.

### **Program Description:**

This program is designed for students who wish to acquire oral and written language proficiency, an awareness of the chosen language's-speaking culture, and who have plans to transfer to a four-year university. TCC instructional methods infuse technology into the learning process.

### **Degree Awarded: Associate in Arts**

### **General Education Requirements Credit Hours: 37**

#### **Communication 9 hours**

COMM 1113 Public Speaking

\*ENGL 1113 Composition I

\*ENGL 1213 Composition II

#### **Humanities 6 hours**

See the General Education Requirements page for the course list.

#### **Mathematics 3 hours**

See the General Education Requirements page for the course list.

#### **Science 7 hours**

See the General Education Requirements page for the course list.  
One course must be a laboratory science (L).

#### **Social Science 6 hours**

POLS 1113 American Federal Government

and select one course from the following:

HIST 1483 U.S. History 1492 to Civil War Era

HIST 1493 U.S. History Civil War Era to Present

#### **Recommended Electives 3 hours**

CSCI 1203 Computer Concepts and Applications

or

Select three (3) credit hours from the list of Liberal Arts and Science Electives

#### **Required Electives 3 hours**

Select one three-hour course from one of the following:

Psychology, Social Sciences, Foreign Language, or Fine Arts (Art, Music, Theatre).

### **Specialized Course Requirements Credit Hours: 23**

#### **Spanish 18 hours**

SPAN 1103 Spanish I

\*SPAN 1213 Spanish II

\*SPAN 1313 Spanish III

\*SPAN 1413 Spanish IV

\*SPAN 2113 Intermediate Spanish I

**and select one from the following:**

\*SPAN 2213 Intermediate Spanish II

\*SPAN 2523 Intermediate Spanish Grammar and Composition

#### **Controlled Electives 5 hours\*\***

\*SPAN 1001 Spanish for Communication I

SPAN 1031 Spanish Pronunciation

SPAN 1061 Spanish for Biblical Study

\*SPAN 1201 Spanish for Communication II

\*SPAN 1301 Spanish for Communication III

\*SPAN 1401 Spanish for Communication IV

^SPAN 2041 Spanish-Introduction to the Arts

^SPAN 2071 Spanish-Mexican History and Geography Introduction

\*SPAN 2121 Intermediate Spanish Communication

\*SPAN 2143 Latin American Civilization and Culture

\*SPAN 2213 Intermediate Spanish II

\*SPAN 2263 Intermediate Spanish Literature

\*SPAN 2320 International Work and/or Study Seminar

\*SPAN 2330 Spanish International Seminar and/or Field Studies

\*SPAN 2413 Translating Spanish to English

^SPAN 2421 Spanish Culture Comparisons

\*SPAN 2443 Interpreting Spanish to English

\*SPAN 2453 Interpreting English to Spanish

\*SPAN 2463 Courtroom Interpreting Skills Introduction

\*SPAN 2473 Medical Interpreting Skills Introduction

\*SPAN 2523 Intermediate Spanish Grammar and Composition

\*SPAN 2533 Advanced Spanish Conversation

\*SPAN 2543 Translating English to Spanish

\*SPAN 2663 Spanish Service Learning

### **Total Credit Hours: 60**

\*Course has prerequisite (See course description section of catalog).

To receive an A.A. or A.S. Degree, students must demonstrate computer proficiency.

\*\*NOTE: The majority of the controlled electives must be courses taught in Spanish. English based courses may only count for two hours toward the degree.

^Course conducted in English.

General education requirements can be found at:  
[www.tulsacc.edu/gened](http://www.tulsacc.edu/gened)



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## **INTERNATIONAL LANGUAGE STUDIES**

French Option

Workforce Development Certificate

### **Certificate Program Description:**

This program provides an in-depth study of the spoken and written language and prepares students to use the chosen language as a career skill. The courses are designed to emphasize acquisition of competency sufficient to communicate orally and in writing with a native speaker of the target language on a professional or work-related basis. TCC instructional methods infuse technology into the learning process, which increases access to resources for the language. Graduates find a variety of positions with government or social organizations and firms involved with speakers of the target language (translating, interpreting, investments, accounting, banking, education, publishing, manufacturing, sales, service, and travel).

### **Degree Awarded: Certificate of Achievement**

#### **French 18 hours**

FREN 1103 French I

\*FREN 1213 French II

\*FREN 1313 French III

\*FREN 1413 French IV

\*FREN 2113 Intermediate French I

\*FREN 2213 Intermediate French II

#### **Controlled Electives 7 hours\*\***

\*FREN 1001 French for Communication I

\*FREN 1031 French Pronunciation

\*FREN 1201 French for Communication II

\*FREN 1301 French for Communication III

\*FREN 1401 French for Communication IV

^FREN 2041 French - Introduction to the Arts

^FREN 2071 French History and Geography Introduction

\*FREN 2121 Intermediate French Communication

\*FREN 2143 French Civilization and Culture

\*FREN 2263 Intermediate French Literature

\*FREN 2320 International Work and/or Study Seminar

\*FREN 2330 International Seminar and/or Field Studies

\*FREN 2413 French Translating

^FREN 2421 French Culture Comparisons

\*FREN 2433 French Cinema and Conversations

\*FREN 2523 Intermediate French Grammar and Composition

\*FREN 2533 Advanced French Conversation

#### **Total Credit Hours: 25**

\*Course has prerequisite (See course description section of catalog).

To receive an A.A. or A.S. Degree, students must demonstrate computer proficiency.

\*\*NOTE: At least four hours of the controlled electives must be courses taught in French. English based courses may only count for three hours toward the degree.

^Course conducted in English.



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## **INTERNATIONAL LANGUAGE STUDIES**

Italian Option

Workforce Development Certificate

### **Certificate Program Description:**

This program provides an in-depth study of the spoken and written language and prepares students to use the chosen language as a career skill. The courses are designed to emphasize acquisition of competency sufficient to communicate orally and in writing with a native speaker of the target language on a professional or work-related basis. TCC instructional methods infuse technology into the learning process, which increases access to resources for the language. Graduates find a variety of positions with government or social organizations and firms involved with speakers of the target language (translating, interpreting, investments, accounting, banking, education, publishing, manufacturing, sales, service, and travel).

### **Degree Awarded: Certificate of Achievement**

#### **Italian 18 hours**

- ITAL 1103 Italian I
- \*ITAL 1213 Italian II
- \*ITAL 1313 Italian III
- \*ITAL 1413 Italian IV
- \*ITAL 2113 Intermediate Italian I
- \*ITAL 2213 Intermediate Italian II

#### **Controlled Electives 7 hours\*\***

- \*ITAL 1001 Italian for Communication I
- \*ITAL 1201 Italian for Communication II
- \*ITAL 1301 Italian for Communication III
- \*ITAL 1401 Italian for Communication IV
- \*ITAL 2121 Intermediate Italian Communication
- \*ITAL 2143 Italian Civilization and Culture
- \*ITAL 2263 Intermediate Italian Literature
- \*ITAL 2320 International Work and/or Study Seminar
- \*ITAL 2330 Italian International Seminar and/or Field Studies
- ^ITAL 2421 Italian Culture Comparisons
- \*ITAL 2523 Intermediate Italian Grammar and Composition
- \*ITAL 2533 Advanced Italian Conversation

### **Total Credit Hours: 25**

\*Course has prerequisite (See course description section of catalog).

\*\*NOTE: At least four hours of the controlled electives must be courses taught in Italian. English based courses may only count for three hours toward the certificate.

^Course conducted in English.



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## **INTERNATIONAL LANGUAGE STUDIES**

Japanese Option

Workforce Development Certificate

### **Certificate Program Description:**

This program provides an in-depth study of the spoken and written language and prepares students to use the chosen language as a career skill. The courses are designed to emphasize acquisition of competency sufficient to communicate orally and in writing with a native speaker of the target language on a professional or work-related basis. TCC instructional methods infuse technology into the learning process, which increases access to resources for the language. Graduates find a variety of positions with government or social organizations and firms involved with speakers of the target language (translating, interpreting, investments, accounting, banking, education, publishing, manufacturing, sales, service, and travel).

### **Degree Awarded: Certificate of Achievement**

#### **Japanese 18 hours**

JAPN 1103 Japanese I

\*JAPN 1213 Japanese II

\*JAPN 1313 Japanese III

\*JAPN 1413 Japanese IV

\*JAPN 2113 Intermediate Japanese I

\*JAPN 2213 Intermediate Japanese II

#### **Controlled Electives 7 hours\*\***

\*JAPN 1001 Japanese for Communication I

\*JAPN 1201 Japanese for Communication II

\*JAPN 1301 Japanese for Communication III

\*JAPN 1401 Japanese for Communication IV

^JAPN 2071 Japanese History and Geography Introduction

\*JAPN 2320 International Work and/or Study Seminar

^JAPN 2421 Japanese Culture Comparisons

\*JAPN 2523 Intermediate Japanese Grammar and Composition

### **Total Credit Hours: 25**

\*Course has prerequisite (See course description section of catalog).

\*\*NOTE: At least four hours of the controlled electives must be courses taught in Japanese. English based courses may only count for two hours toward the certificate.

^Course conducted in English.





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## **INTERNATIONAL LANGUAGE STUDIES**

Spanish Option

Workforce Development Certificate

### **Program Description:**

This program provides an in-depth study of the spoken and written language and prepares students to use the Spanish language as a career skill. The courses are designed to emphasize acquisition of competency sufficient to communicate orally and in writing with a native speaker of the target language on a professional or work-related basis. TCC instructional methods infuse technology into the learning process, which increases access to resources for the language. Graduates find a variety of positions with government or social organizations and firms involved with speakers of the target language (translating, interpreting, investments, accounting, banking, education, publishing, manufacturing, sales, service, and travel). Courses may also be transferred to an Associate of Arts Degree.

### **Degree Awarded: Certificate of Achievement**

#### **Spanish 18 hours**

SPAN 1103 Spanish I

\*SPAN 1213 Spanish II

\*SPAN 1313 Spanish III

\*SPAN 1413 Spanish IV

\*SPAN 2113 Intermediate Spanish I

\*SPAN 2213 Intermediate Spanish II

**or**

\*SPAN 2523 Intermediate Spanish Grammar and Composition

#### **Controlled Electives 7 hours\*\***

\*SPAN 1001 Spanish for Communication I

SPAN 1031 Spanish Pronunciation

SPAN 1061 Spanish for Biblical Study

\*SPAN 1201 Spanish for Communication II

\*SPAN 1301 Spanish for Communication III

\*SPAN 1401 Spanish for Communication IV

^SPAN 2041 Spanish - Introduction to the Arts

^SPAN 2071 Spanish-Mexican History and Geography

Introduction

\*SPAN 2121 Intermediate Spanish Communication

\*SPAN 2143 Latin American Civilization and Culture

\*SPAN 2263 Intermediate Spanish Literature

\*SPAN 2320 International Work and/or Study Seminar

\*SPAN 2330 Spanish International Seminar and/or Field Studies

\*SPAN 2413 Translating Spanish to English

^SPAN 2421 Spanish Culture Comparisons

\*SPAN 2443 Interpreting Spanish to English

\*SPAN 2453 Interpreting English to Spanish

\*SPAN 2523 Intermediate Spanish Grammar and Composition

\*SPAN 2533 Advanced Spanish Conversation

\*SPAN 2543 Translating English to Spanish

### **Total Credit Hours: 25**

\*Course has prerequisite (See course description section of catalog).

\*\*NOTE: At least four hours of the controlled electives must be courses taught in Spanish. English based courses may only count for three hours toward the certificate.

^Course conducted in English.





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## **INTERNATIONAL LANGUAGE STUDIES**

Spanish Interpreting Skills Option  
Workforce Development Certificate

### **Program Description:**

This program provides an introduction to interpreting skills for the courtroom or medical areas. Courses are designed to emphasize acquisition of speaking competency sufficient to communicate fluently (Spanish to English and English to Spanish) and to provide communication assistance between non-Spanish speaking medical personnel and non-English speaking patients with legal or medical groups.

### **Degree Awarded: Certificate of Achievement**

#### **Spanish 18 hours**

\*SPAN 1313 Spanish III

\*SPAN 1413 Spanish IV

\*SPAN 2443 Interpreting Spanish to English

\*SPAN 2453 Interpreting English to Spanish

#### **and select one of the following:**

\*SPAN 2113 Intermediate Spanish I

\*SPAN 2213 Intermediate Spanish II

\*SPAN 2483 Community Interpreting Skills Introduction

#### **and select one of the following:**

\*SPAN 2463 Courtroom Interpreting Skills Introduction

\*SPAN 2473 Medical Interpreting Skills Introduction

#### **Controlled Electives 1-3 hours**

\*SPAN 2661-3 Spanish Service Learning

#### **Total Credit Hours: 19-21**

\*Course has prerequisite (See course description section of catalog).



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## **INTERNATIONAL LANGUAGE STUDIES**

Spanish Translating Skills Option  
Workforce Development Certificate

### **Program Description:**

This program provides an introduction to translating skills. Courses are designed to emphasize usage of language competency for written translation purposes (Spanish to English and English to Spanish). Holders of the certificate find a variety of opportunities in business and industry and social service areas.

### **Degree Awarded: Certificate of Achievement**

#### **Spanish 18 hours**

\*SPAN 1313 Spanish III

\*SPAN 1413 Spanish IV

\*SPAN 2113 Intermediate Spanish I

\*SPAN 2413 Translating Spanish to English

\*SPAN 2543 Translating English to Spanish

#### **and select one of the following:**

\*SPAN 2213 Intermediate Spanish II

\*SPAN 2523 Intermediate Spanish Grammar and Composition

#### **Controlled Electives 3 hours**

\*SPAN 2321-3 International Work and/or Study Seminar

\*SPAN 2331-3 Spanish International Seminar and/or Field Studies

\*SPAN 2143 Latin American Civilization and Culture

#### **Total Credit Hours: 21**

\*Course has prerequisite (See course description section of catalog).



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## **LIBERAL ARTS**

University Transfer Degree

### **University Transfer Degree Information:**

Students should work closely with an academic advisor each semester to make certain you are enrolled in the correct courses for your degree program, especially if you are planning to transfer to a four-year college or university. Students are encouraged to begin a dialogue with their intended transfer schools as early as possible. Early coordination between TCC academic advisors and advisors from selected four-year institutions can streamline the transfer process. It is the student's responsibility to ensure that he/she understands the program/admission/transfer requirements for the transfer school.

### **Degree Awarded: Associate in Arts**

### **General Education Requirements Credit Hours: 31**

#### **English 6 hours**

\*ENGL 1113 Composition I

\*ENGL 1213 Composition II

#### **Humanities 6 hours**

Select six (6) hours from courses designated Humanities on the General Education Requirements page.

#### **Mathematics 3 hours**

See the General Education Requirements page for the course list.

#### **Science 7 hours**

See the General Education Requirements page for the course list. One course must be a laboratory science (L).

#### **Social Science 6 hours**

POLS 1113 American Federal Government

**and select one course from the following:**

HIST 1483 U.S. History 1492 to Civil War Era

HIST 1493 U.S. History Civil War Era to Present

#### **Required Electives 3 hours**

Select one three-hour course from one of the following:

Psychology, Social Sciences, Foreign Language, or Fine Arts (Art, Music, Theatre).

### **Specialized Course Requirements Credit Hours: 29-30**

#### **Humanities 6 hours**

HUMN 2113 Humanities I

HUMN 2223 Humanities II

### **Select courses from the following three areas of emphasis:**

#### **1) General Emphasis 23 Hours**

##### **Controlled Electives 12 hours**

Choose courses from at least four Liberal Arts & Sciences disciplines. See Liberal Arts and Sciences Electives list.

##### **Recommended Electives 11 hours**

#### **2) Peace Studies and Conflict Resolution Emphasis\*\* 24 Hours**

##### **Foreign Language 6 hours**

2 semesters of the same foreign language

##### **Integrative Courses 6 hours**

PSYC 2323 Conflict Resolution

\*SOCI 2153/\*PSYC 2133 Crisis Intervention and Experience

\*Prerequisite of PSYC 1113 or SOCI 1113 may be met in General Education requirements.

##### **Cultural Organizations 3 hours**

SOCI 2123 Introduction to Cultural Anthropology

POLS 2013 Introduction to Comparative Governments

POLS 2203 Introduction to International Relations

RELG 2173 Religion and Society

RELG 1213 Religions of the World - Eastern Tradition

RELG 1223 Religions of the World - Western Tradition

ECON 2013 Principles of Macroeconomics

ECON 2123 International Economic Issues

BUSN/SPCH 2053 Intercultural Communications

BUSN/PHIL 1143 Introduction to Ethics/Business Issues

##### **Artistic Expression 3 hours**

ENGL 2683 Survey of World Literature from 1700

ENGL 2893 Minority Literature

HUMN 2163 International Film

ART 1063 Art History Survey II

NAMS 2613 Native American Arts

HUMN 2883 Art and Identity

HUMN 2323 20th Century Global Humanities

##### **Social Sciences and World Affairs 3 hours**

GEOG 2153 Human Ecology



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## **LIBERAL ARTS**

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GEOG 2033 World Regional Geography  
GEOG 1043 Introduction to Cultural Geography  
GEOG 1023 World Economic Geography  
PSYC/SOCI 2053 Social Psychology  
SOCI 2113 Social Problems in America  
SOCI 2143 Minorities in America

### **History 3 hours**

AFRS 2343 The African Diaspora  
HIST 2343 Native American History  
HIST 1073 20th Century World History  
HIST 2023 Modern Eastern Civilizations  
HIST 2223 Modern Latin American History  
HIST 2333 African American History

### **3) Humanities and the Environment Emphasis\*\* 23 Hours**

#### **Integrative Courses 6 hours**

GEOG 2153 Human Ecology  
HUMN 2993 Capstone: Environmental Humanities - Activism Projects

#### **Physical and Social Sciences 8 hours**

PHSC 1114 General Physical Sciences  
BIOL 1114 General Biology for Non-Majors  
If PHSC 1114 and/or BIOL 1114 were completed under the General Education Requirements, select 8-9 hours from the following:  
BIOL 2144 Marine Biology  
GEOG 1043 Introduction to Cultural Geography  
GEOG 2113 Introduction to Oceanography  
GEOL 1014 General Geology (Physical)  
GEOL 1024 General Geology (Historical)  
SOCI 2123 Introduction to Cultural Anthropology  
NAMS 2113 Native American Cultures

#### **History and Philosophy 6 hours**

PHIL 2163/HIST 2163 Introduction to the History and Philosophy of Science  
HIST 1073 20th Century World History  
HIST 2023 Modern Eastern Civilization  
HIST 2043 Contemporary Affairs  
HIST 2223 Modern Latin American History  
PHIL 1113 Introduction to Philosophy  
BUSN 1143/PHIL 1143 Introduction to Ethics: Business Issues  
PHIL 2133 Introduction to Ethical Thinking  
PHIL 2143 Introduction to Social and Political Philosophy  
PHIL 1213/RELG 1213 Religions of the World - Eastern Tradition

#### **Artistic Expressions 3 hours**

ENGL 2413 Introduction to Literature  
ENGL 2773 Survey of American Literature to 1865

ENGL 2883 Survey of American Literature from 1865  
ENGL 2893 Minority Literature  
HUMN 2163 International Film  
HUMN 2333 Humanities: Literature and Film  
HUMN 2553 American Humanities  
HUMN 2883 Art and Identity: Cultural Encounters in America  
ART 1063 Art History Survey II  
NAMS 2613 Native American Arts

### **Total Credit Hours: 60-61**

To receive an A.A. or A.S. Degree, students must demonstrate computer proficiency.  
Physical Education activity classes do not count toward the associate degree requirements in this curriculum at TCC.

**\*\*NOTE:** Students who complete this area of emphasis may apply for an institutional certificate of completion from the Liberal Arts Division.





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## **LIBERAL ARTS**

American Studies Option  
University Transfer Degree

### **University Transfer Degree Information:**

Students should work closely with an academic advisor each semester to make certain you are enrolled in the correct courses for your degree program, especially if you are planning to transfer to a four-year college or university. Students are encouraged to begin a dialogue with their intended transfer schools as early as possible. Early coordination between TCC academic advisors and advisors from selected four-year institutions can streamline the transfer process. It is the student's responsibility to ensure that he/she understands the program/admission/transfer requirements for the transfer school.

### **Degree Awarded: Associate in Arts**

### **General Education Requirements Credit Hours: 25**

#### **English 6 hours**

- \*ENGL 1113 Composition I
- \*ENGL 1213 Composition II

#### **Humanities 3 hours**

- HUMN 2553 American Humanities

#### **Mathematics 3 hours**

- \*MATH 1513 College Algebra

#### **Social Science 6 hours**

- POLS 1113 American Federal Government

#### **and select one course from the following:**

- HIST 1483 U.S. 1492 to Civil War Era
- HIST 1493 U.S. Civil War Era to Present

#### **Science 7 hours**

Seven credit hours of science (one course must be a laboratory science) from the General Education Requirements list.

### **Specialized Course Requirements Credit Hours: 36**

- \*ENGL 2773 American Literature I
- \*ENGL 2883 American Literature II
- RELG 2233 Religion in America

#### **and select one course from the following:**

- HIST 1483 U.S. History 1492 to Civil War
- HIST 1493 U.S. History Civil War to Present

#### **Select one of the following courses on minorities in America:**

- \*ENGL 2893 Minority Literature
- HIST 2333 African-American History
- HIST/NAMS 2343 Native American History
- SOCI 2143 Minorities in America

#### **Select one of the following courses on American society:**

- HIST 2043 Contemporary Affairs
- SOCI 2113 Social Problems in America
- PHIL 2143 Introduction to Social and Political Philosophy
- POLS 2023 Introduction to American Politics
- \*SOCI 2013 Marriage and Family
- NAMS 2513 Introduction to Native American Law

#### **Select one of the following courses on American culture:**

- HUMN 2443 Art of Film
- HUMN 2663 Hollywood's America
- HUMN 2773 American Popular Culture
- HUMN 2883 Art and Identity: Culture Encounters in America
- NAMS 2113 Introduction to Native American Cultures
- NAMS 2213 Introduction to Native American Spiritualities
- NAMS 2313 Introduction to Native American Literature/Drama/Film

#### **Controlled Electives 15 hours**

- (Any course not taken from the list of specialized course requirements may be taken as a controlled elective.)
- ^Foreign Language through Level IV (Spanish recommended)
- HIST 1073 Twentieth Century World History
- HIST 2523 Oklahoma History
- HIST 2533 American Frontier
- Any NAMS course

#### **Recommended Electives (not required for degree)**

- HIST 1063 Modern Western Civilization
- HUMN 2223 Humanities II
- RELG 1223 Religions of the World: The Western Tradition

#### **Total Credit Hours: 61**

- \*Course has prerequisite (See course description section of catalog).
- To receive an A. A. or A. S. degree, students must demonstrate computer proficiency.
- Physical education activity courses do not count toward the associate degree requirements in this curriculum.





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## **LIBERAL ARTS**

Film Option

University Transfer Degree



### **University Transfer Degree Information:**

Students should work closely with an academic advisor each semester to make certain you are enrolled in the correct courses for your degree program, especially if you are planning to transfer to a four-year college or university. Students are encouraged to begin a dialogue with their intended transfer schools as early as possible. Early coordination between TCC academic advisors and advisors from selected four-year institutions can streamline the transfer process. It is the student's responsibility to ensure that he/she understands the program/admission/transfer requirements for the transfer school.

### **Degree Awarded: Associate in Arts**

### **General Education Requirements Credit Hours: 31**

#### **English 6 hours**

\*ENGL 1113 Composition I

\*ENGL 1213 Composition II

#### **Humanities 6 Hours**

See the General Education Requirements page for the course list.

#### **Mathematics 3 hours**

See the General Education Requirements page for the course list.

#### **Science 7 hours**

See the General Education Requirements page for the course list.

One course must be a laboratory science (L).

#### **Social Science 6 hours**

POLS 1113 American Federal Government

**and select one course from the following:**

HIST 1483 U.S. History 1492 to Civil War Era

HIST 1493 U.S. History Civil War Era to Present

#### **Required Electives 3 hours**

Select one three-hour course from one of the following:

Psychology, Social Sciences, Foreign Language,

or Fine Arts (Art, Music, Theatre).

### **Specialized Course Requirements Credit Hours: 30**

#### **Art 3 hours**

**Select one course from the following:**

ART 1113 Art Appreciation

ART 1063 Art History Survey II

#### **Computer Science 3 hours**

CSCI 1203 Computer Concepts and Applications

#### **Filmmaking 9 hours**

ART 2813 Filmmaking I

\*ART 2823 Film Internship, Filmmaking II

ART 2913 Film/Video History Analysis I

#### **Humanities 9 hours**

HUMN 2333 Film and Literature

HUMN 2443 Art of Film

HUMN 2663 Hollywood's America

#### **Theatre 6 hours**

THEA 1053 Acting I

THEA 2453 Scriptwriting

#### **Additional Recommended Courses**

(not required for degree)

\*ART 1123 Drawing I

ART 2853 Photography

HUMN 2613 International Film

RELG 2313 Religion in Film

Any Foreign Language

#### **Total Credit Hours: 61**

\*Course has prerequisite (See course description section of catalog).  
To receive an A.A. or A.S. Degree, students must demonstrate computer proficiency.



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## **LIBERAL ARTS**

International Option

University Transfer Degree

### **University Transfer Degree Information:**

Students should work closely with an academic advisor each semester to make certain you are enrolled in the correct courses for your degree program, especially if you are planning to transfer to a four-year college or university. Students are encouraged to begin a dialogue with their intended transfer schools as early as possible. Early coordination between TCC academic advisors and advisors from selected four-year institutions can streamline the transfer process. It is the student's responsibility to ensure that he/she understands the program/admission/transfer requirements for the transfer school.

### **Degree Awarded: Associate in Arts**

#### **For More Information Contact:**

Liberal Art Division: Metro: (918) 595-7118 Northeast: (918) 595-7494 Southeast: (918) 595-7780 West: (918) 595-8077

### **General Education Requirements Credit Hours: 31**

#### **English 6 hours**

- \*ENGL 1113 Composition I
- \*ENGL 1213 Composition II

#### **Humanities 6 hours**

- HUMN 2113 Humanities I
- HUMN 2223 Humanities II

#### **Mathematics 3 hours**

##### **Select one course from the following:**

- \*MATH 1513 College Algebra
- \*MATH 1613 Plane Trigonometry
- \*MATH 1715 College Algebra and Trigonometry
- \*MATH 2114 Analytic Geometry and Calculus I
- \*MATH 2124 Analytic Geometry and Calculus II

#### **Science 7 hours**

(One course must be a laboratory science.)

- BIOL 1114 General Biology for Non-Majors
- BIOL 1383 Nutrition
- \*BIOL 1404 General Botany
- \*BIOL 1604 Zoology
- \*BIOL 2154 Human Physiology
- \*BIOL 2164 Microbiology
- \*CHEM 1114 Principles of Chemistry
- GEOL 1014 General Geology (Physical)
- GEOL 1024 General Geology (Historical)
- GEOG 1014 Geography (Physical)
- GEOG 2013 Meteorology
- \*PHYS 1114 General Physics I
- \*PHSC 1114 General Physical Science

#### **Social Science 6 hours**

- HIST 1493 U.S. History Civil War Era to Present
- POLS 1113 American Federal Government

### **Required Electives 3 hours**

#### **Select one course from the following:**

- Art 1113 Art Appreciation
- MUSC 1113 Music Appreciation
- SOCI 2123 Introduction to Cultural Anthropology

### **Specialized Course Requirements Credit Hours: 30**

#### **Economics 3 hours**

##### **Select one course from the following:**

- ECON 2013 Principles of Macroeconomics
- ECON 2023 Principles of Microeconomics
- \*ECON 2123 International Economic Issues

#### **Foreign Language 6 hours**

\*\*(Same language)

#### **Geography 3 hours**

##### **Select one course from the following:**

- GEOG 1023 World Geography (Economic)
- GEOG 1043 Introduction to Cultural Geography
- GEOG 2033 World Regional Geography

#### **History 3 hours**

##### **Select one course from the following:**

- HIST 1063 Modern Western Civilization
- HIST 1073 Twentieth Century World History
- HIST 2023 Modern Eastern Civilization
- HIST 2043 Contemporary Affairs
- HIST 2223 Modern Latin American History
- HIST 2333 African American History

#### **Philosophy/Religion 3 hours**

##### **Select one course from the following:**

- PHIL/RELG 1213 Religions of the World: The Eastern Tradition
- PHIL/RELG 1223 Religions of the World: The Western Tradition

#### **Political Science 3 hours**

##### **Select one course from the following:**

- \*POLS 2013 Introduction to Comparative Governments
- \*POLS 2203 Introduction to International Relations



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## **LIBERAL ARTS**

International Option  
University Transfer Degree



### **Controlled Electives 9 hours**

#### **Select one course from the following:**

COMM 2053 Intercultural Communication

CSCI 1203 Computer Concepts and Applications

\*ENGL 2673 World Literature I

\*ENGL 2683 World Literature II

#### **and select two courses from the following:**

AFRS 2713 Survey of African Civilization

ASNS 1103 Asian Philosophy and Culture

BIOL 2123 Environmental Inquiry

HUMN 2613 International Film

NAMS 2113 Native American Cultures

### **Total Credit Hours: 61**

\*Course has prerequisite (See course description section of catalog).

\*\*Check catalog for advanced standing credit.

To receive an A.A. or A.S. Degree, students must demonstrate computer proficiency.



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## **LIBERAL ARTS**

Native American Studies Option  
University Transfer Degree

### **University Transfer Degree Information:**

Students should work closely with an academic advisor each semester to make certain you are enrolled in the correct courses for your degree program, especially if you are planning to transfer to a four-year college or university. Students are encouraged to begin a dialogue with their intended transfer schools as early as possible. Early coordination between TCC academic advisors and advisors from selected four-year institutions can streamline the transfer process. It is the student's responsibility to ensure that he/she understands the program/admission/transfer requirements for the transfer school.

### **Program Description:**

This emphasis is designed to meet the educational needs of both Native American and non-Native American students. Native American Studies (NAMS) courses focus upon the diverse world-views expressed in Native American cultures, spiritualities, histories, oral traditions, and literatures.

### **Degree Awarded: Associate in Arts**

#### **For More Information Contact:**

Liberal Arts and Communication Division: West (918) 595-8077

### **General Education Requirements Credit Hours: 28**

#### **English 6 hours**

- \*ENGL 1113 Composition I
- \*ENGL 1213 Composition II

#### **Humanities 6 hours**

GEOG 1043 Introduction to Cultural Geography

#### **And select one course from the following:**

- HUMN 2113 Humanities I
- HUMN 2223 Humanities II

#### **Mathematics 3 hours**

#### **Select one course from the following:**

- \*MATH 1513 College Algebra
- \*MATH 1473 Mathematics for Critical Thinking

#### **Science 7 hours**

See the General Education Requirements page for complete list. One course must be a laboratory science.

#### **Social Science 6 hours**

POLS 1113 American Federal Government

#### **and select one course from the following:**

- HIST 1483 U.S. History 1492 to Civil War Era
- HIST 1493 U.S. History Civil War Era to Present

### **Specialized Course Requirements Credit Hours: 32-33**

#### **Native American Studies 12 hours**

#### **Select four courses from the following:**

- NAMS 1013 Cherokee Language I
- NAMS 1023 Cherokee Language II
- NAMS 2013 Images of Indians in American Culture
- NAMS 2113 Native American Cultures
- NAMS 2213 Native American Spiritualities

NAMS 2313 Native American Literature/Drama/Film

NAMS/HIST 2343 Native American History

NAMS 2513 Native American Law

NAMS 2613 Native American Art

#### **American Society 12 hours**

#### **Select four courses from the following:**

(Any course not taken from the list of Native American Studies courses may be substituted for a course on American society.)

HIST 1483 U.S. History 1492 to Civil War Era

**or**

HIST 1493 U.S. History Civil War Era to Present

HIST 2523 Oklahoma History

HIST 2533 American Frontier

HUMN 2553 American Humanities

HUMN 2663 Hollywood's America

HUMN 2773 American Popular Culture

HUMN 2883 Art and Identity: Cultural Encounters in America

RELG 2233 Religion in America

SOCI 2113 Social Problems In America

SOCI 2143 Minorities in America

#### **Recommended Electives 8-9 hours**

(Any course not taken from the list of General Education Requirements or the Specialized Course Requirements may be taken as an elective.)

ART 1113 Art Appreciation

COMM 2053 Intercultural Communication

CSCI 1203 Computer Concepts and Applications

GEOG 2153 Human Ecology

HORT 1303 Principles of Horticulture

HUMN 2113 Humanities I

HUMN 2223 Humanities II

RELG 1113 Introduction to Religious Studies

RELG/SOCI 2173 Religion and Society

SOCI 2123 Introduction to Cultural Anthropology

#### **Total Credit Hours: 60-61**

\*Course has prerequisite (See course description section of catalog). To receive an A.A. or A.S. Degree, students must demonstrate computer proficiency. Physical education activity courses do not count toward the associate degree requirements in this curriculum.





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## **MANAGEMENT**

Workforce Development Degree



### **Program Description:**

The Management degree will prepare students for a wide range of management positions. Students may select from two degree options: Management (General) and Management Internship.

### **Degree Awarded: Associate in Applied Science**

#### **For More Information Contact:**

Business and Information Technology Division:  
Southeast: (918) 595-7639, Northeast: (918) 595-7439

### **General Education Requirements Credit Hours: 18**

#### **Economics 3 hours**

ECON 2013 Principles of Macroeconomics

#### **Communication 9 hours**

COMM 1113 Public Speaking

\*ENGL 1113 Composition I

#### **And select one course from the following:**

\*ENGL 1213 Composition II

\*ENGL 2333 Technical/Professional Writing

\*ENGL 2343 Business Communication I

#### **Social Science 6 hours**

POLS 1113 American Federal Government

#### **and select one course from the following:**

HIST 1483 U.S. History 1492 to Civil War Era

HIST 1493 U.S. History Civil War Era to Present

### **Specialized Course Requirements Credit Hours: 42**

#### **Core Courses 18 hours**

#### **Management 15 hours**

MGMT 2123 Leadership Development

MGMT 2323 Organizational Behavior

\*MGMT 2353 Business Policy

\*MGMT 2453 Human Resources Management

#### **and select one course from the following:**

MGMT 1353 Management Essentials

MGMT 2363 Principles of Management

#### **Marketing 3 hours**

MKTG 2423 Principles of Marketing

### **Students should select courses from one of the two degree options:**

#### **1) Management Option 24 hours**

**Option Description:** For managers already in the business world, the Management option will equip them with the

additional management skills they need, and hone the skills they already possess. This option will help managers succeed in their current positions and prepare them for further career advancement. Major focus of this option is on improving decision-making processes, learning how to motivate members of a team, and developing new techniques to resolve conflicts.

#### **Business 6 hours**

##### **(Select two courses from the following)**

BUSN 1053 Introduction to Business

\*BUSN 2213 Small Business Management

BUSN 2363 Supervisory Management

#### **Computer Information Systems 3 hours**

CSCI 1203 Computer Concepts and Applications

**or**

CSCI 1011 Introduction to Personal Computers

#### **and select two one credit hour software courses.**

#### **Recommended Electives 15 hours**

\*ACCT 2213 Financial Accounting

\*ACCT 2223 Managerial Accounting

BUSN 2333 Principles of Finance

ECON 2023 Principles of Microeconomics

\*MGMT 2103 Workforce Development Internship

MGMT 2403 Critical Thinking for Results

MGMT 2443 Imagination, Innovation, and Creativity

MGMT 2993 Selected Topics in Management

MKTG 2343 Customer Service





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## **MANAGEMENT**

Workforce Development Degree

### **2) Management Internship\*\* Option 24 hours**

**Option Description:** Learning to do, doing to learn. That's the essence of the Management Internship option, designed not only to help students develop the managerial skills they must have to prosper in today's business world, but also to practice those skills in their own business setting. This option combines formal classroom study with a student-internship project at the student's place of employment. This option is recommended for current managers who wish to advance and need additional management training, those recently promoted to managerial positions, or those who have been identified by their employer as having managerial potential.

#### **Computer Information Systems 3 hours**

CSCI 1203 Computer Concepts and Applications

**or**

CSCI 1011 Introduction to Personal Computers

**and select two one credit hour software courses.**

#### **Management 6 hours**

\*\*MGMT 1343 Management Internship I

\*\*MGMT 1363 Management Internship II

#### **Recommended Electives 15 hours**

\*ACCT 2213 Financial Accounting

\*ACCT 2223 Managerial Accounting

BUSN 1053 Introduction to Business

\*BUSN 2213 Small Business Management

BUSN 2333 Principles of Finance

BUSN 2363 Supervisory Management

ECON 2023 Principles of Microeconomics

\*\*MGMT 2303 Management Internship III

\*\*MGMT 2343 Management Internship IV

MGMT 2403 Critical Thinking for Results

MGMT 2443 Imagination, Innovation, and Creativity

MKTG 2343 Customer Service

#### **Total Credit Hours: 60**

\*Course has prerequisite (See course description section of catalog).

\*\*All students in the Management Internship option must contact a Management Program instructor prior to enrolling in one of the Management Internship courses.



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## **MARKETING**

University Transfer Degree



### **University Transfer Degree Information:**

Students should work closely with an academic advisor each semester to make certain you are enrolled in the correct courses for your degree program, especially if you are planning to transfer to a four-year college or university. Students are encouraged to begin a dialogue with their intended transfer schools as early as possible. Early coordination between TCC academic advisors and advisors from selected four-year institutions can streamline the transfer process. It is the student's responsibility to ensure that he/she understands the program/admission/transfer requirements for the transfer school.

### **Program Description:**

This program is designed to provide the student with fundamental skills, attitudes, and experience in Marketing, Communication, Customer Service, Consumer Behavior and Sales.

### **Degree Awarded: Associate in Science**

#### **For More Information:**

Business and Information Technology Division  
Southeast Campus: (918) 595-7639

### **General Education Requirements Credit Hours: 37**

#### **Communication 9 hours**

COMM 1113 Public Speaking

\*ENGL 1113 Composition I

\*ENGL 1213 Composition II

#### **Humanities 6 hours**

See the General Education Requirements page for the course list.

#### **Mathematics 3 hours**

See the General Education Requirements page for the course list.

#### **Science 7 hours**

See the General Education Requirements page for the course list.  
One course must be a laboratory science (L).

#### **Social Science 6 hours**

POLS 1113 American Federal Government

and select one course from the following:

HIST 1483 U.S. History 1492 to Civil War Era

HIST 1493 U.S. History Civil War Era to Present

#### **Recommended Electives 2 hours**

CSCI 1203 Computer Concepts and Applications

or

Select two (2) credit hours from the list of Liberal Arts and Science Electives

#### **Required Electives 3 hours**

Select one three-hour course from one of the following:

Psychology, Social Sciences, Foreign Language, or Fine Arts (Art, Music, Theatre).

### **Specialized Course Requirements Credit Hours: 24**

#### **Accounting 6 hours**

\*ACCT 2213 Financial Accounting

\*ACCT 2223 Managerial Accounting

#### **Economics 6 hours**

ECON 2013 Principles of Macroeconomics

ECON 2023 Principles of Microeconomics

#### **Marketing 9-12 hours\*\***

MKTG 1313 Sales and Negotiations

\*MKTG 2363 Consumer Behavior

MKTG 2423 Principles of Marketing

MKTG 2343 Customer Service

\*MKTG 2393 Advertising and Promotion Management

#### **Mathematics 0-3 hours\*\***

\*MATH 2193 Elementary Statistics

#### **Total Credit Hours: 60**

\*Course has prerequisite (See course description section of catalog).

To receive an A.A. or A.S. Degree, students must demonstrate computer proficiency.

**\*\* It is highly recommended that students consult with an advisor at the college or university to which they plan to transfer when selecting these courses.**



**2016-2017**

## **MARKETING**

Merchandising Option

University Transfer Degree

### **University Transfer Degree Information:**

Students should work closely with an academic advisor each semester to make certain you are enrolled in the correct courses for your degree program, especially if you are planning to transfer to a four-year college or university. Students are encouraged to begin a dialogue with their intended transfer schools as early as possible. Early coordination between TCC academic advisors and advisors from selected four-year institutions can streamline the transfer process. It is the student's responsibility to ensure that he/she understands the program/admission/transfer requirements for the transfer school.

### **Program Description:**

Merchandising degrees include the study of Marketing Principles, Drawing, Fashion Innovation Design, and Product Development. Further study of Human Development, Psychology, Sociology and Leadership are included.

### **Degree Awarded: Associate in Science**

#### **General Education Requirements Credit Hours: 40-41**

##### **Communication 9 hours**

COMM 1113 Public Speaking

\*ENGL 1113 Composition I

\*ENGL 1213 Composition II

##### **Social Science 6 hours**

POLS 1113 American Federal Government

**and select one course from the following:**

HIST 1483 U.S. History 1492 to Civil War Era

HIST 1493 U.S. History Civil War Era to Present

##### **Science 7-8 hours**

**Select one course from the following:**

CHEM 1034 Practical Chemistry

\*CHEM 1114 Principles of Chemistry

\*CHEM 1315 General Chemistry I

**and 3 hours of general education courses designated as Science**

##### **Humanities 6 hours**

See the General Education Requirements for course list.

##### **Mathematics 6 hours**

\*MATH 1513 College Algebra

**and**

\*\*3 hours designated as Mathematics in the General Education Requirements.

##### **Psychology 3 hours**

PSYC 1113 Introduction to Psychology

##### **Economics 3 hours**

ECON 2013 Principles of Macroeconomics

### **Specialized Course Requirements Credit Hours: 24**

#### **Accounting 3 hours**

\*ACCT 2213 Financial Accounting

#### **Computer Science 3 hours**

CSCI 1203 Computer Concepts and Applications

#### **Sociology 3 hours**

SOCI 1113 Introduction to Sociology

#### **Management 3 hours**

MGMT 2123 Leadership Development

#### **Marketing 9 hours**

MKTG 1313 Sales and Negotiations

MKTG 2343 Customer Service

MKTG 2423 Principles of Marketing

#### **Human Development 3 hours**

**Select one course from the following:**

CHLD 2003 Child Development in the Lifespan

HSVC 2023 Lifespan Development

PSYC 2023 Developmental Psychology

#### **Total Credit Hours: 64-65**

\*Course has a prerequisite (See course description section of the catalog).

\*\*Students are encouraged to take MATH 2193 Elementary Statistics.

To receive an A.A. or A.S. Degree, students must demonstrate computer proficiency.



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## **MARKETING**

Workforce Development Degree



### **Program Description:**

This program is designed to provide students the opportunity to engage in a hands-on approach to marketing. Participants of this program learn the essentials of marketing, how to create professional sales presentations, develop advertising campaigns, write press releases, develop marketing websites, conduct market research and much more. This program is designed to prepare the student for successful employment in a marketing position. The marketing job market remains strong with high salary potential. Graduates of the program qualify for many marketing career opportunities including assistant buyer, customer service consultant, data analyst, event coordinator, marketing assistant, project manager, sales representative, web designer, graphic editor, and telemarketing representative. The program also allows for marketing internship opportunities.

### **Degree Awarded: Associate in Applied Science**

#### **For More Information Contact:**

Business and Information Technology Division  
Southeast Campus: (918) 595-7639

### **General Education Requirements Credit Hours: 18**

#### **Economics 3 hours**

##### **Select one course from the following:**

ECON 1353 Personal Finance  
ECON 2013 Principles of Macroeconomics

#### **English 6 hours**

\*ENGL 1113 Composition I

##### **and select one course from the following:**

\*ENGL 1213 Composition II  
\*ENGL 2343 Business Communication I

#### **Mathematics 3 hours**

##### **Select one course from the following:**

BUSN 1353 Business Mathematics  
\*MATH 1513 College Algebra

#### **Social Science 6 hours**

POLS 1113 American Federal Government

##### **and select one course from the following:**

HIST 1483 U.S. History 1492 to Civil War Era  
HIST 1493 U.S. History Civil War Era to Present

### **Specialized Course Requirements Credit Hours: 42**

#### **Computer Information Systems 3 hours**

Select 3 credit hours from any Computer Information Systems (CSYS/CSCI) courses.

#### **Marketing 15 hours**

MKTG 1313 Sales and Negotiations

MKTG 2343 Customer Service

\*MKTG 2363 Consumer Behavior

MKTG 2393 Advertising and Promotion Management

MKTG 2423 Principles of Marketing

### **Recommended Electives 15 hours**

\*CSYS 1033 Adobe Phototshop

ECON 2023 Introduction to Microeconomics

MGMT 2123 Leadership Development

MGMT 2363 Principles of Management

MKTG 2993 Special Topics in Marketing

### **Select 9 hours from any of the following areas of emphasis:**

#### **General Marketing Emphasis**

\*ACCT 2213 Financial Accounting

\*MKTG/CSYS 1393 Web Design & Marketing

MKTG 2433 Product Development

#### **Web Design & Marketing Emphasis**

\*MKTG/CSYS 2293 Social Media

\*MKTG/CSYS 1393 Web Design & Marketing

\*MKTG/CSYS 1443 Electronic Commerce

#### **Marketing Internship Emphasis**

MKTG 1403 Marketing Internship I

MKTG 1423 Marketing Internship II

MKTG 1433 Marketing Internship III

#### **Merchandising and Fashion Design Emphasis**

MKTG 1333 Fashion Innovation and Marketing

\*MKTG/CSYS 1393 Web Design & Marketing

MKTG 2433 Product Development

### **Total Credit Hours: 60**

\*Course has prerequisite (See course description section of catalog).





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## **MATHEMATICS**

University Transfer Degree

### **University Transfer Degree Information:**

Students should work closely with an academic advisor each semester to make certain you are enrolled in the correct courses for your degree program, especially if you are planning to transfer to a four-year college or university. Students are encouraged to begin a dialogue with their intended transfer schools as early as possible. Early coordination between TCC academic advisors and advisors from selected four-year institutions can streamline the transfer process. It is the student's responsibility to ensure that he/she understands the program/admission/transfer requirements for the transfer school.

### **Program Description:**

This degree is designed for the student interested in an academic field that reflects the real world through numeric patterns, geometric forms, and analytical processes. A degree in mathematics provides students with tools for lifelong learning in a wide variety of other careers. The mathematics graduate will be prepared to be involved in fields that blend quantitative skills with applied areas such as chemistry, engineering, and physics.

### **Degree Awarded: Associate in Science**

#### **For More Information Contact:**

Science and Mathematics Division:

Metro: (918) 595-7334, Northeast: (918) 595-7542,

Southeast: (918) 595-7742, West: (918) 595-8193

### **General Education Requirements Credit Hours: 37**

#### **Communication 9 hours**

COMM 1113 Public Speaking

\*ENGL 1113 Composition I

\*ENGL 1213 Composition II

#### **Humanities 6 hours**

See the General Education Requirements page for the course list.

#### **Mathematics 3 hours**

See the General Education Requirements page for the course list.

#### **Science 7 hours**

See the General Education Requirements page for complete list.

One course must be a laboratory science.

#### **Social Science 6 hours**

POLS 1113 American Federal Government

**and select one course from the following:**

HIST 1483 U.S. History 1492 to Civil War Era

HIST 1493 U.S. History Civil War Era to Present

#### **Recommended Electives 3 hours**

CSCI 1203 Computer Concepts and Applications

**or**

Select three (3) credit hours from the list of Liberal Arts and Science Electives

#### **Required Electives 3 hours**

**Select one three-hour course from one of the following:**

Psychology, Social Sciences, Foreign Language, or Fine Arts (Art, Music, Theatre)

### **Specialized Course Requirements Credit Hours: 23-24**

#### **Mathematics 15 hours**

\*MATH 2114 Analytic Geometry and Calculus I

\*MATH 2124 Analytic Geometry and Calculus II

\*MATH 2134 Analytic Geometry and Calculus III

\*MATH 2613 Elementary Differential Equations

#### **Recommended Electives 8-9 hours**

\*CHEM 1315 General Chemistry I

\*CHEM 1415 General Chemistry II

CSCI 1203 Computer Concepts and Applications

\*MATH 1613 Plane Trigonometry

\*MATH 1715 College Algebra and Trigonometry

\*MATH 2193 Elementary Statistics

\*PHYS 1114 General Physics I **and** \*PHYS 1214 General Physics II

**or**

\*PHYS 2034 Engineering Physics I **and** \*PHYS 2124 Engineering Physics II

#### **Total Credit Hours: 60-61**

\*Course has prerequisite (See course description section of catalog).

To receive an A.A. or A.S. Degree, students must demonstrate computer proficiency.

Physical education activity courses do not count toward the associate degree requirements in this curriculum.



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## **MEDICAL LABORATORY TECHNICIAN**

Workforce Development Degree

### **Program Description:**

This program prepares the student to perform tests and related duties in a medical laboratory with the supervision of a medical technologist. The Medical Laboratory Technician Program is accredited by the National Accrediting Agency for Clinical Laboratory Sciences. Upon successful completion of the program, students may sit for the National Registry sponsored by the American Society of Clinical Pathology.

Many courses within this degree program may transfer to baccalaureate colleges and universities. Transfer credit varies among colleges. Students should consult the catalog of the specific college/university to which they plan to transfer to select courses that will meet requirements for both the associate and baccalaureate degree programs.

### **Degree Awarded: Associate in Applied Science**

#### **Procedures For Application:**

1. Applications are available through [tulsacc.edu/healthscienceapply](http://tulsacc.edu/healthscienceapply). For more information, contact the Allied Health division office at (918) 595-7002.
2. Submit completed program application form and required materials by June 1.
3. All prospective Medical Laboratory Technician program students must complete an application for enrollment to the College, submit their high school transcript, ACT scores and previous college transcripts to the Registrar. Incomplete submissions will not be considered for admission into the Medical Laboratory Technician program.
4. Acceptance to Tulsa Community College does not guarantee admission into the Medical Laboratory Technician program.
5. Eligible applicants to be interviewed for consideration into the Medical Laboratory Technician program will be notified.
6. In order to enroll in courses that include a clinical component and are part of the program degree plan, students must receive clearance on a criminal background check, including sex offender registry. Potential students need to be aware that drug testing and clearance is a requirement for participation in all clinical components.

#### **General Education Requirements Credit Hours: 28**

(Students planning to transfer to a baccalaureate institution are advised that there may be additional general education courses required for a baccalaureate degree. Students should consult the catalog of the specific college/university to which they plan to transfer.)

#### **Biology 8 hours**

- °BIOL 1314 Human Anatomy and Physiology
- °\*BIOL 2164 Microbiology

#### **Chemistry 5 hours**

- °\*CHEM 1315 General Chemistry I

#### **English 6 hours**

- \*ENGL 1113 Composition I

\*ENGL 1213 Composition II

#### **Psychology or Sociology 3 hours**

- PSYC 1113 Introduction to Psychology
- SOCI 1113 Introduction to Sociology

#### **Social Science 6 hours**

- POLS 1113 American Federal Government
- and select one course from the following:**
- HIST 1483 U.S. History 1492 to Civil War Era
- HIST 1493 U.S. History Civil War Era to Present

#### **Specialized Course Requirements Credit Hours: 41**

##### **Medical Laboratory Technology 41 hours**

- + ° MDLT 1203 Phlebotomy
- + ° MDLT 1212 Introduction to Medical Laboratory Technology
- +°\*MDLT 1222 Phlebotomy Clinical
- ° MDLT 2001 Professionalism/Ethics
- °\*MDLT 2302 Hematology Lab
- °\*MDLT 2303 Hematology
- °\*MDLT 2322 Clinical Chemistry/Urine Chemistry Lab
- °\*MDLT 2323 Clinical Chemistry/Urine Chemistry
- °\*MDLT 2392 Clinical Microbiology Lab
- °\*MDLT 2393 Clinical Microbiology
- °\*MDLT 2422 Immunology and Blood Bank Lab
- °\*MDLT 2424 Immunology and Blood Bank
- °\*MDLT 2436 Clinical Practicum I
- °\*MDLT 2466 Clinical Practicum II

#### **Total Credit Hours: 69**

- \* Course has prerequisite (See course description section of catalog).
- ° Course must be completed with a "C" or better.
- + Course must be taken concurrently.



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# **MEDICAL LABORATORY TECHNICIAN**

Phlebotomy Option

Workforce Development Certificate

## **Program Description:**

This option is for phlebotomy trainees and professionals new to the medical laboratory technology field who need to rapidly acquire phlebotomy (the drawing of blood) skills, as well as acquire a comprehensive overview of the key areas of the clinical laboratory to include specimen processing.

The Phlebotomy Program is approved through the National Accrediting Agency for Clinical Laboratory Sciences. Graduates with a phlebotomy certificate may apply for the National Phlebotomy Registry examination through the American Society of Clinical Pathology.

## **Degree Awarded: Certificate of Achievement**

### **For More Information Contact:**

## **Procedures For Application:**

1. Applications are available through [tulsacc.edu/healthscienceapply](http://tulsacc.edu/healthscienceapply). For more information, contact the Allied Health division office at (918) 595-7002.
2. Submit all material to Allied Health Services, MP450, 919 S. Boston Tulsa, OK 74119
3. All prospective Medical Laboratory Technician Phlebotomy program students must complete an application for enrollment to the College.
4. Acceptance to Tulsa Community College does not guarantee admission into the Medical Laboratory Technician Phlebotomy program.
5. Eligible applicants to be interviewed for consideration for admission into the Medical Laboratory Technician Phlebotomy program will be notified by mail or phone.
6. In order to enroll in courses that include a clinical component and are part of the program degree plan, students must receive clearance on a criminal background check, including sex offender registry. Potential students need to be aware that drug testing and clearance is a requirement for participation in all clinical components.

## **Medical Laboratory Technology 7 hours**

- +MDLT 1203 Phlebotomy
- +MDLT 1212 Introduction to Medical Laboratory Technology
- \*+MDLT 1222 Phlebotomy Clinical

## **Total Credit Hours: 7**

- \*Course has prerequisite (See course description section of catalog).
- Course must be completed with a "C" or better for admission to the Medical Laboratory Technician program.
- + Courses must be taken concurrently.



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## **MUSIC**

University Transfer Degree



### **University Transfer Degree Information:**

Students should work closely with an academic advisor each semester to make certain you are enrolled in the correct courses for your degree program, especially if you are planning to transfer to a four-year college or university. Students are encouraged to begin a dialogue with their intended transfer schools as early as possible. Early coordination between TCC academic advisors and advisors from selected four-year institutions can streamline the transfer process. It is the student's responsibility to ensure that he/she understands the program/admission/transfer requirements for the transfer school.

### **Program Description:**

This program is designed to create a solid musical foundation in our students enabling them to transfer into four-year colleges and universities to pursue a baccalaureate degree in music. The program is also an appropriate course of study for individuals preparing for one of the many careers in music which do not require a baccalaureate degree or for personal enrichment. Skill enhancement and depth are provided by course work in applied music performance ensembles, music theory, music literature, keyboard, computer music composition, and private lessons. Students have the opportunity to broaden the scope of their classroom education by participation in performance groups including the Concert Choir, Show Choir, Concert Band, Jazz Band, Orchestra, and chamber ensembles. The music degree program is supported by a substantial performing arts facility which includes a music recording studio, practice rooms, a MIDI keyboard laboratory, and choral and instrumental rehearsal halls. Most music programs are presented at the state-of-the-art VanTrease Performing Arts Center for Education.

### **Degree Awarded: Associate in Arts**

#### **For More Information Contact:**

Visual and Performing Arts Division: Southeast: (918) 595-7752  
TCC Music Office: Southeast: (918) 595-8698

### **General Education Requirements Credit Hours: 28**

#### **English 6 hours**

- \*ENGL 1113 Composition I
- \*ENGL 1213 Composition II

#### **Humanities 6 Hours**

See the General Education Requirements page for the course list.

#### **Mathematics 3 hours**

See the General Education Requirements page for the course list.

#### **Science 7 hours**

See the General Education Requirements page for the course list.

One course must be a laboratory science (L).

#### **Social Science 6 hours**

POLS 1113 American Federal Government

**and select one course from the following:**

HIST 1483 U.S. History 1492 to Civil War Era

HIST 1493 U.S. History Civil War Era to Present

### **Specialized Course Requirements Credit Hours: 35-43**

#### **MUSC 1030 Recital Class**

A music major is required to have four semesters of transcribed Recital Class.

#### **Performance Ensemble 4 hours**

A Music major must enroll in at least one of these each 16-

week term. Substitutions may be made only with Dean's approval.

\*MUSC 1541 Orchestra

MUSC 1551 Concert Choir

\*MUSC 1651 Concert Band

### **Applied Music Lessons on Primary Instrument 8 hours**

\*\* MUSC 1200-1490 Private Lessons

\*\* MUSC 2200-2240 Private Lessons

#### **Piano 0-8 hours**

**A music major must be proficient in or enrolled in:**

MUSC 1612 Class Piano I

\*MUSC 1622 Class Piano II

\*MUSC 1632 Class Piano III

\*MUSC 1642 Class Piano IV

#### **Theory & History 23 hours**

\*MUSC 1013 Music Theory I

\*MUSC 1023 Music Theory II

\*MUSC 1062 Aural Theory I

\*MUSC 1072 Aural Theory II

\*MUSC 2013 Music Theory III

\*MUSC 2023 Music Theory IV

\*MUSC 2062 Aural Theory III

\*MUSC 2072 Aural Theory IV

\*MUSC 2133 Introduction to History and Literature of Music

#### **Additional Recommended Courses**

(Not required for degree)

MUSC 1002 Fundamentals of Music

MUSC 1053 Recording Studio Techniques I

MUSC 1113 Music Appreciation

\*MUSC 1142 Computer Music Techniques I

MUSC 1153 American Popular Music

MUSC 1171 Beginning Guitar





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## MUSIC

University Transfer Degree

- MUSC 1181 Percussion Class
- MUSC 1512 Voice Class
- \*MUSC 1563 Musical Theatre
- \*MUSC 1661 Jazz Band
- \*MUSC 1711 Brass Ensemble
- \*MUSC 1721 Woodwind Ensemble
- \*MUSC 1731 Guitar Ensemble
- MUSC 1741 Cello Choir
- \*MUSC 1761 String Ensemble
- \*MUSC 1771 Percussion Ensemble
- \*MUSC 1781 Chamber Ensemble
- \*MUSC 1791 Jazz Combo
- MUSC 1802 Jazz Improvisation
- \*MUSC 2181 Show Choir
- \*MUSC 2223 Recording Studio Techniques II
- \*MUSC 2333 Music Internship

### **Total Credit Hours: 63-71**

\*Course has prerequisite (See course description section of catalog).

To receive an A.A. or A.S. Degree, students must demonstrate computer proficiency.

\*\* Music majors at four-year colleges/universities are required to take 2 credit hours of private instruction per 16-week term.

Scholarships may be available. Please contact the music office at 595-8698.



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## NURSING PROGRAM

Setting the standard of nursing excellence for our community, TCC's Nursing Program has provided Tulsa and northeastern Oklahoma with thousands of excellent nursing professionals. TCC offers two nursing tracks ranging from three to four semesters, including Nursing Career Mobility (LPN/Paramedic to RN) Track, and Traditional Nursing (RN) Track.

### APPLYING TO THE NURSING PROGRAM

All potential nursing students must have two (2) applications on file: (1) The application to the College must be on file in the TCC Enrollment Services Office; and, (2) The application for the Nursing Program must be submitted to the Nursing Division office, Metro Campus. Admission to Tulsa Community College does not guarantee admission to the Nursing Program. Prospective students interested in the Nursing Program should contact the Nursing Division office for an application and curriculum plan or access the Nursing Division web page ([www.tulsacc.edu/nursing](http://www.tulsacc.edu/nursing)) for more information regarding application to the Traditional Nursing Track and/or the Nursing Career Mobility Track.

The Tulsa Community College Nursing Program is approved by the Oklahoma Board of Nursing. Graduates of this state-approved program are eligible to apply to take the National Council Licensure Examination (NCLEX) for registered nurses. Applicants for Oklahoma licensure must meet all state and federal requirements to hold an Oklahoma license to practice nursing. In addition to completing a state-approved nursing education program that meets educational requirements and successfully passing the licensure examination, requirements include submission of an application for licensure, a criminal history records search, and evidence of citizenship or qualified alien status. To be granted a license, an applicant must have the legal right to be in the United States (United States Code Chapter 8, Section 1621). In addition, Oklahoma law only allows a license to be issued to U.S. citizens, U.S. nationals, and legal permanent resident aliens. Other qualified aliens may be issued a temporary license that is valid until the expiration of their visa status, or if there is no expiration date, for one year. Applicants who are qualified aliens must present to the Board office, in person, with valid documentary evidence of:

1. A valid, unexpired immigrant or nonimmigrant visa status for admission into the United States;
2. A pending or approved application for asylum in the United States;
3. Admission into the United States in refugee status;
4. A pending or approved application for temporary protected status in the United States;
5. Approved deferred action status; or
6. A pending application for adjustment of status to legal permanent resident status or conditional resident status.

The Board has the right to deny a license to an individual with a history of criminal background, disciplinary action on another health-related license or certification, or judicial declaration of mental incompetence [59 O.S. §567.8]. These cases are considered on an individual basis at the time application for licensure is made, with the exception of felony convictions. An individual with a felony conviction cannot apply for licensure for a least five years after completion of all sentencing terms, including probation and suspended sentences, unless a presidential or gubernatorial pardon is received [59 O.S. §567.5 & 567.6]. Please check with the Oklahoma Board of Nursing for current requirements, since changes may have occurred since printing.

#### Application Deadline Summary

	<b>Request for Substitutions/ Exceptions Due</b>	<b>Application Due</b>	<b>Semester of Enrollment</b>
<b>Traditional Nursing Track</b>	August 1	September 1	Spring/January
<b>Nursing Career Mobility Track: Owasso Campus</b>	March 1	April 1	Fall/August
<b>Nursing Career Mobility Track: Metro Campus</b>	August 1	September 1	Spring/January

Note: If an application deadline falls on a weekend or federal holiday, the deadline is extended to the next business day.



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## APPLICATION TO TRADITIONAL NURSING TRACK

**The Traditional Nursing Track admits a new class each spring. Selected classes are held at both Southeast and Metro Campuses.**

Applicants become qualified for admission based on achievement of Nursing Program admission criteria submitted by the application deadline date. Admission criteria are listed in the Program application. Deadline for submitting the completed nursing application must be met by **SEPTEMBER 1** for admission the following spring. If the application deadline falls on a weekend or federal holiday, the deadline is extended to the next business day. All applicants are notified of their admission status, in writing, within approximately 4 weeks of the application deadline date. The admission decision is based on a ranking process (See Traditional Nursing Track application packet). Students who are accepted to the Nursing Program must meet the following program and curriculum prerequisites prior to beginning nursing courses:

1. Earn required minimum scores on the pre-admission exams. Students who score a 12.9 or below on the Nelson Denny test and are **accepted** into the Nursing Program will be given **conditional acceptance** and will be required to take the Advanced Reading Workshop for Nursing Student Success at the TCC Reading Lab prior to the first semester of the Nursing Program. If the Nelson Denny score of the student is still below 13.0 after completion of reading remediation, the student will be granted **provisional admission**. (See Traditional Nursing Track application packet for specific information related to nursing pre-admission exams).

2. Complete the following prerequisite semester courses of general education classes with a grade of "C" or higher prior to beginning the Nursing Program.

ENGL 1113 Composition I      CHEM 1114 Principles of Chemistry      PSYC 1113 Introduction to Psychology  
BIOL 2134 Human Anatomy      BIOL 1224 Introduction to Biology for Majors

3. Provide documentation of current CNA certification or an acceptable substitute. (See Traditional Nursing Track Application Packet for specific details).

NOTE: \*Substitution requests for the CNA certification requirement are due by **AUGUST 1**. If the application deadline falls on a weekend or federal holiday, the deadline is extended to the next business day. Substitution requests should be submitted in a written letter that is included with the formal application to the program (See Traditional Nursing Track application packet).

4. Submit **ALL** previous official transcripts to Enrollment Services prior to application deadline. Please remember that it may take several weeks to have your transcripts reviewed.

5. Have an overall GPA of 2.5 or above. Any request for exceptions are due in writing and must be submitted with the formal application by **AUGUST 1**. If the application deadline falls on a weekend or federal holiday, the deadline is extended to the next business day. NOTE: To stay eligible for selection in the application pool your GPA must be maintained. Otherwise, you will become ineligible and your application will be returned.

6. Students must make a minimum of "C" in all courses required in each semester of the degree plan for continued enrollment and graduation in the Nursing Program. See course descriptions for pre- and co- requisite course requirements. A Curriculum Degree Plan Sheet for the Traditional Nursing Track is available in the Nursing Division office and at [www.tulsacc.edu/nursing](http://www.tulsacc.edu/nursing).

7. Admission to Tulsa Community College does not guarantee admission to the Nursing Program. To be considered for admission to the Nursing Program one must make application to the Nursing Program, in addition to the College application. To remain in the program, the student must be in "good standing" at TCC.

8. See Traditional Nursing Track application packet for specific requirements related to criminal background check, health record requirements, and CPR certification. Drug screening will be required upon entry to the program.

9. Potential students need to be aware that they may not be approved by the Oklahoma Board of Nursing to take the NCLEX-RN licensure examination if they have:

- 1) Been arrested/convicted of any offense including a deferred sentence.
- 2) Been declared judicially incompetent.
- 3) Ever been convicted of a felony.
- 4) Ever had disciplinary action taken against another health related license. Those needing other information regarding this topic can obtain a copy of Guidelines for NCLEX on the Oklahoma Board of Nursing website.

10. Applicants who previously attend a nursing program (LPN or RN) at TCC or elsewhere, must submit completed application by the Exception/Substitution deadline. The application will be reviewed on an individual basis. Attach official transcripts from the LPN and/or RN school in a sealed envelope. Attach a letter addressing any grade of "W", "D", or "F" you received for any Nursing courses.



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## **APPLICATION TO NURSING CAREER MOBILITY TRACK**

The Nursing Career Mobility Track admits one new class each fall semester at the Owasso Campus and one new class each spring semester at the Tulsa Metro Campus. Applicants become qualified for admission based on achievement of Nursing Program admission criteria submitted by the application deadline date. Admission criteria are listed in the Program application. The deadline for submission of application for the **fall semester** at the Owasso Campus is **APRIL 1**. The deadline for submission of application for the **spring semester** at the Tulsa Metro Campus is **SEPTEMBER 1**. If the application deadline falls on a weekend or federal holiday, the deadline is extended to the next business day. All applicants are notified of their admission status, in writing, within four (4) weeks of the application deadline date. The admission decision is based on a ranking process (See Nursing Career Mobility Track Application Packet). Students who are accepted to the Nursing Program must meet the following program and curriculum prerequisites prior to beginning nursing courses:

1. Earn required minimum scores on the pre-admission exams. Students who score a 12.9 or below on the Nelson Denny test and are **accepted** into the Nursing Program will be given **conditional acceptance**. They will be required to take the Advanced Reading Workshop for Nursing Student Success at the TCC Reading Lab prior to first semester of the program. If the Nelson Denny score of the student is still below 13.0 after completion of reading remediation, the student will be granted **provisional admission**. (See Career Mobility Nursing Track application packet for specific information related to nursing pre-admission exams).

2. Complete the following prerequisite semester courses of general education classes with a grade of "C" or higher prior to beginning the Nursing Program.

- BIOL 1224 Introduction to Biology for Majors
- BIOL 2134 Human Anatomy
- BIOL 2154 Human Physiology
- CHEM 1114 Principles of Chemistry
- ENGL 1113 Composition I
- ENGL 1213 Composition II
- PSYC 1113 Introduction to Psychology

3. Provide documentation of current unrestricted licensure as an LPN in the State of Oklahoma, or National Paramedic Registration.

4. Submit ALL previous official transcripts to Enrollment Services prior to application deadline. Please remember that it may take several weeks to have your transcripts reviewed.

5. Have an overall GPA of 2.5 or above. Any request for exceptions are due in writing and must be submitted with the formal application by **MARCH 1 for the fall semester at the Owasso Campus** and by **AUGUST 1 for the spring semester at the Tulsa Metro Campus**. If the application deadline falls on a weekend or federal holiday, the deadline is extended to the next business day.

6. Students must make a minimum of "C" in all courses required in each semester of the curriculum degree plan for continued enrollment and graduation in the Nursing Program. See course descriptions for pre- and co- requisite course requirements. A curriculum degree plan for the Nursing Career Mobility Track is available in the Nursing Division office and at [www.tulsacc.edu/nursing](http://www.tulsacc.edu/nursing).

7. Admission to Tulsa Community College does not guarantee admission to the Nursing Program. To be considered for admission to the Nursing Program one must make application to the Nursing Program, in addition to the College application. To remain in the program, the student must be in "good standing" at TCC.

8. See Nursing Career Mobility Track application packet for specific requirements related to criminal background check, health record requirements, and CPR certification. Drug screening will be required upon entry to the program.

9. Potential students need to be aware that they may not be approved by the Oklahoma Board of Nursing to take the NCLEX-RN licensure examination if they have:

- 1) Been arrested/convicted of any offense including a deferred sentence.
- 2) Been declared judicially incompetent.
- 3) Ever been convicted of a felony.
- 4) Ever had disciplinary action taken against another health related license. Those needing other information regarding this topic can obtain a copy of Guidelines for NCLEX on the Oklahoma Board of Nursing website.

10. Applicants who previously attend a nursing program (RN) at TCC or elsewhere, must submit completed application by the Exception/Substitution deadline. The application will be reviewed on an individual basis. Attach official transcripts from the RN school in a sealed envelope. Attach a letter addressing any grade of "W", "D", or "F" you received for any Nursing courses.





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## **NURSING (RN)**

### **TCC Associate Degree Nursing Program**

Tulsa Community College offers an Associate Degree Nursing Program that is accredited by the Accreditation Commission for Education in Nursing (ACEN) and approved by the Oklahoma Board of Nursing. The Program challenges students in an environment that facilitates personal and professional growth, educational mobility, and a pattern of life-long learning. Five Core values of the TCC Nursing Program include: Caring; Diversity; Collegiality; Integrity; and, Excellence. Nursing education is a dynamic, collaborative process in which responsibility for outcomes is shared between faculty and student. All theory, lab, and clinical courses follow a concept-based delivery method and competency/standard-based assessment and evaluation process. Six program outcomes include: Patient Centered Care; Teamwork and Collaboration; Best Practice; Quality Improvement; Safety; and Informatics. All nursing courses incorporate the six program outcomes, while student learning outcomes for each individual course integrate knowledge, skills, and attitudes specific to the patient population served and essential for entry level practice.

Together, courses taken for the general education requirements and those taken for the Associate Degree in Nursing will ensure that graduates of the TCC Associate Degree Nursing Program have the knowledge, skills, and attitudes to successfully meet the requirements for entry into the nursing profession set forth by respective professional nursing accrediting/governing bodies. Upon successful completion of all required courses and TCC graduation requirements, graduates are awarded an Associate in Applied Science (AAS) Degree and are eligible to take the National Council Licensure Examination for Registered Nurses (NCLEX-RN).

Prospective students interested in the Nursing Program should contact the Nursing Division office (918-595-7075) for an application and curriculum plan or access the Nursing Division web page ([www.tulsacc.edu/nursing](http://www.tulsacc.edu/nursing)) for more information regarding the Traditional Nursing Track and/or the Nursing Career Mobility Track.

## **TRADITIONAL NURSING (RN) TRACK**

The Traditional Nursing Track admits one new class each spring. This track consists of five semesters to complete an Associate Degree, with most courses offered during the daytime hours. Courses in the Traditional Nursing Track are offered using classroom, lab, and clinical activities as well as blended on-line resources. Students who have successfully completed NURS 2221, NURS 2222, NURS 2231, and NURS 2232 may be eligible to sit for the practical nurse licensure exam prior to completion of the Associate Degree in Nursing. Applicants for practical nurse licensure must also hold a high school diploma or a graduate equivalency degree (G.E.D.) [59 O.S. §567.5 & 567.6].

## **NURSING CAREER MOBILITY (LPN/PARAMEDIC to RN) TRACK**

The Nursing Career Mobility Track admits one new class each fall semester at the Owasso Campus and one new class each spring semester at the Tulsa Metro Campus. This track allows for completion of nursing courses in as few as three semesters. To facilitate the progression of working students, courses in the Nursing Career Mobility Track are offered using classroom, lab, and clinical activities as well as blended on-line resources. Clinical rotations are offered at varying times conducive to part-time and full-time working conditions. Students in the Nursing Career Mobility Track must have access to a personal computer with broadband or DSL IP (Internet Service Provider). A student who is an LPN may be eligible to receive advanced standing based upon completion of a selected maternal-child standardized exam with a score of B or better in lieu of taking NURS 2221, NURS 2222, NURS 2231, NURS 2232.



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## **NURSING (RN) PROGRAM**

Traditional Nursing Track and Nursing Career Mobility Track

**Degree Awarded: Associate in Applied Science**

**General Education Requirements Credit Hours: 38**

### **English 6 hours**

- +\*ENGL 1113 Composition I
- \*ENGL 1213 Composition II

### **Social Science 6 hours**

- POLS 1113 American Federal Government
- and select one course from the following:**
- HIST 1483 U.S. History 1492 to Civil War Era
- HIST 1493 U.S. History Civil War Era to Present

### **Psychology 6 hours**

- +PSYC 1113 Introduction to Psychology
- \*PSYC 2023 Developmental Psychology

### **Science 20 hours**

- +BIOL 1224 Introduction to Biology for Majors
- +\*BIOL 2134 Human Anatomy
- \*BIOL 2154 Human Physiology
- \*BIOL 2164 Microbiology
- +\*CHEM 1114 Principles of Chemistry

Students with a declared major of Nursing Applicant may take BIOL 1224 concurrently with BIOL 2134. See Advisement office for prerequisite waiver.

**Specialized Course Requirements Credit Hours: 35**

### **Traditional Nursing Track**

#### **Nursing 35 hours**

(Enrollment requires admission to the Nursing Program).

- \*NURS 1113 Adult Health I <sup>B</sup>
- \*NURS 1111 Adult Health I – Clinical <sup>C</sup>
- \*NURS 1143 Overview of Professional Development <sup>A</sup>
- \*NURS 1163 Principles of Pharmacology & Medication Safety <sup>D</sup>
- \*NURS 2213 Adult Health II <sup>E</sup>
- \*NURS 2212 Adult Health II – Clinical <sup>F</sup>
- \*NURS 2222 Pediatric Nursing
- \*NURS 2221 Pediatric Nursing – Clinical
- \*NURS 2232 Maternal–Newborn Nursing
- \*NURS 2231 Maternal–Newborn Nursing – Clinical
- \*NURS 2243 Adult Health III <sup>G</sup>
- \*NURS 2242 Adult Health III – Clinical <sup>H</sup>

- \*NURS 2432 Complex Mental Health
- \*NURS 2431 Complex Mental Health - Clinical
- \*NURS 2444 Adult Health IV & Leadership
- \*NURS 2442 Adult Health IV & Leadership - Clinical

### **Career Mobility Track**

(Students in the Career Mobility Track who satisfactorily complete the NURS courses below are not required to complete the correspondingly designated NURS course(s) in the Traditional Nursing Track.. Students should refer to the Career Mobility semester plan for further clarification.)

- \*NURS 1212 Career Mobility I <sup>B, D</sup>
- \*NURS 1211 Career Mobility I – Clinical <sup>C</sup>
- \*NURS 1363 Transition for Career Mobility <sup>A</sup>
- \*NURS 2352 Career Mobility II <sup>E, G</sup>
- \*NURS 2351 Career Mobility II – Clinical <sup>F, H</sup>

### **Total Credit Hours: 73**

\*Has prerequisite/corequisite. (See course description section of catalog).

+Prerequisite course for program

### **Additional Nursing Courses/Electives**

(not required for degree)

- NURS 1013 Critical Thinking & Decision Making
- NURS 1023 Stress Management
- NURS 1033 HONORS Nursing Policy & Politics
- NURS 1043 Nursing Informatics
- NURS 1471 Activities of Daily Living
- NURS 2303 Pharmacology
- NURS 2403 Dosage Calculations for Nurses
- NURS 299X Selected Topics in Nursing



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## NUTRITIONAL SCIENCES

University Transfer Degree

### University Transfer Degree Information:

Students should work closely with an academic advisor each semester to make certain you are enrolled in the correct courses for your degree program, especially if you are planning to transfer to a four-year college or university. Students are encouraged to begin a dialogue with their intended transfer schools as early as possible. Early coordination between TCC academic advisors and advisors from selected four-year institutions can streamline the transfer process. It is the student's responsibility to ensure that he/she understands the program/admission/transfer requirements for the transfer school.

### Program Description:

The Nutritional Sciences program prepares students to work in a wide range of settings in the public and private sectors and assume an array of challenging responsibilities in health care and wellness. Career opportunities for a registered/licensed dietitian include: health care dietitian and administrator, nutrition or food science researcher, fitness/wellness consultant, public health nutritionist, entrepreneur in dietetic programs and services, and corporate dietitian /nutritionist.

- The **allied health** option is for students who are interested in nutrition and desire to pursue professional healthcare occupations, but do not plan to become physicians, dentists, optometrists, pharmacists, or registered dietitians. The allied health option provides course work that is required for most nursing schools, physician assistant's programs, schools of physical and occupational therapy and other health professions.
- The **community nutrition** option is for students who desire to work in the field of foods and nutrition, but do not plan to become registered dietitians. The community nutrition option provides emphasis in improving the health of populations through nutrition programs at schools, and through Cooperative Extension, government programs, and wellness programs.
- The **dietetics** option prepares students for diverse and dynamic professions that integrate human nutrition, food service administration, food science, chemistry, physiology, management and interpersonal skills. Students will be able to transfer to an Oklahoma university and complete course work in a Didactic Program in Dietetics (DPD) which is accredited by the Accreditation Council for Education in Nutrition and Dietetics (ACEND) of the Academy of Nutrition and Dietetics (AND), 120 South Riverside Plaza, Suite 2000, Chicago, IL 60606-6995, ph. 312.899.0040 ext 5400. When students successfully complete the academic requirements (DPD) and experience component (Dietetic Internship), they are eligible for the Registration Examination for Dietitians administered by the Commission on Dietetic Registration (CDR) of the Academy of Nutrition and Dietetics. Application to ACEND-accredited Dietetic Internships is very competitive. Individuals who are successful on the CDR examination become registered dietitians and are entitled to use the initials "R.D." to signify professional competence. Many states including Oklahoma also require a license to practice dietetics in the state.



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## **NUTRITIONAL SCIENCES**

University Transfer Degree

**Degree Awarded: Associate in Science**

**General Education Requirements Credit Hours: 44**

**Communication 9 hours**

COMM 1113 Public Speaking  
\*ENGL 1113 Composition I  
\*ENGL 1213 Composition II

**Humanities 6 hours**

See the General Education Requirements for complete list.

**Mathematics 6 hours**

\*MATH 1513 College Algebra  
\*MATH 2193 Elementary Statistics

**Science 14 hours**

\*BIOL 1224 Introduction to Biology for Majors  
\*CHEM 1315 General Chemistry I  
\*CHEM 1415 General Chemistry II

**Social Science 6 hours**

POLS 1113 American Federal Government  
**and select one course from the following:**  
HIST 1483 U.S. History 1492 to Civil War Era  
HIST 1493 U.S. History Civil War Era to Present

**Psychology 3 hours**

PSYC 1113 Introduction to Psychology

**Specialized Course Requirements Credit Hours: 16**

**Nutrition Core 9 hours**

BIOL 1383 Nutrition  
HSVC 1113 Principles of Human Services  
HSVC 2023 Lifespan Development

**Select from one of the following three (3) options:**

**1) Allied Health Option 7 hours**

\*BIOL 2164 Microbiology  
PHED 2603 Total Wellness

**2) Community Nutrition Option 7 hours**

PHED 2111 Professional Careers in Nutritional Sciences

**And select two courses from the following:**

PHED 2263 Principles in Health and Health Promotion

PHED 2603 Total Wellness

PHED 2653 Applied Anatomy and Kinesiology

**3) Dietetics Option 8 hours**

\*BIOL 2164 Microbiology  
PHED 2111 Professional Careers in Nutritional Sciences  
ALDH 1323 Medical Terminology

**Total Credit Hours: 60-61**

\*Course has prerequisite (See course description section of catalog).

\*\*Advanced standing credit may be given for current certification.

To receive an A.A. or A.S. degree, students must demonstrate computer proficiency.

Transfer admission requirement: 2.5 GPA





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# **OCCUPATIONAL THERAPY ASSISTANT**

Workforce Development Degree

## **Program Description:**

This program is designed to prepare a student to perform occupational therapy procedures and related tasks under the direction and supervision of a Registered Occupational Therapist. The Occupational Therapy Assistant performs various treatment procedures delegated by the Registered Occupational Therapist to patients with physical, psychological, or cognitive disabilities. The Assistant also will work independently in programs to prevent disability and maintain health, such as Activity Director.

## **Degree Awarded: Associate in Applied Science**

*The Occupational Therapy Assistant Program is accredited by the Accreditation Council for Occupational Therapy Education (ACOTE) of the American Occupational Therapy Association (AOTA), located at 4720 Montgomery Lane, P.O. Box 31220, Bethesda, MD 20824-1220. AOTAs phone number is (301) 652-2682 (Website: [www.aota.org](http://www.aota.org)). Graduates of the program will be able to sit for the national certification examination for the occupational therapy assistant administered by the National Board for Certification in Occupational Therapy (NBCOT). After successful completion of this exam, the individual will be a Certified Occupational Therapy Assistant (COTA). Most states require licensure in order to practice; however, state licenses are usually based on the results of the NBCOT Certification Examination.*

## **Admission To The Program:**

The program admits one class of 20 students each year in the summer term. Prospective students are required to complete the application process by January 15 of each year.

## **Procedures for Application:**

1. Applications are available through [tulsacc.edu/healthscienceapply](http://tulsacc.edu/healthscienceapply). For more information, contact the Allied Health division office at (918) 595-7002.
2. Submit completed program application form and required materials by January 15 to the Allied Health Services Division located in the Alfred M. Philips Building, room MP458, 909 South Boston Avenue, Tulsa, OK 74119.
3. All prospective Occupational Therapy Assistant program students must complete an application for enrollment to the College, submit their high school transcripts, ACT scores and previous college transcripts to the Metro Campus Registrar's Office at 909 South Boston Avenue, Tulsa, OK 74119. Incomplete submissions will not be considered for admission into the Occupational Therapy Assistant program.
4. Acceptance to Tulsa Community College does not guarantee admission to the Occupational Therapy Assistant program.
5. Interviews will be granted to applicants who meet the program's minimum requirements. All interviewed applicants will be notified regarding their selection status.
6. In order to enroll in courses that include a clinical component and are part of the program degree plan, students must receive clearance on a criminal background check, including sex offender registry. Potential students need to be aware that drug testing and clearance is a requirement for participation in all clinical components.

## **General Education Requirements Credit Hours: 22**

### **Biology 4 hours**

°BIOL 1314 Human Anatomy and Physiology

### **English 6 hours**

\*ENGL 1113 Composition I

\*ENGL 1213 Composition II

### **Psychology 6 hours**

PSYC 1113 Introduction to Psychology

#### **and select one course from the following:**

\*PSYC 2023 Developmental Psychology

\*PSYC 2193 Personality Theories

### **Social Science 6 hours**

POLS 1113 American Federal Government

#### **and select one course from the following:**

HIST 1483 U.S. History 1492 to Civil War Era

HIST 1493 U.S. History Civil War Era to Present

## **Specialized Course Requirements Credit Hours: 46**

### **Occupational Therapy Assistant 46 hours**

- °OCTA 1203 Introduction to Occupational Therapy
- \*OCTA 1293 Introduction to Occupational Therapy II
- \*OCTA 1303 Clinical Conditions, Terminology, and Skills
- \*OCTA 1352 Neuro Anatomy and Physiology for OTAs
- \*OCTA 1363 Applied Anatomy for OTAs
- \*OCTA 1403 Therapeutic Media
- \*OCTA 1483 Physical Disabilities
- \*OCTA 1443 Psychosocial Theory and Practice
- \*OCTA 1511 Fieldwork I A
- \*OCTA 1521 Fieldwork I B
- \*OCTA 2203 Therapeutic Adaptations
- \*OCTA 2233 Developmental Disabilities Theory and Practice
- \*OCTA 2263 Current Trends in Occupational Therapy
- \*OCTA 2356 Fieldwork II A
- \*OCTA 2376 Fieldwork II B

### **Total Credit Hours: 68**

\*Course has prerequisite (See course description section of catalog).

° Course must be completed with a "C" or better.

It is recommended that students intending to pursue a Master's degree in Occupational Therapy counsel with an OCTA faculty member to select appropriate electives.

NOTE: When you apply to write the certification examination with the National Board for Certification in Occupational Therapy (NBCOT), you will be asked to answer questions related to the topic of felonies. For further information on these limitations, you may contact the NBCOT at: National Board for Certification in Occupational Therapy 4720 Montgomery Lane P. O. Box 31220 Bethesda, MD 20824-1220 .

General education requirements can be found at:  
**[www.tulsacc.edu/gened](http://www.tulsacc.edu/gened)**



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## **PARALEGAL STUDIES**

University Transfer Degree

### **University Transfer Degree Information:**

Students should work closely with an academic advisor each semester to make certain you are enrolled in the correct courses for your degree program, especially if you are planning to transfer to a four-year college or university. Students are encouraged to begin a dialogue with their intended transfer schools as early as possible. Early coordination between TCC academic advisors and advisors from selected four-year institutions can streamline the transfer process. It is the student's responsibility to ensure that he/she understands the program/admission/transfer requirements for the transfer schools.

### **Program Description:**

Upon satisfactory completion of the course requirements, including a grade of "C" or better in all Paralegal courses, graduates are eligible to apply for the examination given by the National Association of Legal Assistants, Inc. to become Certified Legal Assistants (CLA) or the National Association of Legal Professionals to earn the Professional Paralegal (PP) credential. Tulsa Community College is a member of the American Association for Paralegal Education.

### **Degree Awarded: Associate in Arts**

#### **For More Information Contact:**

Business and Information Technology Division  
Metro Campus: (918) 595-7439 **or**  
Paralegal Program Coordinator: (918) 595-7317

#### **ADMISSION TO THE PROGRAM**

1. Complete all admission requirements to Tulsa Community College.
2. Complete all admission requirements to the Paralegal Program.
  - a. Complete Paralegal Application, available in the Business and Technology Division Office, Metro Campus, MC 416.
  - b. Completion of CSCI 1203, ENGL 1113 and 1213, COMM 1113, POLS 1113, and PLGL 1213 with a "C" or better.

Tulsa Community College will refuse program completion credit for legal specialty courses taken more than six years prior to completion of the program, unless the student's proficiency in the area can be demonstrated.

#### **General Education Requirements Credit Hours: 37**

##### **Communication 9 hours**

COMM 1113 Public Speaking  
\*ENGL 1113 Composition I  
\*ENGL 1213 Composition II

##### **Computer Information Systems 3 hours**

CSCI 1203 Computer Concepts and Applications

##### **Humanities 6 hours**

See the General Education Requirements page for course list.

##### **Mathematics 3 hours**

MATH 1513 College Algebra  
or higher level MATH course

##### **Science 7 hours**

See the General Education Requirements page for course list.  
One course must be laboratory science.

##### **Social Science 6 hours**

POLS 1113 American Federal Government  
**and select one of the following:**  
HIST 1483 U.S. History 1492 to Civil War Era  
HIST 1493 U.S. History Civil War Era to Present

##### **Required Electives 3 hours**

Select 3 credit hours from the following disciplines: Psychology, Social Sciences, Foreign Languages, Fine Arts (Art, Music, Theatre). See General Education Requirements for course list.

##### **Specialized Course Requirements Credit Hours 27**

##### **Accounting 3 hours**

\*ACCT 2213 Financial Accounting

##### **Paralegal 24 hours**

**Students are required to earn a "C" or better in all Paralegal Courses**

PLGL 1213 Introduction to the Legal System

\*PLGL 1313 Civil Procedure I

\*PLGL 2303 Civil Procedure II

\*PLGL 2333 Introduction to Legal Research and Writing

\*PLGL 2343 Advanced Legal Research and Writing

\*PLGL 2353 Contracts

\*PLGL 2363 Real Property Law

\*PLGL 2383 Capstone

##### **Total Credit Hours: 64**

\*Course has prerequisite (See course description section of catalog).  
To receive an A.A. or A.S. Degree, students must demonstrate computer proficiency.



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## PARALEGAL

Workforce Development Degree

### Program Description:

This program is designed to prepare graduates to work as professional assistants under the supervision of attorneys, with training in civil procedure, legal research and writing, drafting of documents, interviewing techniques, litigation support, computer use in the law, and law office systems management. Students acquire additional knowledge of various substantive and procedural areas of law including, among others, contract law, real property transactions, business organizations, family law, bankruptcy or probate practice. Upon satisfactory completion of the course requirements, including a grade of "C" or better in all Paralegal courses, graduates are eligible to apply for the examination given by the National Association of Legal Assistants, Inc. to be Certified Legal Assistants (CLA) or the National Association of Legal Professionals to earn the Professional Paralegal (PP) credential. Tulsa Community College is a member of the American Association for Paralegal Education.

### Degree Awarded: Associate in Applied Science

#### For More Information Contact:

Business and Information Technology Division

Metro Campus (918) 595-7439 or

Paralegal Program Coordinator: (918) 595-7317

### ADMISSION TO THE PROGRAM

1. Complete all admission requirements to Tulsa Community College.
2. Complete all admission requirements to the Paralegal Program.
  - a. Complete Paralegal Application, available in the Business and Information Technology Division Office, Metro Campus, MC 416.
  - b. Completion of CSCI 1203, ENGL 1113 and 1213, COMM 1113, POLS 1113, and PLGL 1213 with a "C" or better.

Tulsa Community College will refuse program completion credit for legal specialty courses taken more than six years prior to completion of the program, unless student's proficiency in the area can be demonstrated.

### General Education Requirements Credit hours: 18

#### English 6 hours

\*ENGL 1113 Composition I

\*ENGL 1213 Composition II

#### Social Science 6 hours

POLS 1113 American Federal Government

**and select one course from the following:**

HIST 1483 U.S. History 1492 to Civil War Era

HIST 1493 U.S. History Civil War Era to Present

#### Additional General Education Courses 6 hours

Within the requirement for 18 semester hours or the equivalent of General Education coursework, students must take courses in at least three different disciplines such as:

a. Social sciences, natural sciences, mathematics, humanities, foreign language and English.

b. Acceptable courses include survey and theory courses, but exclude performance, activity, and special topics 2991-2996 courses.

c. Students are required to see the Paralegal Program Coordinator for questions about specific course acceptability.

### Specialized Course Requirements Credit Hours: 45

#### Accounting 3 hours

\*ACCT 2213 Financial Accounting

#### Computer information Systems 3 hours

CSCI 1203 Computer Concepts and Applications

### Paralegal 24 hours

**Students are required to earn a "C" or better in all Paralegal Courses.**

\*PLGL 1213 Introduction to the Legal System

\*PLGL 1313 Civil Procedure I

\*PLGL 2303 Civil Procedure II

\*PLGL 2333 Introduction to Legal Research and Writing

\*PLGL 2343 Advanced Legal Research and Writing

\*PLGL 2353 Contracts

\*PLGL 2363 Real Property Law

\*PLGL 2383 Capstone

### Communication 3 hours

COMM 1113 Public Speaking

### Controlled Electives 12 hours

#### \*\*Paralegal 9 hours

\*PLGL 2373 Computers in the Law

\*PLGL 2403 Principles of Family Law

\*PLGL 2413 Law Office Systems and Procedures

\*PLGL 2423 Corporations, Partnerships and LLC's

\*PLGL 2433 Bankruptcy

\*PLGL 2443 Probate, Administration of Estates and Trusts

\*PLGL 2453 Administrative Law

\*PLGL 2463 Labor and Employment

\*PLGL 2473 Torts and Insurance

\*PLGL 2483 Native American Law

\*PLGL 2493 Criminal Law for Paralegals

\*PLGL 2502 Medical Record Analysis for Paralegals

\*PLGL 2511 E-Discovery for Paralegal

\*PLGL 2601 Worker's Compensation for Paralegals

\*PLGL 2613 Social Security Administration

\*PLGL 2621 Elder Law

\*PLGL 2802 Internship

\*PLGL 2813 Internship

**Select an additional 3 hours from other computer, accounting, business, management, administrative careers, or paralegal courses, Examples are:**

MGMT 2363 Principles of Management

\*\*\*ENGL 2343 Business Communication I

\*PLGL 2802 Internship

\*PLGL 2813 Internship

### Total Credit Hours: 63

\*Course has prerequisite (See course description section of catalog).

\*\*Graduation credit for 1 and 2 credit hour courses in this series is limited to a maximum of 3 credit hours.





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## **PHARMACY TECHNOLOGY**

Workforce Development Certificate

### **Program Description:**

The Pharmacy Technology Program at Tulsa Community College prepares individuals to work under the supervision of registered pharmacists in providing a high level of modern pharmaceutical support in compounding pharmacies, hospital pharmacies, home health pharmacies, retail pharmacies, and clinics. Their duties can include: prescription processing; transcribing doctor orders; IV admixtures; infusion therapeutics; assisting with anticoagulant medication dosage needs; customized medications; compounding gels; customized dosing; inventory activities; quality assurance and control; product repackaging; narcotic distribution and record keeping; parenteral chemotherapy; delivery and stocking of operation rooms; tracking patient medications or lab results; charting; monitoring formulary compliance; customer service and relations; drug ordering and inventory; and third party processing.

### **Program Information:**

The Pharmacy Technology Program admits a new class each full term beginning in August and January. Admission to the class is limited to 24 students. The Pharmacy classes are day courses offered on the Metro Campus and will take 16 weeks to complete. The graduates of this one-term program will receive a Certificate of Achievement and will be eligible to take the National Pharmacy Technician Certification Examination through the Pharmacy Technician Certification Board (PTCB). Individuals who have been convicted of a felony or a crime involving moral turpitude, or who have a substance abuse problem, may not be eligible for licensure in the State of Oklahoma or as a candidate for national certification. If any of these circumstances exist, you may wish to contact the Oklahoma State Board of Medical Licensure and Supervision, P.O. Box 18256, Oklahoma City, OK 73154 and the Pharmacy Technician Certification Board, 2215 Constitution Avenue, NW, Washington, D.C. 20037-2985.

### **Application Instructions:**

1. Applicant must go online and submit an application to Tulsa Community College at the College's website, [www.tulsacc.edu](http://www.tulsacc.edu). If you are, or have been enrolled at Tulsa Community College, no TCC application is needed. Also register with FASFA at [www.fasfa.gov](http://www.fasfa.gov). Please notify the Enrollment Services Office if you have had a name, address, and/or telephone change since applying for admission.

2. Send official high school transcript or GED scores to the Enrollment Services office. High school seniors need to send a seventh (7th) semester transcript. Upon completion of high school, an official transcript needs to be sent with final grades and graduation date.

3. Send official college transcript(s) to the Enrollment Services office from each college attended.

4. First-time college students must meet with a counselor regarding new student orientation, appropriate college placement testing, and possible high school curricular deficiencies.

5. Complete Pharmacy Technology Program application for admission online at [tulsacc.edu/healthscienceapply](http://tulsacc.edu/healthscienceapply) by June 1 for the fall term and by November 1 for the spring term.

6. In order to enroll in courses that include a clinical component and are a part of the program degree plan, students must receive clearance on a criminal background check, including sex offender registry, or provide documentation of a security clearance from another state or country (international students).

### **Admission and Selection Criteria:**

The Pharmacy Technology program admits a new class each full term beginning in August and January. Admission to the class is limited to 24 students. The applicant must have a cumulative college grade point average (GPA) of 2.0, or if the applicant has no college GPA, then a minimum high school GPA or GED of 2.0 is required. Qualified applicants will be granted an interview with the Pharmacy Technician Program Director.

### **Degree Awarded: Certificate of Achievement**

### **For More Information Contact:**

Allied Health Services Division: Metro: (918) 595-7002

### **Pharmacy Technology 16 hours**

- \*PHMT 1324 Introduction to Profession of Pharmacy
- \*PHMT 1334 Introduction to Pharmacology
- o \*PHMT 1414 Pharmacy Technician Practicum I
- o \*PHMT 1524 Preceptorship I

### **Total Credit Hours: 16**

- \*Course has prerequisite (see course description section of catalog)
- o Course must be completed with a "C" or better.





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## **PHILOSOPHY**

University Transfer Degree

### **University Transfer Degree Information:**

Students should work closely with an academic advisor each semester to make certain you are enrolled in the correct courses for your degree program, especially if you are planning to transfer to a four-year college or university. Students are encouraged to begin a dialogue with their intended transfer schools as early as possible. Early coordination between TCC academic advisors and advisors from selected four-year institutions can streamline the transfer process. It is the student's responsibility to ensure that he/she understands the program/admission/transfer requirements for the transfer school.

### **Program Description:**

Philosophy seeks answers to fundamental questions such as: How do I know this to be true? What kind of life should a human being live? Is there such a thing as religious or scientific truth? What is the world ultimately like? Philosophy attempts to develop and use critical methods; that is, to develop standards of logical thinking as opposed to emotional reaction. Philosophy, then, seeks to develop analytical skills that will be useful in every aspect of life as well as enriching and fulfilling to the individual.

### **Degree Awarded: Associate in Arts**

#### **General Education Requirements Credit Hours: 30**

(Humanities requirements are satisfied through specialized course requirements.)

#### **Communication 9 hours**

COMM 1113 Public Speaking

\*ENGL 1113 Composition I

\*ENGL 1213 Composition II

#### **Mathematics 3 hours**

See the General Education Requirements page for the course list.

#### **Science 7 hours**

See the General Education Requirements page for the course list. One course must be a laboratory science (L).

#### **Social Science 6 hours**

POLS 1113 American Federal Government

**and select one course from the following:**

HIST 1483 U.S. History 1492 to Civil War Era

HIST 1493 U.S. History Civil War Era to Present

#### **Recommended Electives 2 hours**

#### **Required Electives 3 hours**

Select one three-hour course from one of the following:

Psychology, Social Sciences, Foreign Language, or Fine Arts (Art, Music, Theatre).

### **Specialized Course Requirements Credit Hours: 30**

#### **Philosophy 15 hours**

PHIL 1113 Introduction to Philosophy

PHIL 1133 Philosophy in Literature

PHIL 1143 Introduction to Ethics: Business Issues

PHIL 1213 Religions of the World: The Eastern Tradition

PHIL 1223 Religions of the World: The Western Tradition

PHIL 2113 Logic

PHIL 2133 Introduction to Ethical Thinking

PHIL 2143 Introduction to Social and Political Philosophy

PHIL 2153 Medical Ethics

PHIL 2163 Introduction to the History and Philosophy of Science

PHIL 2173 Introduction to the Philosophy of Religion

#### **Controlled Electives 15 hours**

\*ENGL 2413 Introduction to Literature

HIST 1053 Ancient and Medieval Western Civilization

\*POLS 2033 Introduction to American Politics

PSYC 1023 Psychology of Personal Adjustment

PSYC 1113 Introduction to Psychology

SOCI 1113 Introduction to Sociology

SOCI 2113 Social Problems in America

SOCI 2123 Introduction to Cultural Anthropology

#### **Total Credit Hours: 60**

\*Course has prerequisite (See course description section of catalog).

Proficiency in a foreign language is recommended.

To receive an A.A. or A.S. Degree, students must demonstrate computer proficiency.



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## **PHYSICAL THERAPIST ASSISTANT**

Workforce Development Degree

### **Program Description:**

Tulsa Community College offers a five (5) term Physical Therapist Assistant Program accredited by The Commission on Accreditation in Physical Therapy Education, American Physical Therapy Association, 1111 North Fairfax Street, Alexandria, VA 22314, Telephone: (703) 706-3245, Website: [www.apta.org/CAPTE](http://www.apta.org/CAPTE).

The physical therapist assistant is a technically educated health care provider who assists the physical therapist in the provision of physical therapy. The physical therapist assistant may perform procedures and related tasks that have been selected and delegated by the supervising physical therapist. To further investigate the role of the physical therapist assistant, contact the American Physical Therapy Association at [www.apta.org](http://www.apta.org). Successful completion of this program requires that the student perform at a "C" level or better in all of their physical therapist assistant courses.

The graduate of this program is eligible to apply for the National Physical Therapy Examination for the physical therapist assistant. Individuals who have been convicted of a felony or of a crime involving moral turpitude, or who have had a drug problem, may not be permitted to take the licensure examination. If any of these circumstances exist, you may wish to contact the Oklahoma State Board of Medical Licensure and Supervision, (405)-848-6841 for clarification.

### **Degree Awarded: Associate in Applied Science**

#### **Admission To The Program:**

Program admits one class each year during the spring term.

#### **Procedure For Application:**

1. Applications are available through [tulsacc.edu/healthscienceapply](http://tulsacc.edu/healthscienceapply). For more information, contact the Allied Health division office at (918) 595-7002.
2. Submit completed program application form and required materials by December 1 to the Allied Health Services Division located in the Alfred M. Philips Building, room MP458, 909 South Boston, Tulsa, OK 74119.
3. All prospective Physical Therapist Assistant Program students must complete an application for enrollment to the College, submit their high school transcripts, ACT scores and previous college transcripts to the Metro Campus Registrar at 909 South Boston, Tulsa, OK74119. Incomplete submissions will not be considered for admission into the Physical Therapist Assistant program.
4. Acceptance to Tulsa Community College does not guarantee admission to the Physical Therapist Assistant Program.
5. Eligible applicants to be interviewed for consideration for admission into the Physical Therapist Assistant Program will be notified by mail. All interviewed applicants will be notified regarding their selection status.
6. In order to enroll in courses that include a clinical component and are part of the program degree plan, students must receive clearance on a criminal background check, including sex offender registry. Potential students need to be aware that drug testing and clearance is a requirement for participation in all clinical components.

### **General Education Requirements Credit Hours: 19**

#### **Biology 4 hours**

°\*\*BIOL 1314 Human Anatomy and Physiology

#### **English 6 hours**

\*ENGL 1113 Composition I

#### **and select 3 credit hours from the following:**

\*ENGL 1213 Composition II

\*ENGL 2333 Technical / Professional Writing

#### **Psychology 3 hours**

PSYC 1113 Introduction to Psychology

#### **Social Science 6 hours**

POLS 1113 American Federal Government

#### **and select one course from the following:**

HIST 1483 U.S. History 1492 to Civil War Era

HIST 1493 U.S. History Civil War Era to Present

### **Specialized Course Requirements Credit Hours: 49**

#### **Allied Health 3 hours**

°ALDH 1323 Medical Terminology

#### **Physical Therapist Assistant 46 hours**

°\*PHTA 1203 Anatomy and Physiology for PTAs

°\*PHTA 1242 Human Growth and Development

°\*PHTA 1303 Introduction to Physical Therapy

°\*PHTA 1211 Clinical Orientation

°\*PHTA 1221 Clinical Practice I

°\*PHTA 1363 Kinesiology for PTAs

°\*PHTA 1383 Pathophysiology for PTAs

°\*PHTA 1392 Clinical Procedures I

°\*PHTA 2113 Rehabilitation

°\*PHTA 2343 Clinical Procedures II

°\*PHTA 2373 Therapeutic Exercise I

°\*PHTA 2383 Therapeutic Exercise II

°\*PHTA 2432 Clinical Practice II

°\*PHTA 2442 Psychosocial Aspects of Physical Therapy

°\*PHTA 2486 Clinical Practice III

°\*PHTA 2543 Neuroscience

°\*PHTA 2522 Special Studies in Clinical Practice

°\*PHTA 2551 Pharmacology for PTAs

#### **Total Credit Hours: 68**

\*Course has prerequisite (See course description section of catalog).

\*\*Student may substitute BIOL 2154 and BIOL 2134 for BIOL 1314.

°Course must be completed with a "C" or above.



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## **PHYSICS**

University Transfer Degree

### **University Transfer Degree Information:**

Students should work closely with an academic advisor each semester to make certain you are enrolled in the correct courses for your degree program, especially if you are planning to transfer to a four-year college or university. Students are encouraged to begin a dialogue with their intended transfer schools as early as possible. Early coordination between TCC academic advisors and advisors from selected four-year institutions can streamline the transfer process. It is the student's responsibility to ensure that he/she understands the program/admission/transfer requirements for the transfer school.

### **Program Description:**

Physics is the foundation for all science areas such as Astronomy, Biology, Chemistry, and Geology. Physics is also the foundation for medicine-related studies and aviation.

### **Degree Awarded: Associate in Science**

#### **For More Information Contact:**

Science and Mathematics Division

Metro: (918) 595-7334, Northeast: (918) 595-7542, Southeast:

(918) 595-7742,

West: (918) 595-8193

### **General Education Requirements Credit Hours: 27**

Mathematics and Science requirements are satisfied through Specialized Course Requirements.

### **Communication 9 hours**

COMM 1113 Public Speaking

\*ENGL 1113 Composition I

\*ENGL 1213 Composition II

### **Humanities 6 Hours**

See the General Education Requirements page for the course list.

### **Social Science 6 hours**

POLS 1113 American Federal Government

**and select one course from the following:**

HIST 1483 U.S. History 1492 to Civil War Era

HIST 1493 U.S. History Civil War Era to Present

### **Recommended Electives 3 hours**

### **Required Electives 3 hours**

Select one three-hour course from the following:

Psychology, Social Sciences, Foreign Language, or Fine Arts

(Art, Music, Theatre)

### **Specialized Course Requirements Credit Hours:33**

### **Chemistry 10 hours**

\*CHEM 1315 General Chemistry I

\*CHEM 1415 General Chemistry II

### **Mathematics 8 hours**

\*MATH 2114 Analytic Geometry and Calculus I

\*MATH 2124 Analytic Geometry and Calculus II

### **Physics 8 hours**

\*PHYS 2034 Engineering Physics I

\*PHYS 2124 Engineering Physics II

### **Recommended Electives 7 hours**

CSCI 1203 Computer Concepts and Applications

\*ENGR 1242 Introductory Engineering Computer Programming

\*MATH 2134 Analytic Geometry and Calculus III

\*MATH 2613 Elementary Differential Equations

### **Total Credit Hours: 60**

\*Course has prerequisite (See course description section of catalog).

To receive an A.A. or A.S. Degree, students must demonstrate computer proficiency.

Physical Education activity classes do not count toward the associate degree requirements in this curriculum at TCC.





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## **POLITICAL SCIENCE**

University Transfer Degree

### **University Transfer Degree Information:**

Students should work closely with an academic advisor each semester to make certain you are enrolled in the correct courses for your degree program, especially if you are planning to transfer to a four-year college or university. Students are encouraged to begin a dialogue with their intended transfer schools as early as possible. Early coordination between TCC academic advisors and advisors from selected four-year institutions can streamline the transfer process. It is the student's responsibility to ensure that he/she understands the program/admission/transfer requirements for the transfer school.

### **Degree Awarded: Associate in Arts**

#### **General Education Requirements Credit Hours: 37**

##### **Communication 9 hours**

COMM 1113 Public Speaking

\*ENGL 1113 Composition I

\*ENGL 1213 Composition II

##### **Humanities 6 hours**

See the General Education Requirements page for the course list.

##### **Mathematics 3 hours**

See the General Education Requirements page for the course list.

##### **Science 7 hours**

See the General Education Requirements page for the course list.  
One course must be a laboratory science (L).

##### **Social Science 6 hours**

POLS 1113 American Federal Government

and select one course from the following:

HIST 1483 U.S. History 1492 to Civil War Era

HIST 1493 U.S. History Civil War Era to Present

##### **Recommended Electives 3 hours**

CSCI 1203 Computer Concepts and Applications

or

Select three (3) credit hours from the list of Liberal Arts and

Science Electives

##### **Required Electives 3 hours**

Select one three-hour course from one of the following:

Psychology, Social Sciences, Foreign Language, or Fine Arts

(Art, Music, Theatre).

#### **Specialized Course Requirements Credit Hours: 23**

##### **Political Science 12 hours**

\*POLS 2013 Introduction to Comparative Governments

\*POLS 2023 Introduction to American Politics

\*POLS 2033 Introduction to Political Thought

\*POLS 2103 Introduction to State and Local Government

\*POLS 2133 Introduction to Public Administration

\*POLS 2153 Introduction to the Constitution and Judicial

Process

\*POLS 2203 Introduction to International Relations

#### **Recommended Electives 11 hours**

##### **Choose from at least three different disciplines.**

CSCI 1203 Computer Concepts and Applications

ECON 2013 Principles of Macroeconomics

GEOG 1023 World Geography (Economic)

HIST 1053 Ancient and Medieval Western Civilization

HIST 1063 Modern Western Civilization

HIST 1483 U.S. History 1492 to Civil War Era

HIST 1493 U.S. History Civil War Era to Present

HIST 2043 Contemporary Affairs

HIST 2523 History of Oklahoma

PHIL 1113 Introduction to Philosophy

PHIL 2163 Introduction to the History and Philosophy of Science

PSYC 1113 Introduction to Psychology

SOCI 1113 Introduction to Sociology

SOCI 2113 Social Problems in America

\*SOCI 2223 Behavioral Statistics

#### **Total Credit Hours: 60**

\*Course has prerequisite (See course description section of catalog).

Proficiency in a foreign language is recommended.

To receive an A.A. or A.S. Degree, students must demonstrate computer proficiency.

Physical Education activity classes do not count toward the associate degree requirements in this curriculum at TCC.





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## **PRE-NURSING**

University Transfer Degree (BSN)

### **University Transfer Degree Information:**

Students should work closely with an academic advisor each semester to make certain you are enrolled in the correct courses for your degree program, especially if you are planning to transfer to a four-year college or university. Students are encouraged to begin a dialogue with their intended transfer schools as early as possible. Early coordination between TCC academic advisors and advisors from selected four-year institutions can streamline the transfer process. It is the student's responsibility to ensure that he/she understands the program/admission/transfer requirements for the transfer school.

### **Degree Awarded: Associate in Science**

#### **For More Information Contact:**

Science and Mathematics Division

Metro: (918) 595-7334 Northeast: (918) 595-7542, Southeast:  
(918) 595-7742

West: (918) 595-8193

### **General Education Requirements Credit Hours: 24**

(Additional General Education Requirements are satisfied through specialized courses.)

#### **English 6 Hours**

\*ENGL 1113 Composition I

\*ENGL 1213 Composition II

#### **Social Science 6 Hours**

POLS 1113 American Federal Government

**And select one course from the following**

HIST 1483 U.S. History 1492 to Civil War Era

HIST 1493 U.S. History Civil War Era to Present

#### **Humanities 6 hours**

See the General Education Requirements for complete list.

#### **Psychology 6 hours**

PSYC 1113 Introduction to Psychology

\*PSYC 2023 Developmental Psychology

### **Specialized Course Requirements Credit hours: 36**

#### **Mathematics 6 hours**

\*MATH 1513 College Algebra

\*MATH 2193 Elementary Statistics

#### **Science 24 hours**

BIOL 1224 Introduction to Biology for Majors

BIOL 1383 Nutrition

\*BIOL 2134 Human Anatomy

\*BIOL 2154 Human Physiology

\*BIOL 2164 Microbiology

\*CHEM 1315 General Chemistry I

### **Controlled Electives 6 hours**

**Select classes that will apply to the university of your choice:**

BUSN 1053 Introduction to Business

CSCI 1203 Computer Concepts and Applications

\*CSCI 2033 Excel

\*ENGL 2383 Advanced Composition

\*MATH 2513 Finite Mathematics

SOCI 1113 Introduction to Sociology

### **Total Credit Hours: 60**

\*Course has prerequisite (See course description section of catalog). To receive an A.A. or A.S. Degree, students must demonstrate computer proficiency.

NOTE: Consult an advisor at the 4-year institution for prerequisite and application information.



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## **PRE-PHARMACY**

University Transfer Degree

### **University Transfer Degree Information:**

This suggested curriculum includes TCC degree requirements and prerequisite courses generally completed in the first two years of a pharmacy doctoral curriculum. This curriculum has been specifically designed to provide seamless transition to the doctoral programs at Oklahoma Colleges of Pharmacy. Students considering this major should consult the division offices listed below and/or the selected courses that will meet the requirements of the Pre-Pharmacy associate degree program and the prerequisite requirements of the chosen doctoral program.

### **Degree Awarded: Associate in Science**

#### **For More Information Contact:**

Science and Mathematics Division  
Metro: (918) 595- 7334 Northeast: (918) 595-7542,  
Southeast: (918) 595- 7742, West: (918) 595-8193

### **General Education Requirements Credit Hours: 24**

#### **English 6 hours**

\*ENGL 1113 Composition I  
\*ENGL 1213 Composition II

#### **Humanities 6 hours**

See General Education Requirements page for complete list.

#### **Social Science 6 hours**

POLS 1113 American Federal Government  
**and select one course from the following:**  
HIST 1483 U.S. History 1492 to Civil War Era  
HIST 1493 U.S. History Civil War Era to Present

#### **Psychology 3 hours**

PSYC 1113 Introduction to Psychology

#### **Economics 3 hours**

ECON 2013 Principles of Macroeconomics

### **Specialized Course Requirements Credit Hours: 45-49**

#### **Mathematics 6 hours**

\*MATH 1513 College Algebra  
^\*MATH 2523 Calculus for Business, Life, and Social Sciences

#### **Science Courses 36 hours**

BIOL 1224 Introduction to Biology for Majors  
\*BIOL 2134 Human Anatomy  
\*BIOL 2164 Microbiology  
\*CHEM 1315 General Chemistry I  
\*CHEM 1415 General Chemistry II  
\*CHEM 2145 Organic Chemistry I  
\*CHEM 2245 Organic Chemistry II  
\*PHYS 1114 General Physics I

### **Additional Courses for Transfer: 3-7 hours**

(Note: These requirements vary by College of Pharmacy. Consult with a transfer counselor at the receiving institution before selecting.)

\*BIOL 2154 Human Physiology  
\*CHEM 2353 Introduction to Biochemistry  
COMM 1113 Public Speaking

### **Total Credit Hours: 69-73**

\*Course has prerequisite (See course description section of catalog).  
^Alternate MATH option: MATH 2114 Analytic Geometry and Calculus I may be taken in place of MATH 2523. Consult the selected College of Pharmacy for specific prerequisite requirements before selecting MATH 2114.  
To receive an A.A. or A.S. Degree, students must demonstrate computer proficiency.



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## **PRE-PROFESSIONAL HEALTH SCIENCES**

Pre-Dentistry / Pre-Medicine / Pre-Optometry  
University Transfer Degree

### **University Transfer Degree Information:**

Students should work closely with an academic advisor each semester to make certain you are enrolled in the correct courses for your degree program, especially if you are planning to transfer to a four-year college or university. Students are encouraged to begin a dialogue with their intended transfer schools as early as possible. Early coordination between TCC academic advisors and advisors from selected four-year institutions can streamline the transfer process. It is the student's responsibility to ensure that he/she understands the program/admission/transfer requirements for the transfer school.

### **Degree Awarded: Associate in Science**

#### **For More Information Contact:**

Science and Mathematics Division  
Metro: (918) 595- 7334 Northeast: (918) 595-7542,  
Southeast: (918) 595- 7742, West: (918) 595-8193

#### **General Education Requirements Credit Hours: 21**

##### **English 6 hours**

\*ENGL 1113 Composition I  
\*ENGL 1213 Composition II

##### **Humanities 6 Hours**

See the General Education Requirements page for the course list.

##### **Social Science 6 hours**

POLS 1113 American Federal Government  
**and select one course from the following:**  
HIST 1483 U.S. History 1492 to Civil War Era  
HIST 1493 U.S. History Civil War Era to Present

##### **Required Electives 3 hours**

Select one three-hour course from one of the following:  
Psychology, Social Sciences, Foreign Language,  
or Fine Arts (Art, Music, Theatre).

#### **Specialized Course Requirements Credit Hours: 42**

##### **Biology 16 hours**

\*BIOL 1224 Introduction to Biology for Majors  
**and select three courses from the following:**  
\*BIOL 1404 General Botany  
\*BIOL 1604 Zoology  
\*BIOL 2134 Human Anatomy  
\*BIOL 2154 Human Physiology  
\*BIOL 2164 Microbiology

##### **Chemistry 15 hours**

\*CHEM 1315 General Chemistry I  
**and select two courses from the following:**  
\*CHEM 1415 General Chemistry II  
\*CHEM 2145 Organic Chemistry I  
\*CHEM 2245 Organic Chemistry II

##### **Mathematics 3 hours**

##### **Select one course from the following:**

\*MATH 1513 College Algebra  
\*MATH 1613 Plane Trigonometry  
\*MATH 1715 College Algebra and Trigonometry  
\*MATH 2114 Analytic Geometry and Calculus I  
\*MATH 2124 Analytic Geometry and Calculus II  
\*MATH 2134 Analytic Geometry and Calculus III

##### **Physics 8 hours**

\*PHYS 1114 General Physics I  
\*PHYS 1214 General Physics II

##### **Additional Recommended Course** (not required for degree)

\*CHEM 2353 Introduction to Biochemistry

##### **Total Credit Hours: 63**

\*Course has prerequisite (See course description section of catalog).  
To receive an A.A. or A.S. Degree, students must demonstrate computer proficiency.



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## **PRE-PROFESSIONAL HEALTH SCIENCES**

Pre-Medical Imaging, Pre-Occupational Therapy, Pre-Physical Therapy Options  
University Transfer Degree

### **University Transfer Degree Information:**

Students should work closely with an academic advisor each semester to make certain you are enrolled in the correct courses for your degree program, especially if you are planning to transfer to a four-year college or university. Students are encouraged to begin a dialogue with their intended transfer schools as early as possible. Early coordination between TCC academic advisors and advisors from selected four-year institutions can streamline the transfer process. It is the student's responsibility to ensure that he/she understands the program/admission/transfer requirements for the transfer school.

### **Degree Awarded: Associate in Science**

#### **For More Information Contact:**

Science and Mathematics Division

Metro: (918) 595-7334, Northeast: (918) 595-7542,

Southeast: (918) 595-7742, West: (918) 595-8193

### **General Education Requirement Credit Hours: 49**

#### **English 6 hours**

\*ENGL 1113 Composition I

\*ENGL 1213 Composition II

#### **Humanities 6 hours**

See the General Education Requirements page for complete list.

#### **Mathematics 3 hours**

\*MATH 1513 College Algebra

#### **Social Science 6 hours**

POLS 1113 American Federal Government

**and select one course from the following:**

HIST 1483 U.S. History 1492 to Civil War Era

HIST 1493 US History Civil War Era to Present

#### **Psychology 3 hours**

PSYC 1113 Introduction to Psychology

#### **Science 25 hours**

BIOL 1224 Introduction to Biology for Majors

\*CHEM 1315 General Chemistry I

\*PHYS 1114 General Physics I

\*BIOL 1604 Zoology

\*BIOL 2134 Human Anatomy

\*BIOL 2154 Human Physiology

### **Specialized Course Requirements Credit Hours: 11-12**

Select from one of the following three options:

**1) Pre-Medical Imaging**

**2) Pre-Occupational Therapy**

**3) Pre-Physical Therapy**

#### **1) Pre-Medical Imaging Option 12 hours**

**(Nuclear Medicine, Radiation Therapy, Radiography, Sonography)**

#### **Allied Health 3 hours**

ALDH 1323 Medical Terminology

#### **English 3 hours**

\*ENGL 2333 Technical/Professional Writing

#### **Sociology 3 hours**

SOCI 1113 Introduction to Sociology

#### **Recommended Electives 3 hours**

#### **2) Pre-Occupational Therapy Option 12 hours**

#### **Allied Health 3 hours**

ALDH 1323 Medical Terminology

#### **Mathematics 3 hours**

\*MATH 2193 Elementary Statistics

#### **Psychology 6 hours**

\*PSYC 2023 Developmental Psychology

**and select one of the following:**

\*PSYC 2193 Personality Theories

\*PSYC 2423 Introduction to Abnormal Psychology

#### **3) Pre-Physical Therapy Option 11 hours**

#### **Mathematics 3 hours**

\* MATH 2193 Elementary Statistics

#### **Physics 4 hours**

\*PHYS 1214 General Physics II

#### **Psychology 3 hours**

\* PSYC 2023 Developmental Psychology

#### **Recommended Electives 1 hour**

#### **Total Credit Hours: 60-61**

\*Course has prerequisite. (See course description section of catalog.)

To receive an A.A. or A.S. degree, students must demonstrate computer proficiency.





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## **PRE-PROFESSIONAL HEALTH SCIENCES**

Pre-Veterinary Science Option  
University Transfer Degree

### **University Transfer Degree Information:**

Students should work closely with an academic advisor each semester to make certain you are enrolled in the correct courses for your degree program, especially if you are planning to transfer to a four-year college or university. Students are encouraged to begin a dialogue with their intended transfer schools as early as possible. Early coordination between TCC academic advisors and advisors from selected four-year institutions can streamline the transfer process. It is the student's responsibility to ensure that he/she understands the program/admission/transfer requirements for the transfer school.

### **Degree Awarded: Associate in Science**

#### **For More Information Contact:**

Science and Mathematics Division  
West Campus: (918) 595-8193

### **General Education Requirements Credit Hours: 24**

(Additional General Education Requirements are satisfied through specialized courses.)

#### **Communication 9 hours**

COMM 1113 Public Speaking  
\*ENGL 1113 Composition I  
\*ENGL 1213 Composition II

#### **Humanities 6 Hours**

See the General Education Requirements page for the course list.

#### **Social Science 6 hours**

POLS 1113 American Federal Government  
**and select one course from the following:**  
HIST 1483 U.S. History 1492 to Civil War Era  
HIST 1493 U.S. History Civil War Era to Present

#### **Required Electives 3 hours**

Select one three-hour course from one of the following:  
Psychology, Social Sciences, Foreign Language,  
or Fine Arts (Art, Music, Theatre).

### **Specialized Course Requirements Credit Hours: 36**

#### **Biology 12 hours**

+\*BIOL 1224 Introduction to Biology for Majors  
\*BIOL 1604 Zoology  
\*BIOL 2164 Microbiology

#### **Chemistry 10 hours**

\*CHEM 1315 General Chemistry I  
\*CHEM 1415 General Chemistry II

#### **Mathematics 6 hours**

\*MATH 1513 College Algebra  
**and select one course from the following:**  
\*MATH 2193 Elementary Statistics  
\*MATH 2523 Calculus for Business, Life and Social Sciences

#### **Physics 8 hours**

\*PHYS 1114 General Physics I  
\*PHYS 1214 General Physics II

#### **Total Credit Hours: 60**

+BIOL 1224 is a prerequisite for BIOL 1604 and BIOL 2164.  
\*Course has prerequisites (See course description section of TCC catalog).  
To receive an A. A. or A.S. Degree, students must demonstrate computer proficiency.



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## **PROJECT MANAGEMENT**

Workforce Development Certificate

### **Program Information:**

This certificate is designed for students seeking project management skills to complement their chosen career, and for professionals preparing for Project Management Institute (PMI) Certification. Students will gain the foundational knowledge and skills needed to participate in and lead successful projects in information technology and other industries where the ability to work as a part of a team and respond to changes in real-time is critical. Proficiency in teamwork, leadership, ethical, and communication skills will be attained. Courses taught using a hands-on, real-world, team-based approach employing essential project management software and mobile technologies.

### **Degree Awarded: Certificate of Achievement**

#### **For More Information Contact:**

Business and Information Technology Division  
West Campus: (918) 595-8033

#### **Business 9 hours**

BUSN 2503 Principles of Project Management  
\*BUSN 2513 Project Management Applications  
\*BUSN 2523 Project Management Certification Preparation

#### **Total Credit Hours: 9**

\*Course has prerequisite (see course description section of catalog).  
PMI® is a registered trademark of the Project Management Institute, Inc.



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## **PSYCHOLOGY**

University Transfer Degree

### **University Transfer Degree Information:**

Students should work closely with an academic advisor each semester to make certain you are enrolled in the correct courses for your degree program, especially if you are planning to transfer to a four-year college or university. Students are encouraged to begin a dialogue with their intended transfer schools as early as possible. Early coordination between TCC academic advisors and advisors from selected four-year institutions can streamline the transfer process. It is the student's responsibility to ensure that he/she understands the program/admission/transfer requirements for the transfer school.

### **Program Description:**

Psychology is the science of behavior and mental processes. Students investigate such topics as personality theories, social psychology, psychological disorders, motivation, learning, physiology, memory and cognition. Through this program, students will explore the complexity of the human experience through all stages of human development.

### **Degree Awarded: Associate in Arts**

### **General Education Requirements Credit Hours: 37**

#### **Communication 9 hours**

COMM 1113 Public Speaking

\*ENGL 1113 Composition I

\*ENGL 1213 Composition II

#### **Humanities 6 hours**

See the General Education Requirements page for the course list.

#### **Mathematics 3 hours**

See the General Education Requirements page for the course list.

#### **Science 7 hours**

See the General Education Requirements page for the course list.  
One course must be a laboratory science (L).

#### **Social Science 6 hours**

POLS 1113 American Federal Government

and select one course from the following:

HIST 1483 U.S. History 1492 to Civil War Era

HIST 1493 U.S. History Civil War Era to Present

#### **Recommended Electives 3 hours**

CSCI 1203 Computer Concepts and Applications

or

Select three (3) credit hours from the list of Liberal Arts and Science Electives

#### **Required Electives 3 hours**

Select one three-hour course from one of the following:

Psychology, Social Sciences, Foreign Language, or Fine Arts (Art, Music, Theatre).

### **Specialized Course Requirements Credit Hours: 23**

#### **Psychology 15 hours**

PSYC 1113 Introduction to Psychology

PSYC 1313 Human Relations

\*PSYC 2023 Developmental Psychology

\*PSYC 2053 Social Psychology

PSYC 2123 Leadership Development

PSYC 2143 Guided Activities in Service Learning

PSYC 2193 Personality Theories

\*PSYC 2203 Mind and Behavior

\*PSYC 2213 Brain and Behavior

\*PSYC 2223 Behavioral Statistics

PSYC 2313 Psychology and Law

\*PSYC 2323 Conflict Resolution

PSYC 2523 Child Psychology

\*PSYC 2533 Adolescent Psychology

\*PSYC 2613 Adult Psychology

\*PSYC/BUSN 2633 Industrial and Organizational Psychology

\*PSYC 2713 Aging and Behavior

\*PSYC 2813 Human Sexuality

#### **Recommended Electives \*\*8 hours**

CSCI 1203 Computer Concepts and Applications

\*MATH 1513 College Algebra

PHIL 1113 Introduction to Philosophy

PHIL 2163 Introduction to the History and Philosophy of Science

\*PSYC 2153 Crisis Intervention and Experience

SOCI 1113 Introduction to Sociology

\*SOCI 2013 Marriage and Family

#### **Total Credit Hours: 60**

\*Course has prerequisite (See course description section of catalog).

\*\* Student should select courses that will transfer to the college / university they plan to attend.

Proficiency in a foreign language is recommended.

To receive an A.A. or A.S. Degree, students must demonstrate computer proficiency.

Physical Education activity classes do not count toward the degree requirements in this curriculum at TCC.

General education requirements can be found at:  
[www.tulsacc.edu/gened](http://www.tulsacc.edu/gened)



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## **RADIOGRAPHY**

(X-ray)

Workforce Development Degree

### **Introduction:**

The Radiography (X-ray) Program at Tulsa Community College is designed to prepare students with the knowledge and skills to function as medical radiographers. The program is nationally accredited by the Joint Review Committee on Education in Radiologic Technology. The graduates of this program receive an Associate Degree in Applied Science and are eligible to apply for the American Registry of Radiologic Technologists Examination.

### **Position Description:**

Medical Radiographers/Radiologic Technologists are the medical personnel who perform diagnostic imaging examinations. Radiographers use x-rays to produce black and white images of anatomy. These images are captured on film, computer or videotape. Radiographers are educated in anatomy, patient positioning, examination techniques, equipment protocols, radiation safety, radiation protection and basic patient care. Radiographers often specialize in areas of CT, MRI, Mammography, Cardiovascular Technology, Quality Control, Management and Education. Radiographers work closely with radiologists, physicians who interpret medical images to either diagnose or rule out disease or injury.

### **Program Information:**

The Radiography (X-ray) Program admits a new class each year beginning in June (summer term). The number of students admitted to the class is limited by clinical availability and is usually 25 to 30 students. The Radiography courses are offered during the day only and will take a total of six (6) terms to complete. The program consists of 50 credit hours of radiography lecture and clinical courses and 22 credit hours of related general education courses.

### **Degree Awarded: Associate in Applied Science**

#### **For More Information Contact:**

Allied Health Service Division located in the Alfred M. Philips Building, Metro Campus, Room MP 458, 909 South Boston, Tulsa, OK 74119, (918) 595- 7002.

#### **Application Instructions:**

1. Applications are available through [tulsacc.edu/healthscienceapply](http://tulsacc.edu/healthscienceapply).
2. Complete the Tulsa Community College Application for Admission and submit it to the Registrar's Office, if you have not been enrolled at TCC within the past year.
3. Send Official High School Transcript or GED scores to the Registrar's Office. High school seniors should send seventh (7th) semester transcript. Upon completion of high school, another official transcript must be sent with final grades and graduation date.
4. Send Official College transcript(s) to the Registrar's Office from each college attended.
5. Send official ACT/SAT scores to the Registrar's Office. (Each applicant must have either ACT/SAT scores to be considered for the program.)
6. First-time college students must meet with counselors regarding new student orientation, CPT (College Placement Test) and possible high school curricular deficiencies.
7. College students new at TCC must meet with counselors regarding COMPASS (college placement tests). Each applicant must show proficiency in English, Reading and Science.
8. Complete the Allied Health Radiography Program Application online at [tulsacc.edu/healthscienceapply](http://tulsacc.edu/healthscienceapply) by February 1. (All information required for the Radiography Program must be on file by February 1, including TCC Application, Program Application, Transcripts, and ACT/SAT Scores).
9. Acceptance to TCC does not guarantee admission to the Radiography Program.

10. All prospective applicants are encouraged to enroll in: BIOL 1314 Human Anatomy and Physiology, RADT 1212 Introduction to Radiography.

11. All applicants will be contacted by the program director for an informational visit and will be ranked for acceptance according to their academic background.

12. In order to enroll in courses that include a clinical component and are part of the degree plan, students must receive clearance on a criminal background check, including sex offender registry. Potential students need to be aware that drug testing and clearance is a requirement for participation in all clinical components.

### **General Education Requirements Credit Hours: 19**

#### **Biology 4 hours**

\*\*\*BIOL 1314 Human Anatomy and Physiology

#### **English 6 hours**

\*ENGL 1113 Composition I

#### **and select one course from the following:**

\*ENGL 1213 Composition II

\*ENGL 2333 Technical/Professional Writing

\*ENGL 2343 Business Communication I

#### **Mathematics 3 hours**

#### **Select one course from the following:**

\*MATH 1473 Mathematics for Critical Thinking

\*MATH 1513 College Algebra

#### **Social Science 6 hours**

POLS 1113 American Federal Government

#### **and select one course from the following:**

HIST 1483 U.S. History 1492 to Civil War Era

HIST 1493 U.S. History Civil War Era to Present

### **Specialized Course Requirements Credit Hours: 51**





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## **RADIOGRAPHY**

(X-ray)

Workforce Development Degree

### **Allied Health 3 hours**

ALDH 1323 Medical Terminology

### **Radiography 48 hours**

◦RADT 1211 Introduction to Radiography Laboratory

◦RADT 1212 Introduction to Radiography

◦RADT 1222 Radiographic Clinical Education I

◦\*RADT 1313 Radiographic Anatomy and Positioning I

◦\*RADT 1324 Radiographic Clinical Education II

◦\*RADT 1333 Radiographic Anatomy and Positioning II

◦\*RADT 1344 Radiographic Clinical Education III

◦\*RADT 1372 Radiographic Technique

◦\*RADT 1383 Advanced Radiographic Technique

◦\*RADT 2301 Radiographic Seminar

◦\*RADT 2312 Radiographic Clinical Education IV

◦\*RADT 2323 Radiographic Special Procedures

◦\*RADT 2336 Radiographic Clinical Education V

◦\*RADT 2343 Radiographic Biology and Pathology

◦\*RADT 2356 Radiographic Clinical Education VI

◦\*RADT 2383 Radiographic Physics

### **Total Credit Hours: 70**

\*Course has prerequisite (See course description section of catalog).

\*\*Student may substitute BIOL 2154 and BIOL 2134.

◦Course must be completed with a "C" or above.



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## **RELIGIOUS STUDIES**

University Transfer Degree

### **University Transfer Degree Information:**

Students should work closely with an academic advisor each semester to make certain you are enrolled in the correct courses for your degree program, especially if you are planning to transfer to a four-year college or university. Students are encouraged to begin a dialogue with their intended transfer schools as early as possible. Early coordination between TCC academic advisors and advisors from selected four-year institutions can streamline the transfer process. It is the student's responsibility to ensure that he/she understands the program/admission/transfer requirements for the transfer school.

### **Program Description:**

Religion is one of the primary social activities of humankind. Its study involves a comparative understanding of the various ways different peoples, across time and space, have developed their religious ideas, values, systems, beliefs, rituals, and traditions in response to fundamental questions of human existence. Religious Studies offers a rigorous, systematic, and objective intellectual inquiry into various aspects of religions, their adherents and world views, their goals and expressions. It employs a wide variety of approaches and methods in order to understand the role of religion in human experience and thought. Courses in Religious Studies are for majors and for those meeting Humanities credit requirements. They are designed to be non-technical and to appeal to a broad range of interests.

### **Degree Awarded: Associate in Arts**

#### **General Education Requirements Credit Hours: 31**

See the General Education Requirements for the course list. Humanities requirement is satisfied in Specialized Course Requirements.

#### **Specialized Course Requirements Credit Hours: 29**

##### **Religious Studies 12 hours**

RELG 1113 Introduction to Religious Studies

##### **and select three courses from the following:**

RELG 1213 Religions of the World: The Eastern Tradition

RELG 1223 Religions of the World: The Western Tradition

RELG 2113 Old Testament

RELG 2123 New Testament

##### **Controlled Electives 12 hours**

##### **Any course not selected from above or**

PHIL 2173 Introduction to the Philosophy of Religion

RELG/SOCI 2173 Religion and Society

RELG 2233 Religion in America

RELG 2243 Christian Ethics and Social Thought

RELG 2313 Religion in Film

##### **Recommended Electives\*\* 5 hours**

##### **General Emphasis**

\*ENGL 2543 British Literature I

\*ENGL 2773 American Literature II

HIST 1053 Ancient and Medieval Western Civilization

HIST 1063 Modern Western Civilization

HUMN 2113 Humanities I

HUMN 2223 Humanities II

PHIL 1113 Introduction to Philosophy

PHIL 1133 Philosophy in Literature

PHIL 2133 Introduction to Ethical Thinking

PSYC 1113 Introduction to Psychology

RELG 2330 Field Studies in Religion

SOCI 1113 Introduction to Sociology

SOCI 2123 Introduction to Cultural Anthropology

##### **or International Studies Emphasis**

GREE 1023 Biblical Greek I

\*GREE 1223 Biblical Greek II

HEBR 1023 Biblical Hebrew I

\*HEBR 1223 Biblical Hebrew II

LATN 1103 Latin I

\*LATN 1213 Latin II

##### **Total Credit Hours: 60**

\*Course has prerequisite (See course description section of catalog).

\*\* Students should select courses that will transfer to the college or university they plan to attend.

Physical Education activity courses do not count toward degree requirements.

To receive an A.A. or A.S. Degree, students must demonstrate computer proficiency.



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## **RESPIRATORY CARE**

Workforce Development Degree

### **Program Description:**

The Respiratory Care Program at Tulsa Community College (TCC) is designed to prepare individuals with the knowledge, skills and behaviors that are required for successful advanced respiratory therapists. If you enjoy working in a fast-paced environment where your technical and scientific responsibilities will be matched by a real need for human relations skills, then the TCC Respiratory Care Program may be for you. Respiratory Care is a health care specialty that offers a set of unique challenges in the areas of prevention, diagnosis, treatment, management and rehabilitation of people with lung disorders. As an advanced respiratory therapist, you will be involved in a wide variety of lifesaving and life-supporting situations, working side by side with physicians, nurses and others on the health care team. You will treat patients ranging from newborns to senior citizens. Your expertise will be in demand and opportunities to expand your knowledge and skills will be great.

### **Program Information:**

The Respiratory Care Program at TCC generally accepts 20-25 students each year beginning in the fall term. The general education courses may be taken prior to being accepted into the program to lighten term course loads. Human Anatomy and Physiology (BIOL 1314) is a prerequisite course that must be taken prior to acceptance into the program. The Respiratory Care Program is a 2-year, 5-term, full-time day program consisting of specialized courses offered in a specific sequence. Graduates of the program are awarded an Associate Degree in Applied Science and are eligible to apply for the National Board for Respiratory Care (NBRC) Certification and Registry Examinations.

### **Accreditation:**

The Respiratory Care Program at Tulsa Community College is nationally accredited by the Commission on Accreditation for Respiratory Care (COARC), 1248 Hardwood Rd., Bedford, TX 76021, (817) 283-2835.

### **Degree Awarded: Associate in Applied Science**

#### **Application Instructions:**

1. Applications are available through [tulsacc.edu/healthscienceapply](http://tulsacc.edu/healthscienceapply). For more information, contact the Allied Health division office at (918) 595-7002.
2. Complete the Tulsa Community College Application for Admission and submit it to the Registrar's Office if you have not been enrolled at TCC within the past year.
3. Send official high school transcript or GED scores to the Registrar's Office. High school seniors should send a seventh (7th) semester transcript. Upon completion of high school, another official transcript must be sent with final grades and graduation date.
4. Send official college transcript(s) to the Registrar's Office from each college attended.
5. Send official ACT/SAT scores to the Registrar's Office. (Each candidate must have either an ACT or SAT score to be considered for the program, regardless of age or educational background.)
6. First-time college students must meet with a counselor regarding COMPASS (college placement tests) and possible high school curricular deficiencies.
7. Complete Respiratory Care Program application for admission by April 15.
8. In order to enroll in courses that include a clinical component and are part of the program degree plan, students must receive clearance on a criminal background check, including sex offender registry. Potential students need to be aware that drug testing and clearance is a requirement for participation in all clinical components.

#### **Selection Criteria**

A selection committee reviews all applications. Qualified

applicants will be granted an interview with the Respiratory Care Program faculty. Qualified applicants are then ranked from the highest to the lowest score according to an established point system. The top 20-25 applicants are selected for the next fall semester class and are notified of their selection by the first week of May. The selection criteria are based upon the following:

- Cumulative GPA
- ACT/SAT Composite Score
- High School GPA (if less than 12 college credit hours)
- Math and/or Science GPA
- Math and Science ACT/SAT Score
- Interview

#### **General Education Requirements Credit Hours: 19**

##### **Biology 4 hours**

o+BIOL 1314 Human Anatomy and Physiology

##### **English 6 hours**

\*ENGL 1113 Composition I

**and select 3 credit hours from the following:**

\*ENGL 1213 Composition II

\*ENGL 2333 Technical/Professional Writing

##### **Psychology 3 hours**

PSYC 1113 Introduction to Psychology

##### **Social Science 6 hours**

POLS 1113 American Federal Government

**and select one course from the following:**

HIST 1483 U.S. History 1492 to Civil War Era

HIST 1493 U.S. History Civil War Era to Present

General education requirements can be found at:  
[www.tulsacc.edu/gened](http://www.tulsacc.edu/gened)



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## **RESPIRATORY CARE**

Workforce Development Degree



### **Specialized Course Requirements Credit Hours: 50**

- o \*RESP 1232 Applied Sciences for Respiratory Care
- o \*RESP 1242 Respiratory Care Patient Assessment
- o \*RESP 1313 Respiratory Care Theory and Techniques I
- o \*RESP 1354 Cardiopulmonary Anatomy and Physiology
- o \*RESP 1403 Respiratory Care Theory and Techniques II
- o \*RESP 1414 Clinical I
- o \*RESP 1443 Respiratory Care Pathophysiology
- o \*RESP 1511 Clinical Procedure Laboratory
- o \*RESP 1522 Introduction to Mechanical Ventilation
- o \*RESP 2102 Clinical II
- o \*RESP 2204 Clinical III
- o \*RESP 2212 Neonatal and Pediatric Respiratory Care
- o \*RESP 2311 Mechanical Ventilator Lab
- o \*RESP 2324 Advanced Topics in Mechanical Ventilation
- o \*RESP 2352 Respiratory Care Pharmacology
- o \*RESP 2414 Clinical IV
- o \*RESP 2452 NBRC Review
- o \*RESP 2562 Cardiopulmonary Diagnostics
- o \*RESP 2493 Respiratory Critical Care

### **Total Credit Hours: 69**

\*Course has prerequisite (See course description section of catalog).

+Prerequisite to admission into the Respiratory Care Program.

oCourse must be completed with a "C" or above.





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## **SOCIOLOGY**

University Transfer Degree

### **University Transfer Degree Information:**

Students should work closely with an academic advisor each semester to make certain you are enrolled in the correct courses for your degree program, especially if you are planning to transfer to a four-year college or university. Students are encouraged to begin a dialogue with their intended transfer schools as early as possible. Early coordination between TCC academic advisors and advisors from selected four-year institutions can streamline the transfer process. It is the student's responsibility to ensure that he/she understands the program/admission/transfer requirements for the transfer school.

### **Program Description:**

Sociology is the study of social life, social change, and the social causes and consequences of human behavior. Sociologists investigate the structure of groups, organizations, and societies, and how people interact within these contexts. Since all human behavior is social, the subject matter of sociology ranges from the intimate family to the hostile mob, from organized crime to religious cults, from the divisions of race, gender and social class to the shared beliefs of a common culture, and from the sociology of work to the sociology of sports. Because sociology addresses the most challenging issues of our time, it is a rapidly expanding field whose potential is increasingly tapped by those who craft policies and create programs.

### **Degree Awarded: Associate in Arts**

#### **General Education Requirements Credit Hours: 37**

##### **Communication 9 hours**

COMM 1113 Public Speaking

\*ENGL 1113 Composition I

\*ENGL 1213 Composition II

##### **Humanities 6 hours**

See the General Education Requirements page for the course list.

##### **Mathematics 3 hours**

See the General Education Requirements page for the course list.

##### **Science 7 hours**

See the General Education Requirements page for the course list. One course must be a laboratory science (L).

##### **Social Science 6 hours**

POLS 1113 American Federal Government

##### **and select one course from the following:**

HIST 1483 U.S. History 1492 to Civil War Era

HIST 1493 U.S. History Civil War Era to Present

##### **Recommended Electives 3 hours**

CSCI 1203 Computer Concepts and Applications

or

Select three (3) credit hours from the list of Liberal Arts and Science Electives

##### **Required Electives 3 hours**

Select one three-hour course from one of the following: Psychology, Social Sciences, Foreign Language, or Fine Arts (Art, Music, Theatre)

### **Specialized Course Requirements Credit Hours: 23-24**

#### **Sociology 15 hours**

SOCI 1113 Introduction to Sociology

SOCI 2113 Social Problems in America

#### **and select three of the following courses:**

\*SOCI 2013 Marriage and Family

\*SOCI 2043 Juvenile Delinquency

\*SOCI 2053 Social Psychology

\*SOCI 2123 Introduction to Cultural Anthropology

\*SOCI 2133 Introduction to Deviant Behavior

\*SOCI 2143 Minorities in America

SOCI/RELG 2173 Religion and Society

\*SOCI 2223 Behavioral Statistics

\*SOCI 2713 Aging and Behavior

\*SOCI 2813 Human Sexuality

#### **Recommended Electives 8-9 hours**

COMM 1013 Fundamentals of Listening

\*CSCI 1203 Computer Concepts and Applications

ECON 2013 Principles of Macroeconomics

\*ENGL 2883 Survey of American Literature from 1865

HIST 2043 Contemporary Affairs

HUMN 2223 Humanities II

PHIL 1113 Introduction to Philosophy

PHIL 2113 Logic

PHIL 2133 Introduction to Ethical Thinking

PHIL 2163 Introduction to the History and Philosophy of Science

\*POLS 2033 Introduction to Political Thought

PSYC 1023 Psychology of Personal Adjustment

PSYC 1113 Introduction to Psychology

PSYC 1313 Human Relations

\*PSYC/SOCI 2150 Crisis Intervention and Experience

\*SOCI 1073 Human Service Techniques

\*SOCI 2243 Introduction to Social Work

#### **Total Credit Hours: 60-61**

\*Course has prerequisite (See course description section of catalog).

Proficiency in a foreign language is recommended.

To receive an A.A. or A.S. Degree, students must demonstrate computer proficiency.

General education requirements can be found at:

**[www.tulsacc.edu/gened](http://www.tulsacc.edu/gened)**



**TULSA  
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## **THEATRE**

University Transfer Degree



### **University Transfer Degree Information:**

Students should work closely with an academic advisor each semester to make certain you are enrolled in the correct courses for your degree program, especially if you are planning to transfer to a four-year college or university. Students are encouraged to begin a dialogue with their intended transfer schools as early as possible. Early coordination between TCC academic advisors and advisors from selected four-year institutions can streamline the transfer process. It is the student's responsibility to ensure that he/she understands the program/admission/transfer requirements for the transfer school.

### **Degree Awarded: Associate in Arts**

#### **For More Information Contact:**

Visual and Performing Arts Division  
Southeast: (918) 595-7752  
TCC Theatre Office: (918) 595-7733

### **General Education Requirements Credit Hours: 35**

#### **Communication 9 hours**

COMM 1113 Public Speaking  
\*ENGL 1113 Composition I  
\*ENGL 1213 Composition II

#### **Humanities 6 hours**

See the General Education Requirements page for the course list.

#### **Mathematics 3 hours**

See the General Education Requirements page for the course list.

#### **Science 7 hours**

See the General Education Requirements page for the course list. One course must be a laboratory science (L).

#### **Social Science 6 hours**

POLS 1113 American Federal Government  
**and select one course from the following:**  
HIST 1483 U.S. History 1492 to Civil War Era  
HIST 1493 U.S. History Civil War Era to Present

#### **Recommended Electives 3 hours**

#### **Required Electives 1 hour**

Select one three-hour course from one of the following:  
Psychology, Social Sciences, Foreign Language, or Fine Arts (Art, Music, Theatre)

### **Specialized Course Requirements Credit Hours: 25**

#### **Theatre 19 hours**

THEA 1033 Stagecraft I

THEA 1053 Acting I

THEA 1081 Theatre Practice I

*A Theatre major is required to have two semesters of transcribed Theatre Practice I*

THEA 1093 Introduction to Theatre

THEA 1133 Costume Techniques I

THEA 2063 Fundamentals of Stage Lighting

\*THEA 2081 Theatre Practice II

*A Theatre major is required to have two semesters of transcribed Theatre Practice II*

#### **Controlled Electives 6 hours**

##### **Select from the following:**

\*THEA 1043 Stagecraft II

THEA 1343 Stage Movement I

\*THEA 2003 Audition Techniques

THEA 2013 Make-Up I

\*THEA 2043 Costume History

\*THEA 2053 Acting II

THEA 2073 Introduction to Production Design

\*THEA 2253 Stage Management

THEA 2313 Voice and Diction I

THEA 2333 Improvisation for the Theatre

THEA 2453 Creative Writing: Scriptwriting I

#### **Additional Recommended Courses**

(not required for degree)

\*ENGL 2543 British Literature I

\*ENGL 2653 British Literature II

\*ENGL 2773 American Literature I

\*ENGL 2883 American Literature II

HIST 1053 Ancient and Medieval Western Civilization

HUMN 2113 Humanities I

HUMN 2223 Humanities II

MUSC 1113 Music Appreciation

MUSC 1153 American Popular Music

\* MUSC 1731 Guitar Ensemble

\* MUSC 1791 Jazz Combo

\*THEA 1563 Musical Theatre

\*THEA 2463 Creative Writing: Scriptwriting II

#### **Total Credit Hours: 60**

\*Course has prerequisite (See course description of catalog).

To receive an A.A. or A.S. Degree, students must demonstrate computer proficiency.



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## **VETERINARY TECHNOLOGY**

Workforce Development Degree

### **Program Description:**

Veterinary Technicians are essential members of the veterinary health care team. A Registered Veterinary Technician (RVT) will support and augment veterinary care in many fields involving animals, including private veterinary practice, biomedical research, herd health management, teaching, zoological parks, and government services.

Under the supervision of a licensed veterinarian, RVT's may perform a diversity of skills to include: intensive nursing care, clinical laboratory procedures, radiology, anesthesiology, dental care, and surgical assistance. A graduate will have an in-depth understanding of the fundamentals of animal husbandry, behavior, and nursing care for a variety of species. The Veterinary Technology Program is accredited by the American Veterinary Medical Association (AVMA). RVT licensure is regulated by the Oklahoma State Board of Veterinary Medical Examiners (OSBVME).

Prospective students must formally apply to the TCC Veterinary Technology Program. For program information and an application, contact: Veterinary Technology Program, TCC West Campus, 7505 West 41st Street, Tulsa, OK 74107-8633, 918-595-8212.

### **Degree Awarded: Associate In Applied Science**

#### **For More Information Contact:**

Veterinary Technology Program West Campus: (918) 595-8212  
Science and Math Division: West Campus: (918) 595-8193

*The graduate will receive an Associate Degree in Applied Science. Upon degree completion, the graduate is eligible to take the NVTE (National Veterinary Technician Examination) and the Oklahoma licensure examination. The licensed RVT will work under the supervision of a licensed veterinarian.*

Individuals may not be eligible for a veterinary technician licensure in the state of Oklahoma who have:

- been addicted to narcotics or alcohol,
- received treatment for the habitual use of narcotics or alcohol;
- been convicted of a narcotics-related offense;
- ever been reprimanded, disciplined, disqualified or suspended from the duties of a veterinary technician or animal care;
- ever been a patient in a sanitarium or institution for the treatment of mental illness;
- been arrested/convicted of any felony offense, including a deferred sentence;

If any of these circumstances exist, it is advised that the prospective student discuss this with the Oklahoma State Board of Veterinary Medical Examiners.

Note: All applicants for licensure in the State of Oklahoma must undergo an OSBI (Oklahoma State Bureau of Investigation) background check during application for Examination and Licensure.

### **Procedures For Application:**

1. All program applicants must complete separate applications to Tulsa Community College and to the Veterinary Technology Program.
2. Contact the Veterinary Technology Program, West Campus (918) 595-8212, for program information and application.
3. Shadowing to be completed before application to program or at program coordinator's discretion. Contact the Veterinary

Technology Program for more information and specific requirements.

4. Prerequisite course work for the Veterinary Technology Program must be completed prior to admission.
5. Submit completed application and required materials, including official high school and college transcripts, and SAT/ACT scores, to: Veterinary Technology Program, TCC West Campus, 7505 West 41st Street, Tulsa, OK 74107-8633, 918-595-8633, by April 30
6. Incomplete submissions will not be considered for admission to the program.
7. Admission to TCC does not guarantee acceptance into the Veterinary Technology Program.
8. Eligible applicants will be notified and an interview will be scheduled.
9. All interviewed applicants will receive notification by mail regarding their selection status.

### **Prerequisites:**

#### **General Education Requirements Credit Hours: 23-24**

#### **Biology 4 hours**

##### **Select one course from the following:**

- \*^BIOL 1224 Introduction to Biology for Majors
- \*^BIOL 1604 Zoology

#### **Chemistry 4-5 hours**

##### **Select one course from the following:**

- \*^CHEM 1114 Principles of Chemistry
- \*^CHEM 1315 General Chemistry I

#### **English 6 hours**

- \*ENGL 1113 Composition I

##### **and select one course from the following:**

- \*ENGL 1213 Composition II
- +\*ENGL 2333 Technical/Professional Writing





**TULSA  
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## **VETERINARY TECHNOLOGY**

Workforce Development Degree

### **Mathematics 3 hours**

#### **Select one course from the following:**

- \*^MATH 1473 Mathematics for Critical Thinking
- \*^MATH 1513 College Algebra

### **Social Science 6 hours**

POLS 1113 American Federal Government

#### **and select one course from the following:**

- HIST 1483 U.S. History 1492 to Civil War Era
- HIST 1493 U.S. History Civil War Era to Present

### **Specialized Course Requirements Credit Hours: 53**

#### **Veterinary Technology 53 hours**

- ^VETT 1125 Anatomy and Physiology
- ^VETT 1132 Introduction to Veterinary Technology
- ^VETT 1161 Clinical Calculations for Veterinary Technicians
- ^VETT 1183 Principles of Small Animal Care
- ^VETT 1193 Principles of Large Animal Care
- ^VETT 1223 Veterinary Hospital Technology I
- \*^VETT 1232 Clinical Pathology I
- \*^VETT 1242 Clinical Pathology II
- \*^VETT 1263 Veterinary Office and Computer Skills
- \*^VETT 2125 Practicum: Animal Clinics and Nursing
- \*^VETT 2224 Microbiology and Sanitation
- \*^VETT 2234 Clinical Pathology III
- \*^VETT 2254 Laboratory, Wild and Exotic Animal Technology
- \*^VETT 2313 Veterinary Hospital Technology II
- \*^VETT 2333 Veterinary Pharmacology
- \*^VETT 2352 Radiology, Ultrasound and Diagnostic Imaging
- \*^VETT 2364 Large Animal Technology

### **Total Credit Hours: 76-77**

- Optional: +VETT 2382 Board Review for Veterinary Technicians
- \* Course has prerequisite (See course description section of catalog).
- ^ Course must be completed with a "C" or better.
- Admission to Veterinary Technology Program or permission of program coordinator.
- + Course is recommended
- ° Biology courses must be completed within 12 years of application date.



## COURSE DESCRIPTIONS

### COURSE NAMING SYSTEM:

Course content areas at Tulsa Community College are categorized in “disciplines,” a related group of courses in a specified subject area, such as English (ENGL) or Physics (PHYS). Each course is first assigned a specific discipline name and then a specific four-digit course number, as in ENGL1113, and a course name, as in Composition I. A brief description of the course content follows the course name and number. If a course is offered as part of a required sequence of courses, the prerequisite requirements for that course are also listed within the catalog course description. Not all courses listed in the catalog are offered each term, and certain courses may be offered on only one campus. Please check the current term class schedule for this information.

### COURSE NUMBERING SYSTEM:

- First digit - The year in which the course is usually taken.\*
- Second and third digit - The individual course number within a discipline.
- Fourth - The credit hours awarded for a course.

\*(Zero level courses are not included in the admission, retention, or graduation grade point averages.)

### CREDIT HOUR:

A credit hour consists of one class period per week in a subject for 16 weeks per semester, with the exception of laboratories, practicums, or physical education activity classes in which generally two periods per week for 16 weeks equals one credit hour. The number of class hours and laboratory hours doubles for a class in an eight-week term. The time required each week for laboratory may vary from course to course. Please refer to the course syllabus for more information.

### GENERAL EDUCATION COURSES:

Courses used to fulfill general education requirements at TCC are listed in the catalog section titled, General Education Requirements. A code letter following a course title designates the general education category for which the course may generally be used for transfer to another university, as follows:

- (A) Analytical and Quantitative Thought
- (D) Diversity
- (H) Humanities
- (I) International or Non-Western Dimension
- (L) Laboratory Science
- (S) Social and Behavioral Sciences

## ACCOUNTING

### ACCT 1003 - Introduction to Accounting

Provides an understanding of the fundamental principles of double entry accounting as applied to practical business situations. Emphasizes the following: preparation of financial statements, debit and credit rules of accounting, the accounting cycle, special journals, and payroll accounting. The entire course incorporates applicable mathematical procedures (and their review) as they are used in accounting methodology.

### ACCT 1411 - Quickbooks

This course includes the review and use of this powerful accounting tool for both accountants and non-accountants to: 1) record sales, track accounts receivable and accounts payable, 2) record expenses and pay bills, 3) track receipts and shipment/sales of inventory as well as inventory analysis, 4) document work estimates, activity by jobs, and employees/contractors time for invoicing and payroll, 5) process employee payroll, print paychecks, prepare quarterly and annual payroll reports and print W-2 forms, and 6) analyze accounting information through the preparation of various reports including balance sheet and income statement. Prerequisite: Working knowledge of accounting and computers.

### ACCT 2213 - Financial Accounting

Theory and practice of measuring and recording financial data for an economic unit: journalizing transactions, adjusting entries for revenue and expense items, inventories, depreciation, internal control with an emphasis on cash, current and long-term liabilities, and accounting for corporation stock transactions. Emphasis also will concentrate on the preparation and use of the income statement, balance sheet, and statement of cash flows. Prerequisites: Must meet appropriate proficiencies in English, Math, and Reading or completion of ACCT 1003 with a grade of “C” or better.

**ACCT 2223 - Managerial Accounting**

An introduction to managerial accounting. Analysis of cost behavior with an emphasis on the accumulation of product costs and budgeting for planning and performance evaluation. Coverage includes job order costing, process costing, cost-volume-profit analysis, capital budgeting, standard costs, and departmentalization. Prerequisites: ACCT 2213 with grade of "C" or better.

**ACCT 2243 - Payroll Administration**

This course will cover a wide spectrum of basic payroll accounting and employment topics for large and small employers. It will concentrate on the administration of the payroll function under the Fair Labor Standard Act and the Internal Revenue Code. Other subjects include overtime pay, payroll taxes, withholding reporting and deposits, voluntary and non-voluntary deductions (cafeteria plans, group health plans, COBRA requirements, worker's compensation issues, pension plans, etc.), and W-2 preparation and reconciliation. The Certified Payroll Professional (CPP) designation requirements will also be introduced. Prerequisites: ACCT 2213 and ACCT 2223 with a grade of "C" or better or instructor approval.

**ACCT 2253 - Peachtree**

This class is a study of a comprehensive automated accounting program. Includes all modules of the package, set-up of a business, and actual operation of the package for three months. Includes lecture and in-class production. Prerequisite: ACCT 2213 with a grade of "C" or better.

**ACCT 2263 - Quickbooks Pro - Comprehensive**

This course will provide a comprehensive study of the QuickBooks Pro Accounting Software Package. It covers a service and merchandising business from a sole proprietorship, partnership, or corporation form and meets the needs of a small to mid-size business. Features will range from creating the company, recording simple to complex entries, preparing multiple reports, preparing payroll to closing the accounting periods. Prerequisite: ACCT 2213 with a grade of "C" or better.

**ACCT 2313 - Intermediate Accounting I**

A review of the accounting cycle and advanced work in the areas of cash, receivables, inventories, current liabilities, plant and equipment, intangible assets and long-term liabilities and stockholders' equity. Prerequisites: ACCT 2223 with a grade of "C" or better.

**ACCT 2323 - Intermediate Accounting II**

A continuation of Intermediate Accounting I, with emphasis on investments, long-term liabilities, accounting for leases and pensions, stock holders' equity, earnings per share, revenue recognition, income taxes, accounting changes, statement of cash flows, financial statement analysis, and disclosures. Prerequisite: ACCT 2313 with a grade of "C" or better.

**ACCT 2333 - Cost Accounting**

Basic principles and procedures of cost accounting and cost control in a manufacturing organization through study of job order and process cost procedures, predetermined cost, and variance analysis. Prerequisites: ACCT 2223 with grade of "C" or better.

**ACCT 2363 - Income Tax I**

Provides an understanding of basic income tax laws applicable to individuals and sole proprietorships. Subjects treated include personal exemption, gross income, business expenses, non-business deductions, capital gains, and losses. Emphasis is on problems commonly encountered in the preparation of income and tax returns. Prerequisite: ACCT 2213 with a grade of "C" or better.

**ACCT 2383 - Governmental and Non-profit Accounting**

A study is made of the unique characteristics of fund accounting used at various levels of governmental units and nonprofit operations. Special emphasis is devoted to budgeting and accounting control as a means of furthering sound financial administration of these organizations. Prerequisites: ACCT 2213 and ACCT 2223 with a grade of "C" or better.

**ACCT 2393 - Accounting Information Systems**

Study of alternative accounting systems used for the collection, organization, and presentation of information. Practice in (1) designing accounting systems to assist management in decision-making process, and (2) designing financial reports for internal and external purposes. Practice in using accounting software. Prerequisites: ACCT 2223 with a grade of "C" or better, CSCI 1203.

**ACCT 2403 - Income Tax II**

The study of advanced federal income taxation problems. Special emphasis is placed on the preparation of returns for partnerships, trusts, and corporations. Other subjects include an introduction of tax planning and research. Prerequisite: ACCT 2363 with a grade of "C" or better.

**ACCT 2433 – Computerized Business Income Tax**

Course is designed to teach the use of professional tax software using Pro Series Professional tax software from Individual to Corporate.

**ACCT 2443 - Auditing**

A study is made of the audit function; a survey is made of the professional authority, body of theory, and standards - general, fieldwork and reporting; and a discussion of the audit opinion and its implications. Special emphasis will be placed on work-paper techniques, internal control and internal auditing. Prerequisite: ACCT 2313 with a grade of "C" or better.

**ACCT 2463 - Fraud Examination**

An examination of various aspects of fraud detection and prevention, including asset misappropriation, skimming, cash larceny, check tampering, register disbursement schemes, payroll and expense reimbursement schemes, inventory and other assets, corruption, bribery, conflicts of interest and fraudulent financial statements. Prerequisites: ACCT 2213 and ACCT 2223 with a grade of "C" or better.

**ACCT 2523 - Accounting Software Applications**

The study of a computer application package using microcomputers as a vehicle. Systems studied will be general ledger, accounts receivable, accounts payable, billing, payroll, and inventory control. Prerequisites: ACCT 2213 with a grade of "C" or better and CSCI 1203.

**ACCT 2533 - Fundamentals of Health Care Accounting**

This is an introductory course in financial accounting for health care organizations. Vocabulary, financial tools and concepts, and assessing financial information will be included.

**ACCT 2543 - Management Accounting in Health Care Organizations**

An introduction to management accounting that provides the student with techniques necessary to understand management accounting as used in health care organizations. The limitations of management accounting in making health care operations decisions will be included. Lecture 3 hours. No Laboratory. Prerequisite: ACCT 2533 with a grade of "C" or better or ACCT 2213 with a grade of "C" or better, or instructor approval.

**ACCT 2563 - Accounting Internship**

Supervised employment in the student's chosen field of Accounting. Intended to provide practical experience for students preparing for a career in accounting. Requires instructor approval.

**ACCT 2571 - Writing for Accountants**

This course is designed for accountants seeking professional improvement in communication skills using formats from actual accounting practice. It covers all the stages of the writing process: planning (including analysis of audience and purpose), critical thinking, accounting research, generating and organizing ideas, writing a draft, revising the draft, and designing a document for effective presentation. Prerequisites: ACCT 2213, ACCT 2223 and ENGL 1113, all with a grade of "C" or better.

**ACCT 2990 - Selected Topics in Accounting**

The study and/or analysis of a selected topic in Accounting. May be repeated with a different topic.

## **AFRICAN STUDIES**

**AFRS 2323 - Field Experience and/or Study Abroad**

This course is designed to provide an on-site experience in a selected African country or in a location rich in African history and/or African connections. Includes lectures, readings, oral interaction, and written reports. All or a portion of the instruction and activities are conducted at the site. Focus on acquiring knowledge of the economic, political, geographical and cultural makeup of the location. Prerequisite: Permission of associate dean of division before enrollment and in advance of on-site experience.

**AFRS 2343 - The African Diaspora**

A historical study of the dispersion of African peoples from the continent of Africa. Topics include the peopling of the world, slavery, colonialism, post-emancipation, civil rights and nationalist movements, post-independence struggles, and Pan-Africanism.

**AFRS 2713 - Survey of African Civilizations (H)**

An interdisciplinary survey of the countries and peoples of Africa from the emergence of human society to the present, with a focus on their discoveries and achievements. Areas of consideration include history, literature, music, art, philosophy, and religion.

**AFRS 2990 - Selected Topics in African Studies**

The study and/or analysis of a selected topic in African Studies. May be repeated with a different topic.

## **ALLIED HEALTH**

**ALDH 1013 - Applied Medical Physics**

Medical Physics is concerned with the application of the concepts and methods of physics to the diagnosis and therapy of human disease. Modern medicine relies on physical tools, techniques and principles developed in the physical sciences. This course is an introduction to key physical principles as applied to medical imaging and radiation/diagnostic ultrasound. Topics covered include imaging metrics, ionizing radiation and radiation safety, radioactivity, radiation therapy computed tomography, nuclear medicine, ultrasound and magnetic resonance imaging.

**ALDH 1323 - Medical Terminology**

A comprehensive medical terminology course focusing on root words, suffixes and prefixes, with exposure to medical terms relating to symptomatology, disease process, diagnostic testing, procedures and abbreviations. The medical terms are introduced and examined by body system. Upon completion of the course, students should be proficient in utilizing, defining and accurately spelling medical terms and identifying medical abbreviations.

## **ALTERNATIVE ENERGY**

(See Electronics Technology Program)

**ALTE 1223 – Hydraulics and Pneumatics**

A study of hydraulic and pneumatic systems as it relates to fluids, energy and power, pumps, actuators, control devices, flow distribution, and industrial applications. Prerequisite: ELET 1212. Cross listed with ELET 1223. Includes lab component.

**ALTE 1443 - Introduction to Alternative Energy**

This course provides basic knowledge of alternative energy systems, including wind, solar and Oklahoma-produced biofuels. Students will have the opportunity to build or test a wind power generator and a solar electric generator. Battery storage systems will be included. Prerequisite: ELET 1212. Cross listed with ELET 1443. Includes lab component.

**ALTE 1464 - Wind and Solar Energy Systems**

A combined study of wind and solar energy power systems. Solar energy is focused on electrical and thermal energy conversion using the sun. Students will design and measure both types of systems for home and/or business use. Wind energy will focus on calculations and case studies using the TCC wind farm at the northeast campus. Electrical energy conversion and storage using Oklahoma's natural resource will also be introduced. Students will measure wind system efficiency for the area and service or design a system. Prerequisite: ELET 1212. Includes lab component.

## **AMERICAN SIGN LANGUAGE EDUCATION**

(See also Interpreter Education)

**ASLE 0612 - Conversational Sign Language for the Deaf and Hard of Hearing I**

This course is designed for deaf and hard of hearing students, offering a continuation of manual communication skills leading to the development of conversational skills. Prerequisite: ASLE 0802 or instructor approval.

**ASLE 0802 -Sign Language for the Deaf and Hard of Hearing I**

This course is designed for deaf and hard of hearing students in developing basic manual communication skills for social, classroom, and work situations. Emphasis will be placed on learning elementary receptive and expressive conversational skills through targeted vocabulary.



**ASLE 1363 - American Sign Language I**

An introduction to American Sign Language (ASL) which includes the development of receptive and expressive skills in authentic situations and an introduction to Deaf culture. This introductory course in ASL uses a natural language approach to introduce culturally appropriate signed concepts related to the immediate environment. Common communicative events and interactions are utilized to acquire a basic working vocabulary and grammar. Course includes development of appropriate linguistic/cultural behaviors and awareness of respect for Deaf culture. Receptive and expressive skills are fostered through interactive ASL lessons without voice.

**ASLE 1373 - American Sign Language II**

Continuation of American Sign Language I. This course further develops receptive and expressive skills in American Sign Language in authentic situations and expands the study of Deaf culture. This course progresses from common, concrete communicative events and interactions to language expressing abstract ideas. Emphasis is on the comprehension and production of increasingly complex linguistic structure focusing on dialogues and conversational expressions. More complex receptive and expressive skills are fostered through interactive ASL lessons without spoken English. Prerequisite: ASLE 1363 with a grade of "C" or better or instructor approval.

**ASLE 1413 - Deaf Culture and History**

This is an interdisciplinary course to introduce students to human values through the exploration of American deaf culture through its history, literature, and arts. Students will explore deaf culture as a minority culture focusing on awareness and understanding of cultural diversity and preservation of language. Culture and relationships are examined through the impact of modern technology and moral trends.

**ASLE 1603 - ASL Choir I**

A non-traditional sign choir, incorporating rhythm and movement with American Sign Language. Students will acquire the skills needed to interpret music in a visually artistic manner. Prerequisite: ASLE1363.

**ASLE 2023 - ASL Choir II**

This course is a continuation of ASLE 1603 ASL Choir I, a non-traditional sign choir, incorporating rhythm and movement with American Sign Language. This course further develops the skills needed to interpret music in a visually artistic manner. Prerequisite: ASLE 1603.

**ASLE 2131 - Conceptual Sign Vocabulary Development**

This course is designed to increase conceptually accurate sign vocabulary. Emphasis will be on analysis of English texts and finding appropriate sign equivalents. Prerequisite: ASLE 1373 with a grade of "C" or better or instructor approval.

**ASLE 2243 - ASL Choir III**

This course is a continuation of ASLE 2023 ASL Choir II, a non-traditional sign choir, incorporating rhythm and movement with American Sign Language. This course further develops the skills needed to interpret music in a visually artistic manner. Prerequisite: ASLE 2023.

**ASLE 2414 - American Sign Language III**

An ASL course focusing on specific grammatical and cultural topics. Emphasis is on the development of fluent conversational skills utilizing grammatical non-manual signals and markers. Students will learn how to narrate, describe, compare, and comment. Narratives of native language users are utilized for beginning text analysis of ASL. Interactive ASL lessons without voice lead to expanded vocabulary mastery and fluency. Prerequisite: ASLE 1373 with a grade of "C" or better or instructor approval. Includes lab component.

**ASLE 2524 - American Sign Language IV**

An advanced ASL performance course integrating cultural and linguistic competencies ranging from informal to formal communication events. Emphasis is on greater fluency in idiomatic language usage and mastery of vocabulary and syntax. Linguistic competence is enhanced through interactive discourse without voice. Prerequisite: ASLE 2414 with a grade of "C" or better or instructor approval. Includes lab component.

## **ARABIC**

### **ARBC 1001 - Arabic for Communication I**

A companion course for ARBC 1103 with emphasis on speaking and comprehension of colloquial Arabic. It is recommended that it be taken simultaneously with ARBC 1103 or after. Prerequisite: ARBC 1103 with a grade of "C" or better or instructor approval.

### **ARBC 1103 - Arabic I**

A beginning course in understanding, speaking, reading, and writing Arabic. The first in a sequence of related courses.

### **ARBC 1213 - Arabic II**

Continued instruction in understanding, speaking, reading, and writing Arabic. The second in sequence of related courses. Prerequisite: ARBC 1103 with a grade of "C" or better or instructor approval.

### **ARBC 2990 - Selected Topics in Arabic**

The study and/or analysis of a selected topic in Arabic. May be repeated with a different topic.

## **ART**

### **ART 1013 - Fundamentals of Art I**

Fundamentals of Art I is a study of the principle elements of two-dimensional design. Those elements include color, perspective, fundamental drawing concepts and compositional elements. By using a variety of materials, students will apply the information to a series of studio assignments. Beginning course required of all art majors. Open to all interested students. Includes lab component.

### **ART 1023 - Painting I**

Painting I will develop skills in opaque painting, stressing form and content, visual appreciation, and individual expression. Prerequisite: ART 1013 or instructor approval. Includes lab component.

### **ART 1033 - Painting II**

Painting II will continue to develop the student's skills in opaque painting. The course will continue to stress form and content, visual appreciation, and individual expression. Prerequisite: ART 1013 and ART 1023 or instructor approval. Includes lab component.

### **ART 1053 - Art History Survey I (H)**

Art History Survey I is a study of the arts, artists and their cultures from the Prehistoric man through the Early Renaissance. Required of all art majors.

### **ART 1063 - Art History Survey II (H)**

Art History Survey II is a study of the arts, artists and their cultures from the Early Renaissance to the present. Required of all art majors.

### **ART 1083 - Fundamentals of Art II**

Fundamentals of Art II is a continuation of Fundamentals of Art I. The course is a study and analysis of three-dimensional art forms. By using a variety of materials and processes, the student will complete a series of studio assignments. Basic concepts involving the use of line, mass, space, texture, and form as related to various three-dimensional materials will be stressed. Suggested for all art majors. Includes lab component.

### **ART 1113 - Art Appreciation (H)**

The study of art from a variety of different backgrounds and cultures as both product and process. Aesthetic judgment-making in evaluation of art from different times and places is stressed.

### **ART 1123 - Drawing I**

Drawing I will develop the student's understanding of the basic concepts of drawing and their powers of observation. Students will work with various media utilizing a variety of sources and environments. Prerequisite: ART 1013 or instructor approval. Includes lab component.

**ART 1133 - Drawing II**

Drawing II will continue to develop the student's understanding of the concepts of drawing. Students will continue to develop their skills in media by using a variety of sources and environments. Prerequisites: ART 1013 and ART 1123 or instructor approval. Includes lab component.

**ART 2053 - Art History Survey III**

Art History Survey III is a study of the arts, artists and their cultures beginning with the early 20th century. Various 20th-century styles will be covered including Cubism, Dada, Pop, Super-Realism, Conceptual, and Performance.

**ART 2063 - Watercolor I**

Watercolor I will develop skills in watercolor painting, stressing form and composition, visual perception, and individual expression. Prerequisite: ART 1013 or instructor approval. Includes lab component.

**ART 2073 - Watercolor II**

Watercolor II will continue to develop skills in watercolor painting. Projects will continue to stress form and composition, visual perception, and individual expression. Prerequisite: ART 1013 and ART 2063 or instructor approval. Includes lab component.

**ART 2083 - Sculpture I**

Sculpture I is a creative approach to sculpture techniques and form exploration using a variety of media. Prerequisite: ART 1013 and ART 1083 or instructor approval. Includes lab component.

**ART 2093 - Sculpture II**

Students will continue to develop their skills, methods, and study of the sculptural form. The course will continue to stress methods, materials, concept, and artistic style. Prerequisites: ART 1013, ART 1083, and ART 2083. Includes lab component.

**ART 2143 - Figure Drawing I**

Figure Drawing I includes study in gesture and finished drawings of the model. Emphasis will be placed on pose, composition, and a variety of media. Prerequisite: ART 1013 or instructor approval. Includes lab component.

**ART 2153 - Figure Drawing II**

Figure Drawing II will continue to develop study in gesture and finished drawings of the model. Students will further their skills in use of media and papers. Prerequisite: ART 1053 and ART 2143 or instructor approval. Includes lab component.

**ART 2223 - Printmaking I**

Printmaking I will cover basic media and processes involved in the relief, intaglio, lithographic and monotype processes. Prerequisites: ART 1013 or instructor approval. Includes lab component.

**ART 2233 - Printmaking II**

Printmaking II will continue to develop the student's skills and knowledge in the relief, intaglio, lithographic and monotype processes. Students will continue to develop their conceptual and studio skills. Prerequisites: ART 1013 and ART 2223 or instructor approval. Includes lab component.

**ART 2263 - Introduction to Ceramics**

Introduction to clay as a medium through hand building and wheel forming methods with an emphasis on critical thinking in relation to three-dimensional form. Techniques explored will include forming, glazing, decoration, and firing. Includes lab component.

**ART 2273 - Intermediate Ceramics**

This class will continue to develop throwing skills, encouraging the student to work on a larger scale. Surface and design techniques will be explored, as well as an introduction to reduction firing. Prerequisite: ART 2263 or instructor approval. Includes lab component.

**ART 2283 - Advanced Ceramics**

This class will be project-oriented, with students exploring forms and techniques of their own choosing, advanced glazing techniques and the fundamentals of glaze chemistry. Prerequisites: ART 2263 and ART 2273 or instructor approval. Includes lab component.

**ART 2823 - Film Internship Filmmaking II**

Continuation of art filmmaking covering basic technical and aesthetic problems of the experimental film.

**ART 2853 - Photography**

This is a comprehensive course in analog darkroom photography. Topics include historical techniques, black and white film exposure, processing and printing, equipment selection, image manipulation, color theory, and digital directions. Emphasis will be placed in the production of fine art photographic images. Students must provide their own 35mm camera. Includes lab component.

**ART 2913 - Film/Video History and Analysis I**

Topics vary. Examines films or videos technically as well as aesthetically. Covers either a specific genre of film or video, a certain time period, or works produced by a single director.

**ART 2990 - Selected Topics in Art**

The study and/or analysis of a selected topic in Art. May be repeated with a different topic.

## **ASIAN STUDIES**

**ASNS 1103 - East Asian Philosophy and Culture**

An Asian introductory course with an interdisciplinary investigation of cultural, philosophical and aesthetic roots. Includes literature, history, art, architecture, geography, music, family issues, and philosophy in association with major cultural and historical movements.

**ASNS 2990 - Selected Topics in Asian Studies**

The study and/or analysis of a selected topic in Asian Studies. May be repeated with a different topic.

## **ASTRONOMY**

**ASTR 1104 - General Astronomy**

An introduction to the concepts of modern astronomy including the solar system, the sun and stars, the Milky Way, other galaxies, and methods of observation.

**ASTR 1121 - Field Astronomy**

An introduction to field astronomy including how to plan for the field work from star charts, setup of the telescope in the field, alignment to the north celestial pole, astronomical coordinates and observational techniques. Prerequisite: ASTR 1104 or concurrent enrollment.

**ASTR 2990 - Selected Topics in Astronomy**

The study and/or analysis of a selected topic in Astronomy. May be repeated with a different topic. Lecture 1-4 hours. No Laboratory.

## **AVIATION SCIENCES TECHNOLOGY**

**AVST 1113 - Private Pilot Ground School**

The Private Pilot Ground School complies with the requirements of the Federal Aviation Regulations Part 141 and Part 61 aeronautical knowledge training preparing the student for the Private Pilot Certificate. Students will receive the required ground training in order to test for the Private Pilot Airplane Knowledge Test. This test requires an additional external cost. The Professional Pilot majors must comply with Tulsa Community College's FAA approved Training Course Outline. See the TCC Aviation Academic Counselor at the Riverside Aviation Center for course permission and enrollment requirements.

**AVST 1222 - Private Pilot Flight Lab**

The Private Pilot Flight Lab complies with the FAA Federal Aviation Regulations. This course will consist of a minimum of 35 flight training hours and 4 hours of pilot briefings preparing the student for the FAA Private Pilot Certificate. The Professional Pilot majors must comply with Tulsa Community College's FAA approved Training Course Outline. The FAA has established flight time minimums however, it is extremely important to note that national flight time averages are documented significantly



above published FAA minimums. Additional direct costs apply based on hourly aircraft rates and flight instruction. Published aircraft rental and instruction rates are available at the TCC Aviation Center. The Private Pilot Airplane Practical Test requires an additional external cost. The FAA Private Pilot Certification Course must be completed in order to advance within the curriculum. See the TCC Aviation Academic Counselor at the Riverside Aviation Center for course permission and enrollment requirements.

**AVST 1232 - ATC Flight Training Lab**

This course will parallel educational and training objectives set forth by the Federal Aviation Administration's Flight Deck Training program in order to provide the air traffic controller with direct interaction with flight crews and flight operations. The student will receive 10 hours of operational flight training experience in aircraft in high volume and high density airspace, IFR and VFR enroute operations, instrument approach procedures in terminal airport areas, and operational flight characteristics of aircraft. See the TCC Aviation Academic Counselor at the Riverside Aviation Center for course permission and enrollment requirements.

**AVST 1343 – Introduction to Air Traffic Control**

Introduction to Air Traffic Control is the first course in the Tulsa Community College Air Traffic Control Degree option program. This course introduces students to the history of the FAA from its founding to the present day operation of the vast National Airspace System (NAS). Topics studied include the structure and classes of airspace, fundamentals of radar, the basic concepts and rules of separation of aircraft, the facilities which control air traffic and the duties of the positions within those facilities. Students will also learn about the FAA Orders and Directives which dictate procedures for control of air traffic as well as flight operations. Other major points covered include airport markings and lighting, flight plans, marking and processing of flight progress strips, ATC clearances, letters of agreement (LOAs) and standard operating procedure (SOP) documents, aircraft performance and recognition, and wake turbulence. See the TCC Aviation Academic Counselor at the Riverside Aviation Center for course permission and enrollment requirements.

**AVST 1354 – ATC Tower Operations I**

This course builds on the concepts from Introduction to Air Traffic Control. Students will learn to apply the basic ATC tower procedures for the safe, orderly and expeditious movement of air traffic. Students learn the rules of airport traffic pattern operation, runway separation requirements, wake turbulence separation rules, coordination between positions, i.e. between Local Control (tower) and Ground Control or Departure Control, proper phraseology for issuing instructions & clearances, adherence to letters of agreement (LOA) and standard operating procedure orders (SOP). Students will practice the application of air traffic rules and procedures in table top and tower simulator labs. Prerequisite: AVST 1113 and AVST 1343. See the TCC Aviation Academic Counselor at the Riverside Aviation Center for course permission and enrollment requirements.

**AVST 1364 – ATC Radar Operations I**

In this course, the student progresses from basic VFR tower operations to learning the concepts and rules for the application of radar in air traffic control, including: radar identification, basic radar vectoring, radar separation rules, radar use in instrument approaches and final approach course intercepts, arrival and departure procedures, and transfer of radar identification. During the latter stages of the course, students will see classroom topics demonstrated in the lab and will begin hands-on training in the simulator. Prerequisite: AVST 1354 and AVST 2213. See the TCC Aviation Academic Counselor at the Riverside Aviation Center for course permission and enrollment requirements.

**AVST 1403 - Advanced Theory of Flight**

This course will provide the professional pilot majors with training on advanced aircraft operations. Material addressed includes high altitude operations, flight management systems, and advanced aircraft systems. Prerequisite: AVST 1113. See the TCC Aviation Academic Counselor at the Riverside Aviation Center for course permission and enrollment requirements.

**AVST 2113 - History of Aviation**

History of aviation covers events from the early developments of flight to the present day and how it has affected our world. Topics covered will consist of historic events, aviation personalities, aircraft, and the role of governments as they have shaped the evolution of flight in the world aviation.

**AVST 2132 - Instrument Flight Lab**

The Instrument Flight Lab complies with the FAA Federal Aviation Regulations. This course will consist of a minimum of 35 flight training hours and 2 hours of pilot briefings preparing the student for the FAA Instrument Rating. The Professional Pilot majors must comply with Tulsa Community College's FAA approved Training Course Outline. The FAA has established flight time minimums however, it is extremely important to note that national flight time averages are documented significantly above published FAA minimums. Additional direct costs apply based on hourly aircraft rates and flight instruction. Published aircraft rental and instruction rates are available at the TCC Aviation Center. The Instrument Airplane Rating Practical Test requires

### **AVST 1232 - ATC Flight Training Lab**

This course will parallel educational and training objectives set forth by the Federal Aviation Administration's Flight Deck Training program in order to provide the air traffic controller with direct interaction with flight crews and flight operations. The student will receive 10 hours of operational flight training experience in aircraft in high volume and high density airspace, IFR and VFR enroute operations, instrument approach procedures in terminal airport areas, and operational flight characteristics of aircraft. See the TCC Aviation Academic Counselor at the Riverside Aviation Center for course permission and enrollment requirements.

### **AVST 1343 – Introduction to Air Traffic Control**

Introduction to Air Traffic Control is the first course in the Tulsa Community College Air Traffic Control Degree option program. This course introduces students to the history of the FAA from its founding to the present day operation of the vast National Airspace System (NAS). Topics studied include the structure and classes of airspace, fundamentals of radar, the basic concepts and rules of separation of aircraft, the facilities which control air traffic and the duties of the positions within those facilities. Students will also learn about the FAA Orders and Directives which dictate procedures for control of air traffic as well as flight operations. Other major points covered include airport markings and lighting, flight plans, marking and processing of flight progress strips, ATC clearances, letters of agreement (LOAs) and standard operating procedure (SOP) documents, aircraft performance and recognition, and wake turbulence. See the TCC Aviation Academic Counselor at the Riverside Aviation Center for course permission and enrollment requirements.

### **AVST 1354 – ATC Tower Operations I**

This course builds on the concepts from Introduction to Air Traffic Control. Students will learn to apply the basic ATC tower procedures for the safe, orderly and expeditious movement of air traffic. Students learn the rules of airport traffic pattern operation, runway separation requirements, wake turbulence separation rules, coordination between positions, i.e. between Local Control (tower) and Ground Control or Departure Control, proper phraseology for issuing instructions & clearances, adherence to letters of agreement (LOA) and standard operating procedure orders (SOP). Students will practice the application of air traffic rules and procedures in table top and tower simulator labs. Prerequisite: AVST 1113 and AVST 1343. See the TCC Aviation Academic Counselor at the Riverside Aviation Center for course permission and enrollment requirements.

### **AVST 1364 – ATC Radar Operations I**

In this course, the student progresses from basic VFR tower operations to learning the concepts and rules for the application of radar in air traffic control, including: radar identification, basic radar vectoring, radar separation rules, radar use in instrument approaches and final approach course intercepts, arrival and departure procedures, and transfer of radar identification. During the latter stages of the course, students will see classroom topics demonstrated in the lab and will begin hands-on training in the simulator. Prerequisite: AVST 1354 and AVST 2213. See the TCC Aviation Academic Counselor at the Riverside Aviation Center for course permission and enrollment requirements.

### **AVST 1403 - Advanced Theory of Flight**

This course will provide the professional pilot majors with training on advanced aircraft operations. Material addressed includes high altitude operations, flight management systems, and advanced aircraft systems. Prerequisite: AVST 1113. See the TCC Aviation Academic Counselor at the Riverside Aviation Center for course permission and enrollment requirements.

### **AVST 2113 - History of Aviation**

History of aviation covers events from the early developments of flight to the present day and how it has affected our world. Topics covered will consist of historic events, aviation personalities, aircraft, and the role of governments as they have shaped the evolution of flight in the world aviation.

### **AVST 2132 - Instrument Flight Lab**

The Instrument Flight Lab complies with the FAA Federal Aviation Regulations. This course will consist of a minimum of 40 flight training hours and 2 hours of pilot briefings preparing the student for the FAA Instrument Rating. The Professional Pilot majors must comply with Tulsa Community College's FAA approved Training Course Outline. The FAA has established flight time minimums however, it is extremely important to note that national flight time averages are documented significantly above published FAA minimums. Additional direct costs apply based on hourly aircraft rates and flight instruction. Published aircraft rental and instruction rates are available at the TCC Aviation Center. The Instrument Airplane Rating Practical Test requires an additional external cost. The FAA Instrument Rating Certification Course must be completed in order to advance within the curriculum. Prerequisites: AVST 1222 for students seeking FAA FAR Part 141 training. AVST 2162 and a valid Private Pilot Certificate for students seeking FAA FAR Part 61 training. See the TCC Aviation Academic Counselor at the Riverside Aviation Center for course permission and enrollment requirements.

**AVST 2152 - Multi-Engine Flight Lab**

The Multi-Engine Flight Lab complies with the FAA Federal Aviation Regulations. This course will consist of a minimum of 15 flight training hours and 15 ground training hours preparing the student for the addition of an airplane multi-engine land class rating to an existing pilot certificate. The Professional Pilot majors must comply with Tulsa Community College's FAA approved Training Course Outline. The FAA has established flight time minimums however, it is extremely important to note that national flight time averages are documented significantly above published FAA minimums. Additional direct costs apply based on hourly aircraft rates and flight instruction. Published aircraft rental and instruction rates are available at the TCC Aviation Center. The Additional Aircraft Rating Practical Test requires an additional external cost. The FAA Additional Aircraft Rating Course must be completed in order to advance within the curriculum. Prerequisite: AVST 2132 (FAA Part 141) or AVST 1222 (FAA Part 61). See the TCC Aviation Academic Counselor at the Riverside Aviation Center for course permission and enrollment requirements.

**AVST 2162 - Commercial Cross-Country Flight Lab**

The Commercial Cross-Country Flight Lab complies with the FAA Federal Aviation Regulations. This course will consist of a minimum of 53 flight training hours preparing the student for the FAA Commercial Pilot Certificate. The Professional Pilot majors must comply with Tulsa Community College's FAA approved Training Course Outline. The FAA has established flight time minimums however, it is extremely important to note that national flight time averages are documented significantly above published FAA minimums. Additional direct costs apply based on hourly aircraft rates and flight instruction. Published aircraft rental and instruction rates are available at the TCC Aviation Center. The Commercial Cross-Country Flight Lab Course must be completed in order to advance within the curriculum. Prerequisite: AVST 2132 for students seeking FAA FAR Part 141 training. Prerequisite: AVST 1222 for students seeking FAA FAR Part 61 training. See the TCC Aviation Academic Counselor at the Riverside Aviation Center for course permission and enrollment requirements.

**AVST 2172 - Commercial Multi-Engine Cross-Country Flight Lab**

The Commercial Multi-Engine Cross-Country Flight Lab complies with the FAA Federal Aviation Regulations. This course will consist of a minimum of 53 flight training hours preparing the student for the FAA Commercial Pilot Certificate. The Professional Pilot majors must comply with Tulsa Community College's FAA approved Training Course Outline. The FAA has established flight time minimums however, it is extremely important to note that national flight time averages are documented significantly above published FAA minimums. Additional direct costs apply based on hourly aircraft rates and flight instruction. Published aircraft rental and instruction rates are available at the TCC Aviation Center. The Commercial Multi-Engine Cross-Country Flight Lab Course must be completed in order to advance within the curriculum. Prerequisite: AVST 2152 and AVST 2132 for students seeking FAA FAR Part 141 training. Prerequisite: AVST 2152 and AVST 1222 for students seeking FAA FAR Part 61 training. See the TCC Aviation Academic Counselor at the Riverside Aviation Center for course permission and enrollment requirements.

**AVST 2181 - Flight Certification Training**

This course provides the required Federal Aviation Administration training in order for the applicant to meet various training objectives for certification of FAA Certificates, FAA Ratings, and or maintain compliance of FAA Currencies. See the TCC Aviation Academic Counselor at the Riverside Aviation Center for course permission and enrollment requirements.

**AVST 2182 - Commercial Flight Lab**

The Commercial Flight Lab complies with the FAA Federal Aviation Regulations. This course will consist of a minimum of 67 flight training hours preparing the student for the FAA Commercial Pilot Certificate. The Professional Pilot majors must comply with Tulsa Community College's FAA approved Training Course Outline. The FAA has established flight time minimums however, it is extremely important to note that national flight time averages are documented significantly above published FAA minimums. Additional direct costs apply based on hourly aircraft rates and flight instruction. Published aircraft rental and instruction rates are available at the TCC Aviation Center. The Commercial Pilot Practical Test requires an additional external cost. The FAA Commercial Pilot Certification Course must be completed in order to advance within the curriculum. Prerequisite: AVST 2162 (FAA Part 141 students) or AVST 2132 (FAA Part 61 students). See the TCC Aviation Academic Counselor at the Riverside Aviation Center for course permission and enrollment requirements.

### **AVST 2192 - Commercial Multi-Engine Flight Lab**

The Commercial Multi-Engine Flight Lab complies with the FAA Federal Aviation Regulations. This course will consist of a minimum of 67 flight training hours preparing the student for the FAA Commercial Pilot Single-Engine and Multi-Engine Certificate. The Professional Pilot majors must comply with Tulsa Community College's FAA approved Training Course Outline. The FAA has established flight time minimums however, it is extremely important to note that national flight time averages are documented significantly above published FAA minimums. Additional direct costs apply based on hourly aircraft rates and flight instruction. Published aircraft rental and instruction rates are available at the Riverside Aviation Center. The Commercial Pilot Single-Engine and Multi-Engine Practical Tests require an additional external cost. The FAA Commercial Pilot Multi-Engine Certification Course must be completed in order to advance within the curriculum. Prerequisite: AVST 2172 (FAA Part 141 students) or AVST 2132 (FAA Part 61 students). See the TCC Aviation Academic Counselor at the Riverside Aviation Center for course permission and enrollment requirements.

### **AVST 2213 - Instrument Pilot Ground School**

The Instrument Pilot Ground School complies with the requirements of the Federal Aviation Regulations Part 141 and Part 61 aeronautical knowledge training preparing the student for the Instrument Pilot Rating. Students will receive the required ground training in order to test for the Instrument Rating Knowledge Test. This test requires an additional external cost. The Professional Pilot majors must comply with Tulsa Community College's FAA approved Training Course Outline. Prerequisites: AVST 1113 and AVST 1222. See the TCC Aviation Academic Counselor at the Riverside Aviation Center for course permission and enrollment requirements.

### **AVST 2226 – ATC Tower Operations II**

This course is a continuation of ATC Tower Operations I. Through a series of simulation scenarios under instructor supervision, students will learn and demonstrate the use of ATC rules and procedures by working simultaneous arrivals, departures, closed (touch & go) traffic and helicopter operations on multiple runways/helipads. Students will demonstrate correct wake turbulence separation, use of taxi-into-position-and-hold operations, runway crossings with both aircraft and vehicular traffic, and handling emergencies. The simulation scenarios become progressively more complex with students providing ATC tower services to small, large, and heavy weight classes of aircraft simultaneously, with emphasis on the correct prioritizing of duties. Prerequisite: AVST 1354. See the TCC Aviation Academic Counselor at the Riverside Aviation Center for course permission and enrollment requirements.

### **AVST 2246 – ATC Tower Operations III**

This course takes the student beyond the traffic complexity of Tower Operations II with increased numbers of aircraft operations, the application of wake turbulence separation, simultaneous IFR, VFR, and closed pattern operations on both parallel and crossing runways. The objective of the course is to prepare the student to perform at the highest levels of traffic complexity taught in the Initial Terminal phase of training at the FAA Academy. Prerequisite: AVST 2226. See the TCC Aviation Academic Counselor at the Riverside Aviation Center for course permission and enrollment requirements.

### **AVST 2253 – Aviation Meteorology**

Aviation Meteorology is the study of the atmosphere and its phenomena as it relates to aviation. This course delves into the characteristics of the atmosphere with a special emphasis on weather affecting aircraft and air traffic control. Content includes fundamentals of aviation weather services, frontal formations, hazardous weather, dissemination of weather content and format, types of surface observations, content and format of pilot weather reports, atmospheric circulation systems, area forecasts, center weather advisories, AIRMETs & SIGMETs, and Convective SIGMETs. See the TCC Aviation Academic Counselor at the Riverside Aviation Center for course permission and enrollment requirements.

### **AVST 2262 - ATC Enroute and Radar**

This course introduces the ATC student to the application of the rules of nonradar separation primarily in the enroute environment of the air traffic control system. Prerequisites: AVST 1364. All required documents must be on file with the Aviation Center. See the TCC Aviation Academic Counselor at the Riverside Aviation Center for course permission and enrollment requirements.

### **AVST 2273 - ATC Career Prep**

This course is designed to assist the ATC student in preparation for the ATSAT test, the entry exam for the FAA, and will examine closely the skills required to score competitively on the ATSAT. Prerequisite: AVST 1343. See the TCC Aviation Academic Counselor at the Riverside Aviation Center for course permission and enrollment requirements.



### **AVST 2313 - Commercial Pilot Ground School**

The Commercial Pilot Ground School complies with the requirements of the Federal Aviation Regulations Part 141 and Part 61 aeronautical knowledge training preparing the student for the Commercial Pilot Certificate. Students will receive the required ground training in order to test for the Commercial Pilot Airplane Knowledge Test. This test requires an additional external cost. The Professional Pilot majors must comply with Tulsa Community College's FAA approved Training Course Outline. Prerequisite: AVST 2213 and AVST 2132. See the TCC Aviation Academic Counselor at the Riverside Aviation Center for course permission and enrollment requirements.

## **BIOLOGY**

### **BIOL 1114 - General Biology for Non-Majors (L)**

A presentation of selected principles in biological science for the non-science major, including the cell concept, the organization of multi-cellular systems, plants and animals as organized systems, and man in relation to his environment. Includes lab component.

### **BIOL 1132 - Topical Reading in Biology**

Reading a combination of popular materials (newspapers, magazines, and books for non-scientists) and semi-technical materials in topics of current biological and popular interests. Discussion of such topics with students, faculty, and visitors. For majors and non-majors.

### **BIOL 1224 - Introduction to Biology for Majors (L)**

Introductory biology course for majors with lab. This course includes an in-depth study of fundamental biological concepts, including metabolism, homeostasis, heredity, evolution, and ecology at the sub-cellular, cellular and organismal levels. It provides the foundation for other advanced courses in the biological sciences. Prerequisite: MATH 0013 or equivalent. Includes lab component.

### **BIOL 1314 - Human Anatomy and Physiology**

An introduction to the basic principles of the structure and function of the human body. A beginning course designed to emphasize the integration of all body systems. Designed for students in Allied Health programs. Includes lab component.

### **BIOL 1324 - Basic Microbiology**

An introductory course in microbiology. Consideration will be given primarily to the pathogenic microorganisms, including bacteria, viruses, and protozoa. Emphasis will be placed on nomenclature of organisms, their associated diseases, and related terminology. It is highly recommended that students complete BIOL 1114 General Biology for Non-Majors or BIOL 1314 Human Anatomy and Physiology before enrolling in this course. Includes lab component. Prerequisite: CHEM 1134.

### **BIOL 1383 - Nutrition**

An evaluation of basic composition of nutrients and accessory factors required for adequate human nutrition. Application of nutritional principles to the planning of normal and special dietary regime.

### **BIOL 1404 - General Botany (L)**

An introduction to photosynthetic organisms and fungi, including their anatomy, physiology, genetics, ecology, classification, and evolution with emphasis on the seed plants. Recommended for science majors. Prerequisite: Completion of BIOL 1224 with a grade of "C" or better or instructor approval. Includes lab component.

### **BIOL 1423 - Microbes and Society**

This course is designed for the non-majors student. Microorganisms are a ubiquitous fundamental part of this planet. Course topics will explore the diversity of microbial life and their relationship with society and the environment.

### **BIOL 1604 - Zoology (L)**

An integrated approach to the evolution of anatomical and physiological mechanisms within the animal kingdom. The morphology, physiology, and embryological development of systems and mechanisms within the major invertebrate and vertebrate phyla will be covered. Prerequisite: Completion of BIOL 1224 with a grade of "C" or better or instructor approval. Includes lab component.

**BIOL 2123 - Environmental Inquiry**

A study of environment apart from mankind (natural environment), the influence of humans on the environment with emphasis on population growth and problems it has created relative to environmental features such as soil, waters, vegetation, wildlife, landforms, and the atmosphere.

**BIOL 2134 - Human Anatomy (L)**

A systemic approach to the study of the human body. Clinical and functional relationships of each organ system is emphasized. Prerequisite: Completion of BIOL 1224 or BIOL 1604 with a grade of "C" or better. Includes lab component.

**BIOL 2143 - Marine Biology**

The nature, interrelationships, and ecology of lifeforms throughout the oceans will be explored. Morphology and physiology of major phyla of marine organisms will be investigated. Interrelationships of marine life to the geological, physical, and chemical characteristics of the ocean will be studied. An ecological approach to all relationships will be used. Prerequisite: BIOL 1114 or BIOL 1224 or GEOL 1113.

**BIOL 2154 - Human Physiology (L)**

The function of mammalian organ systems including basic, cell-molecular properties, maintenance systems, communication and control, reproduction and integration of activities. Emphasis on humans in homeostasis. Prerequisites: Completion of BIOL 1224 or BIOL 1604, BIOL 2134, and CHEM 1114 or CHEM 1315 with a grade of "C" or better. Includes lab component.

**BIOL 2164 - Microbiology (L)**

Included will be a survey of the protozoa and fungi of medical significance, with an in-depth survey of bacteria, their morphology, metabolism, pathogenic capabilities, and classification. Laboratory will emphasize those techniques concerned with isolation and pure culture of microorganisms and the use of biochemical criteria in taxonomy. Prerequisite: CHEM 1114 or CHEM 1315 and completion of BIOL 1224 with a grade of "C" or better or instructor approval. Includes lab component.

**BIOL 2213 - Brain and Behavior**

This course covers both the biological basis of human behavior (including the nervous system, homeostasis, biological clocks, etc.) and the psychological consequences of the biology of our species (feelings, learning and memory, thinking and consciousness, the malfunctioning brain, etc.) The course also includes speculation on future developments in brain research. Prerequisites: BIOL 1114 or BIOL 1224 and PSYC 1113. Cross listed with PSYC 2213.

**BIOL 2313 - Principles of Ecology**

A study of key ecological concepts introducing the student to the foundations of the various sub-disciplines and terminology used in ecology, along with resources and resource management in the environment and the interaction of species. Terrestrial and aquatic ecosystems will be covered in considerable detail.

**BIOL 2990 - Selected Topics in Biology**

The study and/or analysis of a selected topic in Biology. May be repeated with a different topic.

## **BIOMEDICAL EQUIPMENT TECHNOLOGY**

**BMET 1304 - Introduction to Biomedical Electronics**

A study of the techniques and instruments used in hospitals and medical clinics. Information on hospital and clinical organization and operations with emphasis on regulations and procedures for patient safety and shock hazard prevention is provided. Additional emphasis is given to medical terminology, and anatomy and physiology. Prerequisite: Concurrent enrollment in ELET 1303. Includes lab component.

**BMET 2343 - Biomedical Electronics Theory I**

A study of the basic principles by which physiological events are measured. Electronic fundamentals are used to understand electrodes, transducers, amplifiers, and patient monitoring systems. Electrode care and placement and the operation of medical electronic instruments are studied. Prerequisite: BMET 1304, concurrent enrollment, or approval of the associate dean. Includes lab component.

### **BMET 2353 - Biomedical Electronics Theory II**

A continuation of BMET 2343. An application of the techniques studied in BMET 2343 to measurements made in cardiology, laboratory medicine, and radiology. Theory, operation, and maintenance of equipment used in clinics and hospitals. Testing of equipment used for respiratory and physical therapy will be included. Prerequisites: BMET 2343 and ELET 2244. Includes lab component.

### **BMET 2373 - Biomedical Electronics Clinical**

Supervised practical experience in cooperating hospitals, and/or Biomedical Service Centers, which encompass a study of techniques used in repair of medical equipment. Prerequisites: BMET 2343 and concurrent enrollment in BMET 2353.

### **BMET 2990 - Selected Topics in Biomedical Equipment Technology**

The study and/or analysis of a selected topic in Biomedical Equipment Technology. May be repeated with a different topic.

## **BIOTECHNOLOGY**

### **BIOT 1113 - Introduction to Biotechnology**

An introduction to biotechnology including career exploration, history and applications of DNA/RNA technology, molecular biology, bioethics, safe laboratory practices and bioinformatics. The course covers calculations for solution preparations, instruction on making buffers, determining pH, pipetting, making dilutions, calibration of pipets and balances as well as an introduction into DNA and protein isolation and analysis. Includes lab component.

### **BIOT 1315 - Biotechnology Laboratory Methods and Techniques**

Emphasis is on laboratory operations, management, equipment, instrumentation, quality control techniques, and safety procedures. Lecture emphasis will be on biochemistry, bioorganic topics and the scientific method, including assay design. Laboratory practice will stress lab safety and the design of assays for various classes of biochemicals, including RNA, DNA, enzyme and total protein assays. Prerequisites: BIOT 1113 or concurrent enrollment, BIOL 1224 or concurrent enrollment, and CHEM 1114 or CHEM 1315 all with grades of "C" or better. Includes lab component. Offered spring semester only.

### **BIOT 1534 - Cell Culture Techniques**

This course will discuss the lecture topics of the cell cycle, cell requirements for growth, and bacterial and animal viruses. Lab topics will include sterile technique. In the study of eukaryotic cell culture techniques, the laboratory emphasizes the principles and practices of media preparation and sterilization, initiation, cultivation, maintenance, and the preservation of cell, including applications such as project development and biomanufacturing. The topic of lab safety with potentially biohazardous agents will be covered. Prerequisites: BIOT 1315 or concurrent enrollment and BIOL 2164 or concurrent enrollment. Includes lab component. Offered fall semester only.

### **BIOT 2101 - Biotechnology Quality Assurance**

The issues of quality control in a biotechnology setting will be explored, along with FDA, EPA and OSHA regulations. Prerequisite: BIOT 1113. Offered spring semester only.

### **BIOT 2202 - Applied Bioscience Research**

In an applied learning investigation, students will extract DNA from an organism, amplify a specific gene, purify the product and ligate the gene into a plasmid with subsequent transformation. The resulting product will be analyzed with a variety of bioinformatics tools. Students will be introduced to the process of constructing a research investigation and communicating the results using scientific poster presentations. Prerequisites: BIOT 1113 or BIOL 1224 or instructor approval. Includes lab component.

### **BIOT 2246 - Molecular Biology and Techniques**

An introduction to the principles of heredity and theory of molecular biology with an emphasis on DNA replication, transcription, gene expression and regulation, recombinant DNA, and RNA interference. Techniques such as DNA and RNA isolation, DNA restriction digests, cell transformation, transfection, PCR, DNA sequencing, real-time PCR, blot assays, microarray analysis, DNA mapping, cloning and DNA bioinformatic tools will be discussed and explored. Prerequisites: BIOT 1315, BIOL 2164 and CHEM 1124 or CHEM 1415 with grades of "C" or better. Includes lab component. Offered fall semester only.

**BIOT 2335 - Biotechnology Proteomics and Instrumentation**

Lecture will discuss theory, applications, and operation of various analytical instruments with an emphasis on protein purification in both an R&D laboratory and a biomanufacturing facility. Laboratory exercises will focus on calibration of instruments, quantitative and qualitative analysis by chromatography, centrifugation, spectrophotometry, and SDS-PAGE gel analysis. Additionally, basic immunology including humoral and cellular immunity with ELISAs, Western Blots and cytoimmunology will be taught. An introduction to protein bioinformatics tools is included. Prerequisites: BIOT 1534 with a grade of "C" or better and CHEM 1124 or CHEM 1415 with a grade of "C" or better. Includes lab component. Offered spring semester only.

**BIOT 2512 - Biotechnology Apprenticeship**

This is an experience external to the college for an advanced student in a specialized field involving a written agreement between the educational institution and a business or industry partner. Mentored and supervised by a workplace employee, the student achieves objectives in a biotechnical project that are developed and documented by the college that directly relate to specific occupational outcomes. This may be a paid or unpaid experience. This course may be repeated if topics and learning outcomes vary. The student should have a minimum of 160 hrs on the job. Prerequisites: BIOT 2246 or BIOT 2335 with grades of "C" or better.

**BIOT 2990 - Selected Topics in Biotechnology**

The study and/or analysis of a selected topic in Biotechnology. May be repeated with a different topic.

## **BUSINESS**

**BUSN 1053 - Introduction to Business**

Provides overall picture of business operation: includes analysis of specialized fields with business organization; identifies role of business in modern society.

**BUSN 1123 - Keyboarding I**

Introduction and development of alpha/numeric keyboarding skills using the touch method on the microcomputer. Development of speed and accuracy.

**BUSN 1143 - Introduction to Ethics: Business Issues (H)**

An introductory level course in ethics, focusing on the types of situations that pose ethical problems in business. An attempt will be made to help the student develop an ethical framework which will allow the student to address ethical issues in the business world. Cross listed as PHIL 1143.

**BUSN 1153 - Introduction to Hospitality Operations –Hotels, Restaurants and Tourism**

Study of hotels, restaurants, gaming operations, and the tourism and hospitality industry around the world. The course covers the scope of the industry including an analysis of ethical issues and career opportunities. Special emphasis is given to the essential management functions of the hospitality enterprise including marketing, human resources, accounting, finance, and information technologies.

**BUSN 1163 - Introduction to the Legal System**

History and overview of the legal system, legal ethics, unauthorized practice, the rules of professional conduct, importance of communications, judgment and analytical ability, terminology sources, and works of the law.

**BUSN 1173 - Introduction to Health Care Business Operations**

A basic course in United States health care including the history of health care delivery systems, comparable systems outside the United States, available resources, system processes, outcomes, and health policies for the future.

**BUSN 1200 - Understanding Corporate Finance**

This course covers the concepts necessary to understand and interpret financial statements and reports, cost of producing a product, profit, and cash flow.

**BUSN 1211 - Basic Corporate Finance**

The purpose of this course is to discuss key core business principles and operational realities, providing employees with fundamental information on how businesses operate. Informed and motivated employees are a vital competitive advantage to a business and can dramatically impact profitability. It is in the employees' interest to understand how businesses operate because successful businesses have longevity and profitability, providing a variety of benefits to employees.



**BUSN 1221 - Strategic Planning**

Strategic Management is defined including process elements: values, vision, mission, situation analysis, setting goals, objectives strategies, writing action plans, and implementation of the plan.

**BUSN 1233 - Project Management**

The study of a project manager's responsibility of guiding a project toward successful completion based upon established parameters including time, cost, and resources while maintaining a high standard of quality. Key elements included: defining the project, project assessment and goal setting, defining tasks, milestones, resources including budgets, timelines, schedule adjustments; and reporting progress and results.

**BUSN 1301 - Medical Vocabulary**

This course is a thorough introduction to the complex language of medical terminology including anatomy and physiology, diseases, treatments, and medications. The terms are introduced by body structure and body system with emphasis on word roots, prefixes, suffixes, and spelling, pronunciation, and analysis of unfamiliar terms.

**BUSN 1353 - Business Mathematics**

Utilizes mathematical operations to solve practical business application problems. Includes a review of basic mathematics and percentages, discounts, price change calculations, payroll, banking and finance applications will be covered. Microsoft Excel will be used and additional topics include installment buying, mortgages, taxes, insurance, analysis of financial statements and inventory costs.

**BUSN 2053 - Intercultural Communication (H,I)**

An introductory course in intercultural communication; the study of communication among people from different cultures. Emphasis is on increasing students' understanding of cultural theories of communication and cultural issues that affect communication effectiveness especially in educational and business contexts. Cross listed as SPCH 2053.

**BUSN 2173 - Skillbuilding and Document Processing**

An intensive skillbuilding and document processing course designed to prepare students with the skills needed for today's office environment. Skillbuilding and major business document formats including business memos, letters, envelopes, basic reports and tables will be covered. Prerequisite: BUSN 1123 or instructor approval.

**BUSN 2203 - Supervision & Leadership - Hospitality Industry**

Functions and methods of supervision as related to hospitality and related industries; overview of knowledge and skills required by frontline supervisors and managers in diagnosing performance and training issues, analyzing and selecting appropriate supervisory methods, conducting performance and follow-up evaluations; development of emerging or existing leadership skills in industry supervisors and managers.

**BUSN 2213 - Small Business Management**

A study of the steps necessary to start and operate a small business including the development of a business plan covering forecasting, feasibility, financing, location, legal requirements, and other activities as well as a study of market planning, staffing, financial analysis, legal problems, and monitoring on-going activities. Prerequisite: ACCT 2213 or concurrent enrollment, or instructor approval.

**BUSN 2313 - Business Law I**

Introduction to basic legal principles with emphasis on torts, contracts, property, bailments, sales, and secured transactions.

**BUSN 2323 - Business Law II**

A continuation of Business Law I with emphasis on commercial paper, insurance, agency, business associations, antitrust, and bankruptcy. Prerequisite: BUSN 2313.

**BUSN 2333 - Principles of Finance**

This course covers concepts essential for successful management of business finances and emphasizes financial analysis and planning techniques, capital investment analysis, techniques for managing financial assets, and sources of business financing. Prerequisite: ACCT 2213.

**BUSN 2343 - Investments in Stocks and Bonds**

The basic principles of the stock market as they affect the individual investor in stocks and bonds. Investments in these securities are studied from the standpoint of the short-term and long-term investor.

**BUSN 2363 - Supervisory Management**

A study of management philosophy and decision-making processes; study of principles in the functions of planning, organizing, supervising, and controlling. Includes cases in handling of morale, discipline, communications, grievances, order-giving, and other phases of effective relations with subordinate employees.

**BUSN 2403 - Guest Relations and Customer Service**

Basic concepts and current trends in customer service and guest relations in the hospitality industry. Special areas of emphasis include problem solving, development of a customer service strategy, creating customer service systems, coping with challenging customers, customer retention and measuring satisfaction. Examines organization and operation of hotels and restaurants from frontline, front office and guest service operations. Explores key front office functions, related systems, and skills necessary to ensure guest satisfaction and efficient operations.

**BUSN 2423 - Special Events Management**

An examination of businesses that produce special events, including corporate events, concerts, sporting events, fairs and festivals. Management functions studied will include event design, planning, coordination, marketing and promotion, finances and budgeting, and evaluation. Related topics will include classification of special events, theming, event flow, entertainment, food and beverage, off-site options, transportation, special effects and audio visual production, licenses and contracts. Ethical and legal considerations, including music licensing, alcohol liability, labor issues, financial reporting, accessibility, and insurance will be studied.

**BUSN 2433 - Introduction to Entrepreneurship**

A focus on the entrepreneurial mindset and the process of launching and growing a new business. Students will review opportunities, innovation, new value creation, business context, existing firms, and any area of business or life that pertains to entrepreneurship.

**BUSN 2483 - Health Care Law**

This course provides a foundation of health care law that covers improvement of health care delivery including criminal and civil aspects, staffing issues, records management, legal reporting, ethics, patients' rights, employment laws, and other important legal issues. Prerequisite: BUSN 1173 or instructor approval.

**BUSN 2492 - Health Care Business Operations Internship**

This course provides supervised practice of Health Care Business Operations skills and knowledge gained in the core courses of the program and should be taken during the student's last term.

**BUSN 2503 - Principles of Project Management**

An introduction to the basic theory and principles of project management. Emphasis is on the major Process Groups of Initiating, Planning, Executing, Controlling and Closing and how the steps interrelate during the project life cycle. Students will expand their knowledge and increase their aptitude in the use of the interpersonal skills needed to participate in a team-based environment. Through a hands-on approach, students will develop teamwork, leadership, ethical and communication skills required, as well as techniques for building trust and resolving conflicts with project participants.

**BUSN 2513 - Project Management Applications**

Students will learn to use the essential technologies of project management. The student will develop skills in the efficient and effective use of industry standard software to create, coordinate, and communicate project information. Mobile tools such as laptops and handheld devices will be employed to acclimate students to today's real-time project management environment. Emphasis will be on the use of project management principles in case studies and real-world examples. Prerequisite: BUSN 2503 and CSCI 1203 or instructor approval.

**BUSN 2523 - Project Management Certification Preparation**

Through the use of case studies and real-world examples, this course prepares students for certification exams offered by the Project Management Institute (PMI®). The course meets the Project Management Institute's educational requirements for the Certified Associate in Project Management (CAPM®) exam and the Project Management Professional (PMP®) exam. Prerequisite: BUSN 2503 or instructor approval. CAPM®, PMP® and PMI® are registered trademarks of the Project Management Institute, Inc.

**BUSN 2613 - Labor and Food Cost Management**

Concepts related to preparation of hot foods, pantry, and bakery items for commercial kitchens. Emphasis on essential components and techniques of food production, food cost control setting standards, ordering, and inventory. Other topics will include control of labor costs and revenues.

**BUSN 2633 - Industrial and Organizational Psychology (S)**

An application of the principles of psychology to the problems of business and industry. Special attention will be given to the areas of communication, motivation, job satisfaction, and personnel selection, placement, and training. Prerequisite: PSYC 1113 or PSYC 1313. Cross listed as PSYC 2633.

**BUSN 2643 - Procedures for Administrative Careers**

This course includes issues related to changes in the workplace, current technology in the workplace, communications, records management, financial issues, conference and meeting planning, travel arrangements and exploration of career opportunities. Prerequisite: CSCI 2013.

**BUSN 2683 - Administrative Careers Internship**

Supervised employment providing practical and technical skills experience beyond the scope of the classroom. Prerequisite: instructor approval.

**BUSN 2713 - Principles of Casino Gaming Management**

Covers the principles involved with the successful operation of a casino gaming operation. Specific topics will include the history of gaming in the United States, the functions of NIGC and MICS. Students will also be introduced to casino departments and their functions. Students will be exposed to guest service issues, ethical considerations, industry terminology, surveillance issues, and the role of information technology.

**BUSN 2723 - Principles of Hotel Management**

Covers the principles involved with the successful operation of a lodging establishment. Specific topics will include the planning and development of a hotel, design and organization, revenue and cost centers, security issues, various legal issues including ADA compliance, ethical considerations, operational controls, finance, and information technology utilization.

**BUSN 2733 - Principles of Meetings and Convention Management**

Covers the principles involved with the successful planning and execution of meetings and conventions. Specific topics will include key participants in the industry, types of meetings and events, diverse venues, industry suppliers, the classification of meeting and event planners and incentive and management destination companies. Pre-event, on-site, and post-event activities will be studied, including strategies to develop well-organized meetings and events. Related topics will include conducting a needs analysis, developing clear and measurable meeting objectives, planning programs, developing timelines and budgets, and performing a breakeven analysis.

**BUSN 2743 - Principles of Restaurant Management**

Covers the principles involved with the successful operation of a foodservice operation. Specific topics will include restaurant organization and design, menu design, operational controls, finance and accounting, product safety, off premise service, marketing, ethical and legal issues including ADA compliance, and information technology utilization.

**BUSN 2813 - Legal Issues in Hospitality Management**

A study of the legal environment of the hospitality industry including restaurants, hotels, casinos, meetings and tourist destinations. Basic legal principles such as torts, contract law, property, sales, and secured transactions will be covered. Special emphasis will be given to the study of customer and employee relationships, safety and product liability and alcoholic beverages. The course will emphasize local, state, federal and international law as well as ethical considerations.

**BUSN 2823 - Hospitality Management Practicum**

The practicum experience affords the student an opportunity to gain work experience in a sector relevant to the hospitality industry. Criteria include a supervised program of work and study whereby the student develops learning outcomes relevant to his/her skills and knowledge and applies practical experience based on classroom learning. Periodic and end-of-semester written reports noting progress toward learning outcomes will be required. 140 hours. Prerequisites BUSN 1153, BUSN 2203, BUSN 2403, BUSN 2613, CSCI 1203, and successful completion of at least one of the following courses: BUSN 2713, BUSN 2723, BUSN 2733, BUSN 2743.

**BUSN 2990 - Selected Topics in Business**

The study and/or analysis of a selected topic in Business. May be repeated with a different topic.

## CARDIOVASCULAR TECHNOLOGY

### **CVTC 1003 - Introduction to Cardiovascular Technology**

An introduction to the field of cardiovascular technology. Topics include patient history, physical assessment, communication, ethics, and documentation. Special emphasis will be placed on the principles of radiation safety, sterile technique, cardiac monitoring, and arterial hemostasis. Prerequisite: ALDH 1323 with a grade of "C" or better.

### **CVTC 1013 - Cardiovascular Anatomy and Physiology**

The study of the anatomy, physiology, and structural composition of the heart and vascular systems. Topics include cardiac embryology, coronary arteries, valves, electrical conduction system, hemodynamics, peripheral vascular system, and interpretation of 12 lead EKG. Prerequisite: BIOL 1314 with a grade of "C" or better.

### **CVTC 1023 - Cardiovascular Pharmacology**

Covers the basic fundamentals of cardiovascular pharmacology and the most frequently used medications in the cardiovascular setting. Topics include the basic principles of drug receptors, pharmacodynamics, pharmacokinetics, calculations, routes of administration, and emergency medications used in the cath lab. Prerequisites: ALDH 1323; BIOL 1314 and MATH 1473, all with a grade of "C" or better. Corequisite: CHEM 1114.

### **CVTC 1034 - Cardiovascular Skills Practicum**

Acquaints the student to the clinical cardiovascular setting in a simulated environment. The course is an introduction to the various cardiovascular procedural areas providing a comprehensive understanding of the field of cardiology, x-ray physics, imaging, cardiographic angiography, and fluorography. An emphasis will be placed on establishing and maintaining a sterile field.

### **CVTC1044 - Cardiovascular Pathophysiology**

Prepares the cardiovascular technology student to identify the pathological processes and congenital defects of the cardiovascular system. Topics will include infective endocarditis and rheumatic heart disease, coronary artery disease, pericardial disease, valvular heart disease, heart failure, cardiogenic shock, hypertension, murmurs and congenital abnormalities. Disorders of the conduction system will also be covered, including SA node, AV node, and ventricular arrhythmias. Prerequisite: CVTC 1013.

### **CVTC 1063 - Clinical Practicum I**

This course provides an introduction to the cardiovascular clinical environment. The learner will focus on the elements of patient care, the patient-technologist relationship, and the professional relationship between the physician and the cardiovascular healthcare team. Students are assigned to clinical experiences in local hospitals in addition to on-campus lecture and laboratory sessions. Prerequisite: CVTC 1034.

### **CVTC 2103 - Invasive Procedures I**

Designed to prepare the student to enter the invasive cardiovascular field. Introduces the construction and purpose of specialized equipment and its role in invasive procedures. Topics will include invasive cardiovascular equipment, specialized equipment and cardiac pacemaker and defibrillator implantation. Prerequisite: CVTC 1034 with a grade of "C" or better. Includes lab component.

### **CVTC 2125 - Clinical Practicum II**

Clinical experience is provided in the cardiac catheterization laboratory setting. The student will gain valuable hands-on experience in the areas of scrubbing, circulating, recording, pre- and post-procedure care and manipulating imaging equipment. Prerequisite: CVTC 1063; Co-requisite CVTC 2103.

### **CVTC 2133 - Invasive Procedures II**

Continues the advanced study of invasive cardiac medical electronics and instrumentation. Emphasis will be placed on advanced diagnostic and therapeutic procedures including intravascular ultrasound, coronary artery blood flow, atherectomy, laser and RF ablation techniques. Cardiovascular support systems, such as intra-aortic balloon pump will be introduced. The basics of intracardiac mapping for electrophysiology studies will be explained. Prerequisite: CVTC 2103 with a grade of "C" or better. Includes lab component.

### **CVTC 2145 - Clinical Practicum III**

A laboratory course designed to provide a continuation of the clinical practicum. An emphasis will be placed on refining skills used in specific diagnostic tests, the calculation of hemodynamic data, and professional performance in the clinical environment. Prerequisite: CVTC 2125; Co-requisite CVTC 2133.



## CAREERS

### **CARS 0811 - Orientation to College for the Deaf and Hard of Hearing**

Designed to introduce deaf and hard of hearing students to the college setting. Special emphasis on self advocacy, accommodations, interaction with faculty and staff, and familiarity with TCC.

## CHEMISTRY

### **CHEM 1034 - Practical Chemistry**

This course for non-science majors will include an examination of the principle concepts, theories, and practical applications of chemistry. These fundamental principles are applied to topics of vital interest to society such as energy, polymers, foods, drugs, and pollution.

### **CHEM 1114 - Principles of Chemistry (L)**

A course for science majors. Not open for credit to students who have credit in CHEM 1315 or 1415. Does not substitute for CHEM 1315. Principle concepts and theories of chemistry are examined. These fundamental principles are applied to a variety of topics such as chemical bonding, chemical reactions, states of matter, solutions, electrochemistry, and nuclear chemistry. The descriptive chemistry of some common elements and compounds is included. Prerequisite: MATH 0013 or appropriate placement test score. Includes lab component.

### **CHEM 1134 - General, Organic and Biological Chemistry**

For Dental Hygiene students. This is a comprehensive course that briefly covers general and organic chemistry with a focus on biological chemistry and its application to the dental hygiene profession. Atomic structure, chemical bonding, intermolecular forces, solutions, acids and bases, functional groups, carbohydrates, lipids, proteins, nucleic acids, and metabolism will be covered. Course includes lab and covers general, organic, and biochemistry.

### **CHEM 1315 - General Chemistry I (L)**

Designed for science and science-related majors. The course includes the fundamental laws and theories dealing with the structure and interactions of matter and the use of these principles in understanding the properties of matter, chemical bonding, chemical reactions, the physical states of matter, changes of state, and solutions. The fundamental principles are applied to the solution of quantitative problems relating to chemistry. Prerequisite: MATH 1513 or MATH 1715 or equivalent with a grade of "C" or better. Includes lab component.

### **CHEM 1415 - General Chemistry II (L)**

Designed for science and science-related majors, this course is a continuation of CHEM 1315. The fundamental concepts introduced previously, together with additional ones, are applied to solutions, colloids, chemical kinetics, chemical equilibria, electrochemistry, nuclear chemistry, and organic chemistry. Qualitative inorganic analysis is included in the laboratory work. Prerequisite: CHEM 1315 with a grade of "C" or better.

### **CHEM 2145 - Organic Chemistry I (L)**

A study of fundamental concepts of organic structure and bonding, reactions of principal functional groups, mechanisms, and nomenclature of hydrocarbons and their derivatives. Laboratory emphasis is on purification, separation, synthesis and instrumental methods of studying organic systems. Prerequisite: CHEM 1415. Includes lab component.

### **CHEM 2245 - Organic Chemistry II (L)**

A continuation of CHEM 2145, reactions of principal functional groups and mechanisms. Laboratory emphasis is on synthesis and organic qualitative analysis. Prerequisite: CHEM 2145. Includes lab component.

### **CHEM 2353 - Introduction to Biochemistry**

This is an introductory course designed to assist students in their preparation for MCAT, PCAT and upper level biochemistry courses. The course covers the topics of the structure and function biochemicals, especially proteins, carbohydrates, lipids and nucleic acids and goes into the elementary details of membrane structures and transport across membranes, DNA replication, transcription and translation, and intermediary metabolism of carbohydrates. Prerequisite: CHEM 2145.

### **CHEM 2990 - Selected Topics in Chemistry**

The study and/or analysis of a selected topic in Chemistry. May be repeated with a different topic.

## CHILD DEVELOPMENT

(Students are required to earn a "C" or better in Child Development courses in order to graduate.)

### CHLD 1001 – Early Learning Guidelines - Infants, Toddlers, and Twos

Course focuses on the Oklahoma Early Learning Guidelines for Infants, Toddlers, and Twos. Students become familiar with the guidelines and will learn how to plan developmental activities that utilize the guidelines to promote growth and development in concept areas of creativity, communication and literacy, math, physical development, health and safety, science, social and emotional development, and self and social awareness.

### CHLD 1003 – Spanish for Classroom Teachers

This course offers an overview of basic Spanish grammar and pronunciation with emphasis on vocabulary necessary for communicating with students and parents with limited English. Cross-listed as SPAN 1003.

### CHLD 1101 - CDA: Application and Assessment Preparation

This is a preparation course for the CDA Credential. Students will study the CDA assessment system and review the competency standards for the CDA Credential evaluation. How to complete the direct assessment application, compile the Professional Resource File, distribute and collect the parent questionnaires, select a CDA Advisor, and completion of the Observation Instrument will be covered. Student candidates for the CDA credential may apply in one or more of the following: preschool, family childcare, infant/toddler, bilingual, and/or monolingual Spanish. Each of these areas will be explained in this class.

### CHLD 1102 - CDA: Competencies 1 and 4

This is a preparation course for the CDA Credential. Focus on how to establish and maintain a safe, healthy, learning environment for children and how to establish positive relationships with families. Students will learn how to promote good health and nutrition, prevent illness, reduce injuries, arrange materials and space, and establish routines in the preschool environment for learning, exploration, and play. The importance of involving families in programs for children will be emphasized. Course addresses CDA Competencies #1 and #4. Assigned field experiences. Prerequisites: Criminal History and Sex Offender Registry background check and CHLD 1101 or concurrent enrollment.

### CHLD 1202 - CDA: Competency 3

This is a preparation course for the CDA Credential. Focus on how to promote children's self esteem and independence and how to help children feel physically and emotionally secure. Children's development of social skills, empathy, and respect for others will be emphasized. Students will learn the relationship between guidance methods and children's individuality, personality, and developmental levels. Prevention of behavior problems and positive guidance techniques are presented. Course addresses CDA Competency #3. Assigned field experiences. Prerequisites: Criminal History and Sex Offender Registry background check and CHLD 1101 or concurrent enrollment.

### CHLD 1302 - CDA: Competency 2

This is a preparation course for the CDA Credential. Study of developmentally appropriate equipment, activities, and methods to promote the physical and cognitive development of children. Focus on music, art, drama, books, literature, writing, and block play. Students learn how to provide opportunities that promote creativity, curiosity, exploration, and problem solving. Gross motor, fine motor, and development of children's senses are featured. Language development and communication are studied. Course addresses CDA Competency #2. Assigned field experiences. Prerequisites: Criminal History and Sex Offender Registry background check and CHLD 1101 or concurrent enrollment.

### CHLD 1402 - CDA: Competencies 5 & 6

This is a preparation course for the CDA Credential. Focus on the management of resources, organization strategies, communication, planning, record keeping, and working cooperatively with others. Making professional and ethical decisions based on knowledge of child development theories, practices and quality child care services is emphasized. Importance of participation in activities that promote competence, personal growth, and professional development is stressed. Course addresses CDA Competencies #5 and #6. Assigned field experiences. Prerequisites: Criminal History and Sex Offender Registry background check and CHLD 1101 or concurrent enrollment.

### CHLD 2003 - Child Development in the Lifespan

This course focuses on the study of child development beginning with conception and continuing through the significant age periods of human life. Students will study the principles of development, developmental theories and the dynamics of development within the context of the cultural, societal, and family environments. Assigned field experiences.

**CHLD 2023 - Child Development and Parenting**

A systems perspective of child development and parenting with an emphasis on the ecological approach. Course will include the study of family processes, parenting philosophies, styles, and techniques. Assigned field experiences.

**CHLD 2032 - Early Field Experience in Teaching - Early Childhood**

This course is for students who are considering teaching as a career. Students who are interested in becoming a teacher in early childhood (Kindergarten - 3rd grade) should enroll in this class. Students are placed in a school setting where they complete 32 hours interacting, tutoring, mentoring, and helping children with school related learning. This is a blended online, on-campus, lab course and requires a two hour on-campus orientation the first Friday of the semester. Students are required to complete written assignments both online and in the school classroom where they are assigned. Prerequisites: Completed information sheet and a Criminal History and Sex Offender Registry background check clearance.

**CHLD 2042 - Early Field Experience in Teaching - Elementary**

This course is for students who are considering teaching as a career. Students who are interested in becoming a teacher in elementary (1st-8th grade) should enroll in this class. Students are placed in a school setting where they complete 32 hours interacting, tutoring, mentoring, and helping children with school related learning. This is a blended online, on-campus, lab course and requires a two hour on-campus orientation the first Friday of the semester. Students are required to complete written assignments both online and in the school classroom where they are assigned. Prerequisites: Completed information sheet and a Criminal History and Sex Offender Registry background check clearance.

**CHLD 2052 - Early Field Experience in Teaching - Secondary**

This course is for students who are considering teaching as a career. Students who are interested in becoming a teacher in secondary (7th-12th grade) should enroll in this class. Students are placed in a school setting where they complete 32 hours interacting, tutoring, mentoring, and helping children with school related learning. This is a blended online, on-campus, lab course and requires a two hour on-campus orientation the first Friday of the semester. Students are required to complete written assignments both online and in the school classroom where they are assigned. Prerequisites: Completed information sheet and a Criminal History and Sex Offender Registry background check clearance.

**CHLD 2101 – Quality Child Care**

The course is designed to meet students' individual goals for their child care home or center. Students will learn how to plan, develop, and implement procedures for a safe, healthy, high quality program for children. Areas of study will include staffing, environment, health and safety, services, family involvement, and quality relationships as well as other relevant topics. Participants will identify their child care home or center challenges and establish goals as a guide for the improvement of their program.

**CHLD 2103 - Child Guidance**

This course presents the theoretical basis for the use of constructive child guidance and discipline techniques in programs serving children. Students learn observational methods and behavior analysis to help determine the most appropriate guidance techniques and understand the impact of development on children's behavior. Field experience facilitates the acquisition of observational skills and provides models for discussion and learning child guidance and classroom management skills. Assigned field experiences. Prerequisites: CHLD 2003 with a grade of "C" or better or concurrent enrollment.

**CHLD 2112 – Multicultural Issues in Early Care and Education**

This course provides an in-depth study of culture and diversity among children and families being served in community early care and education programs. The course includes application of historical and contemporary theorists. A primary objective of the course is to help students become culturally competent to meet the needs of children and families in early care and education settings. Strategies for resolving cultural differences, for building trust, and for developing responsive relationships with children, parents, and colleagues are presented.

**CHLD 2113 - Introduction to Child Care Management**

This course provides an overview of how to effectively manage child care programs. A focus on relevant and current issues, integrating knowledgeable, reflective, and critical perspectives in early education is presented. Licensing requirements, staff management and conflict resolution are addressed. Students will learn how to use developmental knowledge to create healthy, respectful, supportive and challenging learning environments. A basic introduction to child care budgets and finances is addressed. The course highlights the benefits of establishing positive and supportive relationships with children, families and community. Assigned field experiences. Offered fall semester only.

**CHLD 2181 – Early Childhood Gardening Activities for Teachers**

This course will provide hands-on activities for classroom teachers to implement low cost gardening projects and garden crafts. Most projects use materials that are recycled and found in your kitchen. Many projects can be used for inexpensive parent gifts. Projects include: an insect house, potpourri, pressed plant material bookmarks, and plant propagation. Participants will develop and present a lesson plan using a plant part and PASS objectives. Cross listed as PHSC 2181.

**CHLD 2203 - Child and Family in the Community**

Focus on contemporary societal factors including diversity, culture, and family structures as they relate to children in various childcare programs. Ethics, professionalism, and skills development for child development and human services professionals will be addressed. Emphasis on promoting optimum development and support of families and children within programs and the larger community. Assigned field experiences.

**CHLD 2213 - Children with Special Needs**

This course will focus on the principles and practices of facilitating learning for children with special needs. A primary objective is to make practical application to healthy learning environments for all children. Legislative issues, inclusion, early intervention, developmentally appropriate strategies, advocacy, and parental involvement will be addressed. Assigned field experiences.

**CHLD 2223 - Early Childhood Foundations**

History and philosophy of early childhood education with emphasis on planning, implementing, evaluating, and developing appropriate learning experiences for children birth to eight. Course includes application of Piaget's and Vygotski's principles of learning and development. Art, music, science, math and other curricula in preschool education will be studied. Prerequisites: Criminal History and Sex Offender Registry background check, CHLD 2003 with a "C" or better. This course can not be taken concurrently with CHLD 2253 or CHLD 2513. Course includes a lab component. Offered fall semester only.

**CHLD 2233 - Physical Development and Creative Expression: Birth to Eight**

Study of creativity, play, and motor development with appropriate experiences in play, music, art, and motor skills for children, birth to eight years. Assigned field experiences. Prerequisites: Criminal History and Sex Offender Registry background check. This course can not be taken concurrently with CHLD 2513 or CHLD 2253.

**CHLD 2243 - Language and Cognitive Development: Birth to Eight**

Study of language and cognitive development with consideration of appropriate experiences in literacy, numeracy, and science for children birth to eight years. Assigned field experiences. Prerequisites: Criminal History and Sex Offender Registry background check. Offered spring semester only.

**CHLD 2253 - Child Development Practicum**

The practicum is the culminating experience for the Child Development student. Practicum site placements will be individualized based on the student's degree option. Students will interact with children and/or families teaching appropriate curriculum and activities. A portfolio of previously completed course work will be compiled by each student to document student knowledge, skills and abilities as they relate to the NAEYC associate degree standards for early childhood education. Prerequisites: Criminal History and Sex Offender Registry background check and CHLD 2003, completed with a grade of "C" or better. This course can not be taken concurrently with CHLD 2513 or CHLD 2223. Offered spring semester only.

**CHLD 2263 - Social and Emotional Development: Birth to Eight**

Study of social and emotional development and appropriate experience for children birth to eight years. Assigned field experiences. Prerequisites: Criminal History and Sex Offender Registry background check. Offered fall semester only.

**CHLD 2341 - Brain Development: Birth to Eight**

The focus of this course is research findings in the field of neuroscience that relate to early childhood development, care, and education. Students will study the impact of negative experiences as well as the protective functions of responsive care and attachment in relation to brain development during early childhood. A primary objective will be to learn how to make practical application of brain development knowledge to the early care and education of young children. Assigned field experiences.



**CHLD 2413 - Professionalism & Leadership in Early Care & Education**

Course presents an in depth study of professionalism and leadership topics meaningful to early care and education directors, principals, and teachers. The profession of early childhood education and what it means to be a professional will be studied. The NAEYC Standards, Position Statements, and Code of Ethical Conduct will be reviewed and discussed. Relevant current issues, advocacy, integration of knowledge, reflective practice, intentional teaching, and critical perspectives in early education will be presented. The class includes a professional NAEYC Standards based self assessment and a planning form for setting goals and charting one's own professional development in the field of early care and education. Offered fall semester only.

**CHLD 2421 - Children and Trauma**

The study of how children are affected by traumatic experiences is the emphasis of this course. Students will learn the difference between trauma and stress. Post-Traumatic Stress Syndrome, including the definition, symptoms, and a discussion of referral criteria and commonly used treatments will be included. Students will be introduced to supportive techniques for children in early childhood care and education programs who may be exhibiting behaviors that are indicative of trauma. Behaviors consistent with different types of trauma will be discussed. Assigned field experiences.

**CHLD 2513 - Programming for Infants and Toddlers**

This course will focus on developmental theories as they relate to infant and toddler development and behavior. Students will study infant and toddler care-giving routines as opportunities for facilitating development through focus on individuality and responsiveness. Developmentally appropriate environmental and interaction practices, including health and safety, will be addressed. Prerequisites: Criminal History and Sex Offender Registry background check. CHLD 2003 with a grade of "C" or better and all previous CHLD coursework with a grade of "C" or better. This course cannot be taken concurrently with CHLD 2223 or CHLD 2253. Course includes a lab component.

**CHLD 2543 - Cognitive and Language Development in Infants and Toddlers**

This course focuses on cognitive and language development from birth to three years. Sensitive, supportive, and responsive care-giving that meets the needs and interests of infants and toddlers is emphasized. Developmentally appropriate expectations and environments that support the cognitive and language development of infants and toddlers are studied and emphasized. Assigned field experiences. Prerequisites: CHLD 2003, CHLD 2513 or concurrent enrollment and all previous CHLD coursework with a grade of "C" or better.

**CHLD 2613 - Health, Safety, and Nutrition: Birth to Eight**

This course examines health, safety, and nutrition practices in early childhood programs. Topics include: state child care licensing standards, common medical conditions affecting children's health, the infectious process and environmental control, safety management and injury prevention, planning for children's health and safety education, nutritional guidelines, child malnutrition, childhood obesity, immunizations, emergency response procedures, and children with special medical needs. Course emphasizes the importance of respecting and partnering with families to help children establish healthy lifestyles and achieve their learning potential. Assigned field experiences and/or service-learning projects. Prerequisites: Criminal History and Sex Offender Registry background check.

**CHLD 2701 - Child Abuse and Neglect**

An in-depth study of child sexual, physical, and emotional abuse and child neglect. The impact of abuse on children at different ages/stages will be covered. Course will feature community and individual factors associated with abuse as well as prevention and intervention strategies.

**CHLD 2990 - Selected Topics in Child Development**

The study and/or analysis of selected topics in child development. May be repeated with a different topic. Field experiences in topic-related settings may be required beyond the normal class hours.

**CHINESE**

**CHNS 1103 - Chinese I**

An elementary course in understanding, speaking, reading, and writing Chinese. The first in a sequence of related courses.

**CHNS 1213 - Chinese II**

Continued instruction in understanding, speaking, reading, and writing Chinese. Prerequisite: CHNS 1103 with a grade of "C" or better or approval of instructor.

**CHNS 1313 - Chinese III**

Continued instruction in understanding, speaking, reading, and writing Chinese. Prerequisite: CHNS 1213 with a grade of "C" or better or approval of instructor.

**CHNS 1413 - Chinese IV**

Continued instruction in understanding, speaking, reading, and writing Chinese. Prerequisite: CHNS 1313 with a grade of "C" or better or approval of instructor.

**CHNS 2033 - Chinese Literature in Translation**

Readings of literary works in translation selected to increase the student's knowledge of Chinese culture and societies. Conducted in English.

**CHNS 2113 - Intermediate Chinese I**

An intermediate course in understanding, speaking, reading, and writing Chinese. Taught in Chinese. Prerequisite: CHNS 1413 with a grade of "C" or better or approval of instructor.

**CHNS 2143 – Asian Civilization and Culture**

This course provides a comprehensive look at the Asia-Pacific region and how it relates to the West. This course is interdisciplinary, covering the historical, cultural, religious and economic factors of the region. Recommended for students of Chinese and Asian Studies. Cross listed to ASNS 2123.

**CHNS 2213 Intermediate Chinese II**

An intermediate course in understanding, speaking, reading, and writing Chinese. Taught in Chinese. Prerequisite: CHNS 2113 with a grade of "C" or better or approval of instructor or Dean of Global Education.

**CHNS 2990 - Selected Topics in Chinese**

The study and/or analysis of a selected topic in Chinese. May be repeated with a different topic.

## **CIVIL ENGINEERING TECHNOLOGY**

**CVET 1373 - Materials of Construction**

Fundamentals of construction materials such as masonry, wood, concrete, asphalt, and steel along with their application to construction. Blueprint techniques, planning and code provisions are studied through design problems. Prerequisite: MATH 1454, or MATH 1715 or MATH 1513 and MATH 1613.

**CVET 1383 - Construction Plans, Specifications and Contract Documents**

A study and interpretation of construction plans, shop drawings, contract documents, specifications, scheduling, and estimating relative to construction operations. An introduction to the purpose and use of A.I.S.C., A.S.T.M., A.S.M.E., A.C.I., C.S.I. of standards. Prerequisite: Concurrent enrollment in or completion of MATH 1454, or MATH 1715 or MATH 1513.

**CVET 1413 - Wastewater Treatment**

A study of wastewater treatment systems including flow estimation, sewer system design, and design of each unit in a wastewater treatment plant. Other topics studied will be environmental concerns, water quality, laboratory analysis, and sludge disposal. Prerequisite: MATH 1454, or MATH 1513 and MATH 1613.

**CVET 2373 - Physical Properties of Soil**

Load bearing qualities of soils and methods of analyzing subsoil conditions, bearing capacity and settlement. Types of foundation design and behavioral characteristics studied. Prerequisites: MATH 1454 or MATH 1513 and MATH 1613, or MTH1715 and PHYS 1114. Includes lab component.

**CVET 2461 - HEC I**

An introduction to the HEC-I computer model which is designed to simulate the surface runoff at a river basin by unit hydrographic and routing components. The Corps of Engineers and the City of Tulsa use this model. Prerequisite: MATH 1454 or MATH 1513 and MATH 1613.

**CVET 2471 - HEC II**

An introduction to the HEC-2 computer model which is intended for calculating water surface profiles in natural or man-made channels. Both subcritical and supercritical flow profiles can be calculated. The Corps of Engineers and the City of Tulsa use this program. Prerequisite: MATH 1454 or MATH 1513 and MATH 1613.

**CVET 2990 - Selected Topics in Civil Engineering Technology**

The study and/or analysis of a selected topic in Civil Engineering Technology. May be repeated with a different topic.

**CODING AND REIMBURSEMENT SPECIALIST**

See Health Information Technology and Course Descriptions

**COMMUNICATION**

**COMM 1113 - Public Speaking**

An introductory course in oral communication, emphasis is on improving applied communication skills. Special attention is given to critical thinking skills and the anatomy of the communication process: audience analysis, research, organization, logic, ethical use of evidence, delivery, and listening. Required for B.A. and B.S. degrees in most professional majors; i.e. Business, Law, Education, Medical, English.

**COMM 2043 - Advanced Public Speaking**

Advanced Public Speaking builds on the foundation of the public speaking skills developed in COMM 1113, and is designed to challenge students to refine those skills. Students will learn to apply communication principles to practical challenges faced in personal, civic, and professional life, including specialty speeches, panel discussions, and basic group communication. Particular emphasis will be given to more fully developing students' persuasive speaking skills by building on the foundational principles of persuasion covered in COMM 1113. Prerequisite: COMM 1113 with a "C" or better, or instructor approval.

**COMM 2053 - Intercultural Communication (H) (I)**

An introductory course in intercultural communication: the study of communication among people from different cultures. Emphasis is on increasing students' understanding of cultural theories of communication and of cultural issues that affect communication effectiveness especially in educational and business contexts. Cross listed with BUSN 2053.

**COMM 2073 - Oral Interpretation**

Oral Interpretation combines communication concepts and skills with dual goals of helping the student to understand basic communication principles and improving oral communication skills. Special emphasis is placed on preparing, selecting, organizing, and delivering literary works as well as on analyzing and evaluating the performance process.

**COMM 2093 - Business and Professional Communication**

A study of the principles and theories of business and professional communication. Students will address a variety of questions that arise from the intersection of public, professional life and the academic study of rhetoric/communication.

**COMM 2103 - Interpersonal Communication**

A study of the principles and theories of communication in dyadic (one-to-one) and human interactive situations. Emphasis will be on increasing student awareness of verbal and nonverbal communication behavior. Focus will be directed toward improving interpersonal communication skills.

**COMM 2113 - Fundamentals of Listening**

This course is designed to teach fundamental listening techniques and to improve listening skills through a combination of lecture and practical experiences. Actual listening situations will be provided which center on listening experiences commonly encountered in business professions, educational fields, and numerous occupational areas.

**COMM 2243 - Small Group Communication**

A study of theories and principles related to small group communication. Emphasis on the communication dynamics involved in group relationships, group decision making processes, and group leadership in both professional and personal contexts. Students become better group members and learn how to facilitate effective collaboration among members of a group.

**COMM 2333 - Forensics**

This course is open to all students. Participation includes preparation, practice, class performances and competitions. Students will perform various individual events including oral interpretation events (dramatic and humorous interpretation, interpretation of prose and poetry, and duo interpretation) and platform speaking events (persuasive and informative speaking, impromptu and extemporaneous speaking, after dinner speaking, communication analysis, Student Congress, Parli-Debate, and Lincoln Douglas debate). The student must compete with the TCC Forensic Team and travel to at least two regional competitions throughout the semester. This class is available for credit to both majors and non-majors.

**COMM 2343 - Forensics Performance Competition**

This course is open to all students. Participation includes preparation, practice, class performances and competitions. Students will perform various individual events including oral interpretation events (dramatic and humorous interpretation, interpretation of prose and poetry, and duo interpretation) and platform speaking events (persuasive and informative speaking, impromptu and extemporaneous speaking, after dinner speaking, communication analysis, Student Congress, Parli-Debate, and Lincoln Douglas debate). The student must compete with the TCC Forensic Team and travel to at least three regional competitions throughout the semester. This class is available for credit to both majors and non-majors.

**COMM 2351 - Forensics Competition Practicum**

This course is open to all students. Participation includes preparation, practice, class performances and competitions. Students will perform various individual events including oral interpretation events (dramatic and humorous interpretation, interpretation of prose and poetry, and duo interpretation) and platform speaking events (persuasive and informative speaking, impromptu and extemporaneous speaking, after dinner speaking, communication analysis, Student Congress, Parli-Debate, and Lincoln Douglas debate). The student must compete with the TCC Forensic Team and travel to at least three regional competitions throughout the semester. This class is available for credit to both majors and non-majors.

**COMM 2353 - Forensics II**

This course is open to all students. Participation includes preparation, practice, class performances and competitions. Students will perform various individual events including oral interpretation events (dramatic and humorous interpretation, interpretation of prose and poetry, and duo interpretation) and platform speaking events (persuasive and informative speaking, impromptu and extemporaneous speaking, after dinner speaking, communication analysis, Student Congress, Parli-Debate, and Lincoln Douglas debate). The student must compete with the TCC Forensic Team and travel to at least three regional competitions throughout the semester. This class is available for credit to both majors and non-majors.

**COMM 2363 - Forensics III**

This course is open to all students. Participation includes preparation, practice, class performances and competitions. Students will perform various individual events including oral interpretation events (dramatic and humorous interpretation, interpretation of prose and poetry, and duo interpretation) and platform speaking events (persuasive and informative speaking, impromptu and extemporaneous speaking, after dinner speaking, communication analysis, Student Congress, Parli-Debate, and Lincoln Douglas debate). The student must compete with the TCC Forensic Team and travel to at least three regional competitions throughout the semester. This class is available for credit to both majors and non-majors.

**COMM 2373 - Forensics IV**

This course is open to all students. Participation includes preparation, practice, class performances and competitions. Students will perform various individual events including oral interpretation events (dramatic and humorous interpretation, interpretation of prose and poetry, and duo interpretation) and platform speaking events (persuasive and informative speaking, impromptu and extemporaneous speaking, after dinner speaking, communication analysis, Student Congress, Parli-Debate, and Lincoln Douglas debate). The student must compete with the TCC Forensic Team and travel to at least three regional competitions throughout the semester. This class is available for credit to both majors and non-majors.

**COMM 2503 - Communication Theory**

A survey of theories designed to explain how humans interact. Includes verbal, nonverbal, interpersonal, small group, organizational, political, intercultural, and mass communication. Prerequisite: COMM 1113.

**COMM 2553 - Introduction to Rhetorical Theory**

Survey of theories focusing on how persuasive messages are communicated. Particular attention is given to public communication and various rhetorical theories. Students explore the relationship between public communication and efforts to influence audiences. Special attention is given to the intersection of rhetoric and 'persuasion' as well as the rhetorical traditions from literary criticism. Prerequisite: COMM 1113.



**COMM 2990 - Selected Topics in Communication**

The study and/or analysis of a selected topic in Communication. May be repeated with a different topic.

**COMPUTER AIDED DESIGN (CAD)**

See Drafting and Design Engineering Technology Program and Course Descriptions

**COMPUTER INFORMATION SYSTEMS**

**CSCI 0802 - Computer Concepts for the Deaf and Hard of Hearing**

This course is designed to give students with a hearing loss the vocabulary and conceptual base necessary to succeed in college level computer classes, specifically introductory theory classes.

**CSCI 0811 - Computer Exploration for the Deaf and Hard of Hearing**

This course is designed to introduce students to the Windows operating system and beginning word processing with Microsoft Word. An introduction to the Internet, Email, PowerPoint and Excel may be explored. May be repeated with a different topic.

**CSCI 1011 - Introduction to Personal Computers**

This class for the complete novice is designed to eliminate the fear of computers and introduce the Windows environment plus word processing, spreadsheet, and database programs. Hands-on sessions on the personal computer will help the student gain confidence in using the computer.

**CSCI 1123 - 3D Graphics Using Lightwave**

The study of terminology and principles relating to the creation of ray-traced images using Lightwave computer graphics software. Students will learn to creatively concept, design, model, surface, and render 3D objects and environments. Topics will include an exploration of modeling tools, texture mapping, camera and light rigging, plugins, and rendering techniques. Additional topics will involve a basic overview of key-frame animation techniques to create a fly-through. Offered fall term only. Prerequisite: CSCI 1203 and or CSYS 1033 or instructor approval.

**CSCI 1171 - Introduction to Web Page Design**

This course is intended to provide students with an overview of the tools available to design and develop an effective personal or corporate presence on the World Wide Web. This will be accomplished through the use of hands-on projects and exercises.

**CSCI 1203 - Computer Concepts and Applications**

This is a theory/applications course. The theory introduces the role of computers in all aspects of global society including security issues. The applications segment utilizes Microsoft Windows, Word, Excel, Access, Power Point and the Internet to equip students with basic computer skills necessary for their academic and professional careers. It will serve as the first course to be taken by any computer science major, may satisfy a computer science requirement for another discipline, a university parallel transferable course and meets the computer proficiency requirements mandated by the Oklahoma State Regents for Higher Education.

**CSCI 1263 - Network Fundamentals**

This first course in the network curriculum provides a general introduction to networking. Topics will include an overview of the hardware and software needed for network connectivity including personal computer operating systems, network media and topology, network card configuration and installation, communication protocols and standards. This course provides for hands-on interaction with network related hardware and software. The focus will include coverage of Comp TIA'S objectives for the Network+ certification exam. Prerequisite: CSCI 1203 or instructor approval. Recommended: CSYS 2023 and CSCI 2143.

**CSCI 1273 - Customer Support**

Designed to show how customer support positions provide guidance and assistance in both consulting and troubleshooting roles within a helpdesk environment. Guidance in educating the user community based upon current hardware/software products. Understanding the importance of developing a better understanding of a customer's business environment and troubleshooting/resolving the customer's problems as quickly as possible. Develop troubleshooting and problem solving techniques to distinguish between communication vs. equipment hardware/software problems and be able to effectively communicate with non technical users over the telephone. Prerequisite: CSCI 1263.

**CSCI 1283 - 2D Animation**

Students will develop skills in the use of industry-standard software to develop storyboards and two-dimensional animation including creating, importing, and sequencing media elements to create multimedia presentations. There will be an emphasis on conceptualization, creativity, and visual aesthetics. Students will push the boundaries of their imagination and explore storytelling through animation. Students will be encouraged to obtain Adobe Certified Associate (ACA) status through industry certification. Offered fall and spring semesters. Prerequisite: CSCI 1203 or instructor approval.

**CSCI 1293 - 3D Animation Using Lightwave**

The study of terminology and principles relating to the creation of ray-traced 3D animations using Lightwave computer graphics software on Macintosh platforms. Students will design and construct motion graphics for the web, multimedia, and digital video. Topics will include keyframe animation, animation using paths, and procedural animation techniques. Offered spring term only. Prerequisite: CSCI 1123 or instructor approval.

**CSCI 1483 - Introduction to UNIX (Linux)**

An introduction to UNIX operating system with specific reference to UNIX commands, the UNIX file structure, editors, and shell programming. Includes an introduction to system administration and security. Prerequisites: CSCI 1203 or instructor approval.

**CSCI 1531 - Introduction to Excel**

This course is designed for the beginning spreadsheet student. Instruction will focus on the set-up and elementary operations of using and building spreadsheets and workbooks. Prerequisite: CSCI 1011 or CSCI 1641 or instructor approval.

**CSCI 1541 - Advanced Excel**

A brief review of the basic spreadsheet operations will be covered. Emphasis will be on data commands and shortcuts. Add-In options and macros will be discussed. Prerequisite: CSCI 1531 or CSCI 1203 or instructor approval.

**CSCI 1551 - Introduction to Word**

This course is designed for the beginning word processing student. Instruction will focus on the set-up and elementary operations of creating and using documents. Prerequisite: CSCI 1011 or CSCI 1641 or instructor approval.

**CSCI 1561 - Advanced Word**

A brief review of the basic word processing operations will be covered. Emphasis will be on assembly and merging documents. There will be discussion on shortcuts, styles, macros, and creating templates. Prerequisite: CSCI 1551 or CSCI 1203 or instructor approval.

**CSCI 1571 - Introduction to Access**

This course is designed for the beginning database student. Instruction will focus on the set-up and elementary operations of creating and using a database. Queries and reports will be generated. Prerequisite: CSCI 1011 or CSCI 1641 or instructor approval.

**CSCI 1641 - Windows**

This course is a hands-on introduction to the Windows operating system. The student will learn how to set-up and configure the Windows environment plus launch and run multiple applications. Many of the basic features and operations that are performed in most Windows applications will be demonstrated and practiced. Prerequisite: CSCI 1011.

**CSCI 1711 - Introduction to PowerPoint**

This course is designed for the beginning student. Instruction will be on developing slide presentations, speaker notes, handouts and flyers. Guidelines for effective presentation will be discussed. Prerequisites: CSCI 1011 and CSCI 1641 or CSCI 1203.

**CSCI 1721 - Applied Integrated Software**

The student must have basic integrated spreadsheet knowledge. The study of the integration of the functions of the package including the development and use of charts will be provided through lecture and lab activities.

**CSCI 1901 - Beginning UNIX (Linux)**

A practical introduction to the UNIX operating system, with emphasis on creating and manipulating files and using basic commands. Includes an introduction to shell programming. Prerequisite: CSCI 1011 or instructor approval.

**CSCI 2013 - Word**

This course offers an in-depth coverage of the concepts and techniques required to create complex documents for business use and to assist in the preparation for the Microsoft Office Specialist Word expert exam. Prerequisite: CSCI 1203 or instructor approval.

**CSCI 2033 – Excel**

This course provides an in-depth coverage of the concepts and techniques required to use a spreadsheet to express, analyze, and solve business-related problems and to assist in the preparation for the Microsoft Office Specialist Excel expert exam. Prerequisite: CSCI 1203 or instructor approval.

**CSCI 2043 - Access**

This course covers the topics required to create, update, and query a database and generate reports and to assist in the preparation necessary for the Microsoft Office Specialist Access core exam. Prerequisite: CSCI 1203 or instructor approval.

**CSCI 2073 - Ethics in Information Technology**

This course will cover ethical decision making, privacy, computer and Internet crime, intellectual property, freedom of expression, software development, social networking, computer and network security, computer reliability, and the professional ethics forum that ties them together. Ethical scenarios, cases and current events items are used to provide a broad practical awareness of the ethical issues.

**CSCI 2133 - Introduction to JAVA**

An introduction to how Java language is used to develop highly portable applications and applets. Topics will include data objects exceptions, threads, and the Abstract Windows Toolkit. Prerequisites: CSYS 1203 and CSCI 2473 or CSCI 2843 or instructor approval.

**CSCI 2143 - A+ II**

This course deals with the most current Windows operating systems, Mac OS and Linux. Topics include installation, maintenance and common features. Introduction to virtualization, security, common threats, vulnerabilities and preventative methods will be covered, along with software troubleshooting, tools and best practices. Occupational procedures will include safety, environmental concerns, ethics, professionalism and troubleshooting theory. This course will prepare the student to take and pass the second of the two required CompTIA exams to gain A+ certification. As the Comp TIA exam is modified to meet industry needs, this course will also be modified to cover the new topics in the exam. Prerequisite: CSCI 1203 or instructor approval.

**CSCI 2163 - Windows Operating Systems**

This course covers a state-of-the-art operating system environment. Major areas to be studied will include coverage of installation procedures, customizing desktops, security issues, file management, network/internet connectivity, managing programs/hardware/digital media, maximizing performance, and some troubleshooting techniques. Prerequisite: CSCI 1203.

**CSCI 2263 - Digital Video I/Final Cut Pro**

A general overview of digital video editing. Students will gain hands-on experience in video capture and editing using Final Cut Pro nonlinear video editing software on Macintosh platforms. Offered fall and spring terms. Prerequisites: CSYS 1211 and CSYS 2573 or JRMCI 2573 or instructor approval. Cross listed as JRMCI 2263. Includes lab component.

**CSCI 2273 - Digital Video II/ Final Cut Pro**

An in-depth continuation of CSCI 2263 where students will integrate graphics, audio, animation, and special effects into digital video projects. Students will use Final Cut Pro video editing software on Macintosh platforms. Offered fall and spring term. Prerequisite: CSCI 2263 or JRMCI 2263 or instructor approval. Cross listed as JRMCI 2273. Includes lab component.

**CSCI 2283 - Visual Basic**

The Visual Basic language is presented with the students creating applications that will run in the Windows environment. Topics include event processing techniques, incorporating GUI objects and menus into an application and discussion of application specific commands and functions.

**CSCI 2473 - C Language**

The C programming language is presented with emphasis on applications as a portable, "mid-level" language. The student will write several programs utilizing the important features of C such as functions, structures, pointers, recursion and bit-operations. Students should have a working knowledge of the operating system in which they will be interacting. Prerequisite: CSYS 1203 or instructor approval.

**CSCI 2483 - PowerPoint / Multimedia**

This course provides comprehensive coverage of the concepts and techniques to create presentations suitable for professional purposes, to understand the underlying functionality of presentation software, and to assist in the preparation for the Microsoft Office Specialist PowerPoint comprehensive exam. Prerequisite: CSCI 1203 or instructor approval.

**CSCI 2653 - Database for UNIX (Linux) Systems**

An introduction to UNIX database software including how to create, update, and query a database, generate reports, set up a command file, and organize a database. Prerequisites: CSCI 1483 and a 3-credit hour programming class, or instructor approval.

**CSCI 2683 - Data Structures**

Advanced programming techniques and concepts using the C programming language. Topics will include algorithm analysis and design, memory management, software engineering concepts and standard data structures including linked lists and binary trees. Prerequisite: CSCI 2473 or instructor approval.

**CSCI 2753 - Introduction to Networking**

This course is designed for the student majoring in microcomputer programming, microcomputer software applications, or mainframe programming. It provides an overview of networks in a computer environment. Topics will include installation and configuration of software and hardware components of a network, typical network configurations, and file and software sharing. Hands on experience will be provided on a typical network in the lab. Prerequisite: CSCI 2163 or instructor approval.

**CSCI 2773 - Advanced Database for UNIX (Linux) Systems**

Continued instruction in the creation and use of UNIX databases, including performance improvement techniques. Prerequisite: CSCI 2653.

**CSCI 2783 - Advanced UNIX (Linux)**

Continued instruction in the UNIX operating system, including system administration functions. Emphasis will be placed on setting up and maintaining file systems, networks, devices, and users. This course helps prepare the student to take the current CompTIA Linux + certification exam. Prerequisite: CSCI 1483 or instructor approval.

**CSCI 2843 - C++ Programming Language**

Programming techniques in object-oriented programming, including data abstraction, inheritance, polymorphism, and dynamic object creation. Emphasis will be placed on the reusability of objects and the focus on object concepts as they deal with future program maintenance. Prerequisite: CSYS 1203 and CSCI 2473 or instructor approval.

**CSCI 2873 - Advanced C++**

This course is intended to strengthen a student's ability to design an object oriented system and implement that system on a Windows based platform. The class will concentrate on conforming to industry-standard user and system interface guidelines to build potentially commercial level products. Prerequisite: CSCI 2843 or instructor approval.

**CSCI 2953 - Analysis/Solution Architecture**

This course is designed to help prepare for the Solution Architecture component of the Microsoft Certified Solutions Developer certification exam. Topics include how to gather, analyze, and present business processes and requirements and the use of appropriate Microsoft® Solutions Framework (MSF) models and processes to create conceptual, logical and physical designs for a business solution. Students will learn how to select suitable technologies and architectures for their solution, based on trade-off analysis.

**CSCI 2972 - Digital Media Capstone**

The Digital Media Capstone course will require students to develop a basic personal identity system, resume, and portfolio within the scope of their specialty (Adobe Master Design Specialist, Digital Media Specialist, or Web Design Specialist). Students will also study and obtain Adobe Certified Associate (ACA) status. Offered fall and spring terms. Students must have completed 75% of their curriculum requirements and obtained instructor permission to enroll.

**CSCI 2982 - Digital Media Internship**

This internship component expands the Digital Media Program by providing students with practical, hands-on learning through professional work experience and supervision. Students will complete an approved 120-hour (60 hours per credit) on-site work experience within the scope of their specialty (Adobe Master Design Specialist, Digital Media Specialist, or Web Design Specialist). Prerequisite: CSCI 2972 and consent of instructor.



**CSCI 2983 – Information Technology Capstone/Internship**

The Information Technology Capstone/Internship is designed to assist students in developing the specialized skills necessary to succeed in a business or corporate setting. The course can include working at a company as an intern, creating a project assigned by faculty, developing a portfolio that contains the projects completed from course work and/or a Capstone project. Students will be under the supervision of faculty. Students will spend 12 hours per week at an internship site or working on a project. Prerequisites: Students must have completed 75% of their curricular requirements, completed the application process, and obtained instructor permission to enroll.

**CSCI 2990 - Selected Topics in Computer Science**

The study and/or analysis of a selected topic in Computer Science. May be repeated with a different topic.

**CSYS 1013 - HTML and CSS**

Hypertext Markup Language (HTML) and Cascading Style Sheets (CSS) will be presented along with the introductory principles of website design. Projects will include the creation of a variety of different types of web pages and websites, advocating accessibility and efficiency principles and techniques. Prerequisite: CSCI 1203.

**CSYS 1022 - MS Word for Medical Documents**

This course provides introductory word processing skills for medical professionals. Creating, formatting, editing, and illustrating documents; creating tables, forms, and templates; and collaborating on documents will be covered.

**CSYS 1033 - Adobe Photoshop**

Key Photoshop concepts and techniques plus the more advanced features and tools in the latest version of the software will be covered. Emphasis will be placed on the work area, basic photo corrections, retouching and repairing, working with selections, layer basics, masks and channels, correcting and enhancing digital photographs, typographic design, vector drawing, techniques, advanced layering, advanced compositing, and preparing files for the web. This is the first course to prepare students with the skills for continued creative study in CSYS 1073 Advanced Photoshop. Students will learn about the benefits of obtaining Adobe Certified Associate (ACA) and/or Adobe Certified Expert (ACE) status through industry certification. Offered fall, spring, and summer sessions.

**CSYS 1043 - Adobe Acrobat**

A presentation of key concepts, techniques, and tools found within Acrobat Pro. Emphasis will be placed on Acrobat basics, keyboard accelerators and shortcuts, creating PDF files, combining files into PDF portfolios, creating PDF documents from web pages, editing PDF files, adding signatures and security, creating media-rich presentations, exploring engineering, technical, and legal features, creating forms, using Acrobat in professional publishing, employing commenting tools, and making documents accessible and flexible. Students will be encouraged to obtain Adobe Certified Associate (ACA) and/or Adobe Certified Expert (ACE) status through industry certification. Offered fall, spring and summer terms. Prerequisite: CSCI 1203 or instructor approval.

**CSYS 1063 - Digital Image Editing**

Explore your creativity while learning the industry standard graphics editing software in a hands-on environment. Enhance digital photographs and artwork. Put into practice the principles behind layers, channels, paths and special effects. Design techniques are explored when producing collages, logos, ads and web graphics. Promote success with your digital designs for personal use, marketing and the Web. Prerequisites: CSCI 1203 or CSYS 1203 or instructor approval, CSCI 2163 recommended.

**CSYS 1073 - Advanced Photoshop**

An advanced course in Adobe Photoshop where students will learn professional Photoshop techniques to enhance and alter digital photographs and prepare them for web and print distribution using Macintosh computers. Emphasis will be placed on masking, layering techniques, video editing, 3d features, and choosing a non-destructive workflow that will raise skill levels to new heights. Students will be encouraged to obtain Adobe Certified Associate (ACA) status through industry certification. Offered fall, spring, and summer terms. Prerequisite: CSYS 1211 and CSYS 1033 or instructor approval.

**CSYS 1103 - Introduction to Computer Electronics**

An introduction to electronic principles used in microcomputers. Elements from DC, AC, Digital Electronics, and Microprocessors will be covered. Prerequisites: CSCI 1203.

**CSYS 1133 - Oracle: Introduction to SQL**

This course offers an extensive introduction to data server technology. The course covers the concepts of relational databases and the SQL languages. Demonstrations and hands-on exercises reinforce the concepts. Prerequisite: CSCI 1203 or instructor approval.

**CSYS 1153 - Adobe Dreamweaver**

A presentation of key Dreamweaver concepts and techniques plus the more advanced features and tools in the latest version of the software will be covered. Emphasis will be placed on Dreamweaver basics, customizing the workspace, applying cascading style sheets, working with text, designing with images, inserting links, crafting page layouts, creating interactive pages, constructing forms, adding multimedia, publishing to the web, increasing productivity with templates, and working with code. Students will be encouraged to obtain Adobe Certified Associate (ACA) and/or Adobe Certified Expert (ACE) status through industry certification. Offered fall and spring terms. Prerequisites: CSYS 1013 and CSYS 1033, or instructor approval.

**CSYS 1203 - Introduction to Computer Programming**

This course is a required prerequisite for all programming classes and will serve as an introduction to structured programming techniques. Topics to be covered include flowcharting, pseudo code, sequence, selection, iteration, arrays, I/O, principles of problem solving, debugging, documentation and good programming practice. Topics will be applied using an appropriate programming language. Co-requisite: CSCI 1203 Computer Concepts and Applications.

**CSYS 1211 - Introduction to MAC OS**

This course is a hands-on introduction to the Macintosh operating system. The student will learn to setup and configure as well as launch and run multiple applications in the Mac environment. Basic features and operations performed in Mac applications will be demonstrated and practiced, including file management techniques. Offered fall and spring terms.

**CSYS 1393 - Web Design and Marketing**

An introduction to Web site creation and marketing as it relates to E-Commerce business. Topics may include market research, usability issues, and design guidelines which include marketing approaches such as importance of logos, psychology of color, product promotion and cost factors. Students will develop and test a Web site using popular Web development software. Prerequisite: CSCI 1203 Recommended: MKTG 2423. Cross listed with MKTG 1393.

**CSYS 1443 - Electronic Commerce**

This course will examine the foundation, operation and implications of the Internet economy. Course content may include such topics as Internet technologies, privacy, security, online market mechanisms, interaction with customers, electronic publishing, electronic shopping, knowledge-based products, pricing in the Internet economy, database issues, online auctions and e-marketplaces, intellectual property, policies, ethics for the Internet economy, emerging technologies and an outlook for the new economy. Prerequisite: CSCI 1203 or instructor approval

**CSYS 1793 – Mobile Development – iPhone**

A hands-on introduction to designing, developing, debugging and testing mobile applications using Objective C and targeting the iPhone mobile device. Among the topics to be covered: using Core Graphics and Core Animation to customize UI components, using the iPhone's built-in accelerometers, and integrating your application with other iPhone applications and services. Prerequisite: CSCI 2473 or instructor approval.

**CSYS 2013 - Webserver Administration**

Methods of building, maintaining, monitoring and controlling a web site. Architecture of web sites and integration with other servers will be addressed. Security issues. Firewall options and current web server software will be explored. Prerequisites: CSYS 1203, CSCI 1203, and CSCI 1263.

**CSYS 2023 - A+ I**

This course covers three basic areas: computer hardware, networking, and mobile devices. Learning will be focused on skills across those three areas, including identifying, comparing, contrasting, appropriate selection to meet customer needs, installation, configuration and troubleshooting. This course will prepare the student to take and pass the first of the two required CompTIA exams to gain A+ certification. As the CompTIA exam is modified to meet industry needs, this course will also be modified to cover the new topics in the exam. Prerequisite: CSC1203 or instructor approval.

**CSYS 2033 - Scripting**

Course objectives consist of learning the JavaScript scripting language and how it is used to create dynamic content for web pages through the use of variables, functions, objects and events along with data types and operators. Also covered will be the use of the JavaScript language to process web page based forms, animations, cookies, and implementing web page security. Prerequisites: CSYS 1013 or concurrent enrollment.

**CSYS 2063 - Windows Server Administration**

Students will perform server installation and operations of networking services, Active Directory services, monitoring and troubleshooting, as well as gain an understanding of the operating system functions and capabilities. Microsoft's objectives and certification guidelines will be covered. Prerequisite: CSCI 1263 or instructor approval.

**CSYS 2073 - MS Office**

An in-depth treatment of the Microsoft Office product. Access, Excel, Word, and PowerPoint will be used separately and as an integrated part of Office. Emphasis will be placed on hands-on training. Prerequisite: CSCI 1203 or instructor approval.

**CSYS 2153 - Advanced XHTML Technologies**

This course focuses on the development of multimedia-intensive, platform independent web pages for conventional Internet, Intranet, and Extranet based applications. Topics will include DHTML, CSS, client-side scripting, XML, and multimedia. Prerequisite: CSYS 1013.

**CSYS 2223 - Graphical User Interface Development**

Students will learn how to design, develop and evaluate interactive application interfaces. Topics include: events, regular expressions, exception handling, debugging, and testing. Prerequisite: CSYS 2613.

**CSYS 2273 - Internet Business Applications**

An introduction to the development of applications that can be used in a web-based environment. Topics can include Active Server Pages, JAVA Server Pages, and DCOM development. Prerequisite: CSYS 1013.

**CSYS 2293 - Social Media**

Social Media is an evolving set of online applications and Website features that enable user-generated content and online communication between individuals. More broadly referred to as Web 2.0, this trend creates exciting opportunities for both businesses and individuals. In this course, students will explore the use of Social Media for business and personal use. Each student will develop a Social Media Marketing plan for a business. Prerequisite: CSCI 1203. Recommended: MKTG 2423. Cross-listed to MKTG 2293.

**CSYS 2323 - Outlook**

This course covers the topics necessary to utilize a powerful integrated messaging, scheduling, and information management tool and to assist in the preparation necessary for the Microsoft Office Specialist Outlook core exam. Prerequisite: CSCI 1203 or instructor approval.

**CSYS 2343 - Visual Basic for Applications**

The Visual Basic for Applications language is presented with emphasis on how to record, edit, and write VBA macros and procedures for use with word processing, spreadsheet, and database applications. Specific topics include automating routine applications tasks, automating OLE and other types of data exchanges between applications programs, and writing complete programs that handle all aspects of performing complex tasks. Prerequisites: (CSCI 2013 and CSCI 2033) or (CSCI 2013 and CSCI 2043) or (CSCI 2033 and CSCI 2043) or instructor approval.

**CSYS 2383 - Implementing and Supporting TCP/IP**

Course covers installation, configuration, use, and support TCP/IP, to include: protocol suite components, IP addressing, subnet masks, DHCP, LMHOSTS, WINS, DNS, SNMP. Prerequisite: Instructor approval.

**CSYS 2413 - Advanced JAVA**

This is an advanced programming course that emphasizes JDBC and advanced client server programming techniques in JAVA. Prerequisite: CSCI 2133 or instructor approval.

**CSYS 2433 - Microsoft Exchange Server**

Course covers installation and configuration of Exchange Server and clients, to include: public folders, replication of folders, forms, Internet mail, Netware connectivity. Prerequisite: Instructor approval.

**CSYS 2463 - PHP Programming**

Course objectives consist of learning the PHP scripting language and how it is used to create dynamic content for web pages through the use of variables, functions, and objects along with data types and operators. Also covers the use of the PHP language to: process web page based forms, read and write cookies, perform service side file I/O and access databases. Prerequisite: CSYS 2033.

**CSYS 2493 - Principles of Information Assurance**

Introduction to all areas of information assurance, including attackers and techniques, policies & procedures, hardening of operating systems, applications, and networks, email and web security, cryptography, public key infrastructures, operational security, and recovery of digital evidence (forensics). Students will perform numerous hands-on labs. This course prepares students to take the CompTIA Security+ certification exam. Prerequisite: CSCI 1263 or instructor approval.

**CSYS 2503 - ASP.NET**

This course will teach students how to use ASP.NET to create data driven web pages. Topics will include a brief overview of MS-SQL Server and Internet Information Server, creating web pages that dynamically display, insert, update, and delete records from a SQL Server database and use Crystal Reports to present data on a web page. Programming techniques are presented that enhance Rapid Application Development for web based programs. Prerequisite: CSCI 2283 or instructor approval.

**CSYS 2533 - Java Server Pages**

This course prepares students to develop real world web applications using Java Server Pages (JSP). Students are introduced to the fundamentals of JSP technology with an emphasis on extensible and dynamic web applications that include the following: how to write Java Server Pages using Java Beans, how to submit and process HTML forms, how to write customized Tag Libraries which simplify web page maintenance, and how to write web applications that connect to a database. Prerequisites: CSYS 1013, CSYS 2413, or instructor approval.

**CSYS 2563 - Enterprise Security**

Information security for the entire organization from a management perspective. Topics include the history and development of computer and network security, system development life cycle, user needs, threats, attacks, risk analysis and management, legal & ethical issues, policy & procedure development, converged network security, cryptology, tools & techniques, physical security, operational security, implementation & administration, personnel security, contingency planning, incident handling and disaster recovery. Students will complete several projects to help reinforce the material. Prerequisite: CSCI 1203.

**CSYS 2573 - Videography**

An introductory study in video techniques and basic equipment - including digital video camera operation, video formats, composition, basic lighting and audio, production planning and visual storytelling. Offered fall and spring terms. Prerequisite: JRM 1103 and/or concurrent enrollment or instructor approval. Cross listed with JRM 2573.

**CSYS 2603 – Mobile Web Design**

This course will focus on creating websites that are optimized for mobile devices. Topics covered will include designing for the mobile web, the mobile first design philosophy, responsive design, and touch based design patterns. Technologies and techniques used will include, but are not limited to, HTML, CSS, Javascript, progressive enhancement, device detection, media and storage APIs, and geolocation. Prerequisite: CSYS 2033.

**CSYS 2613 – C# Programming**

An introduction to C# and the .NET Framework. Topics will include exception handling techniques, C#-based GUI development, multithreading, strings, characters, regular expressions, graphics, files and streams. Prerequisites: CSYS 1203 or instructor approval.

**CSYS 2623 – Mobile Development - Advanced iPhone**

This course is a continuation of CSYS 1793 Mobile Development iPhone. It focuses on advanced mobile application development topics including OpenGL, Core Graphics, Core Animation, Web Services, Networking, and Instruments. Prerequisite: CSYS 1793.

**CSYS 2643 – Database Design and SQL**

Course covers the design and creation of relational databases using the Structured Query Language including performing analysis of data needs, establishing table structures, defining and working with keys, defining field specifications, establishing and working with table relationships, defining business rules, creating views, and managing data integrity. Prerequisite: CSYS 1203 or instructor approval.

**CSYS 2673 - Adobe Illustrator**

An overview of Illustrator concepts and techniques plus the more advanced features and tools in the latest version of the software will be covered. Emphasis will be placed on using Illustrator tools and commands, selecting and aligning, creating and editing artwork, working with type, layers, brushes, and symbols, applying effects. Students will be encouraged to obtain Adobe Certified Associate (ACA) and/or Adobe Certified Expert (ACE) status through industry certification. Offered fall and spring terms. Prerequisite: CSCI 1203 or instructor approval.



### **CSYS 2683 - Adobe InDesign**

A general overview of key concepts, techniques, and tools found within Adobe InDesign. Emphasis will be placed on InDesign basics, general work area, setting up a document, working with typography, creating text and graphic frames, importing and editing text, preparing styles, importing and linking graphics, mixing swatches and defining color formats, creating tables, working with effects and transparency, preparing master pages for long documents, preflighting, packaging, and outputting content for print and electronic mediums. Additional topics will involve a discussion of the basic principles and elements of design. Students will conceptually develop all projects using a basic creative process. Students will be encouraged to obtain Adobe Certified Associate (ACA) and/or Adobe Certified Expert (ACE) status through industry certification. Offered fall and spring terms. Prerequisite: CSCI 1203 or instructor approval.

### **CSYS 2703 - Computers in the Law**

A beginning class covering the use of computer applications in legal organizations designed to introduce the use of computer software and hardware; word processing; databases; timekeeping and billing; docket control; case management; litigation support; computer-assisted research; courthouse-related applications; and specialized legal software. Prerequisite: CSCI 1203 or instructor approval.

### **CSYS 2713 - Adobe Premiere**

A general overview of key concepts, techniques, and tools found within Adobe Premiere. Emphasis will be placed on Premiere basics such as importing, editing, working with audio, creating transitions, and producing titles. Additional topics will involve multi-camera editing, DVD with menu compilation, time-remapping techniques, effects, and compressing video for handheld devices such as mobile phones, iPods, PSPs and smartphones. Basic script and storyboard techniques will be discussed for the creative development of all video projects. Students will be encouraged to obtain Adobe Certified Expert (ACE) status through industry certification. Offered fall and spring terms. Prerequisites: CSCI 1203 and CSYS 1211 or instructor approval.

### **CSYS 2733 - Adobe Audition**

A general overview of key concepts, techniques, and tools found within Adobe Audition. Emphasis will be placed on Audition basics, the work area, repairing and adjusting audio clips, editing and enhancing voice-over recordings, sampling, creating background music and loops, exploring effects, working with markers, importing, exporting, and round-trip editing. Students will be encouraged to obtain Adobe Certified Expert (ACE) status through industry certification. Offered fall and spring terms. Prerequisites: CSCI 1203 and CSYS 1211 or instructor approval.

### **CSYS 2753 - Adobe After Effects**

A general overview of key concepts, techniques, and tools found with Adobe After Effects. Emphasis will be placed on After Effects basics, work area, creating animation using effects and presets, working with typography and animating text, synchronizing audio, animating layers, working with shape layers, working with masks, distorting objects with puppet-pin tools, keying, performing color correction, exploring 3D elements, using 3D effects, nesting, rotoscoping, motion tracking, stabilization, and rendering. Principles of design and motion graphics will be shared. Basic script and storyboard techniques will be discussed for the creative development of all animated narratives. Students will be encouraged to obtain Adobe Certified Associate (ACA) and/or Adobe Certified Expert (ACE) status through industry certification. Offered fall and spring terms. Prerequisites: CSCI 1203 and CSYS 1211 or instructor approval.

### **CSYS 2763 - Digital Photography**

The techniques and procedures of digital photography will be introduced. Working with digital cameras to input images into the digital environment and using Adobe Photoshop software, students will learn how to enhance, resize, and alter photographs while preparing them for print and online distribution. The integration of technical skills and aesthetic expression are emphasized. Projects require exploration and experimentation. Students must provide their own cameras. Offered fall and spring terms. Prerequisite: CSYS 1033 or instructor approval.

### **CSYS 2783 – Advanced C# Programming**

Course builds on the material from the introductory C# programming course and includes graphical interface development using C#, event driven programming, custom controls, advanced OO concepts, using the pre-processor, exception handling, and unit testing. Prerequisite: CSYS 2613 or instructor approval.

### **CSYS 2793 – Mobile Development – Android**

A hands-on introduction to designing, developing, debugging and testing mobile applications using Java and targeting Android-based mobile devices. Among the topics to be covered: taking advantage of Android's APIs for data storage, retrieval, user preferences, files, databases, and content providers, and using Android's communication APIs for SMS, telephony, network management, and Internet resources. Prerequisites: CSCI 2133 or instructor approval.

### **CSYS 2813 – Mobile Development – Windows Mobile**

A hands-on introduction to designing, developing, debugging, and testing mobile applications using C# and targeting Windows Mobile-based devices. Among the topics to be covered: designing and developing a user interface that responds to different screen resolutions, sizes, and orientations; creating and connecting to SQL Server Compact Edition databases in order to perform transactions; exchanging data with a Web Page from a mobile application by using HTTP; and calling a Web service from a mobile application. Prerequisites: CSYS 2613 or instructor approval.

### **CSYS 2823 – Mobile Game Development**

The student will learn the basics of mobile game development as well as the process for marketing and distribution for both the iOS and Android platforms. This is an advanced hands-on development class that requires prior development knowledge of either the iOS or Android platforms. Prerequisites: CSYS 1793 and CSYS 2793.

### **CSYS 2843 – Mobile Development Capstone**

The final course in the Mobile Computing Development degree sequence. With a focus on incorporating skills learned throughout the degree sequence, students will develop a professional mobile solution while working with clients in the community. Prerequisites: CSYS 1793 and CSYS 2793.

### **CSYS 2853 – Ruby**

This course will familiarize students with use of the Ruby programming language and environment and will cover the creation and use of variables and constants, control structures, blocks and iterators, classes and objects. Prerequisite: CSYS 1203 or CSYS 2033 or instructor approval.

### **CSYS 2863 – Rails I**

This course will teach students the basics of designing and implementing web applications using the model/view/controller design pattern with the Ruby on Rails framework. Students will be taught how to perform migrations, work with object relational mappings, work with routing, perform ajax operations, and perform test-driven development. Prerequisites: CSYS 2853 and CSYS 2033 or instructor approval

### **CSYS 2873 – Rails II**

The second Rails course teaches students more advanced concepts and techniques that can be incorporated into Ruby and Rails-powered Websites. Topics will include Web services through Rails, incorporation of Rails javascript helpers and AJAX functionality, unit and function testing and test-driven development, as well as other selected topics. Prerequisite: CSYS 2863 or instructor approval.

### **CSYS 2943 - Windows Server Advanced Administration**

Provides more in-depth knowledge of the day-to-day activities of Windows Server Administration to include Microsoft specific topics of deploying, managing and maintaining servers. Students will learn to configure and manage the following: file and print services; network services and access; Network Policy Server Infrastructure, Active Directory; and Group Policy. Microsoft objectives and certification guidelines will be covered. Prerequisite: CSYS 2063 or instructor approval.

### **CSYS 2953 - Windows Server Advanced Services**

Students will gain knowledge of the advanced services available within the Windows Server operating system. Specific topics of high availability, file and storage solutions, business continuity, disaster recovery, network services, Active Directory infrastructure, and Identity and Access Solutions are covered. Microsoft objectives and certification guidelines will be covered. Prerequisite: CSYS 2063 or instructor approval.

### **CSYS 2990 - Selected Topics in Computer Science**

The study and/or analysis of a selected topic in Computer Science. May be repeated with a different topic.

## **CRIMINAL JUSTICE**

### **CRIM 1013 - Introduction to Criminal Justice**

An examination of the historical development of law enforcement. Fundamental functions of federal, state, and local law enforcement agencies. The trend toward professionalism.

**CRIM 1213 - Police Fundamentals**

Theory and basic knowledge necessary to enable a beginning peace officer to perform field services. Emphasis on authority, ethics, arrest, evidence, public relations, preventive patrol, crimes, and basic criminal procedure. Prerequisite: State certification as peace officer.

**CRIM 1253 - Police Methods and Equipment**

Methods and equipment necessary to enable a beginning peace officer to perform field services. Prerequisite: State certification as peace officer.

**CRIM 2023 - Traffic Investigation**

A study of traffic enforcement, education, and engineering with primary emphasis on techniques, traffic accident investigation analysis, and selective enforcement.

**CRIM 2063 - Law Enforcement Supervision**

The essentials of supervision with primary emphasis toward the supervisor's role in planning, budgeting, training, methods of improving leadership, and awareness of the managerial role.

**CRIM 2103 - Criminal Evidence**

The law, rules, and kinds of evidence. Admissible evidence for criminal prosecution.

**CRIM 2113 - Criminalistics**

Basic criminalistics designed to develop proficiency in the scientific detection, collection, and preservation of evidence in criminal investigation. Forensic science from a practical, rather than theoretical point of view. Prerequisite: CRIM 1013.

**CRIM 2123 - Criminal Law I**

An examination of the nature of the criminal act. Classification of crimes, necessary elements, and defenses. Consideration of the effects of case decisions on criminal law.

**CRIM 2133 - Introduction to Crime Scene Investigation**

This course is designed to familiarize the student with the collection of physical evidence at the scene of the crime. The course will emphasize the crime scene search, the recognition of physical evidence, the techniques and methods for collection, preservation and transmission for laboratory analysis of visible and latent evidence.

**CRIM 2143 - Criminal Law II**

The substantive criminal law defining common law and statutory offenses and punishments. Prerequisite: CRIM 2123.

**CRIM 2183 - Police Equipment and Weapons**

A study of the various types of equipment and weapons used in law enforcement.

**CRIM 2213 - Interrogation Techniques**

Basic fundamentals of proper techniques of interrogation, interview, case preparation, and courtroom testimony.

**CRIM 2223 - Criminal Procedures I**

The control machinery of criminal law from investigation to pardon. Problems incident to investigation, search and seizure, arrest, trial, judgment, and disposition of persons suspected and/or accused of criminal acts.

**CRIM 2333 - Criminal Procedures II**

A hybrid course presented in lecture, independent and on-line study requiring service learning/internship in a field-study environment. The course includes review and preparation of common documents in law enforcement including a case report, affidavit of probable cause, and a search warrant with accompanying documents. Prerequisite: CRIM 2223 or concurrent enrollment.

**CRIM 2990 - Selected Topics in Criminal Justice**

The study and/or analysis of a selected topic in Criminal Justice. May be repeated with a different topic.

## DEAF AND HARD OF HEARING COURSES

Tulsa Community College offers specialized courses for the deaf and hard of hearing in the following subjects, each of which has its own category heading and course prefix numbers: English, Math, Computer Science, Sign Language and personal development. These courses are listed in alphabetical order within their discipline. For more information please refer to the Student Services section of this catalog.

## DENTAL HYGIENE

A student must be admitted into the Dental Hygiene Program and remain a student in good standing before enrolling in any course within the discipline.

### DHYG 1012 - Dental and Oral Anatomy

This course includes anatomy of the oral structures, tooth morphology, dental anomalies, and physiology of occlusion. Prerequisite: Acceptance into the Dental Hygiene Program. Includes lab component.

### DHYG 1022 - Head and Neck Anatomy

Gross anatomy of the head and neck with emphasis on osteology, circulation, innervation and musculature as these structures relate to the clinical practice of dental hygiene. Prerequisite: Acceptance into the Dental Hygiene Program.

### DHYG 1302 - Oral Embryology and Histology

Embryonic development and microscopic anatomy of human body systems with emphasis on the oral structures. Prerequisite: Acceptance into the Dental Hygiene Program.

### DHYG 1333 - Pathology, Etiology and Immunology

This course provides an overview of the principles of general pathology, the study of pathology of organ systems of most importance to the dental hygienist and an in-depth study of pathology of the head, neck, and oral structures. The course includes the etiology of disease, host responses of inflammation, repair and immunology, and common clinical features of disease. It emphasizes visual differentiation between normal and abnormal tissues and conditions. Prerequisites: Successful completion of all previous Dental Hygiene (DHYG) coursework with a grade of "C" or better.

### DHYG 1353 - Periodontology

This course is designed to provide the student with a thorough understanding of the role of the dental hygienist in the treatment of periodontal disease. The normal periodontium, pathogenesis and etiology of periodontal disease will be reviewed. This course also includes host response and periodontitis as a manifestation of systemic diseases along with incorporating an evidence-based approach to periodontal care. Assessment, planning implementing and maintenance strategies for the prevention and treatment of periodontal diseases are also presented. Prerequisites: Successful completion of all previous Dental Hygiene (DHYG) coursework with a grade of "C" or better.

### DHYG 1363 - Dental Hygiene Theory I

Introduction to the dental hygiene profession. Principles of ethical and professional behavior are presented along with professional responsibility. This course includes dental terminology, basic principles of infection control (standard precautions), oral health services to patients with bloodborne infectious diseases and concepts of oral hygiene. The course will also include patient management and disease prevention, patient health education, dental deposits and their significance in oral disease, the dental hygiene plan, care and maintenance of implants, introduction to oral inspection procedures (extra/intra oral examination, examinations of teeth and surrounding periodontal structures), along with obtaining medical/dental histories and vital signs. Prerequisites: Acceptance into the Dental Hygiene Program.

### DHYG 1373 - Dental Hygiene Theory II

This course includes an overview of dental specialties; procedures for medical and dental emergencies; oral health care services to patients with bloodborne infectious diseases; and concepts of planning dental hygiene care for child, adolescent, adult, and older adult/geriatric patients. Also included in this course are the rationale and use of instrument sharpening, tobacco use cessation, the ultrasonic scaler, and desensitization. Another component of the course includes outside observation with selected dental offices. Laboratory hours will be announced in the course syllabus. Prerequisites: Successful completion of all previous Dental Hygiene (DHYG) coursework with a grade of "C" or better.



**DHYG 1384 - Clinical Dental Hygiene I**

This course includes the preclinical laboratory experience designed to develop thorough and efficient dental instrumentation techniques for comprehensive oral hygiene services. It includes clinical concepts of patient education and treatment, the setup and care of equipment and instruments, aseptic technique and the prevention of disease transmission, taking medical/dental histories and vital signs, inspection of oral hard and soft tissues, dental charting procedures, and instrumentation skills. Preclinical experience will be gained through mannequins and student partner practice. Material fees required. Prerequisites: Acceptance into the Dental Hygiene Program and current certification in basic life support for healthcare providers.

**DHYG 1394 - Clinical Dental Hygiene II**

Application of clinical techniques, skills, and current procedural practices of the dental hygienist with emphasis on self-evaluation. Focus will be on integrating knowledge into individualized patient treatment plans that may include: patient motivation/education to include selection of appropriate oral health products and tobacco cessation counseling if necessary, charting/data gathering skills, data processing support, instrumentation techniques/skills, power scaling utilization, desensitization, administration of local anesthesia, administration of nitrous oxide/oxygen analgesia, as well as fluoride applications. In addition, a weekly group discussion of selected topics will be conducted in a colloquium format. Course includes 180 clinical hours. Materials fee required. Prerequisites: Current certification in Basic Life Support for Healthcare Providers and successful completion of all previous Dental Hygiene (DHYG) coursework with a grade of "C" or better.

**DHYG 1412 - Dental Radiography Foundation**

A study of the physical and chemical properties of X-radiation, biological effects of X-rays, materials, radiographic analysis, and procedures. Prerequisites: Acceptance into the Dental Hygiene Program.

**DHYG 1421 - Dental Radiography Techniques**

The student will receive practical experience in radiography techniques, evaluation, and interpretation, care of equipment, radiation safety and infection control. Prerequisites: Acceptance into the Dental Hygiene Program. Includes lab component.

**DHYG 1512 - Dental Pain Management**

Introduction to dental pain management therapies with emphasis on administration of Nitrous Oxide/Oxygen sedation and local anesthesia. Prerequisites: Current certification in Basic Life Support for Healthcare Providers and successful completion of all previous Dental Hygiene (DHYG) coursework with a grade of "C" or better. Includes lab component.

**DHYG 1532 - Dental Hygiene Pharmacology**

This course includes an introduction to the basic principles of drug actions and interactions, emphasizing dental-related therapeutics and drugs associated with common system disorders. Also included in this course are the indications and procedures for use of emergency drugs that are commonly used in dentistry. Prerequisites: Successful completion of all previous Dental Hygiene (DHYG) coursework with a grade of "C" or better.

**DHYG 2022 - Special Needs/Geriatrics**

Focus is on the management of older adult/geriatric patients and those patients whose medical, physical, psychological, or social situations make it necessary to modify normal dental routines in order to provide dental treatment for those individuals. These individuals include, but are not limited to, people with developmental disabilities, complex medical problems, and significant physical limitations. Prerequisites: Successful completion of all previous Dental Hygiene (DHYG) coursework with a grade of "C" or better.

**DHYG 2312 - Community Dental Health I**

This course is designed to prepare students to promote oral health and prevent oral disease through organized community-based efforts. Topics presented include: the role of the dental public health professional; epidemiological patterns of oral diseases; evidence based decision making; research methodology; biostatistics and governmental influences in the oral health care delivery system. Additional topics included are principles in program assessment, planning, implementation, and evaluation. The concept of cultural competency, social responsibility, service-learning, and ethical and legal principles are also introduced. Prerequisites: Successful completion of all previous Dental Hygiene (DHYG) coursework with a grade of "C" or better.

**DHYG 2321 - Community Dental Health II**

This course provides practice experience within the community for developing, implementing and evaluating dental health projects. Students will participate in dental screenings, table clinics, school health oral presentations and other community-based projects. Prerequisites: Current certification in Basic Life Support for Healthcare Providers and successful completion of all previous Dental Hygiene (DHYG) coursework with a grade of "C" or better.

**DHYG 2343 - Dental Materials, Techniques and Support Services**

Presentation of procedures and materials used in dentistry, including their chemical composition and physical characteristics. Allows student to perform procedures that fall within the scope of dental hygiene practice, manipulate materials, and explain procedures to patients. Also included are the rationale and use of impressions, study models, sealants and the air polisher. Prerequisites: Successful completion of all previous Dental Hygiene (DHYG) coursework with a grade of "C" or better. Includes lab component.

**DHYG 2362 - Dental Hygiene Theory III**

This course includes concepts and application of non-surgical periodontal therapy, advanced instrumentation skills, planning dental hygiene care for the periodontal patient, reevaluation and maintenance of oral and periodontal health, advanced fulcrum techniques, application of chemotherapeutic agents, insurance coding for dental procedures, dietary analysis and counseling, and cases. Prerequisites: Successful completion of all previous Dental Hygiene (DHYG) coursework with a grade of "C" or better.

**DHYG 2382 - Ethics, Law and Dental Practice Management**

This course focuses on preparation for practice and ethical decision making, including principles of professionalism, principles of office management with emphasis on productivity, remuneration, risk management and the concept of the dental health team, jurisprudence, current dental hygiene issues, preparation for board examinations, preparation of personal resumes, and interviewing techniques. Prerequisites: Successful completion of all previous Dental Hygiene (DHYG) coursework with a grade of "C" or better.

**DHYG 2385 - Clinical Dental Hygiene III**

Continued development of clinical techniques, skills, and current procedural practices of the dental hygienist with emphasis on self-evaluation. Emphasis on individualized dental hygiene care plans, reevaluation and maintenance of oral and periodontal health status, subsequent treatment needs, referral, risk assessment, expanded functions, dental hygiene case presentations and current advances in dental hygiene services. Clinical application of radiography, non-surgical periodontal therapy and advanced instrumentation techniques, power driven scalers and air polisher utilization, the administration of nitrous oxide/oxygen analgesia and local anesthesia. Students also participate in service learning rotations (up to 16 hours) at selected community sites. In addition, a weekly group discussion of selected topics will be conducted in a colloquium format. Course includes 240 clinical hours. Materials fee required. Prerequisites: Current certification in Basic Life Support for Healthcare Providers and successful completion of all previous Dental Hygiene (DHYG) coursework with a grade of "C" or better.

**DHYG 2395 - Clinical Dental Hygiene IV**

This course offers continued development of competency in clinical techniques, skills, and current procedural practices of the dental hygienist with emphasis on self-evaluation. Includes continuing clinical application of expanded functions, along with non-surgical periodontal therapy, re-evaluation and periodontal maintenance strategies. Students also participate in service learning rotations (up to 16 hours) at selected community sites. In addition, a weekly group discussion of selected topics will be conducted in a colloquium format. Course includes 240 clinical hours. Materials fee required. Prerequisites: Current certification in Basic Life Support for Healthcare Providers and successful completion of all previous Dental Hygiene (DHYG) coursework with a grade of "C" or better.

**DHYG 2990 - Selected Topics in Dental Hygiene**

The study and/or analysis of a selected topic in Dental Hygiene. May be repeated with a different topic.

**DIAGNOSTIC MEDICAL SONOGRAPHY**

**DMS 1002 – Introduction to Diagnostic Medical Sonography**

This course incorporates an introduction to ultrasound scanning techniques. Students will use ultrasound equipment to practice the principles and protocols to the performance of satisfactory diagnostic sonographic imaging and Doppler procedures in a supervised setting. Also included are basic patient care skills, body mechanics, the rights, and privacy of patients, medical ethics and appropriate oral and written communications. Prerequisite: Admission to Diagnostic Medical Sonography program. Includes lab component.

**DMS 1103 - Acoustical Physics and Instrumentation I**

A study of the principles of diagnostic ultrasound, the fundamental properties of ultrasonic physics, stressing tissue interactions, and interfaces. Focusing characteristics, methods, intensity, and power considerations are introduced along with system resolution considerations. Prerequisite: Admission to the Diagnostic Medical Sonography program.

**DMS 1213 - Acoustical Physics and Instrumentation II**

A continuation of the study of the properties of diagnostic ultrasound, stressing the operation of diagnostic equipment, the display systems, biological effects and quality assurance methods. Current developments in ultrasound are reviewed, discussed, and evaluated. Prerequisite: Prior DMS coursework with a grade of "C" or better or instructor approval.

**DMS 1223 - Abdominal Sonography I**

This course is an in-depth study in the sonographic imaging of the abdominal viscera and includes sonographic terminology and correlation of the ultrasound findings with clinical laboratory tests. Hands-on lab activities designed to ensure competency in basic scanning skills are included. Prerequisite: Prior DMS coursework with a grade of "C" or better or instructor approval

**DMS 1233 - OB/GYN Sonography I**

This course includes an in-depth study of the female pelvis with emphasis on the sonographic appearance of its structure and the numerous pathological processes that may affect the gravid and non-gravid uterus. The course will continue to study early pregnancy and its complications and includes a hands on lab designed to ensure competency. Prerequisite: Prior DMS coursework with a grade of "C" or better or instructor approval.

**DMS 1242 - Sonography Clinical Practice I**

A beginning clinical education experience requiring application of the knowledge learned in the classroom. Professionalism and personal interaction are stressed along with technical competencies. Clinical education occurs in various clinical sites and allows students to experience current clinical practice. Prerequisite: All prior DMS coursework with a grade of "C" or better or instructor approval.

**DMS 1252 - Sonography Clinical Practice II**

A clinical education experience requiring application of the knowledge learned in the classroom. Professionalism and personal interaction are stressed along with technical competencies. Prerequisite: All prior DMS coursework with a grade of "C" or better or instructor approval.

**DMS 1263 - Neurosonography and Small Parts Sonography**

This course is a study of the sonographic imaging of the premature infant brain and the pathological processes that affect it. Also included are the sonographic evaluations of the prostate, scrotum, thyroid gland, breast and superficial structures. A hands-on lab designed to ensure competency is included. Prerequisite: Prior DMS coursework with a grade of "C" or better or instructor approval.

**DMS 2035 - Sonography Clinical Practice III**

A clinical education experience requiring application of the knowledge learned in the classroom. Professionalism and personal interaction are stressed along with technical competencies. Prerequisite: Instructor approval or completion of all prior DMS coursework with a grade of "C" and students must sit for the ARDMS SPI exam.

**DMS 2123 - Abdominal Sonography II**

This course is a continuation of Abdominal Sonography I and is an in-depth study of the abdominal viscera stressing deviations and pathologies. Includes correlation of the ultrasound findings with clinical laboratory tests as well as a hands-on lab designed to ensure competency. Prerequisite: Instructor approval or completion of all prior DMS coursework with a grade of "C" and students must sit for the ARDMS SPI exam.

**DMS 2131 - Ultrasound Seminar**

This course is a comprehensive review of all aspects of the sonography curriculum to prepare the students for the Board Exams. Prerequisite: Prior DMS coursework with a grade of "C" or better or instructor approval.

**DMS 2133 - OB/GYN Sonography II**

This course is a continuation of OB/GYN Sonography I which includes the sonographic evaluation of pregnancy and related complications. Emphasis is placed on the detection of fetal anomalies, pathology, and the scan planes necessary for appropriate imaging. This course includes a hands on lab designed to ensure competency. Prerequisite: Instructor approval or completion of all prior DMS coursework with a grade of "C" and students must sit for the ARDMS SPI exam.

**DMS 2148 - Sonography Clinical Practice IV**

This last clinical education experience progresses the student to an entry level sonographer prepared to enter the workforce. Professionalism and personal interaction are stressed along with technical competencies. Prerequisite: All prior DMS coursework with a grade of "C" or better or instructor approval.

**DMS 2153 - Vascular Ultrasound**

Venous and arterial anatomy and hemodynamic functions, both normal and abnormal will be stressed. Sonographic imaging techniques for vascular structures and Doppler spectral analysis of normal and pathological patterns will also be studied.

Prerequisites: Admission to DMS program and successful completion of all prior DMS course work or proof of prior Sonographic Registry.

**DRAFTING AND DESIGN ENGINEERING TECHNOLOGY**

**DRFT 1324 - Engineering Drawing with CAD**

This introductory course for the beginning drafter includes such topics as drafting room practices, graphical geometry, orthographic projection, dimensioning, and perspective views. Emphasis is placed on developing the abilities of three-dimensional vision, graphic communication skills, and lettering. Dimensioning is taught to ASME standards. Course also includes introduction to AutoCAD. Includes lab component.

**DRFT 1363 - Civil Drafting and Design**

This course introduces the different drawings used in the field of Civil Engineering. Typical subjects covered include project stationing, development of roadway; storm sewer; sanitary sewer; water line and drainage structure plan and profile sheets, plotting drawings from survey field notes, contour interpolation and cross-sections. Prerequisites: DRFT 1324 and MATH 1513 or MATH 1454. Includes lab component.

**DRFT 1442 - Descriptive Geometry**

Study geometric projection of lines, points, and planes in AutoCAD. Solve related drafting problems. Study space relations that points, lines, and planes share in forming any given shape. Prerequisite: DRFT 1324 or DRFT 2204.

**DRFT 2023 - Pro/Engineer Modeling**

This course in solid modeling covers all basic aspects of Pro/ENGINEER in a project oriented environment. The student uses the current version of Pro/ENGINEER Wildfire to create part models with their drawings and assemblies. Also covered are advanced modeling, BOM and sheet metal techniques. Prerequisite: Computer skills with Windows software and an understanding of basic drafting. Includes lab component.

**DRFT 2033 - Pro/Engineer Manufacturing**

This course is designed to explore the manufacturing module in Pro/ENGINEER in a project oriented environment. The student uses the current version of Pro/ENGINEER Wildfire to create manufacturing assemblies. Also covered are advanced modeling, structure and mechanism techniques. Prerequisite: DRFT 2023 or equivalent. Includes lab component.

**DRFT 2043 - CATIA Fundamentals**

This course is designed to familiarize the student with the functional skills required to employ CATIA in a project orientated environment. Instruction will be provided covering the basic concepts needed to use CATIA to create part models, file functions, and analysis. Basic Windows skills and an understanding of Basic Drafting is highly recommended. Cross listed with ENGT 2043. Includes lab component.

**DRFT 2053 - CATIA Solids and Surfacing**

This course is designed to familiarize the student with the advanced skills required to employ CATIA's Surfacing and Solid functions in a project orientated environment. Instruction will be provided covering the concepts needed to use CATIA to create part models, file functions, and analysis. Prerequisite: DRFT/ENGT 2043. Cross listed with ENGT 2053. Includes lab component.

**DRFT 2123 - Construction Drawings and CAD**

Interpretation and production of construction drawings, including architectural and civil engineering drawings using computer aided drafting software and techniques. Prerequisite: DRFT 1363. Includes lab component.

**DRFT 2204 - AutoCAD 2**

This course introduces AutoCAD software as a drafting tool. Students develop skills needed to produce 2D drawings, basic dimensioning, and disk data storage. Covers creation, retrieval, and modification of drawings using basic AutoCAD commands. Prerequisite: DRFT 1324. Includes lab component.



**DRFT 2223 - Mechanical Design I (Computer Aided Design)**

A study of mechanical design principles which addresses such problems as geometric arrangements, effects of motion of one part on others, and effects of forces. Also addressed are properties of materials, limitation of manufacturing processes and economics, and the use of handbooks to aid in the study of the interrelationship of parts. Computer aided drafting equipment is utilized. Prerequisites: MATH 1513 or MATH 1454 and DRFT 2204. Includes lab component.

**DRFT 2233 - Autodesk Inventor Modeling**

This course introduces 3D solid modeling and parametric modeling techniques and concepts using the Inventor program. It starts by constructing basic shapes to building intelligent more complex solid models and creating multi-view drawings. Includes lab component.

**DRFT 2293 - Survey of CAD Applications**

This course is intended to provide comprehensive overview of production drawings and documents from the standpoint of the production designer. This course is project-oriented comprised of three component phases, and the final project is delivered as a set of documents. One phase demonstrates the relation between tool and product design processes and manufacturing methods. Another phase covers structural working drawings per AISC design specifications with a focus on members, connections, and fasteners. A third phase presents fundamentals in process piping drafting. The use of handbook and standards including architectural design will be highlighted throughout the course. Prerequisite: DRFT 2204 and a 3D solids course such as ProE, Inventor or Solidworks.

**DRFT 2393 - Basic SolidWorks**

A fundamental introduction to 3-dimensional production solids modeling utilizing SolidWorks CAD software, including generation of the solids model and conversion to a working drawing. Includes lab component.

**DRFT 2453 - Architectural Drafting**

A course that is designed to teach the procedures and practices that are necessary to produce a set of working architectural drawings. The student will complete a set of drawings and specifications that would be required in the design and construction of a residential building using a CAD program. Prerequisite: DRFT 2204. Includes lab component.

**DRFT 2473 - Tool Design**

An introductory course designed to provide fundamental knowledge of designing efficient tools for material removal, pressworking, joining, and inspecting manufactured parts, such as die design, jig and fixture design, and gage design. Emphasis will be placed on troubleshooting, safety, and economics. Prerequisite: ENGT 1313. Includes lab component.

**DRFT 2990 - Selected Topics in Drafting and Design Technology**

The study and/or analysis of a selected topic in Drafting and Design Technology. May be repeated with a different topic.

## **ECONOMICS**

**ECON 1353 - Personal Finance**

The study of practical applications in budgeting, borrowing, insurance, investments, taxes, home ownership, and other aspects of personal money management.

**ECON 2013 - Principles of Macroeconomics (S)**

An introduction to the functioning and current problems of the aggregate economy. Major topics include supply and demand, determination and analysis of national income, employment and unemployment, inflation, monetary and fiscal policy, and international trade.

**ECON 2023 - Principles of Microeconomics (S)**

An introduction to prices and markets. Major topics include elasticity and consumer choice, product markets, factor markets, income distribution, and the foreign exchange market.

**ECON 2123 - International Economic Issues (S,I)**

This course examines the unique aspects of business operations within various regions of the world and the nature of international trade, foreign exchange, and the critical operational problems and issues involved in conducting business in other countries. A review of global geography will be conducted during the course and current international business trends and topics will be discussed. Prerequisite: ECON 2013.

**ECON 2990 - Selected Topics in Economics**

The study and/or analysis of a selected topic in Economics. May be repeated with a different topic.

## **ELECTRONICS TECHNOLOGY**

**ELET 1212 - Introduction to Electricity**

A beginning course in basic electricity/electronics. Emphasis will be placed on equipment familiarization using digital multimeters, oscilloscopes, also electrical safety, and analyzing simple direct and alternating current circuits. This course is designed for students needing an exposure to electricity or as a beginning class for electronics. Prerequisite: MATH 0013 or instructor approval.

**ELET 1223 - Hydraulics and Pneumatics**

A study of hydraulic and pneumatic systems as it relates to fluids, energy and power, pumps, actuators, control devices, flow distribution, and industrial applications. Prerequisite: ELET 1212. Cross listed with ALTE 1223. Includes lab component.

**ELET 1232 – Introduction to Substation Safety**

An introductory course covering substation basics, including grid connects infrastructure, components, and electrical safety. Electrical safety practices will be demonstrated and analyzed. SCADA analysis will be demonstrated. This course can be taken concurrently with other substation courses. Prerequisite: ELET 1212 or basic knowledge of electrical circuits.

**ELET 1303 - DC Circuit Analysis**

An introductory course in basic electricity including electrical properties of materials, units, basic electrical laws and theorems, and electrical circuits and components. This course also introduces the student to electronic design software used in troubleshooting circuits. Prerequisite: MATH 1454 or MATH 1513 and ELET 1212 or concurrent enrollment. Includes lab component.

**ELET 1313 - AC Circuit Analysis**

Introduction to alternating current electricity. A study of the characteristics of sine wave including the amplitude, frequency, period, and phase relationships; analyzing AC circuits by use of AC network theorems, resonant circuits and filter circuits. Prerequisites: ELET 1303 and MATH 1454 or MATH 1613 or concurrent enrollment. Includes lab component.

**ELET 1443 - Introduction to Alternative Energy**

This course provides basic knowledge of alternative energy systems, including wind, solar and Oklahoma-produced biofuels. Students will have the opportunity to build or test a wind power generator and a solar electric generator. Battery storage systems included. Prerequisite: ELET 1212. Includes lab component. Cross listed with ALTE 1443.

**ELET 1503 - Programmable Control**

A study of programmable controllers as they relate to the control of automated systems. Included is a study of the memory system and I/O interaction, specifications, wiring, logic concepts, number systems and codes, the instruction set, ladder logic programming and application problems. Prerequisite: ELET 1212. Includes lab component.

**ELET 2112 – Substation Breaker Circuits**

Covers the principles and troubleshooting of an electrical substation. The student will be able to identify and utilize personal safety equipment while performing maintenance and troubleshooting to low and high voltage breaker equipment. Included topics are vacuum, air, oil, gas circuit breakers and mechanical operating system of the breakers. Prerequisite: ELET 1313 or concurrent enrollment.

**ELET 2132 – Substation Relay Circuits**

Covers the principles and troubleshooting of an electrical substation. The student will be able to identify and utilize personal safety equipment while performing installation and maintenance to electromechanical substation relays. Focus on the manual calculation and testing of the devices, including different testing techniques: static element testing, end-to-end/dynamic testing, and performing the same with the use of automation. Prerequisite: ELET 1313 or concurrent enrollment.

**ELET 2152 – Substation Transformer Circuits**

Covers the principles and troubleshooting of an electrical substation. The student will be able to identify and utilize personal safety equipment while performing testing, calculations of loads, and maintenance to large substation transformers. Analysis includes real and reactive power, transmission line power, phase angle between sender and receiver, HV transformers, three phase power, and transients. Prerequisite: ELET 1313 or concurrent enrollment.

**ELET 2172 – Substation Relay Circuits II**

This course continues with advanced troubleshooting of electrical substation relay circuits. Advanced relay circuits focuses on the manual calculation and testing of the devices, including different testing techniques and not limited to microprocessor based programming, SCADA, and system automation. Prerequisite: ELET 2132 or concurrent enrollment. Includes lab component.

**ELET 2215 - Digital Circuits**

The course is a comprehensive study of the principles and techniques of modern digital system. Topics to be included are number systems and codes, logic gates and Boolean algebra, combinational logic circuits, flip-flops and related devices, arithmetic circuits, counters and registers, MSI logic circuits, analog conversion, memory devices, and integrated-circuit logic families. Prerequisites: ELET 1313.

**ELET 2244 - Amplifiers I**

A thoroughly modern introduction to solid state electronic devices and basic electronic circuits. The study includes diodes, rectifiers transistor bias and load lines, common emitter, common collector and common base circuits, and an introduction to field effect transistors and thyristors. It deals with special amplifiers, power amplifiers, push-pull amplifiers, feedback amplifiers, differential amplifiers, direct coupled and integrated circuit amplifiers, and operational amplifiers. Prerequisites: ELET 1313. Includes lab component.

**ELET 2333 - Amplifiers II**

A continuation of topics covered in Amplifiers I. This course will cover power and operational amplifier circuits. The study also includes generators, timers, active filters, and power supply circuits. Prerequisite: ELET 2244. Includes lab component.

**ELET 2514 - Microprocessors**

An introduction to the architecture and instruction of microprocessors and microcontrollers. Logic switches, I/O's, and displays are used in the lab including the use of the Arduino microcontroller and many other peripherals. Coding and decoding using C language will be covered. Conclusion of the lab experience will be to design an intelligent robot. Prerequisite: ELET 2215. Includes lab component.

**ELET 2525 - Wireless Communications**

This course is designed to instruct the student in communication circuits and systems. Topics will include R.F. amplifiers, variable oscillators, amplitude and frequency modulation. Lab experience will include receiver trouble shooting, antenna fabrication and testing on an antenna range, microwave test equipment, LNA design, and wireless telecommunication systems. Prerequisite: ELET 2244.

**ELET 2533 - Automation Control**

This course covers electrical power, motors and the devices used to control motor systems. Topics to be included are a review of DC/AC circuits, servo-controls, sensors, and integrated applications. Prerequisite: ELET 1313 or ELET 1503. Includes lab component.

**ELET 2632 - Introduction to Nanotechnology**

This course is designed to help the student develop an understanding of the fundamental concepts behind nano and micro technology. Topics include fabrication, clean-rooms, microscopy, lithograph, and materials used in the building of silicon devices. Other areas of study will focus on where and how this new technology is used. Classroom demonstration will be used. Prerequisite: ELET 1212. Cross listed with NANT 2632.

**ELET 2990 - Selected Topics in Electronics Technology**

The study and/or analysis of a selected topic in Electronics Technology. May be repeated with a different topic.

**EMERGENCY MEDICAL SERVICES PROFESSIONAL**

**EMSP 2115 - Principles of Paramedic I**

An introduction to basic EMS knowledge, life span development, advanced level patient assessment, clinical reasoning, and the components of safe quality care. The student will be expected to accept accountability for personal learning and performance which reflects a fundamental understanding of EMS history and a complex understanding of EMS systems, roles, responsibilities, and professionalism of EMS personnel. The student should successfully complete required supervised hours and competencies in approved clinical and prehospital sites as determined by the program. Prerequisite: Admission to program and FEMS 1214 with a grade of "C" or better. Corequisite: EMSP 2129.

**EMSP 2129 - Paramedic Theory and Application I**

The study of practical application of adult epidemiology, psychosocial impact, pathophysiology, and management of respiratory, cardiovascular, and medical emergencies, which includes clinical reasoning and the development of treatment plans. Pharmacology introduces the student to the principles of pharmacology, medication administration, major medication classes, and emergency mediations. Advanced Cardiac Life Support certification and laboratory included. Prerequisite: FEMS 1214 (or equivalent) with a grade of "C" or better. Corequisite: EMSP 2115.

**EMSP 2214 - Principles of Paramedic I I**

A study of all age groups of advanced assessment, pathophysiology, and management of trauma emergencies to include clinical reasoning and the development of treatment plans. The student will be required to successfully complete supervised hours and competencies in approved clinical and prehospital sites as determined by the program. The purpose of field/clinical is to allow the application of learned principles in the delivery of patient care. Prerequisite: EMSP 2115 and 2129 with a grade of "C" or better. Corequisite: EMSP 2229.

**EMSP 2229 - Paramedic Theory and Application II**

A study of specific populations including obstetrical and gynecological conditions, neonatal, pediatric, geriatric, bariatric, and patients with special challenges including epidemiology, psychosocial impact, anatomy, physiology, pathophysiology, presentation, prognosis and management to include clinical reasoning and the development of treatment plans. Students will engage in management of chronic illness and emergencies affecting special populations including polypharmacological impacts, abuse, neglect, poverty, and the terminally ill using the application of standards of paramedic practice. Includes Pediatric Advanced Life Support certification and laboratory. Prerequisite: EMSP 2115 and 2129 with a grade of "C" or better. Corequisite: EMSP 2214.

**EMSP 2314 - Principles of Paramedic III**

This capstone leadership course integrates all didactic knowledge, psychomotor skills, affective behavior and clinical instruction throughout the program to demonstrate entry level paramedic competency and apply clinical decision making. The student will be expected to accept accountability for personal learning and performance which reflects a complex understanding and the ability to apply knowledge and skills in clinical decision making. The course includes a leadership experience and laboratory and emphasizes decision making. Prerequisite: EMSP 2115, EMSP 2129, EMSP 2214, and EMSP 2229 with a grade of "C" or better. Corequisite: EMSP 2325.

**EMSP 2325 - Paramedic Theory and Application III**

This internship is a capstone experience in which the student must successfully demonstrate the ability to assess, manage, and direct care for sick and injured patients during out-of-hospital patient contacts. This course and attached clinical experiences assess the student's ability to perform as a competent entry level paramedic. Prerequisite: Completion of all previous EMSP courses (or equivalent) with a grade of "C" or better. Corequisite: EMSP 2314.

## **ENGINEERING**

**ENGR 1111 - Introduction to Engineering**

An overview of study skills, orientation and entrance requirements for a typical engineering college, computer-based productivity tools, and engineering ethics and careers.

**ENGR 1132 - Engineering Design with Computer Aided Design**

An introduction to engineering design using modern methodologies and state-of-the-art computer-aided design tools. Hands-on design construction and testing through class participation. Prerequisite: MATH 1454 or MATH 1613. Includes lab component.

**ENGR 1242 - Introductory Engineering Computer Programming**

Programming to solve problems typical of practice in engineering. Instruction and writing programs in computer languages. Prerequisites: MATH 1454 or MATH 1513.

**ENGR 2103 - Engineering Statics**

Topics covered are: equilibrium of particles and rigid bodies in two and three dimensions, vector algebra of forces and moments, friction, centroids, moments of inertia, distributed forces, internal loads with loading diagrams, trusses, and frames. Prerequisites: PHYS 2034 and MATH 2114.



**ENGR 2143 - Engineering Strength of Materials**

Topics covered are elastic and plastic stress, strain and deformation, axial, torsion, bending and combined loading, thermal stress, pressure vessels, columns and buckling, shear flow, bending moment and torque diagrams, beam deflection; Mohr's circle of stress, statically indeterminate members. Prerequisites: ENGR 2103 and MATH 2124.

**ENGR 2213 - Thermodynamics**

Energy and energy relationships involving heat, work, and mass. First and second laws of thermodynamics for ideal and pure substances, control volume analysis and cyclic systems; equations of state. Prerequisites: CHEM 1315, PHYS 2034, and MATH 2124.

**ENGR 2262 - Professional ENGR/SURV Ethics**

This course covers an introduction to contemporary ethics and provides an overview of professional issues dealing with responsibility and professionalism. It delves into everyday problems encountered by professional land surveyors and engineers. Cross listed with SURV 2262.

**ENGR 2523 - Elementary Dynamics**

Kinematics and Kinetics of particles and bodies, using the three different coordinate systems in two and three dimensions; pulley systems; work-energy methods, impulse-momentum principles, including oblique impact, coefficient of restitution, linear and angular momentum. Prerequisite: ENGR 2103.

**ENGR 2613 - Introduction to Electrical Science**

Elements of electrical engineering; AC and DC Circuits, mesh and nodal formulation of network equations, steady-state response to sinusoids and step function, energy, power, power factor, Thevenin and Norton analysis, Laplace transforms. Introduction to PSPICE. Prerequisites: PHYS 2124 and MATH 2124.

**ENGR 2990 - Selected Topics in Engineering**

The study and/or analysis of a selected topic in Engineering. May be repeated with a different topic.

## **ENGINEERING TECHNOLOGY**

**ENGT 1212 - Introduction to Fabrication Lab**

A course for the development of lab research and projects in engineering technologies. Students will utilize basic hand tools in the design and fabrication of projects. With training, students may also work with mills, lathes, welding, PCB circuit design, soldering, and/or 3-D plotting in project development. Basics of metal working machine tools and standard shop practices, with a special emphasis on shop safety, will be covered along with exploration into the fundamentals of turning, milling, broaching and sawing, and the abilities of conventional machine tools. Includes lab component.

**ENGT 1263 - Productivity Planning and Inventory Control**

An overview of the dynamics of managing production and inventory in the constantly changing industrial and commercial environments. Topics include forecasting sales, "just in time" manufacturing, production, and inventory requirements. The relationships of marketing management to production planning and inventory control are studied.

**ENGT 1313 - Manufacturing Processes**

A study of the history of, and current trends in, industrial processes, their development and impact, and the sources and classifications of engineering materials used in manufacturing. The means of material recovery from nature to fabrication as it is related to tools, machines, and processes, which are combined to produce a finished product. Visits to local industrial plants are arranged.

**ENGT 1363 - Metallurgy**

A basic metallurgy course that includes instruction in process and physical metallurgy covering composition, structure, heat treatment, and properties of various alloys, both ferrous and non-ferrous. Designed for manufacturing engineering and quality control majors.

**ENGT 1443 - Geometric Dimensioning and Tolerancing**

An in depth study of dimensional tolerancing as identified in the American National Standards Institute, ANSI Y 14.5 specification. This course will explore the meaning of symbols used in the International Standard, their application and the processes necessary to achieve the specified geometry, as well as the common practices used in Engineering drawings and practical limits and challenges in the manufacturing environment. Prerequisite: QCTT 1223 or any DRFT class. Cross listed as QCTT 1443.

**ENGT 1463 - Composite Materials**

This course explores the properties and the processes of manufacturing used with today's modern composite materials. Typical processes used in the Tulsa area will be reviewed along with site visits.

**ENGT 1513 - Manufacturing Safety**

This course provides the basics of workplace safety principles in modern and real-world manufacturing and industrial processes for employment in entry-level manufacturing jobs. Students will learn how to work in a safe and productive manufacturing workplace; perform safety and environmental inspections; perform emergency drills and participate on emergency teams; identify unsafe conditions and take appropriate corrective action; provide safety orientation for all employees; train personnel to correctly use safety equipment; suggest processes and procedures that support work environment safety; fulfill safety and health requirements for maintenance, installation, and repair; monitor safe equipment and operator performance; and utilize effective safety-enhancing workplace practices.

**ENGT 1523 - Manufacturing Quality**

This course provides the basics of workplace quality principles in modern and real-world manufacturing and industrial processes needed for employment in entry-level manufacturing jobs. Students will learn to participate in periodic internal quality audit activities; correctly check calibration of gages and other data collection equipment; suggest continuous improvements; inspect materials and product/process at all stages to ensure required specifications; document results of quality tests; communicate issues with quality and take corrective action to restore or maintain quality; record process outcomes and trends; identify fundamentals of blueprint reading; and use common metric and measurement systems and precision measurement tools.

**ENGT 1533 - Manufacturing Procedures**

This course offers a basic overview of modern and real world manufacturing trends, and how manufacturing transforms materials into products. The course covers the varying types of manufacturing production and materials, the role of communication in industry; and how teamwork and leadership blend to make manufacturing processes and procedures successful.

**ENGT 1543 - Manufacturing Maintenance**

This course provides a basic technical overview of modern and real world manufacturing tools and equipment used in today's manufacturing companies. Knowledge of how to improve productivity through predictive and preventive maintenance is emphasized. Students will gain an understanding of safety systems, sensors, and maintenance housekeeping procedures in the manufacturing industry.

**ENGT 2043 - CATIA Fundamentals**

This course is designed to familiarize the student with the functional skills required to employ CATIA in a project orientated environment. Instruction will be provided covering the basic concepts needed to use CATIA to create part models, file functions, and analysis. Basic Windows skills and an understanding of basic drafting are highly recommended. Cross listed with DRFT 2043. Includes lab component.

**ENGT 2053 - CATIA Solids and Surfacing**

This course is designed to familiarize the student with the advanced skills required to employ CATIA's Surfacing and Solid functions in a project orientated environment. Instruction will be provided covering the concepts needed to use CATIA to create part models, file functions, and analysis. Prerequisite: DRFT/ENGT 2043 and Basic Windows skills and an understanding of basic drafting are highly recommended. Cross listed with DRFT 2053. Includes lab component.

**ENGT 2153 - Lean, Six Sigma, Quality Systems**

An introduction to the history, evolution and practice of advanced manufacturing and quality systems, including Lean Manufacturing, Kaizen, 5-S, Kanban, Toyota Production System and Six Sigma. Exploration into the theory and tools behind today's most advanced business philosophies. Cross listed with QCTT 2153.

**ENGT 2462 - Project Engineering and Management**

Project engineers are responsible for overseeing the various stages of development for a variety of products and projects. This course will prepare the student for assignments in industrial project management. Course material includes project scheduling, cost management, resource allocation, team building, project scope, and risk management.

**ENGT 2543 - Manufacturing Engineering I**

An introduction to manufacturing engineering methods used for component parts manufacture. Topics covered include concurrent engineering and manufacturing plan development for formed metal parts, machined parts, and composite parts. This course emphasizes the methods used in the aerospace industry to create producible designs and successful manufacturing build plans. Prerequisite ENGT 1313.

**ENGT 2643 - Manufacturing Engineering II**

A study of manufacturing engineering techniques required to create and implement a manufacturing build plan. Topics covered include concurrent engineering and planning of bonding and assembly manufacturing sequences. This course emphasizes the methods used in the aerospace industry to create successful manufacturing build plans and disciplined bills of material for detail parts, subassemblies, and major assemblies. Prerequisite: ENGT 2543.

**ENGT 2990 - Selected Topics in Engineering Technology**

The study and/or analysis of a selected topic in Engineering Technology. May be repeated with a different topic.

**ENGLISH**

**ENGL 0601 - Basic Grammar**

Addresses fundamental principles of grammar: parts of speech, clauses and phrases, sentence patterns, subject-verb agreement, and major sentence errors. Includes lab component.

**ENGL 0611 – Sentence Improvement**

Instructs students in different kinds of sentence construction and application of that knowledge to actual writing experiences. Includes lab component.

**ENGL 0621 – Punctuation**

Teaches students the rules of punctuation and their proper application. Includes lab component.

**ENGL 0631- Spelling and Phonics**

Helps students master basic spelling literacy, principles of phonics, and decoding skills. Includes lab component.

**ENGL 0641 – Basic Vocabulary**

Introduces fundamentals for vocabulary building, including dictionary use; prefixes, suffixes, and roots; and application of that knowledge to the decoding of words. Includes lab component.

**ENGL 0651 – Study Skills**

Instructs students in study techniques and habits: note and test-taking, the SQ3R (survey, question, read, recite and review) method for reading, memorization, vocabulary building, and assignment strategies. Includes a lab component.

**ENGL 0661 – Writing Skills**

Assists students with basic techniques of writing: organization; paragraph development, unity, and coherence; and word choice, economy, and order. Includes lab component.

**ENGL 0813 – Reading and Vocabulary for the Deaf and Hard of Hearing**

Instructs deaf and hard-of-hearing students in basic reading skills by emphasizing vocabulary and comprehension of main ideas.

**ENGL 0823 – Writing Skills for the Deaf and Hard of Hearing**

Instructs deaf and hard of hearing students in basic writing skills by emphasizing English language usage, including sentence structure, grammar, punctuation, paragraphs and essays.

**ENGL 0903 – Reading I**

Teaches students basic reading skills necessary to improve comprehension, build vocabulary, and develop interest in reading.

**ENGL 0913 – Reading II**

Provides students an opportunity to enhance skills and techniques taught in Reading I. Emphasizes locating central themes and/or main ideas, distinguishing between major and minor details, drawing logical conclusions, and recognizing purpose and tone. Prerequisite: ENGL 0903 with a grade of "C" or better, or appropriate placement score.

**ENGL 0923 – Writing I**

Helps students improve their writing skills through practical writing experiences for social, business, and academic life. Intended as a clinic for individual problems with English language usage, grammar, spelling, and punctuation, as well as sentence structure and paragraph development.

**ENGL 0933 – Writing II**

A continuation of Writing I that provides students with approaches to paragraph and essay writing. Emphasizes skills for basic academic writing: sentence structure, English language usage, punctuation, and editing and revising. Prerequisite: ENGL 0923 with a grade of “C” or better, or appropriate placement score.

**ENGL 0963 – College Survival**

Orients students to TCC campuses, student support services, college procedures and resources, and aids students in adapting to the college environment. Introduces students to study techniques and life skills that will enable them to complete their college program.

**ENGL 0990- Selected Topics in Developmental English**

The study and/or analysis of a selected topic in Developmental English. May be repeated with a different topic.

**ENGL 1003 – Academic Strategies**

Orients students to TCC campuses and college services, emphasizing personal and social strategies to increase student involvement in college and community activities. Requires students to analyze and apply study techniques and behavior patterns essential to college success, apply critical and creative thinking skills to solve academic and social problems, and construct goals and time plans to balance work, school, and family. Cross listed to NURS 1003.

**ENGL 1071 – College Vocabulary Enrichment**

This self-paced course is designed to increase a student’s vocabulary in a variety of content areas and will help students develop a college vocabulary that will allow them to read, write, and speak with greater facility and understanding.

**ENGL 1083 – Grammar and Mechanics**

Offers a fundamental, systematic, and rigorous survey of the principles and structures of contemporary English grammar. Explores concepts of grammar and mechanics necessary to speak and write effectively.

**ENGL 1091 - College Orientation**

Designed to help traditional and non-traditional college students understand and respond to many academic issues that face them at TCC. Special emphasis on structured interaction of students with faculty, staff, and other students.

**ENGL 1113 – Composition I**

The first in a sequence of two courses. Introduces students to academic writing, basic research, and documentation. Prerequisite: ENGL 0933 with a grade of “C” or better, or appropriate placement score.

**ENGL 1121 – Composition Lab**

A supplement to composition courses that provides individualized instruction in standard usage and essay structure.

**ENGL 1123 - Writing for the OGET**

Prepares students for the written portion of the Oklahoma General Education Test. Includes readings in the field of education. Writing assignments will emphasize analysis, evaluation, and synthesis. Requires targeted work in grammar, punctuation, sentence structure, and usage. Prerequisite: ENGL 1113 with a grade of “C” or better.

**ENGL 1131 – Reading Lab**

Assists students who have already achieved college-level reading skills to develop efficient techniques in college-content area reading and to approach the reading process with critical and evaluative skills.

**ENGL 1141 – Effective Business Writing**

Provides individual instruction on correspondence commonly used in business with emphasis on organization, format, grammar, and diction. Includes lab component.

**ENGL 1151 - Effective Communications**

This course is designed to study the principles and the theories of communication in one-on-one and group settings. Emphasis will be on increasing student awareness of verbal and nonverbal communication behavior. Focus will be directed toward establishing improved communication skills.



**ENGL 1161 – Information in the Digital Age**

Teaches fundamental research skills and familiarizes students with library and Internet information resources. Emphasizes systematic search for print and online sources appropriate for college-level research assignments; critical evaluation of sources; and effective, ethical use of source material. Develops information literacy and lifelong learning abilities, benefiting students' performance in other classes and in personal and professional pursuits.

**ENGL 1213 – Composition II**

The second in a sequence of two courses. Furthers analytical reading skills, academic writing, and techniques of research and documentation. Prerequisite: ENGL 1113 with a grade of "C" or better.

**ENGL 1691 – Speed Reading**

Helps students improve their reading rates with effective comprehension through computer-delivered programs and directed reading assignments. Includes lab component.

**ENGL 2012 – Grammar Review for Teachers**

Reviews grammar skills to be used in teaching correct English usage. Can be adapted to any grade level, K-12. Includes lab component.

**ENGL 2022 – Writing Process for Teachers**

Assists teachers in developing techniques to be used in teaching the writing process. Can be adapted to any grade level, K-12. Includes lab component.

**ENGL 2032 - Reading and Study Skills for Teachers**

Assists teachers in developing techniques to be used in teaching reading and study skills. Can be adapted to any grade level, K-12. Includes lab component.

**ENGL 2042 – Spelling and Vocabulary for Teachers**

Assists teachers in developing techniques to be used in teaching spelling and vocabulary skills. Can be adapted to any grade level, K-12. Includes lab component.

**ENGL 2223 - Reading Enhancement**

Designed to direct the student in more efficient college reading. Especially emphasized is the application of logical thinking and deep speculation related to reading across the curriculum. Laboratory exercises, which are designed to promote skill in vocabulary, comprehension, and speed, may be tailored to enhance these skills in a student's major area of study if he/she so desires. Prerequisite: ENGL 0903.

**ENGL 2333 – Technical/Professional Writing**

Offers applied practice in technical and professional writing with emphasis on format, style, research techniques, and editing for specialized audiences and/or publications. Prerequisite: ENGL 1113 with a grade of "C" or better.

**ENGL 2343 – Business Communication I**

Focuses on effective methods of business communication, including various letters, memoranda, resumes, documented researched reports, oral presentations, and PowerPoint presentations. Gives attention to audience analysis and business writing style and usage. Prerequisite: ENGL 1113 with a grade of "C" or better.

**ENGL 2373 - Teach-A-Reader**

Designed to teach the student to tutor functionally illiterate adults who wish to learn to read. Fifteen hours of training workshop is provided, and the student commits to 55 hours of tutoring. One paper is required at the completion of the 55 hours of tutoring.

**ENGL 2383 - Advanced Composition**

Allows students who have successfully completed ENGL 1113 and 1213 to reinforce and refine their writing skills. Provides practice in drafting and revising expository essays and analyzing the work of professional writers through primary and secondary sources. Prerequisite: ENGL 1213 with a grade of "C" or better.

**ENGL 2393 - Introduction to Drama (H)**

Introductory study of the performance of dramatic literature. Prerequisite: ENGL 1113 or THEA 1093 or approval of instructor.

**ENGL 2403 - Advanced Reading Enhancement and Speed**

A comprehensive program designed to improve the following: critical thinking and evaluating, vocabulary, comprehension, and reading rate. Students will use practice materials and computer programs to attain improvement. Prerequisite: ENGL 1113 or instructor approval.

**ENGL 2413 – Introduction to Literature (H)**

Introduces students to the study of fiction, poetry, and drama with attention to the elements and conventions specific to each literary type. Intended to serve as basis for further study in literature survey courses. Prerequisite: ENGL 1113 and ENGL 1213 with a grade of "C" or better. ENGL 1213 may be taken concurrently with this class.

**ENGL 2433 – Novel Writing**

Focuses on the craft of novel writing, with emphasis on developing characters, plotting a novel, and drafting a first chapter. Requires students to write and revise their own novel chapters, study published novels, and critique their classmates' novel chapters. This class may not be offered every semester.

**ENGL 2443 – Poetry Writing**

Focuses on the craft of writing poetry, with emphasis on poetic forms, meter, word choice, figurative language, and imagery. Requires students to write and revise poems, study published poetry, and critique classmates' poems. This class may not be offered every semester.

**ENGL 2453 - Creative Writing: Scriptwriting**

The course teaches screenplay writing techniques. Attention is given to subject and character development. Students learn the components of plot development, scene building and screenplay formats. Cross listed with THEA 2453.

**ENGL 2463 – Nonfiction Writing**

Explores nonfiction genres such as personal essay, memoir, or travel writing. Addresses narrative structure, scene construction, voice, and theme. Requires students to demonstrate proficiency in use of terminology and critical skills necessary for creating and revising nonfiction. This class may not be offered every semester.

**ENGL 2473 – Short Story Writing**

Focuses on the craft of writing short stories, with emphasis on point of view, character development, plot, setting, and prose style. Requires students to write and revise their own short stories, study published short stories, and critique classmates' short stories. This class may not be offered every semester.

**ENGL 2483 – Novel Writing Workshop**

Provides the opportunity for advanced students to submit pages of a novel in progress for the class to critique. Concentrates on intensive writing and revision and on analysis of published novels. Prerequisite: ENGL 2433 with a grade of "C" or better. This class may not be offered every semester.

**ENGL 2493 – Creative Writing: Introduction**

Provides an introductory study of creative writing that may include poetry, short story, non-fiction, and script writing. This class may not be offered every semester.

**ENGL 2533 – Short Story Writing Workshop**

Designed for students who have written one or more short stories. Provides further instruction in the craft of fiction writing and requires students to write short stories for the class to critique. Prerequisite: ENGL 2473 with a grade of "C" or better. This class may not be offered every semester.

**ENGL 2543 – British Literature I (H)**

Surveys early English literature and literary movements, including representative authors from the Anglo-Saxon to the Romantic periods. Prerequisite: ENGL 1113 and ENGL 1213 with a grade of "C" or better. ENGL 1213 may be taken concurrently with this class. This class may not be offered every semester.

**ENGL 2653 – British Literature II (H)**

Surveys English literature and literary movements, including representative authors from the Romantic period to the present. Prerequisite: ENGL 1113 and ENGL 1213 with a grade of "C" or better. ENGL 1213 may be taken concurrently with this class. This class may not be offered every semester.

**ENGL 2663 – The Novel**

Studies the origins and development of the novel and includes selected readings from novels, in whole or in part. Prerequisite: ENGL 1213 with a grade of “C” or better. This class may not be offered every semester.

**ENGL 2673 - World Literature I (H)**

Surveys literature and literary movements from antiquity to 1700, including representative works from various global traditions. Prerequisite: ENGL 1113 and ENGL 1213 with a grade of “C” or better. ENGL 1213 may be taken concurrently with this class. This class may not be offered every semester.

**ENGL 2683 – World Literature II (H)**

Surveys literature and literary movements from 1700 to the present, including representative works from various global traditions. Prerequisite: ENGL 1113 and ENGL 1213 with a grade of “C” or better. ENGL 1213 may be taken concurrently with this class. This class may not be offered every semester.

**ENGL 2773 – American Literature I (H)**

Surveys representative American literature and literary movements from the pre-colonial through the Civil War eras. Prerequisite: ENGL 1113 and ENGL 1213 with a grade of “C” or better. ENGL 1213 may be taken concurrently with this class. This class may not be offered every semester.

**ENGL 2883 – American Literature II (H)**

Surveys representative American literature and literary movements from the Civil War era to the present. Prerequisite: ENGL 1113 and ENGL 1213 with a grade of “C” or better. ENGL 1213 may be taken concurrently with this class. This class may not be offered every semester.

**ENGL 2893 - Minority Literature**

The study of representative works of literature from African-American, Asian-American, Hispanic-American, and Native American writers. Prerequisites: ENGL 1113 and ENGL 1213 or approval of instructor. This class may not be offered every semester.

**ENGL 2990 - Selected Topics in English**

The study and/or analysis of a selected topic in English. May be repeated with a different topic.

## **ENGLISH AS A SECOND LANGUAGE**

**English as a Second Language (ESL) courses are designed for students whose native language is not English. In accordance with the policy statement of the State Board of Regents, ESL students with a TOEFL score below 500 are not eligible for admission into undergraduate coursework at Oklahoma institutions of higher learning. The state approved Intensive English Program at Tulsa Community College incorporates classroom instruction with language laboratory activities which assist students in gaining sufficient language skills to become eligible for undergraduate coursework. A proficiency check is made at the end of each level. No credit toward graduation is awarded. Placement in each course is determined through an evaluation process administered by the ESL Program.**

**ESLG 0513 - ESL Listening for Understanding**

This intermediate course will develop basic listening strategies for everyday communication. The emphasis is on identifying the main idea, and sound discrimination. Placement is determined by the ESL Program.

**ESLG 0523 - ESL Reading for Understanding**

This intermediate level course will develop basic reading strategies necessary in everyday life. The emphasis is on identifying the main idea and identifying details. Placement is determined by the ESL Program.

**ESLG 0533 - ESL Grammar for Understanding**

This intermediate level course develops fundamental principles of English grammar in both written and spoken form. Using grammar in communication is emphasized. Placement is determined by the ESL Program.

**ESLG 0543 - ESL Writing for Understanding**

This intermediate course develops basic sentence and paragraph structures as well as vocabulary and some grammatical concepts. Placement is determined by the ESL Program.

**ESLG 0553 - ESL Speaking for Understanding**

This intermediate level course develops the basic strategies for oral communication. The focus in this course is on day-to-day conversation. Vocabulary and idiomatic usage is also developed. Placement is determined by the ESL Program.

**ESLG 0613 - ESL Listening for Communication**

This intermediate level course continues the development of listening strategies used in everyday communication. The emphasis is on listening for both details and the main idea. Placement is determined by the ESL Program.

**ESLG 0623 - ESL Reading for Communication**

This intermediate level course continues the development of basic reading strategies. The emphasis is on reading for speed and comprehension. Placement is determined by the ESL Program.

**ESLG 0633 - ESL Grammar for Communication**

This intermediate level course continues the development of basic grammatical principles in spoken and written form. Using appropriate grammar in communication is stressed. Placement is determined by the ESL Program.

**ESLG 0643 - ESL Writing for Communication**

This intermediate level course continues development of paragraph writing with attention to organization, word economy and order, paragraph development with unity and coherence needed for longer connected discourse. Placement is determined by the ESL Program.

**ESLG 0653 - ESL Speaking for Communication**

This intermediate level course continues the development of oral communication strategies. Vocabulary development, grammatical issues and context usage are examined in this course. Placement is determined by the ESL Program.

**ESLG 0713 - ESL Listening for Academic Purposes**

This advanced level course develops listening skills necessary in an academic setting. The emphasis is on identifying important points and note taking strategies. Listening passages are based on college lecture material. Placement is determined by the ESL Program.

**ESLG 0723 - ESL Reading for Academic Purposes**

This advanced level course develops reading skills necessary in an academic setting. Texts are based on actual college level textbooks. A variety of strategies for academic reading are addressed. Speed and comprehension are stressed. Placement is determined by the ESL Program.

**ESLG 0733 - ESL Grammar for Academic Purposes**

This advanced level course develops the advanced English grammatical concepts necessary for success in the American college classroom. Written and spoken forms are developed. Placement is determined by the ESL Program.

**ESLG 0743 - ESL Writing for Academic Purposes**

This advanced level course develops writing skills necessary for success in the American college classroom with attention to essay development. Organization of multiple paragraphs, word economy and vocabulary development are examined in this course. Placement is determined by the ESL Program.

**ESLG 0753 - ESL Speaking for Academic Purposes**

This advanced level course develops speaking strategies necessary in an academic setting as well as daily life. The emphasis is on speaking on and American classroom setting as well as development of idiomatic speech. Placement is determined by the ESL Program.

**ESLG 0763 - ESL TOEFL Preparation**

This course reviews English reading, writing, listening and speaking skills to prepare students for the Test of English as a Foreign Language (TOEFL). Placement is determined by the ESL Program.

**ESLG 0813 - ESL Listening for College**

This advanced level course continues the development of listening strategies necessary in an American college setting. The emphasis is on note-taking and identifying verbal and non-verbal cues. Listening passages are based on college lecture material. Placement is determined by the ESL Program.



**ESLG 0823 - ESL Reading for College**

This advanced level course continues the development of college level reading skills. Speed and comprehension are the focus. Texts are based on authentic college texts. Placement is determined by the ESL Program.

**ESLG 0833 - ESL Grammar for College**

This advanced level course continues the development of English grammatical concepts necessary for success in the American college classroom. Written and spoken forms are focused on. Placement is determined by the ESL Program.

**ESLG 0843 - ESL Writing for College**

This advanced level course continues to develop the essay writing skills necessary for success in the American college. Placement is determined by the ESL Program.

**ESLG 0853 - ESL Speaking for College**

This advanced level course continues the development of speaking strategies in both academic and daily life settings. The emphasis is on speaking in a variety of classroom situations and the use of idiomatic speech. Placement is determined by the ESL Program.

**ESLG 0990 - Selected Topics in English as a Second Language**

The study and/or analysis of a selected topic in ESL. May be repeated with a different topic. Placement determined by the ESL Program.

**EVENT MANAGEMENT**

See Business Course Descriptions

**FIRE AND EMERGENCY MEDICAL SERVICES**

**FEMS 1214 - Principles of Fire and of Emergency Medical Services**

Topics include the history and development of fire protection; the role of the fire service in the development of civilization; introduction to general fire hazards; and a discussion of the problems and possible solutions for current and future fire protection. May be taken concurrently with FEMS 1224 or FEMS 2319 if prerequisites are met. Prerequisites: Appropriate placement scores or MATH 0013 or MATH 0055 and ENGL 0913 and ENGL 0933.

**FEMS 1224 - Emergency Services Safety and Survival**

This course introduces the basic principles and history related to the national firefighter life safety initiatives, focusing on the need for culture and behavior change throughout emergency services. Topics include the aspects of tactics and strategy in extinguishing fires; pre-fire plans, organization of the fire ground, including techniques of using available equipment and personnel; a study of conflagrations and techniques of predicting fire severity; the development of skills for effective response to crises. May be taken concurrently with FEMS 1214.

**FEMS 1233 - Fire Behavior and Combustion**

A review of basic physical science; fundamental chemistry and physics of fire; the hazards of many materials, systems, and processes; and appropriate techniques to control their risks. Prerequisites: BIOL 1314, CHEM 1114, FEMS 1214, FEMS 1224, and FEMS 2319, all with a grade of "C" or better.

**FEMS 1243 - Hazardous Materials Chemistry**

This course covers topics based on basic chemistry relating to categories of hazardous materials including recognition, identification, reactivity, and health hazards encountered by emergency services. Prerequisites: BIOL 1314, CHEM 1114, FEMS 1214, FEMS 1224, FEMS 1233, and FEMS 2319, all with a grade of "C" or better. May be taken concurrently with FEMS 1253 and FEMS 1263.

**FEMS 1253 - Building Construction for Fire Protection**

Concepts in fire safe building design and construction to include a detailed study of materials, assemblies and methods, building codes and the Life Safety Code, and relationships among public and private agencies with fire safety interests. Prerequisites: BIOL 1314, CHEM 1114, FEMS 1214, FEMS 1224, FEMS 1233, and FEMS 2319, all with a grade of "C" or better. May be taken concurrently with FEMS 1243 and FEMS 1263.

### **FEMS 1263 - Fire Protection Hydraulics and Water Supply**

This course is designed to develop understanding of fluid flow through hoses, pipes, pumps, and fire protection appliances as well as water supply and distribution analysis using hydraulics calculations and testing techniques to detect anomalies in design or performance capabilities. Prerequisites: BIOL 1314, CHEM 1114, FEMS 1214, FEMS 1224, FEMS 1233, and FEMS 2319, all with a grade of "C" or better. May be taken concurrently with FEMS 1243 and FEMS 1253.

### **FEMS 2213 - Legal Aspects of Emergency Services**

An introduction to federal, state, and local laws that regulate emergency services, national standards influencing emergency services, standard of care, tort, liability, and a review of relevant court cases. Students study and explore past, current, and possible future litigation issues involving the emergency services based on legal and ethical decisions. Prerequisites: BIOL 1314, CHEM 1114, FEMS 1214, FEMS 1224, FEMS 1233, FEMS 1243, FEMS 1253, FEMS 1263, and FEMS 2319, all with a grade of "C" or better. May be taken concurrently with FEMS 2223 and FEMS 2233.

### **FEMS 2223 - Fire Prevention**

Topics include the fundamentals of fire prevention codes and their enforcement; the techniques of fire safety inspection which result in maximum compliance; fire prevention through the methods of public fire safety education. Prerequisites: BIOL 1314, CHEM 1114, FEMS 1214, FEMS 1224, FEMS 1233, FEMS 1243, FEMS 1253, FEMS 1263, and FEMS 2319, all with a grade of "C" or better. May be taken concurrently with FEMS 2213 and FEMS 2233.

### **FEMS 2233 - Code Enforcement**

A comprehensive overview of the everyday work practices of fire inspectors and the important role they play in fire risk reduction in their communities. Course covers basic and advanced concepts for fire science students, fire inspectors, and fire officers. Prerequisites: BIOL 1314, CHEM 1114, FEMS 1214, FEMS 1224, FEMS 1233, FEMS 1243, FEMS 1253, FEMS 1263, and FEMS 2319, all with a grade of "C" or better. May be taken concurrently with FEMS 2213 and FEMS 2223.

### **FEMS 2243 - Fire Protection Systems**

A study of fire hazards related to various industrial processes, techniques, and facilities; the design and properties of private fire protection devices and agents; automatic fire detection and fire extinguishing systems; and familiarization with regulatory agencies, codes, and standards. Prerequisites: BIOL 1314, CHEM 1114, FEMS 1214, FEMS 1224, FEMS 1233, FEMS 1243, FEMS 1253, FEMS 1263, FEMS 2213, FEMS 2223, FEMS 2233, and FEMS 2319, all with a grade of "C" or better. May be taken concurrently with FEMS 2253 and FEMS 2263.

### **FEMS 2253 - Fire Investigation and Arson**

This course covers the firefighter's role in fire investigations; the method and mechanics of protecting, searching, and controlling the fire scene; determining the point or origin, path of fire travel, and fire causes; interviews and interrogations; recognizing and preserving evidence; Oklahoma arson laws; alibis, motives, providing the corpus delicti, preparation of the case, court testimony, reports and records and juvenile fire setters. Includes lab component. Prerequisites: BIOL 1314, CHEM 1114, FEMS 1214, FEMS 1224, FEMS 1233, FEMS 1243, FEMS 1253, FEMS 1263, FEMS 2213, FEMS 2223, FEMS 2233, and FEMS 2319, all with a grade of "C" or better. May be taken concurrently with FEMS 2243 and FEMS 2263.

### **FEMS 2263 - Fire and Emergency Services Administration**

Planning and organization for the municipal fire service, methods of management and supervision applied to the fire service, relations with other municipal entities, the bargaining agent and the public, and the expanding scope of municipal fire service responsibilities. Prerequisites: BIOL 1314, CHEM 1114, FEMS 1214, FEMS 1224, FEMS 1233, FEMS 1243, FEMS 1253, FEMS 1263, FEMS 2213, FEMS 2223, FEMS 2233, and FEMS 2319, all with a grade of "C" or better. May be taken concurrently with FEMS 2243 and FEMS 2253.

### **FEMS 2319 – Emergency Medical Technician**

Study of modules of EMT preparatory activities, basic airway management, patient assessment, shock medical emergencies, trauma emergencies, pediatrics, geriatrics, obstetrics and EMT operations. Includes blood sugar determination, intravenous therapy maintenance, and the performance of lifting and moving. Practicum skills are an integral part of the course. Under the direct supervision of a clinical preceptor, the student will attend field and/or hospital clinicals which require certain immunizations and liability insurance. American Heart Association BLS for the Healthcare Provider certification will be required during the course. Prerequisite: FEMS 1214 with a grade of "C" or better or concurrent enrollment.

### **FEMS 2403 – Public Safety Prior Learning Assessment**

Students develop their Professional Portfolio Profile of Prior Learning to document prior learning, knowledge, skills and abilities while building a professional portfolio for career assessment, employment, and promotional opportunities. Students learn how to package the Portfolio utilizing modern communication techniques, programs, and processes while increasing their understanding of forty essential soft communication skills. Competency is demonstrated by designing, developing, and submitting a Portfolio Assessment Profile for evaluation as a capstone exercise. Prerequisite: Instructor approval required.

### **FEMS 2990 - Selected Topics in Fire and Emergency Medical Services**

The study and/or analysis of a selected topic in Fire and Emergency Medical Services. May be repeated with a different topic.

## **FOREIGN LANGUAGE**

**Tulsa Community College offers courses in the following languages, each of which has its own category heading and course prefix: Arabic, Chinese, ESL, French, German, Greek, Hebrew, Italian, Japanese, Latin, Portuguese, Russian, and Spanish. These languages are listed in alphabetical order.**

## **FRENCH**

### **FREN 1001 - French for Communication I**

A companion course to FREN 1103 with emphasis on speaking and comprehension skills. Recommended that it be taken simultaneously with FREN 1103 or after. Prerequisite: FREN 1103 with a grade of "C" or better or instructor approval.

### **FREN 1031 - French Pronunciation**

A beginning course in French with special emphasis on pronunciation and the oral skills. May be taken simultaneously with FREN 1103. Prerequisite: FREN 1103 with a grade of "C" or better or instructor approval.

### **FREN 1103 - French I**

A beginning course in understanding, speaking, reading, and writing French. The first in a sequence of related courses.

### **FREN 1201 - French for Communication II**

Continued instruction in basic language concepts and beginning conversational skills. Conducted in French. Prerequisite: FREN 1103 with a grade of "C" or better or instructor approval.

### **FREN 1213 - French II**

Continued instruction in understanding, speaking, reading, and writing French. The second in a sequence of related courses. Prerequisite: FREN 1103 with a grade of "C" or better or instructor approval.

### **FREN 1301 - French for Communication III**

Continued instruction to develop oral fluency and conversational skills. Conducted in French. Prerequisite: FREN 1213 with a grade of "C" or better or instructor approval.

### **FREN 1313 - French III**

Continued instruction in understanding, speaking, reading, and writing French. The third in a sequence of related courses. Prerequisite: FREN 1213 with a grade of "C" or better or instructor approval.

### **FREN 1401 - French for Communication IV**

Continued instruction to develop oral fluency and conversational skills. Conducted in French. Prerequisite: FREN 1313 with a grade of "C" or better or instructor approval.

### **FREN 1413 - French IV**

Continued instruction in understanding, speaking, reading, and writing French. The fourth in a sequence of related courses. Prerequisite: FREN 1313 with a grade of "C" or better or instructor approval.

### **FREN 2041 - French - Introduction to the Arts**

An introduction to the French arts with an attempt to develop an aesthetic awareness and an understanding of the role that the arts play in modern day French activities. Conducted in English.

**FREN 2071 - French History and Geography Introduction**

A survey of French history and geography as it relates to modern day French societies and language with an awareness of the relationship between the physical, political, and linguistic regions. Conducted in English.

**FREN 2113 - Intermediate French I**

An intermediate course in understanding, speaking, reading, and writing French. Taught in French. Prerequisite: FREN 1413 with a grade of "C" or better or instructor approval.

**FREN 2121 - Intermediate French Communication**

Intensive practice in speaking French at the intermediate level covering a wide range of subjects; i.e., everyday language, intermediate literature samples, other publications, and current events. Conducted in French. Prerequisite: FREN 2113 with a grade of "C" or better or instructor approval.

**FREN 2143 - French Civilization and Culture**

Conversations and readings concerning French culture and civilization. Conducted in French. Prerequisite: FREN 2113 with a grade of "C" or better or instructor approval.

**FREN 2213 - Intermediate French II**

An intermediate course in understanding, speaking, reading, and writing French. Taught in French. Prerequisite: FREN 1413 with a grade of "C" or better or instructor approval.

**FREN 2263 - Intermediate French Literature**

Development of reading skills in the target language using intermediate level literary texts. Conducted in French. Prerequisite: FREN 2113 with a grade of "C" or better or instructor approval.

**FREN 2320 - International Work and/or Study Seminar**

Practicum with an international firm and/or study abroad. Focus on application and enhancement of language skills (oral and written forms). Lecture and/or laboratory equivalent. Prerequisite: Permission of Dean of Global education and Associate Dean before enrollment and in advance of work/study abroad experience.

**FREN 2330 - French International Seminar and/or Field Studies**

This course is designed to provide an on-site experience in the selected French-speaking country. Includes lectures, readings, oral interactions, and written reports. All or a portion of instruction and activities are conducted at the international site. Focus on language (oral and written forms) and culture development. Prerequisite: Permission of Dean of Global Education and Associate Dean before enrollment and in advance of in-country experience.

**FREN 2413 - French Translating**

Translating skills course with focus on translating the written language of French to English with some English to French. Prerequisite: FREN 2113 with a grade of "C" or better or instructor approval.

**FREN 2421 - French Culture Comparisons**

Focus on the cultural aspects of the Francophone people. Includes a comparison with the American culture as well as other culture groups. Conducted in English.

**FREN 2433 - French Cinema and Conversation**

Analytical study of French films in terms of historical and cultural contexts. Students will use language in a meaningful way to address the different cultural aspects portrayed in the films. Prerequisite: FREN 2213 with a grade of "C" or better or 18 hours of French or instructor approval.

**FREN 2523 - Intermediate French Grammar and Composition**

This course includes a thorough review of syntax and grammar and the development of composition skills. Conducted in French and English. Prerequisite: FREN 2213 with a grade of "C" or better or 18 hours of French or instructor approval.

**FREN 2533 - Advanced French Conversation**

This course is intended for students who have studied French structure through the intermediate level and have gained a basic oral fluency and proficiency. Class activities will focus on acquiring sufficient speaking skills to interact with native speakers and the use of French as the main language of communication without the aid of an interpreter. Conducted in French. Prerequisite:



FREN 2213 with a grade of "C" or better or 18 hours of French or instructor approval.

**FREN 2990 - Selected Topics in French**

The study and/or analysis of a selected topic in French. May be repeated with a different topic.

## **GEOGRAPHIC INFORMATION SYSTEMS**

**GIS 2344 - Introduction to Geographic Information Systems**

An introductory course designed to acquaint students with the theory and uses of Geographic Information Systems to capture, store, query, and analyze data referenced to a location on the Earth's surface. Topics include history and applications, map projections, coordinate systems, data sources, structures, and models, along with methods of data acquisition, management, manipulation, analysis, and visualization. The lab component will provide students hands-on experiences with ArcGIS software. Cross listed with GEOG 2344.

**GIS 2373 – GIS Data Acquisition and Management**

This course will serve as an introduction to spatial data acquisition for Geographic Information Systems. Students will gain the experience necessary in order to acquire, convert, and create spatial data. Emphasis will be placed on Global Positioning Systems, Metadata, and the creation and editing of data in a personal geo database. Prerequisites: GEOG/GIS 2344 with a grade of "C" or better or instructor approval. Includes lab component.

**GIS 2383 - Advanced Geographic Information Systems**

Students will explore various components of spatial analysis and raster data. The lab component of this course will provide students with an introduction to the ArcGIS Spatial Analyst and 3D Analyst extensions. This course is a continuation of the Introduction to GIS course (GEOG 2344 or GIS 2344). Prerequisite: GEOG/GIS/SURV 2344 with a grade of "C" or better or instructor approval.

**GIS 2393 - Geographic Information Systems Practicum**

This course is designed to provide the student with experience in designing, implementing, and completing GIS projects. Emphasis will be placed on project planning, data acquisition, management, analysis, and presentation. Prior knowledge of GIS is required. Prerequisites: GIS/GEOG/SURV 2344, GEOG 2354, GIS 2373, GIS 2383, all with a grade of "C" or better or instructor approval. Includes lab component.

**GIS 2990 - Selected Topics in Geographical Information Systems**

The study and/or analysis of selected topics in Geographical Information Systems. May be repeated with a different topic.

## **GEOGRAPHY**

**GEOG 1014 - Geography (Physical) (L)**

Physical geography is a survey of those sciences which study the natural environment. The course presents a study of meteorology, climatology, geology, hydrology, oceanography, soil science, and plant and animal ecology. A major thrust of the course is to establish the interrelatedness of these sciences in terms of scientific principles which apply to each of them. Attention is given to the laws of thermodynamics as well as factors influencing the distributions of weather phenomena, climate zones, landforms, oceanic processes, soil processes, plants, and animals. The course is specifically aimed at non-science majors. Includes lab component.

**GEOG 1023 - World Geography (Economic) (S)**

A study of the relation of mankind to his environment and his utilization of natural resources, dealing with problems of production manufacture, and distribution of goods throughout the world. The aspects of primitive subsistence and degrees of commercialism are considered.

**GEOG 1043 - Introduction to Cultural Geography (S,I,H)**

An introduction to the basic concepts associated with people and their relationships to their physical and cultural environment, with an emphasis on social, economic and political organization.

**GEOG 2013 - Meteorology**

A study of the Earth's atmosphere including its dynamics, processes, and structure as they pertain to the establishment of weather. Attention will be given to the relationships between weather conditions and air pollution.

**GEOG 2033 - World Regional Geography (S,I,H)**

A study of China, the former USSR, Europe, Latin America, the Arab world, and other parts of our globe. Special emphasis will be given to the five dimensions: political, economic, historical, social, and geographic as each relates to the specific regions. Foresights and options will be examined to improve our vision of the modern world with its ever more close associations and dependencies.

**GEOG 2344 - Introduction to Geographic Information Systems**

An introductory course designed to acquaint students with the theory and uses of Geographic Information Systems to capture, store, query, and analyze data referenced to a location on the Earth's surface. Topics include history and applications, map projections, coordinate systems, data sources, structures, and models, along with methods of data acquisitions, management, manipulation, analysis, and visualization. The lab component will provide students hands-on experiences with ArcGIS software. Cross listed with GIS 2344.

**GEOG 2354 - Computer Cartography**

This course will provide students with a brief history and an introduction of cartography. Students will be introduced to the basics of map creation, interpretation, and design. The lab component of this course will introduce students to ESRI's ArcView software mapping capabilities. Includes lab component.

**GEOG 2990 - Selected Topics in Geography**

The study and/or analysis of a selected topic in Geography. May be repeated with a different topic.

## **GEOLOGY**

**GEOL 1014 - General Geology (Physical) (L)**

Study of earth materials and processes for science and non-science majors. Includes examination of the Earth's interior, magnetism, gravity, setting in space, minerals, rocks, structure, and geologic processes. Laboratory may include field studies.

**GEOL 1024 - General Geology (Historical) (L)**

Study of earth materials and processes within a time perspective. For science and non-science majors. Utilizes fossils, geologic maps, and field studies to interpret geologic history. Laboratory may include field studies.

**GEOL 1113 - Introduction to Oceanography**

General survey of the scientific framework of the four specializations of oceanographic study- biological, chemical, geological/geophysical, and physical oceanography.

**GEOL 2021 - Map and Airphoto Interpretation**

Recognition of landforms and geologic features on topographic maps and airphotos. Includes interpretation of geologic maps and fundamentals basic to all types of contour maps. Prerequisite: GEOL 1014 or GEOG 1014, or instructor approval.

**GEOL 2990 - Selected Topics in Geology**

The study and/or analysis of a selected topic in Geology. May be repeated with a different topic.

## **GERMAN**

**GRMN 1001 - German for Communication I**

A companion course to GRMN 1103 with emphasis on speaking and comprehension skills. Recommended that it be taken simultaneously with GRMN 1103 or after. Prerequisite: GRMN 1103 with a grade of "C" or better or instructor approval.

**GRMN 1103 - German I**

A beginning course in understanding, speaking, reading, and writing German. The first in a sequence of related courses.

**GRMN 1201 - German for Communication II**

Continued instruction in basic language concepts and beginning conversational skills. Conducted in German. Prerequisite: GRMN 1103 with a grade of "C" or better or instructor approval.

**GRMN 1213 - German II**

Continued instruction in understanding, speaking, reading, and writing German. The second in a sequence of related courses. Prerequisite: GRMN 1103 with a grade of "C" or better or instructor approval.

**GRMN 1301- German for Communication III**

Continued instruction to develop oral fluency and conversational skills. Conducted in German. Prerequisite: GRMN 1213 with a grade of "C" or better or instructor approval.

**GRMN 1313 - German III**

Continued instruction in understanding, speaking, reading, and writing German. The third in a sequence of related courses. Prerequisite: GRMN 1213 with a grade of "C" or better or instructor approval.

**GRMN 1413 - German IV**

Continued instruction in understanding, speaking, reading, and writing German. The fourth in a sequence of related courses. Prerequisite: GRMN 1313 with a grade of "C" or better or instructor approval.

**GRMN 2113 - Intermediate German I**

An intermediate course in understanding, speaking, reading, and writing German. Taught in German. Prerequisite: GRMN 1413 with a grade of "C" or better or instructor approval.

**GRMN 2143 - German Culture and Civilization**

Focus on conversational skills and readings concerning German culture and civilization. Conducted in German. Prerequisite: GRMN 2113 with a grade of "C" or better or instructor approval.

**GRMN 2213 - Intermediate German II**

An intermediate course in understanding, speaking, reading, and writing German. Taught in German. Prerequisite: GRMN 1431 with a grade of "C" or better or instructor approval.

**GRMN 2263 - Intermediate German Literature**

Development of reading skills in the target language using intermediate level literary texts. Conducted in German. Prerequisite: GRMN 2113 with a grade of "C" or better or instructor approval.

**GRMN 2320 - International Work and/or Study Seminar**

Practicum with an international firm and/or study abroad. Focus on application and enhancement of language skills (oral and written forms). Lecture and/or laboratory equivalent. Prerequisite: Permission of Dean of Global Education and Associate Dean before enrollment and in advance of work/study abroad experience.

**GRMN 2330 - German International Seminar and/or Field Studies**

This course is designed to provide an on-site experience in the selected German speaking country. Includes lectures, readings, oral interactions, and written reports. All or a portion of instruction and activities are conducted at the international site. Focus on language (oral and written forms) and culture development. Prerequisite: Permission of Dean of Global Education and Associate Dean before enrollment and in advance of in-country experience.

**GRMN 2990 - Selected Topics in German**

The study and/or analysis of a selected topic in German. May be repeated with a different topic.

## **GREEK**

**GREE 1001 - Greek for Communication I**

A beginning course in basic language with emphasis on speaking and comprehension skills. May be taken simultaneously with GREE 1103.

**GREE 1023 - Biblical Greek I**

This course will serve as an introduction to New Testament Greek with an emphasis on work with biblical texts and Biblical Greek grammar.

**GREE 1143 - Greek for Travel I**

A beginning course in understanding, speaking, reading, and writing Greek with emphasis on language needed for traveling. Includes basic language and culture concepts.

**GREE 1201 - Greek for Communication II**

Continued instruction in basic language concepts and beginning conversational skills. Prerequisite: GREE 1103 with a grade of "C" or better or instructor approval.

**GREE 1223 - Biblical Greek II**

This course of elementary readings in New Testament Greek will involve translation of narrative material to gain a familiarity with simple biblical texts and to continue the process of vocabulary building. Prerequisite: GREE 1023 with a grade of "C" or better or instructor approval.

**GREE 2990 - Selected Topics in Greek**

The study and/or analysis of a selected topic in Greek. May be repeated with a different topic.

## **HEALTH CARE ADMINISTRATION**

See Business course descriptions and Business - Health Care Business Operations

## **HEALTH INFORMATION TECHNOLOGY**

### **Medical Records**

**HITC 1113 – Introduction to Health Information Management**

Students are exposed to the educational requirements and professional credentials for health information management, as well as job functions, career opportunities, and alternative work settings. The organizational structure of the American Health Information Management Association (AHIMA) is reviewed along with member services provided. Record format, content, documentation guidelines, and procedures for quantitative and qualitative analysis of the record are also examined. Other topics addressed include: the master patient index, the number index, numbering and filing systems, and record tracking, retrieval and retention. Prerequisite: Admission to the Health Information Technology Program. Includes lab component.

**HITC 1131 - Health Care Delivery Systems and Trends**

Students are exposed to the evolution and organization of current health care systems in the United States, regulatory agencies, health care organizations, health care settings (i.e., hospitals, ambulatory care, long term care, home health care, hospice), health care professionals, third party payers, and health care financing. Terminology associated with health care delivery systems will be defined and current trends with health care delivery examined.

**HITC 1213 – Statistics and Research Methodology**

Descriptive statistics (i.e., means, frequencies, ranges, percentiles and standard deviations), health care statistics, vital statistics and productivity statistics are introduced, including definitions, sources, methods for collection (including abstracting) and reporting, as well as analysis techniques to determine significance, reliability, validity, and/or manipulation. Indices (i.e., diagnosis, procedure, and physician), registers (i.e., birth, death, cancer and trauma) and databases maintained in the health information management department are examined. Students are introduced to, and apply, knowledge-based research techniques and research protocol. Exposure to Institutional Review Boards, national guidelines for human subjects research and health informatics are also included. Prerequisite: HITC 1113, with a "C" or better. Includes lab component.

**HITC 1223 – Electronic Health Record Systems**

This course provides an overview of electronic health record (EHR) systems including the architecture and design, evaluation and acquisition, data integrity, security and privacy concepts, including monitoring processes and data recovery techniques. Also addressed are policies and procedures for assessing the EHR and its content for compliance as a legal business record. Students are familiarized with state and national initiatives, regulations and guidelines related to information systems for healthcare delivery systems. Other topics examined include data dictionaries, data modeling, data warehousing, screen design, personal health records and micrographics, electronic or imaging technology for data/record storage and retrieval. Prerequisite: HITC 1113 with a grade of "C" or better, and HITC 1353 or concurrent enrollment.



**HITC 1231 - Management of Medical Document Processing**

This course is designed to expose students to report formats utilized in medical transcription, dictation challenges (i.e., accents, mumbling, speed problems, and specialized terminology), and dictation and transcription equipment. Other issues examined include automated authentication, voice recognition technology, centralized versus decentralized transcription, outsourcing of transcription services and incentive pay plans. Prerequisite: CSYS 2073 or program director/ instructor approval. Includes lab component.

**HITC 1242 - Health Information Management in Alternate Care Settings**

Alternate care settings (i.e., physician's office, ambulatory care, long term care, home health, hospice, subacute care, rehabilitation, mental health, and dental care) will be examined individually with respect to accrediting agencies, regulatory guidelines, and professional associations. An emphasis will be placed on documentation requirements, systems and administrative procedures, medical office procedures, software and technological tools and professional practice standards related to management of health information in each of the settings. Prerequisite: HITC 1113 with a grade of "C" or better or concurrent enrollment.

**HITC 1333 - CPT and HCPCS Coding**

The course will examine the process of coding procedures using Current Procedural Terminology IV (CPT-IV) and HCFA's Common Procedural Coding System (HCPCS). CPT coding guidelines, section guidelines, modifier usage, and code linkage will be examined in detail. Students will be exposed to HCPCS codes and the hospital chargemaster. Coding exercises will demonstrate the student's understanding of the principles of CPT coding. Prerequisites: BIOL 1314 and ALDH 1323, with a grade of "C" or better. Includes lab component.

**HITC 1353 - Legal Aspects of Health Records**

The focus of this course is on legal issues affecting health information. It provides exposure to the American legal system, legal terminology, case studies, and statutes with practical application of these principles and concepts to medical records. Confidentiality and security of medical information is addressed as are HIPAA regulations. Other topics examined include: birth and death certificates, informed consent, response to subpoenas, admissibility, discoverability, negligence, liability, living wills, and organ donations. Prerequisite: HITC 1113, with a grade of "C" or better.

**HITC 1363 – Classification Systems, Terminologies and Coding I**

The current mandated classification system utilized in coding diagnoses and procedures will be examined in detail including associated conventions, guidelines and principles. Variations in coding guidelines based on health care settings will be delineated. Pertinent reference books and publications will be identified. Definitions and reporting guidelines from the Uniform Hospital Discharge Data Set (UHDDS) will be reviewed. Proficiency in coding will be demonstrated through coding exercises and practical applications. Other classifications, taxonomies, nomenclatures, terminologies and clinical vocabularies utilized in reimbursement or managing health information are investigated. Prerequisites: BIOL 1314 and ALDH 1323 with a grade of "C" or better. Includes lab component.

**HITC 1412 - Professional Practice Experience I**

Supervised exposure to basic health information management functions and applicable software applications via field trips, demonstrations and/or performance activities provided in an appropriate health care setting or through simulated laboratory activities. Prerequisites: HITC 1213 and HITC 1353 with a grade of "C" or better.

**HITC 2053 - Pathophysiology and Pharmacology I**

Review of current theories of disease process by body systems to assist the student in interpreting documentation within the medical record. This course will familiarize students with common diseases by examining diagnostic criteria, tests and procedures, etiological factors, associated complications and treatment regimens, including procedures and/or medications. Drug classification and adverse drug reactions are examined as are the implications of diagnostic test results. Prerequisites: BIOL 1314 and ALDH 1323, with a grade of "C" or better.

**HITC 2113 - Management Techniques for Health Information Services**

During this course the application of basic management techniques as they relate to health information services are examined including planning, organizing, staffing, supervising, and controlling. Students will be exposed to the development and use of job descriptions, policies and procedures, productivity standards, performance evaluations, and budgets. Techniques for resume writing, interviewing, counseling, procedure analysis, forms design, department design and/or layout with ergonomic equipment consideration, and purchase, will also be addressed. Critical thinking skills, decision making techniques and team building concepts are examined. Prerequisite: HITC 1213, with a grade of "C" or better.

### **HITC 2121 - Physician Billing and Reimbursement**

Introduction to physician billing and reimbursement issues including insurance verification, preauthorization, claims processing and adjudication, interpretation of explanation of benefits (EOB), appeal of denials, accounts receivable, postings and collections. Other issues examined include the physician fee schedule, Resource Based Relative Value System (RBRVS) and major third party players (private and government sponsored). Prerequisites: HITC 1333 and HITC 1363 with a grade of "C" or better and HITC 2403 or concurrent enrollment. Includes lab component.

### **HITC 2133 – Reimbursement Systems and Revenue Cycle Management**

Students are introduced to the following reimbursement systems: Ambulatory Patient Classification (APC), Diagnosis Related Groups (DRG), Medicare Severity Diagnosis Related Groups (MS-DRG), Resource Utilization Groups (RUG), Home Health Resource Groups (HHRG), and the prospective payment systems for inpatient rehabilitation and psychiatric facilities. Retrospective and prospective reimbursement systems and capitation are examined. Revenue cycle management issues including advance beneficiary notice, bill preparation, reviewing remittance advice forms, appealing denials, case mix index, and charge master maintenance are investigated. Coding quality and compliance strategies and plans are reviewed. Prerequisites: HITC 1333 and HITC 1363 with a grade of "C" or better and HITC 2403 or concurrent enrollment.

### **HITC 2153 - Pathophysiology and Pharmacology II**

This course continues the review of current theories of disease process for the remaining body systems not covered in HITC 2053. Students will investigate common diseases by examining diagnostic criteria, tests and procedures, etiological factors, associated complications and treatment regimens, including procedures and/or medications. Drug classification and adverse drug reactions are examined as are the implications of diagnostic test results. Prerequisites: BIOL 1314 and ALDH 1323 with a grade of "C" or better.

### **HITC 2213 - Quality, Utilization, and Risk Assessment**

Course includes a detailed examination of licensure and accreditation standards utilized to measure department compliance. Students are introduced to quality improvement theory and techniques (departmental and hospital-wide) and to the "team concept approach" including a review of member and/or facilitator skills needed to successfully participate. The course will also address the concepts and theories of utilization management, critical care pathways, severity of illness systems, quality improvement organizations, and risk management. The role of the medical staff coordinator in credentialing, privileging, committee preparation, and minutes documentation is also examined. Prerequisite: HITC 1213, with a grade of "C" or better.

### **HITC 2342 - Professional Practice Experience III - Coding**

Utilizing the current mandated code sets, students will apply coding guidelines and principles to advanced coding problems and patient record documentation. Coding software and groupers will be utilized. Supervised experience coding a variety of patient types (e.g., inpatient, outpatient, physician visits) will occur in a health care setting or through simulated laboratory activities. Exposure to other coding related functions (e.g., Charge Master Maintenance, Clinical Documentation Improvement, Billing Issues) could occur via field trips, individual assignments or guest speakers. Prerequisites: HITC 1333, HITC 1363, HITC 2403, HITC 2133, HITC 2121, HITC 2053 and HITC 2153 with a grade of "C" or better or instructor approval.

### **HITC 2403 - Coding II**

The application of coding principles and guidelines introduced in HITC 1363 will be continued. Source documents are reviewed to practice identifying diagnostic and procedural information to be coded. Coding and reporting guidelines are then applied to diagnostic and procedural information obtained from the health records. This enables the student to establish the necessary skills for achieving coding totality, coding accuracy, and appropriate sequencing of codes. Students will also utilize coding software and groupers Prerequisite: HITC 1363 with a grade of "C" or better. Includes lab component.

### **HITC 2412 - Professional Practice Experience II**

Supervised exposure to expanded health information management functions (e.g., Cancer Registry, Quality Assessment, Medical Staff Coordination) and alternate care settings (e.g., Home Health, Hospice, Skilled Nursing Facilities) via field trips, demonstrations and/or performance activities conducted at the facility or in simulated laboratory activities. Emphasis is placed on the variations in policies, functions, procedures and documentation requirements applicable to each setting. Prerequisites: HITC 1413 and HITC 1353 with a grade of "C" or better.

### **HITC 2990 - Selected Topics in Health Information Technology**

The study and/or analysis of a selected topic in Health Information Technology. May be repeated with a different topic.

## HEBREW

### **HEBR 1011 - Introduction to Hebrew**

Includes a study of language structure and vocabulary of biblical scriptures.

### **HEBR 1023 - Biblical Hebrew I**

This course will serve as an introduction to biblical Hebrew with an emphasis on language use through work with biblical texts as well as instruction in the fundamentals of Hebrew grammar.

### **HEBR 1223 - Biblical Hebrew II**

This course of elementary readings in biblical Hebrew will involve translation of narrative material to gain a familiarity with simple biblical texts and to continue the process of vocabulary building. Prerequisite: HEBR 1023 with a grade of "C" or better or approval of instructor or Associate Dean.

### **HEBR 2990 - Selected Topics in Hebrew**

The study and/or analysis of a selected topic in Hebrew. May be repeated with a different topic.

## HISTORY

### **HIST 1044 - Oklahoma History plus Research**

Intercultural contributions from prehistoric to present, including explorations, Indian cultures, homesteading, and statehood with individually directed research. Includes lab component.

### **HIST 1053 - Ancient and Medieval Western Civilization (H)**

A survey of the background for development of civilization in the West including the Near East, Greece, and Rome through the Middle Ages and into the period of the Renaissance and Reformation.

### **HIST 1063 - Modern Western Civilization (H)**

The unfolding of the pattern of modern western civilization from the Renaissance to current times. A study of the Age of Revolution and the beginnings of industrialism in the nineteenth century and the social, economic, and political factors of recent world history.

### **HIST 1073 - Twentieth Century World History (H) (I)**

A survey of world history covering World War I and its aftermath, the Depression and the rise of totalitarianism, World War II, the decline of Western imperialism and the growth of the Third World, and the issues of the 1980's.

### **HIST 1083 - Survey of English History to 1688 (H)**

An introductory survey of English history from its prehistoric beginnings to 1688. The course will trace the early development of the English people, the growth of monarchy and representative government in the Middle Ages, and the golden age of the Tudors to the triumph of parliament over the Stuarts in 1688.

### **HIST 1093 - Survey of English History from 1688 to Present (H)**

An introductory survey of English history from the Glorious Revolution of 1688 to the present. The course will trace the emergence of the modern British political system after 1688, the growth and decline of the British Empire, and the role of Britain as a great world power.

### **HIST 1483 - U.S. History 1492 to the Civil War Era**

A general presentation of United States history, commencing with the European background and first discoveries. The pattern of exploration, settlement, and development of institutions is followed throughout the colonial period and the early national experience to Civil War era.

### **HIST 1493 - U.S. History - Civil War Era to the Present**

A survey of the unfolding of United States history from the Civil War Era to the present day. The study includes social, economic, and political aspects of American life and follows the development of the United States as a world power.

**HIST 2023 - Modern Eastern Civilization (H) (I)**

A survey of modern East Asian civilizations, including Japan, during the nineteenth and early twentieth centuries, and China, during the early and mid-twentieth century. A study of the impact of the West on these Eastern societies will be considered with particular emphasis placed on the problems of trade and diplomacy, the political and industrial transformation of Japan, the revolutionary process in China, and the rise of nationalism in Southeast Asia.

**HIST 2043 - Contemporary Affairs (H) (D)**

A study of contemporary affairs based on news magazines, newspapers, and audiovisual resources. By studying current events the student can gain a greater insight into his/her own time and also into historical methodology. Emphasis on self-directed study and skills in using the Learning Resources Center.

**HIST 2163 - Introduction to the History and Philosophy of Science (H)**

An introductory survey of the development of Western science, and some of the philosophical issues involved in this development. The development of the scientific method will be examined, as will the effects that this method has had on man's perception of himself and the world around him.

**HIST 2223 - Modern Latin American History (I)**

The study of Latin American republics after the independence movements, emphasizing the dictators and the liberal reform movement of the nineteenth century, U.S. involvements, and the recent social revolutions of the twentieth century.

**HIST 2333 - African-American History (H)**

A survey of the African-American experience in American history, beginning with slavery during the creation of the United States as a democratic republic. Tracing the abolitionist movement, African-Americans in the Civil War, Reconstruction and post-Reconstruction, the course will focus on America's attempts to deal with the consequences of slavery throughout the twentieth century.

**HIST 2343 - Native American History**

An introduction to the cultures, experiences, and conflicts of Native Americans from pre-history to the present. Cross listed with NAMS 2343.

**HIST 2353 - Hispanic American History (H) (D) (S)**

This interdisciplinary course introduces students to the important historical, cultural, political, and social experiences of Hispanic Americans. Students examine the struggles, triumphs, and contributions of this multifaceted ethnic group with emphasis on the history of the United States to explain the contemporary status of Hispanic Americans.

**HIST 2523 - History of Oklahoma**

Intercultural contributions from prehistoric to present, including explorations, Indian cultures, homesteading, and statehood.

**HIST 2533 - Survey of the American Frontier**

An introductory survey of the frontier movement in American history. Attention will go to the various phases of the frontier, to the interaction of Anglo-immigrant and Indian cultures and to the effects that the process of western settlement had on the development of the American national character.

**HIST 2990 - Selected Topics in History**

The study and/or analysis of a selected topic in History. May be repeated with a different topic.

## **HUMAN RESOURCES**

**HRES 1313 - Principles of Human Resources**

The principles, policies, and practices currently related to the organization and administration of the human resources department. Will include topics on the employment process, diversity in the workplace, promotion principles, retirement plans, union and nonunion activities and relations. Comparative analysis of such human resources practices as rating scales, job evaluation, safety, and welfare programs also will be included.



**HRES 1333 - Benefits Management**

A study of employee benefits management. Will include the analysis, selection, and administration of benefit plans, including health delivery systems (HMO's and PPO's, etc.), retirement plans, savings investment plans, and workers' compensation. Prerequisite: HRES 1313 or instructor approval.

**HRES 1343 - Compensation Management**

A study of compensation management systems. A salary planning emphasis which includes organizational policies, job analysis, job evaluation, salary surveys, compensation structuring computer generated programs, and employee performance appraisals. Prerequisite: HRES 1313 or instructor approval.

**HRES 2313 - Human Resource Law I**

An in-depth study of the various human resource laws which have an effect on companies and organizations today. Topics to be covered include the ADA, EEO, affirmative action programs, discrimination, employment contracts, employee discipline, and employee termination. Prerequisite: HRES 1313 or instructor approval.

**HRES 2323 - Employment and Evaluation Techniques**

Recruitment and selection will be covered for both exempt and non-exempt employees, with concentration on interviewing techniques. Employee evaluation will be covered including performance appraisal, discipline and reward system. Case examples will be reviewed in both the manufacturing and service sectors. Prerequisite: HRES 1313 or instructor approval.

**HRES 2333 - Employee and Labor Relations**

A study of issues in the areas of industrial, labor, and employee relations including handling personnel problems, analyzing labor relations problems and their resolutions, and negotiating collective bargaining agreements. Prerequisite: HRES 1313 or instructor approval.

**HRES 2343 - Training and Development**

An introduction to training and development, including program development, media, methods, and resources. Will include section on cost benefits resulting from the relationship of training and development to employee productivity. Will include oral presentations. Prerequisite: HRES 1313 or instructor approval.

**HRES 2353 - Human Resource Law II**

A continuation of Human Resource Law I with an emphasis on the importance of legal compliance related to performance appraisals, training, employee privacy, OSHA, safety programs, union-management relations including NLRB and current labor legislation, compensation and benefits, retirement, worker's compensation and unemployment compensation. Prerequisite: HRES 1313 and HRES 2313 or instructor approval.

**HRES 2990 - Selected Topics in Human Resources**

The study and/or analysis of a selected topic in Human Resources. May be repeated with a different topic.

**HUMAN SERVICES**

**Students must earn a grade of "C" or better in HSVC courses or gain instructor approval in order to progress to advanced courses in the program.**

**HSVC 1113 - Principles of Human Services**

An interdisciplinary approach to the understanding of human services. The theoretical and practical approaches utilized by various human service agencies within the community will be considered. The course will also introduce the student to the skills necessary for the paraprofessional in education, developmental disabilities, gerontology, mental health care, and substance abuse areas.

**HSVC 1213 - Basic Counseling Skills**

Basic models and techniques of individual and group counseling for a variety of clients will be introduced. Content will emphasize communication skills, interviewing techniques, assessment of client's needs, problem identification skills, client rights, and development of client goals and objectives.

**HSVC 1313 - Chemical Dependency and Treatment**

Introduction to substance abuse and treatment; includes treatment strategies, perspectives, and understanding of the addiction process and its effects upon the individual, his/her family, his/her employer, and society.

**HSVC 1403 - Direct Support Professional Foundations**

Basic knowledge necessary to enable a beginning Direct Support Professional (DSP) or Habilitation Training Specialist (HTS) to provide supports in residential, employment or vocational, community waiver or specialized foster care services for individuals with disabilities. Emphasis on fundamentals of working in the field, effective teaching/learning, communication, ethical and legal issues, basic residential support, health and safety issues, physical assistance, behavioral intervention, and community inclusion. Prerequisite: DDS Certificate of Training and instructor approval. Includes lab component.

**HSVC 1413 - Introduction to Developmental Disabilities**

This course will provide an overview of developmental disabilities, focusing on education and training needs of persons with mild to severe/profound disabilities, as well as trends and issues in services to this population. Students will be exposed to strategies/outcomes planning and assessment skills that are used to help the consumer with disabilities prepare for transition from school to community living and employment. Students will examine job opportunities, training and skill requirements for employment.

**HSVC 1421 – Behavioral Supports for Individuals with Disabilities**

This course focuses on proactive strategies to support the needs of individuals with disabilities. Content identifies antecedents and consequences that maintain the behavior, including the function of a behavior. Consideration will be given to identifying and teaching the individual appropriate alternative behaviors. Interventions discussed and applied will be appropriate for home, community, social, or employment settings.

**HSVC 1423 - Models for Supporting Persons with Developmental Disabilities**

An examination of the community environment support settings in which persons with disabilities live, go to school, and work. The course will emphasize the concepts of values, beliefs, ethics, attitudes, respect, and choices as the foundation within all the support networks. The latest models in the areas of family, education, employment, medical, recreation and leisure, advocacy, and community-based programming will be reviewed.

**HSVC 1443 - Direct Support Professional I**

This course will enhance professional awareness and knowledge of issues related to the Direct Support Professional. Emphasis on professionalism, code of ethics, DSP roles and interaction with various professionals and organizations. Course will also guide participants in analysis of life experiences and professional growth, incorporating portfolio and career path development. Instructor approval required.

**HSVC 1453 - Direct Support Professional Practicum**

Practicum provides an opportunity for students to observe daily operations and practice skills in a setting specializing in disabilities. Faculty-guided seminar and assignments will provide opportunities for students to demonstrate the application of attitudes, skills, and knowledge to the field of developmental disabilities. Students will demonstrate sensitivity to diverse populations, self-examination, and satisfactory proficiency in developing, interpreting, implementing, and documenting helping interventions specific to the provider agency. Demonstration of effective communication, positive behavioral interventions, documentation of activities incorporating client-specific supportive services, and other DSP role competencies will be emphasized. Field Practicum Requirement: 100 hours. Prerequisites: Instructor approval required.

**HSVC 1523 - Volunteer Management in Human Services**

Many health and human services agencies and providers expand and extend their services through the work of volunteers. This course will examine the operation of volunteer programs, including program design, recruitment and selection, orientation, and training and supervision. Prerequisite: HSVC 1113. Includes lab component.

**HSVC 2003 - Family Relationships**

The study of interpersonal relationships with family members addressing processes and influences throughout family life. Principles and issues of family life perspective, including dynamics of families affected by chemical and alcohol dependency will be addressed.

**HSVC 2023 - Lifespan Development**

Theoretical concepts and principles of development from prenatal period through death. Addresses the nature and dynamics of developmental changes and the impact upon individuals and family groups over their life spans with emphasis on multidimensional and ecological perspectives. Directed observation/field assignments.

**HSVC 2053 - Human Services Applications/Case Management**

Intervention strategies for diverse populations, recognizing family, community, state, and societal systems and each system's role in mental and physical health. Course content will include treatment planning, community resources, referral and networking, program coordination, ethical standards for human services workers, and advocacy. Prerequisites: HSVC 1113 and HSVC 1213.

**HSVC 2073 - Issues in Human Services**

This course is designed to address recent trends, issues, values and ethics, policies, and laws relevant to working with diverse populations. Human services planning and in-depth coverage of specific areas in human services, such as developmental disabilities, elderly, and other special populations, will provide the student with current information and strategies in human services. Prerequisite: HSVC 1113.

**HSVC 2101 – Ethics, Human Services and the Law**

This course focuses on key ethical and legal issues of specific populations including, but not limited to, children, elderly, mentally ill, and the developmentally disabled. Medical settings and spirituality in counseling will be discussed.

**HSVC 2103 - Practicum I**

This course is designed to give students field experience through a supervised work experience in an alcohol or chemical dependency program. In addition to the 100 hour on-site experience, students will also participate in a weekly lecture to analyze their experiences and concerns. Prerequisites: HSVC 1113, HSVC 1213, HSVC 1313, HSVC 2213, and SOCI 1133 or PSYC 2133 with a "C" or better and Instructor approval.

**HSVC 2111 – Cultural Competence in the Helping Professions**

A course to introduce cultural competence and its practical applications within the helping professions. Steps towards becoming culturally competent as an individual and professional, including ethical responsibility, self-assessment and awareness, framework for culturally sensitive practice, and an individualized plan of action will be incorporated.

**HSVC 2113 - Internship**

This course is designed to give students field experience through a supervised work experience with an appropriate agency. This experience should relate to the student's area of concentration. In addition to the 160 hours of on-site work experience, students will meet weekly in a lecture/discussion to discuss and analyze their experiences and concerns. Prerequisites: HSVC 1113, HSVC 1213, HSVC 2023 and HSVC 2053 and Instructor approval.

**HSVC 2121 – Stress Management in the Helping Professions**

This course addresses characteristics of stress and burnout specific to human service professionals. Techniques for preventing and addressing the symptoms and causes of stress for self-management and implementation with clients will be explored. Course includes activities, discussions, and media presentation.

**HSVC 2153 - Peer - Mentoring and Leadership I**

This course provides advanced human services majors with the opportunity to serve peers and faculty in the Human Services program at Tulsa Community College while practicing various skills critical to professional development. Prerequisite: Instructor approval. Includes lab component.

**HSVC 2163 - Peer Mentoring and Leadership II**

This course provides advanced human services majors with the opportunity to serve peers and faculty in the Human Services program at Tulsa Community College while practicing various skills critical to professional development. Students previously serving as peer mentors will progress in professional competencies individualized to meet the needs of the student and the program. Prerequisite: Instructor approval. Includes lab component.

**HSVC 2173 - Service Learning in Human Services**

Features hands-on learning in diverse human service settings. Learning in a "real world" environment by participating in activities that contribute to improving conditions for those in need. Students will perform various assignments available at the identified agencies. In-class time may include conceptual overview lecture/discussion prior to field assignments and "process" assignments, such as journals and group discussions while in the field. Includes lab component.

**HSVC 2203 - Parent-Child Relations**

Focus on parent-child relations across the lifespan. The interactional influence of children on the family and the impact of parenting on the child will be addressed within a variety of system contexts, including family, school and neighborhood, community and professionals. Emphasis on promoting optimum development and support of families and children addressing challenging issues of contemporary parenting, such as single parenting, stepfamilies, and high risk families. Assigned field experiences. Prerequisite: HSVC 2023.

**HSVC 2211 – Introduction to Child Welfare**

This course will introduce the student to the field of child welfare services. Historical applications as well as current policies and procedures will be examined. Students will be introduced to the complete cycle of child welfare including prevention and treatment. Ethical and legal issues will also be discussed.

**HSVC 2213 - Introduction to Group Dynamics**

Lecture will focus on the history and application of group dynamics and group therapy. Students will gain knowledge and skill in conducting group therapy. Application of group therapy with special populations, such as chemical dependency, adolescents, and mental disorders, will be discussed. Students will gain awareness of group therapy techniques in an experiential setting. Prerequisites: HSVC 1213 and HSVC 1313. Includes lab component.

**HSVC 2221 – Childhood Stress**

This course is geared to human services students and professionals who desire to better understand the actions and reactions of children to stressful situations. Typical characteristics and various techniques for intervention will be addressed through a multitude of presentation methods.

**HSVC 2231 – Critical Issues with Children**

This course is designed for human services students and professionals who desire to better understand children in the context of critical issues within their lives, including developmental issues, family and social issues, and behavioral issues. Typical characteristics and various techniques for intervention will be addressed through a multitude of presentation methods.

**HSVC 2241 – Dealing with the Sexually Abused Child in the Classroom**

This course will address the special needs and behaviors of a child that has been sexually abused. Participants will learn to identify problem behaviors as well as strategies to address these behaviors.

**HSVC 2342 - Recreation Therapy/Rope Course Training**

Certified low sequencing of icebreakers, warm-ups and initiatives for low challenge course elements. Training in belaying, repelling, high set-ups, rescues, and all technical aspects of running a high challenge course. (Miscellaneous fees may be required.)

**HSVC 2363 - Recreation Therapy/Outdoor Adventure**

Field based course to understand origins and components of involvement in outdoor pursuits. Numerous skills applied to various outdoor settings. (Miscellaneous fees may be required.)

**HSVC 2413 - Introduction to Leisure Services**

The nature, scope and significance of leisure and recreation. Delivery systems for leisure services, major program areas and the interrelationship of special agencies and institutions serving the recreation needs of society. Cross listed with PHED 2513.

**HSVC 2433 - Introduction to Therapeutic Recreation**

Theory and application of therapeutic recreation with emphasis on types of illnesses and disabilities, delivery systems, programming and services. This course is also available as PHED 2533.

**HSVC 2513 - Management of Community Programs**

This course will prepare students for management careers and/or enhance the skills of professionals already employed in a community setting. It will include an examination of management philosophies, guidelines, strategies, personnel issues, and current program operations of human service agencies/organizations, particularly small non-profit entities. Prerequisite: HSVC 1113.

**HSVC 2613 - Gerontology in Human Services**

Focus on the roles and responsibilities of the human services worker with this specialized population, including knowledge of the social welfare system, bereavement, current status of managed care, and other related issues. An overview of the aging process and implications of an aging population will be presented. Discussion of levels of care, resources, and options for the elderly population within the community will be addressed. Fifteen to twenty field hours in a related service agency are required. Prerequisite: HSVC 2023.



**HSVC 2701 – Introduction to Play Therapy**

Along with an overview of play therapy history and application, specific play therapy techniques such as art therapy, sand-tray play, water play, mutual storytelling, puppetry, board games, and role-plays will be presented in an experiential learning environment. Discussion will include applications with special populations and students will learn how to engage a variety of populations in specific play techniques.

**HSVC 2711 - Clinical Application of Dreaming**

The clinical and therapeutic application of dreams will be explored in an experiential environment. The use of dreams in individual, group, and family therapy will be presented. Students will have the opportunity to explore their dreams using a variety of techniques and methodologies.

**HSVC 2990 - Selected Topics in Human Services**

The study and/or analysis of a selected topic in Human Services. May be repeated with a different topic.

## **HUMANITIES**

**HUMN 2113 - Humanities I (H)**

An interdisciplinary survey designed to strengthen the student's fundamental grasp of human values, ideas, discoveries, and creative achievements. Areas of consideration may include architecture, cosmology, dance, drama, film, history, literature, music, mythology, painting, philosophy, religion, and sculpture.

**HUMN 2223 - Humanities II (H)**

A continued interdisciplinary survey designed to strengthen the student's fundamental grasp of human values, ideas, discoveries and creative achievements. Areas of consideration may include architecture, cosmology, dance, drama, film, history, literature, music, mythology, painting, philosophy, religion, and sculpture.

**HUMN 2313 - Field Studies in Humanities**

An interdisciplinary Humanities course designed to provide students with faculty-led experiences of different creative expressions. The course includes lectures and readings to prepare students for on-site experiences and discussion. May be repeated with different on-site experiences for up to nine hours credit. Requires instructor approval.

**HUMN 2323 - 20th Century Humanities (H)**

This course will allow a global focus on creative achievements from 1900 to the present. It is a survey of the "modern" humanities.

**HUMN 2333 - Humanities: Literature and Film (H)**

An introductory study of the narrative through examination of selected literature and its adaptation into film.

**HUMN 2443 - Art of Film (H)**

A critical study of film as an art form and as a reflection of modern culture through examination of selected works and reviews.

**HUMN 2553 - American Humanities (H)**

An interdisciplinary, multi-cultural survey designed to strengthen the student's appreciation of America's rich cultural heritage. Areas of consideration may include architecture, cosmology, dance, drama, film, history, literature, music, painting, philosophy, religion, and sculpture.

**HUMN 2613 - International Film (H,I)**

Analytical study of exemplary international films in terms of major historical periods or trends, themes and aesthetics. Critical analysis of aesthetic and narrative traditions of film as a reflection of the humanistic values of the cultures of their production. Students will speak and write critically about film as an art form as well as about film in relation to culture.

**HUMN 2663 - Hollywood's America (H)**

This course will explore values, myths, and legends about America as portrayed by Hollywood. It will examine how films about America both reflect and lead popular American and international consciousness of America's society, history, heroes, heroines, and villains.

**HUMN 2773 - American Popular Culture (H)**

This course is a critical analysis of the form and content of the arts Americans experience on a daily basis. Areas of consideration may include advertising arts, cartoons, dance, fashions, film, new religions, popular literature, popular music, and television.

**HUMN 2883 - Art and Identity: Cultural Encounters in America (H)**

This course examines cultural identities in America as they are expressed through oral traditions, music, literature, and the arts. The course explores how the various cultures which came together in America borrowed for each other to produce the forms we see today. Distinctions are made between perceived cultural differences and those cultural elements which are common to all humanity.

**HUMN 2990 - Selected Topics in Humanities**

The study and/or analysis of a selected topic in Humanities. May be repeated with a different topic.

## **INFORMATION TECHNOLOGIES CONVERGENCE**

See Information Technology Programs

**ITCV 1033 – Introduction to Voice & Data Networking**

This is an introductory study of voice and data communications and convergence. Topics include the history and evolution of the telecommunications infrastructure, analog & digital signaling & transmission media & technologies, service providers, binary, decimal, and hexadecimal numbering systems, circuit and packet switching, WAN and broadband networking technologies, and Voice over IP. Students will perform numerous hands-on labs. This course is a prerequisite for ITCV 2033 Cisco CCENT / ICND1, and serves as a substitute for CSCI 1263 Network Fundamentals. Prerequisite: CSCI 1203 or demonstration of computer proficiency.

**ITCV 2023 – Wireless Networking**

An in-depth study of current and emerging wireless communications and networking technologies used in PANs, LANs, MANs, and WANs. Topics include wireless transmission, RF, IR, antennas, WLAN's, security, global positioning systems, cellular technologies, RFID, NFC, Blue Tooth, satellite, VoWLAN, ZigBee, and Wi-Max. Prerequisite: ITCV 1033 or instructor approval.

**ITCV 2033 – Cisco CCENT/ICND 1**

This course prepares students to take the Cisco ICND 1 certification exam, and is a prerequisite for taking ITCV 2203 Cisco CCNA Routing & Switching/ICND2. Topics include a review of networking fundamentals, Ethernet LANs, and IPv4 addressing, subnetting and services, and an introduction to IPv6. Students will configure real Cisco routers and switches in hands-on labs. Prerequisite: ITCV 1033 or instructor approval.

**ITCV 2203 – Cisco CCNA Routing & Switching/ICND2**

This course prepares the student to take the current CCNA ICND2 certification exam. Topics include LAN switching, IPv4 protocols and routing, WANs, IPv6 routing protocols, and network management. Students will configure real Cisco routers and switches in hands-on labs. Prerequisite: ITCV 2033 Cisco CCENT/ICND 1 or instructor approval.

**ITCV 2293 – Cloud Computing**

This course prepares students to provision and support cloud computing, and will also help to prepare students for industry certification exams. Topics include software as a service (SaaS), platform as a service (PaaS), infrastructure as a service (IaaS), data storage, RAID systems, big data, network attached storage (NAS), storage area networks (SAN), cloud computing, hypervisors, business continuity, replication, virtualization, virtual machines, physical to virtual conversion, and live migration. Students will work in groups to build their own cloud infrastructure with shared storage, multiple hosts, and cloud management. Prerequisites: ITCV 1033, CSCI 1483, and CSYS 2063 or instructor approval.

**ITCV 2990 - Selected Topics in Information Technologies Convergence**

Selected topics in Information Technologies Convergence.

## **INTERIOR DESIGN**

**INTD 1303 – Sales and Negotiations**

A multi-pronged approach focused on the development and growth of the salesperson through a study of self-motivation, business communication, and the development of sales presentations and closing strategies, with special emphasis on developing negotiation skills. Cross-listed to MKTG 1313.

**INTD 1313 - Interior Design Orientation**

An introductory course into the field of interior design which includes the basic elements and principles of design. An overview of the profession including professional standards, employment opportunities, interior materials, and an understanding of basic human needs in relation to design. Concurrent enrollment in INTD 1473 is required and concurrent enrollment in INTD 1433 is strongly recommended for Interior Design majors.

**INTD 1433 - History of Interiors I (H)**

A study of architecture and interior furnishings from prehistoric to the 18th century. Major political, religious and art movements influencing the interior design profession are included. Concurrent enrollment in INTD 1313 and INTD 1473 is recommended. Online only.

**INTD 1443 – History of Interiors II (H)**

A study of architecture, interiors and furniture of the 19th and 20th centuries. Major political, religious and art movements influencing the interior design profession are included. Prerequisites: INTD 1433 with a grade of “C” or better. Online only.

**INTD 1473 – Color Theory**

A study of color as it relates to Interior Design from the past to now. Emphasis on how colors are mixed, emotions are evoked by colors and design implications are related to color. Concurrent enrollment in INTD 1313 is required. Concurrent enrollment in INTD 1433 is suggested. Fall only.

**INTD 1483 - Design I**

An introduction to drafting tools, equipment and techniques. This course will introduce Interior Design students to visual communication for the design profession through technical drafting skills, including floor plans, elevations, and isometrics. Emphasis is placed on the design implications of spatial relationships, scale and function. Prerequisites: INTD 1313 and INTD 1473, both with a grade of “C” or better. Concurrent enrollment in INTD 1493 is required. Concurrent enrollment in INTD 1443 is suggested. Spring only.

**INTD 1493 - Presentation Drawing**

An introduction to architectural sketching, one and two-point perspective drawing, and color rendering techniques to enhance interior presentations. Prerequisites: INTD 1313 and INTD 1473, both with a grade of “C” or better. Concurrent enrollment in INTD 1483 is required. Concurrent enrollment in INTD 1443 is suggested. Spring only.

**INTD 1513 - Design II**

In-depth creative application of space planning for a variety of large project types. Emphasis placed on material and finish selection and presentation boards. Prerequisites: INTD 1443, INTD 1483, and INTD 1493, all with a grade of “C” or better. Concurrent enrollment in INTD 1523 is required. Concurrent enrollment in INTD 1543 is suggested. Fall only.

**INTD 1523 - Introduction to CAD for Interior Design**

This course introduces the principles and techniques utilized in Computer Aided Design and drafting for two dimensional application. Students will be introduced to concepts of drawing entities and objects, as well as processes to manipulate, edit, or modify drawings. Prerequisites: INTD 1443, INTD 1483, and INTD 1493, all with a grade of “C” or better. Concurrent enrollment in INTD 1513 is required. Concurrent enrollment in INTD 1543 is suggested. Fall only.

**INTD 1533 – Photoshop for Interior Design**

This course is designed to provide students with a functional knowledge of the industry standard graphics editing software in a hands-on environment. Design concepts will be emphasized by completing projects based on the Interior Design profession. Prerequisites: INTD 1513 and INTD 1523 or concurrent enrollment. Fall only.

**INTD 1543 - Professional Practice for Interior Design**

A study of professional practices in Interior Design, including business procedures, professional ethics, contracts, project management and specifications. Prerequisites: INTD 1483 and INTD 1493, both with a grade of “C” or better. Concurrent enrollment in INTD 1513 and INTD 1523 is suggested. Online only.

**INTD 2343 - Internship I**

Supervised employment in the Interior Design profession. Intended to provide practical experience for students preparing for a career in the area of Interior Design and decorating who are not already employed in this field. Prerequisites: INTD 1513, INTD 1523, and INTD 1543, all with a grade of “C” or better, and instructor approval.

**INTD 2353 – Internship II**

Supervised employment in the Interior Design profession. Intended to provide practical experience for students preparing for a career in the area of Interior Design who are not already employed in this field. Prerequisites: INTD 2343 with a grade of “C” or better and instructor approval.

**INTD 2403 - Market Field Trip**

Students will become familiar with market showroom services available to interior designers. Showroom procedures in relation to samples, ordering, and financial requirements will be covered. Prerequisites: INTD 1313 with a grade of “C” or better and instructor approval.

**INTD 2433 - Textiles for Interior Design**

A study of styles, properties, testing, and appropriate uses of textiles in Interior Design. Yardage calculations needed for various window treatments and wall covering applications will be covered. Prerequisites: INTD 1513, INTD 1523, and INTD 1543, all with a grade of “C” or better. Concurrent enrollment in INTD 2443 and INTD 2463 is required. Spring only.

**INTD 2443 – Materials and Interior Finishes**

The study of materials and finishes for interiors from characteristics to installation. Emphasis on selecting appropriate materials, estimating and specifications. Prerequisites: INTD 1513, INTD 1523 and INTD 1543, all with a grade of “C” or better. Concurrent enrollment in INTD 2433 and INTD 2463 is required. Spring only.

**INTD 2453 - Advanced CAD for Interior Design**

Advanced visual communication, computer drafting and presentation techniques. In-depth design problems will be addressed. Prerequisites: INTD 1513, INTD 1523, and INTD 1543, all with a grade of “C” or better. Spring and summer.

**INTD 2463 – Codes for Interior Designs**

The study and research of codes used in the Interior Design profession. Emphasis on ADA, fire, and building codes. Prerequisites: INTD 1513, INTD 1523 and INTD 1543, all with a grade of “C” or better. Concurrent enrollment in INTD 2433 and INTD 2443 is required. Spring only.

**INTD 2503 - Computer Graphics**

A study of three-dimensional computer modeling and rendering using various computer programs. Prerequisites: INTD 1513 and INTD 2453, both with a grade of “C” or better. Concurrent enrollment in INTD 2523 is required. Fall only.

**INTD 2513 - Lighting for Interior Design**

A study of lighting design for interior spaces. Emphasis on lighting systems, fixtures, specifications, and placement. Prerequisites: INTD 2503 and INTD 2523, both with a grade of “C” or better. Concurrent enrollment in 2533 is required. Spring Only.

**INTD 2523 - Design III**

Development of a large scale studio project while researching and applying design principles and elements and codes as well as selecting furniture and finishes. Emphasis on the development of construction documents. Prerequisites: INTD 1513, INTD 2443, INTD 2453, INTD 2463, all with a grade of “C” or better. Concurrent enrollment in INTD 2503 is required. Fall only.

**INTD 2533 - Design IV**

Students will assess personal strengths and goals. Emphasis placed on resumes, portfolios, design organization, and presentation methods to exhibit work. Small design projects may be addressed. Prerequisites: INTD 2503 and INTD 2523, both with a grade of “C” or better. Concurrent enrollment in INTD 2513 is required.

**INTD 2990 - Selected Topics in Interior Design**

The study and/or analysis of a selected topic in Interior Design. May be repeated with a different topic.

## **INTERNATIONAL BUSINESS**

See International Business Program Description and Business Course Descriptions

## **INTERPRETER EDUCATION**

See also American Sign Language Education Course Descriptions

**INED 1423 - Introduction to Interpreting**

*The time required for laboratory may vary by course. Please refer to the course syllabus for more information.*



This course is designed to provide students with a working knowledge of the profession of interpreting, including the Code of Ethics, certification criteria, the roles and responsibilities of an interpreter, and compensation. The role of the interpreter in a variety of professional settings including educational, medical, legal, the performing arts, mental health, and employment will be addressed.

### **INED 2213 - American Sign Language to English Interpreting I**

This course is designed to develop consecutive interpreting skills from American Sign Language to spoken English. Emphasis will be on development of interpreting processing skills. Prerequisites: ASLE 1373 and INED 1423 with a "C" or better or instructor approval. Concurrent enrollment with ASLE 2414 and INED 2393 is recommended.

### **INED 2233 - American Sign Language to English Interpreting II**

This course is a continuation of American Sign Language to English Interpreting I. Students will refine consecutive interpretation skills and develop simultaneous interpretation skills from American Sign Language to English. Students will discuss the application of process skills, contrastive ASL-English linguistics, contrastive cultural analysis, and teaming skills. This course includes practice of requisite skills and process tasks of increased complexity with rehearsed and unrehearsed language samples. Prerequisite: INED 2213 with a "C" or better or instructor approval. Concurrent enrollment with INED 2403 and ASLE 2524 is recommended.

### **INED 2393 - Interpreting I**

This course is designed to develop skills in consecutive interpretation from spoken English to American Sign Language. Coursework will enhance development in auditory memory, visualization, message analysis and target language production. Students are required to observe interpreters in two instructor-approved situations beyond the classroom. Prerequisites: ASLE 1373 and INED 1423 with a grade of "C" or better and an appropriate CPT or ACT score or a grade of "C" or better in ENGL 1113 or instructor approval. Concurrent enrollment with INED 2213 and ASLE 2414 is recommended.

### **INED 2403 - Interpreting II**

This course is a continuation of Interpreting I with an emphasis on transliteration skills. Students will work from consecutive interpreting to simultaneous interpreting increasing linguistic competency and cultural appropriateness. Students are required to observe interpreters in two instructor-approved situations beyond the classroom. Prerequisite: INED 2393 with a grade of "C" or better or instructor approval. Concurrent enrollment with INED 2233 and ASLE 2524 is recommended. Includes lab component.

### **INED 2443 - Interpreting in Specialized Settings**

This course is designed to equip the student with the skills and vocabulary needed to interpret in a variety of settings including but not limited to medical, mental health, legal, employment, educational, religious and the performing arts. Prerequisites: INED 2393 and ASLE 2414 with "C" or better or instructor approval. Includes lab component.

### **INED 2613 - Interpreting III**

This course is designed to strengthen processing skills and target language production from spoken English to American Sign Language and from American Sign Language to spoken English through the use of interactive materials. Continued application of process skills, contrastive ASL-English linguistics, contrastive cultural analysis and teaming skills will be provided using rehearsed and unrehearsed texts. Prerequisites: INED 2403 with a grade of "C" or better or instructor approval. Concurrent enrollment with INED 2643 is recommended. Includes lab component.

### **INED 2643 - Interpreting Internship**

This course provides practical experience in settings such as educational, rehabilitation, community service center, and agencies serving children, adolescents, and/or adults who are Deaf or hard of hearing. Students have the opportunity to synthesize practical and academic experiences gained during coursework. The site, supervision, and plan of activity will be agreed upon mutually by student and instructor. Prerequisites: ASLE 1413, INED 2233, INED 2403, INED 2443, and ASLE 2524 with a grade of "C" or better or instructor approval. Concurrent enrollment with INED 2613 is recommended. Includes lab component.

### **INED 2990 - Selected Topics in Interpreter Preparation**

The study and/or analysis of a selected topic in Interpreter Preparation. May be repeated with a different topic.

## ITALIAN

### **ITAL 1001 - Italian for Communication I**

A companion course to ITAL 1103 with emphasis on speaking and comprehension skills. Recommended that it be taken simultaneously with ITAL 1103 or after. Prerequisite: ITAL 1103 with a grade of "C" or better or instructor approval.

### **ITAL 1103 - Italian I**

A beginning course in understanding, speaking, reading, and writing Italian. The first in a sequence of related courses.

### **ITAL 1201 - Italian for Communication II**

Continued instruction in basic language concepts and beginning conversational skills. Conducted in Italian. Prerequisite: ITAL 1103 with a grade of "C" or better or instructor approval.

### **ITAL 1213 - Italian II**

Continued instruction in understanding, speaking, reading, and writing Italian. The second in a sequence of related courses. Prerequisite: ITAL 1103 with a grade of "C" or better or instructor approval.

### **ITAL 1301 - Italian for Communication III**

Continued instruction to develop oral fluency and conversational skills. Conducted in Italian. Prerequisite: ITAL 1213 with a grade of "C" or better or instructor approval.

### **ITAL 1313 - Italian III**

Continued instruction in understanding, speaking, reading, and writing Italian. The third in a sequence of related courses. Prerequisite: ITAL 1213 with a grade of "C" or better or instructor approval.

### **ITAL 1401 - Italian for Communication IV**

Continued instruction to develop oral fluency and conversational skills. Conducted in Italian. Prerequisite: ITAL 1313 with a grade of "C" or better or instructor approval.

### **ITAL 1413 - Italian IV**

Continued instruction in understanding, speaking, reading, and writing Italian. The fourth in a sequence of related courses. Prerequisite: ITAL 1313 with a grade of "C" or better or instructor approval.

### **ITAL 2113 - Intermediate Italian I**

An intermediate course in understanding, speaking, reading, and writing Italian. Taught in Italian. Prerequisite: ITAL 1413 with a grade of "C" or better or instructor approval.

### **ITAL 2121 - Intermediate Italian Communication**

Practice in speaking Italian at the intermediate level covering a wide range of subjects: i.e., everyday language, intermediate literature samples, other publications, and current events. Conducted in Italian. Prerequisite: ITAL 2113 with a grade of "C" or better or instructor approval.

### **ITAL 2143 - Italian Civilization and Culture**

Conversations and readings concerning Italian culture and civilization. Conducted in Italian. Prerequisite: ITAL 2113 with a grade of "C" or better or instructor approval.

### **ITAL 2213 - Intermediate Italian II**

An intermediate course in understanding, speaking, reading, and writing Italian. Taught in Italian. Prerequisite: ITAL 1413 with a grade of "C" or better or instructor approval.

### **ITAL 2263 - Intermediate Italian Literature**

Development of reading skills in the target language using intermediate level literary texts. Conducted in Italian. Prerequisite: ITAL 2113 with a grade of "C" or better or instructor approval.

### **ITAL 2320 - International Work and/or Study Seminar**

Practicum with an international firm and/or study abroad. Focus on application and enhancement of language skills (oral and written forms). Lecture and/or laboratory equivalent. Prerequisite: Approval of Dean of Global Education and Associate Dean before enrollment and in advance of work/study abroad experience.

**ITAL 2330 - Italian International Seminar and/or Field Studies**

This course is designed to provide an on-site experience in the selected Italian speaking country. Includes lectures, readings, oral interactions, and written reports. All or a portion of instruction and activities are conducted at the international site. Focus on language (oral and written forms) and culture development. Prerequisite: Permission of the Dean of Global Education and Associate Dean before enrollment and in advance of in-country experience.

**ITAL 2421 - Italian Culture Comparisons**

Focus on the cultural aspects of the Italian people. Includes a comparison with the American culture as well as other culture groups. Conducted in English.

**ITAL 2533 - Advanced Italian Conversation**

This course is intended for students who have studied Italian structure through the intermediate level and have gained a basic oral fluency and proficiency. Class activities will focus on acquiring sufficient speaking skills to interact with native speakers and the use of Italian as the main language of communication without the aid of an interpreter. Conducted in Italian. Prerequisite: ITAL 2213 with a grade of "C" or better or 18 hours of Italian or instructor approval.

**ITAL 2990 - Selected Topics in Italian**

The study and/or analysis of a selected topic in Italian. May be repeated with a different topic.

## **JAPANESE**

**JAPN 1001 - Japanese for Communication I**

A companion course to JAPN 1103 with emphasis on speaking and comprehension skills. Recommended that it be taken simultaneously with JAPN 1103 or after. Prerequisite: JAPN 1103 with a grade of "C" or better or instructor approval.

**JAPN 1103 - Japanese 1**

A beginning course in understanding, speaking, reading, and writing Japanese. The first in a sequence of related courses.

**JAPN 1201 - Japanese for Communication II**

Continued instruction in basic language concepts and beginning conversational skills. Conducted in Japanese. Prerequisite: JAPN 1103 with a grade of "C" or better or instructor approval.

**JAPN 1213 - Japanese II**

Continued instruction in understanding, speaking, reading, and writing Japanese. The second in a sequence of related courses. Prerequisite: JAPN 1103 with a grade of "C" or better or instructor approval.

**JAPN 1301 - Japanese for Communication III**

Continued instruction to develop oral fluency and conversational skills. Conducted in Japanese. Prerequisite: JAPN 1213 with a grade of "C" or better or instructor approval.

**JAPN 1313 - Japanese III**

Continued instruction in understanding, speaking, reading, and writing Japanese. The third in a sequence of related courses. Prerequisite: JAPN 1213 with a grade of "C" or better or instructor approval.

**JAPN 1401 - Japanese for Communication IV**

Continued instruction to develop oral fluency and conversational skills. Conducted in Japanese. Prerequisite: JAPN 1313 with a grade of "C" or better or instructor approval.

**JAPN 1413 - Japanese IV**

Continued instruction in understanding speaking, reading, and writing Japanese. The fourth in a sequence of related courses. Prerequisite: JAPN 1313 with a grade of "C" or better or instructor approval.

**JAPN 2071 - Japanese History and Geography Introduction**

A survey of Japanese history and geography as it relates to modern day Japanese societies and language with an awareness of the relationship between the physical, political, and linguistic regions. Conducted in English.

**JAPN 2113 - Intermediate Japanese I**

An intermediate course in understanding, speaking, reading, and writing Japanese. Taught in Japanese. Prerequisite: JAPN 1413 with a grade of "C" or better or instructor approval.

**JAPN 2213 - Intermediate Japanese II**

An intermediate course in understanding, speaking, reading, and writing Japanese. Taught in Japanese. Prerequisite: JAPN 1413 with a grade of "C" or better or instructor approval.

**JAPN 2320 - International Work and/or Study Seminar**

Practicum with an international firm and/or study abroad. Focus on application and enhancement of language skills (oral and written forms). Lecture and/or laboratory equivalent. Prerequisite: Approval of Dean of Global Education and Associate Dean before enrollment and in advance of work/study abroad experience.

**JAPN 2421 - Japanese Culture Comparisons**

Focus on the cultural aspects of the Japanese people. Includes a comparison with the American culture as well as other culture groups. Conducted in English.

**JAPN 2523 - Intermediate Japanese Grammar and Composition**

This course includes a thorough review of syntax, grammar and the development of composition skills. Conducted in both Japanese and English. Prerequisite: JAPN 2213 with grade of "C" or better or 18 hours of Japanese or instructor approval.

**JAPN 2990 - Selected Topics in Japanese**

The study and/or analysis of a selected topic in Japanese. May be repeated with a different topic.

## **JOURNALISM/MASS COMMUNICATIONS**

**JRMC 1013 – Introduction to Mass Communications**

A survey course designed to provide students with a panoramic view of mass communications in the digital global age with emphasis on the role of mass media in a diverse society. Open to all majors. Offered fall, spring, and summer terms.

**JRMC 1103 – Introduction to Broadcasting**

Introductory course in the practical application of writing, performance, and technical production pertaining to radio, television field production and studio production. Students will acquire hands-on experience as they produce assignments in the radio lab, on field assignments, and in the television studio. Open to all majors. Includes lab component. Offered Fall and Spring terms.

**JRMC 1113 – Writing for the Mass Media**

Introduction to media writing and Associated Press Style. Course focuses on news and non-news styles used by media writers and professionals. Directed study of practice in writing for print and electronic media, including online media. Offered fall, spring and summer terms. Prerequisites: Word-processing ability and ENGL 1083 or concurrent enrollment. Students are required to pass the Media Writing Skills Test with a score of 70 percent or higher. Offered Fall and Spring terms.

**JRMC 1123 – News Writing and Reporting**

Techniques of news writing and reporting in the digital age, including: writing leads, structuring and polishing the news story; using the stylebook; information gathering and interviewing; determining news value; practice in writing different types of stories, with emphasis on hard news, feature, police, government, and speech coverage. Prerequisites: Typing/word processing ability, successful completion of ENGL 1083 and JRMC 1113 or instructor approval. Offered Fall and Spring terms.

**JRMC 1613 - Radio Production**

This course provides an overview of digital radio production, including technical aspects, editing and radio station operations. The theories, tools, techniques, and regulatory controls of audio production are examined. Offered fall term only. Prerequisite: JRMC 1103 or concurrent enrollment. Includes lab component. Offered Fall term only.

**JRMC 1713 - Voice and Articulation**

A basic investigation of the structure and function of the vocal apparatus for use in broadcast and electronic media. Analysis of sounds (phonemes) of the English language through the study of the International Phonetic Alphabet. Emphasis on improving vocal sound, articulation, and pronunciation through various techniques and exercises. Prerequisite: JRMC 1103 or concurrent enrollment. Offered Fall term only.



**JRMC 2013 – Principles of Advertising**

Course covers elements and purposes of advertising; study of historical, legal, ethical, psychological, economic, global, societal and artistic aspects. Focus on advertising structure, comprehensive campaign reports, marketing and promotional mixes, budget, and media planning, practice in advertising copywriting and design and sales. Prerequisites: JRMC 1113 and/or concurrent enrollment. Offered Fall term only.

**JRMC 2023 - Electronic Communication**

This course introduces students to electronic communication with a series of hands-on projects that incorporate multimedia tools. Students will develop skills in basic blogging, photography, videography, podcasting and web page development. Discussion will focus on effective techniques for storytelling in a changing media landscape, and exploring new approaches to traditional methods of communication. Prerequisite: JRMC 1113. Includes lab component. Offered Spring term only.

**JRMC 2103 - Principles of Broadcasting and Electronic Media**

A survey of the history, growth, and development of electronic media including radio, television, cable, and Internet. It will include FCC regulations and other federal regulatory agencies, station and network operations, and their effects on society. Offered Fall term only.

**JRMC 2143 – Studio Production**

Students learn to write, produce and direct multi-camera studio productions. Topics include studio camera operation, lighting and sound, as well as organized pre-production and crewing in a studio environment. Prerequisites: JRMC 2573 or instructor approval. Includes lab component. Offered Spring term only.

**JRMC 2173 – Advanced Broadcasting**

Advanced study in writing for television and radio practice in script writing; broadcast performance/ announcing; pre-production, broadcast reporting and management of programs and formats. Prerequisite: JRMC 1103. Includes lab component. Offered Spring term only.

**JRMC 2183 – Principles of Public Relations**

Students learn fundamental principles of public relations processes, including research, planning and communication. Course includes an examination of selected case study methodologies, including writing news releases and planning, detailing and producing a comprehensive public relations campaign. Prerequisite: JRMC 1113 or concurrent enrollment. Offered Spring term only.

**JRMC 2263 - Digital Video I/Final Cut Pro**

A general overview of digital video editing. Students will gain hands-on experience in video capture and editing using Final Cut Pro nonlinear video editing software on Macintosh platforms. Prerequisites: CSYS 1211 and CSYS/JRMC 2573 or instructor approval. Cross listed as CSCI 2263. Includes lab component.

**JRMC 2273 - Digital Video II/Final Cut Pro**

An in-depth continuation of JRMC 2263 where students will integrate graphics, audio, animation, and special effects into digital video projects. Students will use Final Cut Pro video editing software on Macintosh platforms. Prerequisite: CSCI/JRMC 2263 or instructor approval. Includes lab component. Cross listed as CSCI 2273.

**JRMC 2373 – Broadcast Laboratory**

Practical application of writing, performance, and technical production of TCC student video programs and program segments. Students will work as a broadcasting team, rotating duties as they produce campus-related programming in a studio-laboratory setting. Prerequisites: JRMC 2173 or concurrent enrollment; JRMC 2263; or program coordinator's approval. Includes lab component. Offered Spring term only.

**JRMC 2433 – Field Production**

Pre and post-production processes involved in field (on location) broadcast productions. Topics include field camera setup and operation, field audio, television direction, and in-camera or basic continuity editing with an emphasis on underlying principles of video technology. Prerequisites: JRMC 2573 or instructor approval. Includes lab component. Offered Fall term only.

**JRMC 2513 – TCC Connection I**

The workshop is continuation and further development in the production of a bi-weekly news product. Included in the workshop is hands-on training for a newspaper and a website. Assignments in news gathering and prioritization, news writing, editing, layout and design, photography, advertising sales, office management, and operations in a media-related environment will be emphasized. Students will acquire experience using InDesign, Photoshop and other media-related software programs. Prerequisite: Instructor approval. Offered Fall term only.

**JRMC 2523 – TCC Connection II**

Continued workshop providing further development in the production of a bi-weekly news product. Included in the workshop is hands-on training for the development of a newspaper and a website. Assignments in news gathering and prioritization, news writing, editing, layout and design, photography, advertising sales, office management, and operations in a media-related environment will be emphasized. Students will acquire experience using InDesign, Photoshop and other media-related software programs. Prerequisite: Instructor approval. Offered Spring and Summer terms.

**JRMC 2573 – Videography**

An introductory study in video technologies basic equipment, including digital video camera operation, video composition, basic lighting, audio, production planning, and visual story telling. Prerequisite: JRMC 1103. Cross-listed with CSYS 2573. Offered Fall and Spring terms.

**JRMC 2623 – Radio Laboratory**

Practical application of writing, performance, and technical production of TCC student radio programs and program segments. Students will work as a radio broadcast team, producing campus-related programming throughout the term. Prerequisite: Instructor approval. Includes lab component. Offered Fall and Spring terms.

**JRMC 2631 – Radio Practicum**

This course concentrates on using the voice-tracking software available in the Radio Lab. Students will receive individual instruction on learning to use the software. Students will then provide weekly programming for TCC's Internet radio station. This is a self-paced course; however, students are required to produce a designated minimum number of shows. Open to all majors. Offered Fall and Spring terms.

**JRMC 2633 – Radio Announcing**

This course provides an interpretive analysis and practical application of broadcast announcing. Broadcast announcing principles and techniques are discussed and applied. Includes creating, reading and delivering commercials, news, interviews, public service announcements, and special events. Prerequisite: JRMC 1613. Includes lab component. Offered Spring term only.

**JRMC 2973 – Journalism and Mass Communications Internship I**

Expands the JRMC and Digital Media Programs, offering internship as a means to provide students with hands-on learning and working experience in their chosen JRMC degree options of Broadcasting, Advertising or Public Relations; or their chosen Digital Media specialty options of Broadcast Production Specialist, Multimedia Reporting Specialist or Radio Production Specialist. Students must apply through internship faculty advisor. Offered Fall, Spring and Summer terms.

**JRMC 2983 – Journalism and Mass Communications Internship II**

Designed as an expansion of the TCC Journalism and Mass Communications Program, offering internship as a means to provide students with hands-on learning experiences and working experience in their chosen field(s) of Journalism: Print Media (newspaper/magazine), Broadcasting (radio/television), Public Relations and Advertising. Prerequisite: Successful completion of JRMC 2973, initiation of the application process with the Program Coordinator or Associate Dean. Offered Fall, Spring and Summer terms.

**JRMC 2990 - Selected Topics in Journalism**

The study and/or analysis of a selected topic in Journalism and Mass Communications. May be repeated with a different topic.

## **LATIN**

### **LATN 1103 - Latin I**

An elementary course in understanding, speaking, reading, and writing Latin. The first in a sequence of four related courses.

### **LATN 1213 - Latin II**

Continued instruction in understanding, speaking, reading, and writing Latin. Prerequisite: LATN 1103 with a grade of "C" or better or instructor approval.

### **LATN 1313 - Latin III**

Continued instruction in understanding, speaking, reading, and writing Latin. Prerequisite: LATN 1213 with a grade of "C" or better or instructor approval.

### **LAT 2413 - Latin Translations**

This course will focus on the meaning of Latin Terminology used in areas of professional, legal, research, health, and government areas. Prerequisite: Instructor approval.

### **LATN 2990 - Selected Topics in Latin**

The study and/or analysis of a selected topic in Latin. May be repeated with a different topic.

## **LEGAL ASSISTANT**

See Paralegal

## **LIBRARY TECHNOLOGY**

### **LIBT 1161- Information in the Digital Age**

This course is designed to teach fundamental research skills and familiarize students with library and Internet information resources. The course emphasizes how to find print and online sources appropriate for college-level research assignments; how to evaluate information; and how to use information effectively and ethically. Skills acquired in this course will help develop information literacy and lifelong learning abilities, benefiting students' performance in other classes and in personal and professional pursuits.

## **MANAGEMENT**

### **MGMT 1073 - Business Experiential Studies**

Experiential learning credit may be granted for knowledge gained through bona fide corporate training programs. Personal involvement in certain professional organizations offering bona fide training may also be considered. The student will be required to attend a portfolio orientation session with the instructor, then develop a portfolio of business training and experiences to be submitted to the college for review to determine the equivalence to college learning. Prerequisite: Completed 12 credit hours of coursework at TCC with a 2.0 GPA or higher.

### **MGMT 1343 - Management Internship I**

Supervised employment in the student's chosen field of management. Intended to provide practical experience for students preparing for a career in management. Prerequisites: Concurrent enrollment in MGMT 1353 or MGMT 2363 and instructor approval.

### **MGMT 1353 - Management Essentials**

Introduction to practical management with emphasis on the role of the manager in the company/organization. Examines the function of management in conjunction with leadership, motivation, and communication.

### **MGMT 1363 - Management Internship II**

Supervised employment in the student's chosen field of management. Intended to provide practical experience for students preparing for a career in management. Prerequisites: MGMT 1343, MGMT 1353 or MGMT 2363, concurrent enrollment in MGMT 2453, and instructor approval.

**MGMT 1383 - Human Resources Management for the Hospitality Industry**

Study of the principles of management for the hospitality industry with emphasis on human factors including the employee selection process, orientation and training, effective communication and motivational techniques. Special emphasis is placed on the legal landscape of the hospitality including issues such as wage and hour laws, employee rights and working with union organizations.

**MGMT 2103 - Workforce Development Internship**

Supervised work experience related to the student's chosen workforce development field of study. Designed to provide practical application of workforce development program content in the work environment. Student must contact workforce development internship instructor and meet all requirements for internship participation including completion of 15 credit hours with a 2.0 GPA or higher, or instructor approval.

**MGMT 2123 - Leadership Development**

This course is designed to provide emerging and existing leaders the opportunity to explore the concept of leadership and to develop and improve their leadership skills. The course integrates reading from the humanities, experiential exercises, films and contemporary readings on leadership.

**MGMT 2303 - Management Internship III**

Supervised employment in the student's chosen field of management. Intended to provide practical experience for students preparing for a career in management. Prerequisites: MGMT 1363, MGMT 2453, concurrent enrollment in MGMT 2323, and instructor approval.

**MGMT 2323 - Organizational Behavior**

A study of the behavioral sciences and their application to human relations and productivity. Includes such topics as motivation, leadership, participative management, group dynamics, communication, organizational change, and group processes as related to team building and total quality management. Prerequisite: MGMT 1353 or MGMT 2363, MGMT 2453 or instructor approval.

**MGMT 2343 - Management Internship IV**

Supervised employment in the student's chosen field of management. Intended to provide practical experience for students preparing for a career in management. Prerequisites: MGMT 2303, MGMT 2323, concurrent enrollment in MGMT 2353, and instructor approval.

**MGMT 2353 - Business Policy**

A study of management activities utilizing comprehensive case problems. Emphasis is on the integration of management functions in the process of planning objectives, establishing policies, and determining strategic plans of action. Prerequisite: MGMT 2323 or instructor approval.

**MGMT 2363 - Principles of Management**

Introduction to the basic theory and principles of management. Emphasis is on the functions of management, planning, organizing, staffing, directing, and controlling. A survey approach to current trends in management and possible future developments in organization and administration.

**MGMT 2403 - Critical Thinking for Results**

Study of managerial critical thinking skills with application in pre-problem solving, purposeful position taking, and methodology to take in information with proper precision, breadth, and depth. Students will learn to persevere intellectually to meet both short and long term business goals.

**MGMT 2443 - Imagination, Innovation, and Creativity**

This course is designed to provide students with practical knowledge, skills, and hands-on exercises which add value to services and products through innovation and imagination. Utilizing critical thinking skills, problem-solving techniques, and various creative exercises, students will develop their personal creative potential, and explore techniques such as lateral thinking, inversion, and free association within a team environment.

**MGMT 2453 - Human Resources Management**

Study of the principles and practices of management with emphasis on the human factors, including recruitment, interviewing, testing, training, and performance appraisal. Emphasizes the responsibilities of all managers for human resources in their organization. Prerequisite: MGMT 1353 or MGMT 2363 or instructor approval.

**MGMT 2990 - Selected Topics in Management**

The study and/or analysis of a selected topic in Management. May be repeated with a different topic.

## **MARKETING**

**MKTG 1313 - Sales and Negotiations**

A multi-pronged approach, focused on the development and growth of the salesperson through a study of self-motivation, business communication, and the development of sales presentations and closing strategies, with special emphasis on developing negotiation skills. Cross-listed with INTD 1303.

**MKTG 1333 - Fashion Innovation and Marketing**

Course emphasizes the process of fashion innovation, variables of fashion affecting production and distribution of consumer goods, and development of present structure in the fashion industry.

**MKTG 1393 - Web Design and Marketing**

An introduction to Web site creation and marketing as it relates to E-Commerce business. Topics may include market research, usability issues, and design guidelines which include marketing approaches such as importance of logos, psychology of color, product promotion and cost factors. Students will develop and test a Web site using popular Web development software. Prerequisite: CSCI 1203. Recommended MKTG 2423. Cross listed with CSYS 1393.

**MKTG 1403 - Marketing Internship I**

Supervised employment in the student's chosen field of marketing. Intended to provide practical experience for students preparing for a career in marketing. Requires instructor approval.

**MKTG 1423 - Marketing Internship II**

Supervised employment in the student's chosen field of marketing. Intended to provide practical experience for students preparing for a career in marketing. Requires instructor approval.

**MKTG 1433 - Marketing Internship III**

Supervised employment in the student's chosen field of marketing. Intended to provide practical experience for students preparing for a career in marketing. Requires instructor approval.

**MKTG 1443 - Electronic Commerce**

This course will examine the foundation, operation and implications of the Internet economy. Course content may include topics such as Internet technologies, privacy, security, online market mechanisms, interaction with customers, electronic publishing, electronic shopping, knowledge-based products, pricing in the Internet economy, database issues, online auctions and e-marketplaces, intellectual property, policies, ethics for the Internet economy, emerging technologies and an outlook for the new economy. Prerequisite: CSCI 1203 or instructor approval.

**MKTG 1453 - Marketing Internship IV**

Supervised employment in the student's chosen field of marketing. Intended to provide practical experience for students preparing for a career in marketing. Requires instructor approval.

**MKTG 2293 - Social Media**

Social Media is an evolving set of online applications and Website features that enable user-generated content and online communication between individuals. More broadly referred to as Web 2.0, this trend creates exciting opportunities for both businesses and individuals. In this course, students will explore the use of social media for for business and personal use. Each student will develop a social media marketing plan for a business. Prerequisite: CSCI 1203. Recommended: MKTG 2423. Crosslisted with CSYS 2293.

**MKTG 2343 - Customer Service**

This course provides students with the basic concepts and current trends in the customer service industry. Special areas of emphasis include problem solving, development of a customer service strategy, creating customer service systems, coping with challenging customers, customer retention and measuring satisfaction.



**MKTG 2363 - Consumer Behavior**

The study of the consumer decision-making process including the effects of psychology and sociology. Course is taught from the perspective of those involved with or interested in selling, advertising, and retailing. Prerequisite: MKTG 2423 or instructor approval.

**MKTG 2393 - Advertising and Promotion Management**

Emphasizing the selection of media sources and coordination of advertising and promotion as a part of the marketing mix. The student will learn how to prepare and manage an advertising and promotion campaign.

**MKTG 2423 - Principles of Marketing**

A study of the marketing mix, including product, price, promotion and distribution and the influence of political, competitive, social, and technological environments on the marketing mix. The course also includes a review of marketing research and consumer behavior.

**MKTG 2433 - Product Development**

Course emphasizes the stages of product development, acquiring raw materials and products, design elements, production processes, pricing strategies, promotional tools, and distribution elements. A focus will be placed on principles related to merchandising, display, and retail practices.

**MKTG 2813 - International Marketing**

Dealing with the problems and opportunities of marketing in an international environment. Includes representation, licensing, credit, export and import requirements, and governmental regulations. Prerequisite: MKTG 2423 or instructor approval.

**MKTG 2990 - Selected Topics in Marketing**

The study and/or analysis of a selected topic in Marketing. May be repeated with a different topic.

## **MATHEMATICS**

**MATH 0003 - Basic Mathematics**

A study of the fundamental operations of whole numbers, fractions, and decimals, including a study of percents, measurement, interest.

**MATH 0013 - Beginning Algebra**

A course for students who need to review their basic algebra background. Included within this course are signed numbers, positive and negative exponents, order of operations, conversions in fractions, decimals and percents, algebraic expressions, factoring, polynomials, slope, graphing, linear equations and inequalities, and applications. Equivalent to one year of high school algebra. Prerequisite: Appropriate Placement score or a grade of "C" or better in MATH 0003.

**MATH 0055 - Basic Mathematics and Beginning Algebra**

A combination of MATH 0003 and MATH 0013. A course for students who need to review their basic mathematics and basic algebra skills. Included in this course are operations with whole numbers, fractions, decimals, and percents, signed numbers, exponents, algebraic expressions, factoring, algebraic fractions, linear equations and inequalities, and graphing. Equivalent to one year of high school algebra.

**MATH 0103 - Developmental Math 1 - Foundations of Mathematics - Arithmetic**

A study of the foundational principles of mathematics: operations with whole numbers, like fractions, decimals, percents and ratios. Includes applications in geometry and order of operations.

**MATH 0105 - Beginning and Intermediate Algebra**

A combination of MATH 0013 and MATH 0123 and equivalent to two years of high school algebra. A course for students who need to review their algebra background or need to satisfy a high school deficiency. Included within this course are signed numbers, negative and fractional exponents, algebraic expressions, factoring, algebraic fractions, functions, domain and range, linear equations and inequalities, absolute value equations and inequalities, systems of linear equations, graphing, irrational numbers, radicals, complex numbers, quadratic and higher degree equations, applications, and variation. Prerequisite: Appropriate placement score or a grade of "C" or better in MATH 0003.

### **MATH 0113 - Geometry**

A course for students that need to review their basic geometry. Included within this course are formal proofs, lines, angles, parallel and perpendicular lines, triangles, polygons, circles, three-dimensional geometry, computational geometry and constructions. Prerequisite: One year of high school algebra and appropriate placement score or a grade of "C" or better in MATH 0013.

### **MATH 0123 - Intermediate Algebra**

An extension of MATH 0013 for students that need to review their algebra background or need to satisfy a high school deficiency. Included within this course are absolute value equations and inequalities, algebraic fractions, irrational numbers, negative and fractional exponents, roots and radicals, complex numbers, domain and range, quadratic equations, variation, graphing, systems of equations and applications. Prerequisite: One year of high school algebra and appropriate placement score or a grade of "C" or better in either MATH 0013 or MATH 0055, or their equivalent.

### **MATH 0203 - Developmental Math 2 - Pre-Algebra**

A course for students who need to review their basic algebra background. Included within this course are signed numbers, positive and negative exponents, order of operations, conversions in fractions, decimals, percentages and proportions, linear equations and inequalities, slope, graphing and applications. Equivalent to one year of high school algebra. Prerequisites: Appropriate placement score or a grade of "C" or better in Math 0103.

### **MATH 0303 - Developmental Math 3 - Elementary Algebra**

An extension of MATH 0203 for students that need to review their algebra background or need to satisfy a high school deficiency. Included within this course are graphing linear equations and inequalities, linear forms and formulas, rational and irrational numbers and equations, negative and fractional exponents, roots and radicals, complex numbers, polynomial math, factoring polynomials and applications. Prerequisites: One year of high school algebra and appropriate placement score or a grade of "C" or better in MATH 0203 or equivalent.

### **MATH 0403 - Developmental Math 4 - Pre-College Algebra**

An extension of MATH 0303 for students who need to review their algebra background or need to satisfy a high school deficiency. Included within this course are quadratic equations, functions, domain range, interval notation, systems of equations, radical and complex numbers, Absolute value equations and inequalities, and applications. Prerequisites: One year of high school algebra and appropriate placement score or a grade of "C" or better in MATH 0303 or its equivalent.

### **MATH 0503 - Developmental Math 5 - Technology Option**

Guided individual technology-based instruction in developmental math. Enrollment by permission only.

### **MATH 0803 - Math Skills for the Deaf and Hard of Hearing**

Designed to assist students who are deaf and hard of hearing in developing math skills necessary to proceed through a planned college curriculum. Course selections will include operations in addition, subtraction, multiplication, division, and fractions.

### **MATH 0822 - Consumer Math for the Deaf and Hard of Hearing**

This course is designed for students who are deaf and hard of hearing to practice using math in everyday situations such as employment, business transactions, transportation, and basic budgeting.

### **MATH 0990 - Selected Topics in Mathematics**

Selected topics in mathematics that do not require students to have a prerequisite basic math or algebra background. Courses in math that are specially designed for companies, institutions, or private organizations and are not dependent upon prerequisite math courses.

### **MATH 1454 - Technical Mathematics**

A course designed for technical-occupational students in pursuit of a degree in technical education. Topics to be included are fundamental concepts of basic mathematics, algebra, right-triangle trigonometry, functions and graphs, factoring and algebraic functions, systems of linear equations, quadratic equations, exponents and radicals, exponents and logarithms, trigonometric functions, complex numbers, and oblique triangles and vectors. Prerequisite: One year of high school algebra and geometry and appropriate placement score or MATH 0013 with a grade of "C" or better, or the equivalent.

### **MATH 1473 - Mathematics for Critical Thinking (A)**

Topics in algebra, set theory, logic, graph theory, geometry, probability, statistics, and computer programming. Other topics as time allows. Prerequisites: Two years of high school algebra and appropriate placement or ACT score, or completion of MATH 0123 or MATH 0105 with a grade of "C" or better, or their equivalent.

**MATH 1483 - Mathematics Functions and Their Uses (A)**

This course focuses on the analysis of functions and their graphs from the viewpoint of rates of change. Linear, polynomial, exponential, logarithmic, and other function models will be studied, with applications to the natural sciences, business, social sciences, and agriculture. Prerequisites: Two years of high school algebra and appropriate placement or ACT score, or MATH 0123 or MATH 0105 with a grade of "C" or better, or their equivalent.

**MATH 1513 - College Algebra (A)**

A continuation of MATH 0123 or MATH 0105, including relations and functions, graphing using transformations, algebra of functions, circles and parabolas, polynomial and rational functions, systems of equations, matrices, exponential and logarithmic functions, sequences and series, and applications. Prerequisites: Two years of high school algebra and appropriate placement or ACT score, or MATH 0123 or MATH 0105 with a grade of "C" or better, or their equivalent.

**MATH 1613 - Plane Trigonometry (A)**

This course consists of trigonometric functions, degree and radian measure, solutions of right and oblique triangles, the unit circle, graphs of circular functions and the inverse functions, identities, inverse trigonometric functions and equation, complex numbers, and polar coordinates. Prerequisite: MATH 1513 with a grade of "C" or better, or concurrent enrollment.

**MATH 1715 - College Algebra and Trigonometry (A)**

A course composed of topics from college algebra and trigonometry involving a strong emphasis on graphing and functions. The course consists of quadratic relations, functions, inverse functions, systems of equations, matrices and determinants, theory of equations, complex numbers, logarithmic and exponential functions, probability, the binomial theorem, sequences, trigonometric functions, trigonometric identities, polar coordinates, solutions of triangles and vectors. Prerequisites: Two years of high school algebra and appropriate placement or ACT score, or MATH 0123 or MATH 0105 with a grade of "C" or better, or their equivalent.

**MATH 2114 - Analytic Geometry and Calculus I (A)**

Limits and continuity; differentiation including transcendental functions; applications of differentiation including related rates, optimization and curve sketching; integration including the substitution rule; the fundamental theorems of calculus; and applications of integration to computation of areas. Prerequisites: A grade of "C" or better in MATH 1513 and MATH 1613, or MATH 1715.

**MATH 2124 - Analytic Geometry and Calculus II (A)**

Further applications of integration; techniques of integration including improper integrals; infinite sequences and series including Taylor and Maclaurin series; parametric equations; and polar coordinates. Prerequisite: MATH 2114 with a grade of "C" or better.

**MATH 2134 - Analytic Geometry and Calculus III**

Geometry of 3-D space; vectors and vector-valued functions; functions of several variables; partial differentiation and gradients; multiple integration; vector analysis including line integrals; surface integrals; Green's theorem; and Stoke's theorem. Prerequisite: MATH 2124 with a grade of "C" or better.

**MATH 2193 - Elementary Statistics**

An introduction to basic statistical terminology, organization of data, measures of central tendency and dispersion, review of combinations, permutations, and probability, binomial and normal distributions, hypothesis testing, and a variety of other statistical techniques. Prerequisite: A grade of "C" or better in MATH 1513 or MATH 1454 or MATH 1473 or MATH 1483 or MATH 1715.

**MATH 2423 - Mathematics Concepts for Educators**

A course designed to provide the foundations for teaching arithmetic and geometry on the elementary level. Origins of numerals, number bases, systems of whole numbers, integers, rational numbers, real numbers, and intuitive geometry are some of the topics included in the course. The course also focuses on current issues in mathematics education and research as well as the use of microcomputers in mathematics education. Prerequisite: MATH 0123 with a grade of "C" or better.

**MATH 2513 - Finite Mathematics**

A survey course in mathematics designed for business and economic students, involving set theory, logic probability, matrices, vectors, linear programming, game theory, and mathematics of finance and accounting. Prerequisite: MATH 1513 or MATH 1715 with a grade of "C" or better.

**MATH 2523 - Calculus for Business, Life, and Social Sciences**

An introduction to differential and integral calculus with applications in the fields of business, and the life and social sciences. Prerequisite: A grade of "C" or better in MATH 1513 or MATH 1483 or MATH 1715 or MATH 2513.

**MATH 2533 - Using Multimedia Environments for Research and Test Analysis in the Social Sciences**

This course will acquaint educators with powerful statistical multimedia environments for the purpose of test analysis and/or conducting research in education, psychology, and the social sciences. Some previous experience with statistics, research, testing and/or evaluation theory is helpful for the course. Participants will explore hands-on multimedia applications in testing and research. Prerequisite: A grade of "C" or better in MATH 2193 and CSCI 1011.

**MATH 2553 - Geometry and Measurement**

This course provides a modeling and hands-on approach to geometry concepts for elementary teachers. Topics include perimeter, area, volume, mass, English and metric systems, time, temperature, vocabulary, polygons, polyhedrons, shapes, constructions, transformations, tessellation, and trigonometry. Prerequisite: A grade of "C" or better in MATH 1473 or MATH 1483 or MATH 1513 or MATH 1715 or their equivalent.

**MATH 2593 - Applied Statistical Analysis**

This course extends the number of concepts that are included in MATH 2193 (Elementary Statistics) by providing advanced statistical types of analysis and methodologies. Emphasis in the course will be on applying advanced statistical techniques to specific application areas such as social science, business, and medical fields. Research techniques, field work, and computer analyses will be the tools involved in conducting the statistical applications in the course. Prerequisite: MATH 2193 with a grade of "C" or better or instructor approval. Includes lab component.

**MATH 2613 - Elementary Differential Equations**

Solutions and applications of first order ordinary differential equations by symbolic and numerical methods. Solutions and applications of second order linear equations. Series solutions, Laplace transforms, and higher order equations with constant coefficients and an introduction to systems of differential equations. Prerequisite: MATH 2124 with a grade of "C" or better.

**MATH 2653 - Discrete Mathematics**

Set theory proof techniques, logic, mathematical induction, Boolean Algebra and lattices, equivalence relations and partitions, functions, algorithm analysis, principles of counting and probability, statistics, recurrence relations, mathematical modeling, matrix algebra, trees, graphs and graph theory. Prerequisite: MATH 2114 with a grade of "C" or better.

**MATH 2990 - Selected Topics in Mathematics**

The study and/or analysis of a selected topic in Mathematics. May be repeated with a different topic.

## **MEDICAL LABORATORY TECHNOLOGY**

**MDLT 1203 - Phlebotomy**

This course will cover the basic concepts and skills needed to prepare an individual to become a phlebotomist. Requires MLT/Phlebotomy Program Director approval. Includes lab component.

**MDLT 1212 - Introduction to Medical Laboratory Technology and Specimen Processing**

This introductory course will emphasize basic laboratory skills and procedures in urinalysis, hematology, chemistry, microbiology, immunology, and blood bank.

**MDLT 1222 - Phlebotomy Clinical**

Students will be assigned to clinical laboratories for practical phlebotomy experiences. Clinical schedule is flexible but equates to 10 clinical lab hours per week for ten weeks. This clinical includes observation and laboratory procedures. Prerequisites: concurrent enrollment in MDLT 1203, and MDLT 1212 and of MLT Program Director approval.

**MDLT 2001 - Professionalism/Ethics**

This is an overview of the lab profession and will include: the different levels of laboratory professionals; professional ethics and conduct; medical legal aspects; and laboratory safety. Professionalism will also be taught in the context of a college-sanctioned club membership/national lab professional organization (ASCLS).

**MDLT 2302 - Hematology Lab**

The student will develop skills and competencies in Hematology/Coagulation laboratory techniques such as specimen processing, identification and enumeration of the formed elements, and the use of instrumentation. They will also perform laboratory tests used to evaluate bleeding disorders. Must be taken concurrently with MDLT 2303. Prerequisite: Admission to the MLT program or Department Head approval.

**MDLT 2303 - Hematology**

Theories of hematology and coagulation are studied with special emphasis on correlating laboratory test results with clinical disease states. The fundamentals of hematology include the structure, function, and kinetics of the formed elements of blood. Coagulation covers the mechanisms of hemostasis and thrombosis, including learning the components of the hemostatic process and the principles of laboratory tests used to evaluate bleeding disorders. Prerequisite: Admission to the MLT program or Department Head approval.

**MDLT 2322 - Clinical Chemistry/Urine Chemistry Lab**

Emphasis is placed on reagent preparations, analytical methodologies and correlating laboratory results with clinical significance. Chemical tests and microscopic examination of urine and other body fluids are performed. Must be taken concurrently with MDLT 2323. Prerequisite: Admission to the MLT program or Department Head approval.

**MDLT 2323 - Clinical Chemistry/Urine Chemistry**

Clinical Chemistry is introduced with an emphasis on quality control, instrumentation, and theories of routine clinical chemistry procedures. Included will be a brief review of laboratory mathematics and a study of kidney structure, function and clinical significance of urine and other body fluids.

**MDLT 2392 - Clinical Microbiology Lab**

The laboratory exercise will endeavor to provide the student with the most comprehensive experiences possible, but will rely on the commonly measured differential characteristics of select bacterial groups. Must be taken concurrently with MDLT 2393. Prerequisite: Admission to the MLT program or Department Head approval.

**MDLT 2393 - Clinical Microbiology**

An emphasis is placed on pathogenic microorganisms, their identification, and related disease processes. Includes instruction in theory and pathogenesis of clinical microbiology, including collection, setup, identification, susceptibility testing, and reporting procedures. Prerequisite: Admission to the MLT program or Department Head approval.

**MDLT 2422 - Immunology and Blood Bank Lab**

The immunology lab will utilize a variety of test kits to demonstrate the serological response to infectious disease. Blood Bank lab will include ABO and D typing, Type and Screen, Rh phenotyping, Cross Matching, Antibody Identification, DAT and Elution. Must be taken concurrently with MDLT 2424. Prerequisite: Admission to the MLT program or Department Head approval.

**MDLT 2424 - Immunology and Blood Bank**

An introduction to the theory and application of basic immunology, including the immune response, principles of antigen-antibody reactions, and the principles of serological procedures. Blood Bank involves the study of the principles, procedures, clinical significance and practice of a wide variety of procedures including donor selection, component preparation and use, and techniques used to detect antigen/antibody reactions which may adversely affect a patient receiving a transfusion. Prerequisite: Admission to the MLT program or Department Head approval.

**MDLT 2436 - Clinical Practicum I**

Students will be assigned to clinical laboratories for practical experiences in various procedures and techniques. Actual number of clinical lab hours is 40 hours per week for eight weeks. This clinical includes observation and laboratory procedures. Prerequisite: Completion of all MDLT courses with a grade of "C" or above.

**MDLT 2466 - Clinical Practicum II**

A continuation of Clinical Practicum I. Emphasis will be placed on observation, clinical application and laboratory procedures. Clinical lab hours are 40 hours per week for eight weeks. Prerequisite: Completion of MDLT 2436 with a grade of "C" or above.

**MDLT 2990 - Selected Topics in Medical Laboratory Technology**

The study and/or analysis of a selected topic in Medical Laboratory Technology. May be repeated with a different topic.



## MEDICAL RECORDS

See Health Information Technology Program and Course Descriptions

## MUSIC

### MUSC 1002 - Fundamentals of Music

A course that places particular emphasis on the basic skills of reading and writing music. It assumes no prior knowledge of music. Music majors must take this course or pass a theory proficiency test before taking MUSC 1013 and MUSC 1062.

### MUSC 1013 - Music Theory I

Development and cultivation of musicianship skills, especially in the areas of tonal and rhythmic perception and articulation. Presentation of the essentials of music; classification of triads and seventh chords and their inversions; introduction to analysis and part writing. Prerequisite: MUSC 1002 with a grade of "C" or better or pass proficiency exam. Corequisites: Concurrent enrollment in Class Piano or Private Piano and MUSC 1062 for music majors. Piano corequisite may be waived by demonstration of proficiency.

### MUSC 1023 - Music Theory II

Continuation of MUSC 1013. Continued work in analysis, part-writing and harmonization with diatonic triads and seventh chords and their inversions. Introduction to modulation and dominant secondary and secondary leading tone chords. Introduction to binary and ternary forms. Prerequisite: MUSC 1013 and MUSC 1062 with a grade of "C" or better or instructor approval. Corequisite: Concurrent enrollment in Class Piano or Private Piano and MUSC 1072 for music majors. Piano corequisite may be waived by demonstration of piano proficiency.

### MUSC 1030 - Recital Class

This course requires attendance at student recitals, TCC departmental concerts and additional concerts approved by faculty. Four terms are required for all music majors. Satisfactory/Unsatisfactory.

### MUSC 1053 - Recording Studio Techniques I

Designed to introduce students to the basic principles, techniques, and tools commonly used in modern sound recording. Open to anyone with an interest in sound or music.

### MUSC 1062 - Aural Theory I

Development of aural skills related to sight-singing, rhythmic and melodic dictation, and keyboard harmony, using examples from the common practice period. Required for music majors. Open to non-music majors with approval of instructor. Taken concurrently with MUSC1013 for music majors. Prerequisite: MUSC 1002 with a grade of "C" or better, pass proficiency exam, or instructor approval.

### MUSC 1072 - Aural Theory II

Development of aural skills related to sight-singing, rhythmic and melodic dictation, and keyboard harmony, using examples from the common practice period. Required for music majors. Taken concurrently with MUSC 1023 for music majors. Prerequisite: MUSC 1013 and MUSC 1062 with a grade of "C" or better, or instructor approval.

### MUSC 1113 - Music Appreciation (H)

A course designed to introduce students to the study of music as an aesthetic, historical, and cultural phenomenon. Students are instructed in perceiving and discerning the characteristics of musical sound, the functions of music in society, and development of the historical tradition of music, with emphasis on the music of the European classical repertoire as well as non-Western practices.

### MUSC 1142 - Computer Music Techniques I

This course is designed to develop computer music skills and comprehension of MIDI with the use of Sibelius music composition software. It is designed to be a lab class. Requires intermediate computer skills. Prerequisite: MUSC 1013.

### MUSC 1153 - American Popular Music (H)

This course is a survey of the history and development of the various styles of popular music that have originated in the United States since the middle of the 19th century. Emphasis is on understanding the basic elements of popular music, song types, and the technological, ethnic, cultural, social, and political forces that have shaped the various types of popular music. Students will be exposed to a wide variety of musical styles from minstrel song, to Tin Pan Alley, the blues, Jazz, Rock, Country, R&B, to the most recent developments of the 21st century. No previous musical experience necessary.

**MUSC 1171 - Beginning Guitar**

Beginning Guitar is designed for beginning students who are not majoring in music. At the end of the term students are expected to analyze written music and interpret a specialized system for writing guitar music called “tablature,” as well as analyze techniques. Basic chords in the first position, called “open chords,” will be used in simple song accompaniments. Students must provide their own instruments in good working condition. Acoustic guitars are preferred but not required. Amplifiers will not be provided.

**MUSC 1181 - Percussion Class**

This percussion methods/techniques class provides students an opportunity to develop beginning level performance skills on the major instruments of the percussion family, as well as an introduction to accessories, Latin percussion, and drum set. The course addresses methods for teaching percussion while providing an environment for students to learn how to diagnose common performance problems associated with percussion instruments and a variety of suggestions for solutions. Other topics to be covered include: equipment maintenance and repairs, suggestions for method books and repertoire, and organizational materials to maintain student’s focus in a band class setting.

**MUSC 1190 - Private Lessons for Non-Majors**

Private piano, voice and instrumental lessons are designed to help non-music majors improve their technique, sight reading skills and basic musicianship. Students are expected to analyze and interpret solo literature. An additional laboratory fee is required. Prerequisite: Requires instructor approval.

1 credit hour private music instruction requires a weekly 30-minute lesson; 3 hours minimum weekly practice recommended. No Lecture. Laboratory 2 hours.

2 credit hours private music instruction requires a weekly 1-hour lesson; 6 hours minimum weekly practice recommended. No Lecture. Laboratory 4 hours.

Private Piano	1-2 Credits
Private Organ	1-2 Credits
Private Voice	1-2 Credits
Private Guitar	1-2 Credits
Private Violin	1-2 Credits
Private Viola	1-2 Credits
Private Cello	1-2 Credits
Private Bass	1-2 Credits
Private Flute	1-2 Credits
Private Oboe	1-2 Credits
Private Clarinet	1-2 Credits
Private Saxophone	1-2 Credits
Private Electric Bass Guitar	1-2 Credits
Private Trumpet	1-2 Credits
Private Horn	1-2 Credits
Private Trombone	1-2 Credits
Private Tuba	1-2 Credits
Private Bassoon	1-2 Credits
Private Harp	1-2 Credits
Private Euphonium	1-2 Credits
Private Percussion	1-2 Credits

**MUSC 1200 to 1490 - Private Music Lessons**

Private piano, voice and instrumental lessons are designed for music majors to improve their technique, sight reading skills and intermediate to advanced musicianship. Students will be expected to analyze and interpret solo literature from various historical periods. Technique, literature, number of performances and practice hours are appropriate for college freshman level. An additional laboratory fee is required. Prerequisite: Requires instructor approval.

1 credit hour private music instruction requires a weekly 30-minute lesson; 3 hours minimum weekly practice recommended. Designed for the music major on a secondary instrument. Placement for non-majors with instructor approval.No Lecture. Laboratory 2 hours.

2 credit hours private music instruction requires a weekly 1-hour lesson; 6 hours minimum weekly practice recommended. Designed for the music major on their primary instrument. Recital and performance examination (jury) will be required. No Lecture. Laboratory 4 hours.

1200 - Private Piano  
1210 - Private Organ  
1240 - Private Voice  
1250 - Private Guitar  
1310 - Private Violin  
1320 - Private Viola  
1330 - Private Cello  
1340 - Private Bass  
1350 - Private Flute  
1360 - Private Oboe  
1370 - Private Clarinet  
1380 - Private Saxophone  
1390 - Private Electric Bass Guitar  
1410 - Private Trumpet  
1420 - Private Horn  
1430 - Private Trombone  
1440 - Private Tuba  
1450 - Private Bassoon  
1460 - Private Harp  
1470 - Private Euphonium  
1490 - Private Percussion

**MUSC 1512 - Voice Class**

A course teaching the principles of breathing, voice production, tone control, enunciation, phrasing and analysis of techniques. Two group lessons per week.

**MUSC 1541 - Orchestra**

Study and performance of concert literature for full orchestra. Prerequisite: Enrollment by audition.

**MUSC 1551 - Concert Choir**

A mixed choral ensemble that studies and performs a wide variety of choral literature suitable for an advanced choir. Performances may include Madrigal programs, participation in state and local choral festivals, and combined choir performances with the Signature Symphony at TCC.

**MUSC 1563 - Musical Theatre**

A course designed to develop the musical and theatrical talents of students who either are interested in a degree in Musical Theatre or simply want to broaden their individual experiences on the stage. Course work consists of learning, blocking and presenting scenes from the major genres in musical theatre. Historical and cultural perspective on individual works will be included in abbreviated lecture form. Requires voice, dance and/or theatre experience.

**MUSC 1612 - Class Piano I**

The electronic piano lab offers individualized as well as class instruction in learning and/or improving techniques in playing the piano. Students will study piano literature from various historical styles and sharpen critical thinking skills as they analyze music presented. \*Required for music majors.

**MUSC 1622 - Class Piano II**

Continuation of Class Piano I. \*Required for music majors. Prerequisite: MUSC 1612 with a grade of "C" or better or instructor approval.

**MUSC 1632 - Class Piano III**

Continuation of Class Piano II. \*Required for music majors. Prerequisite: MUSC 1622 with a grade of "C" or better or instructor approval.

**MUSC 1642 - Class Piano IV**

Continuation of Class Piano III. \*Required for music majors. Prerequisite: MUSC 1632 with a grade of "C" or better or instructor approval.

\*May be waived by piano faculty by demonstration of piano proficiency.

**MUSC 1651 - Concert Band**

Study and performance of concert literature for the wind band. Prerequisite: Enrollment by audition.

**MUSC 1661 - Jazz Band**

This course is designed to study and develop fundamental techniques in the artistry of jazz in an ensemble setting from swing to big band. This class analyzes and incorporates many styles in the jazz idiom including improvisation. Prerequisite: Enrollment by audition.

**MUSC 1711 - Brass Ensemble**

This course is designed to give students the experience of rehearsing and performing in a brass chamber ensemble. Students will be exposed to brass ensemble repertoire and experience a collaborative approach to problem solving. Students must be able to read music and have intermediate musicianship experience on their instrument. Prerequisite: Enrollment by audition or instructor approval.

**MUSC 1721 - Woodwind Ensemble**

This course is designed to give students the experience of rehearsing and performing in a woodwind chamber ensemble. Students will be exposed to woodwind ensemble repertoire and experience a collaborative approach to problem solving. Students must be able to read music and have intermediate musicianship experience on their instrument. Prerequisite: Enrollment by audition or instructor approval.

**MUSC 1731 - Guitar Ensemble**

This course is designed to give students the experience of rehearsing and performing in a guitar chamber ensemble. Students will be exposed to guitar ensemble repertoire and experience a collaborative approach to problem solving. Students must be able to read music and have intermediate musicianship experience on their instrument. Prerequisite: Enrollment by audition or instructor approval.

**MUSC 1741 - Cello Choir**

Open to beginning, intermediate and advanced cello players. The choir studies, rehearses and performs many styles of music, from the Renaissance, Baroque, Classical, Romantic and Contemporary eras. No audition required.

**MUSC 1761 - String Ensemble**

This course is designed to give students the experience of rehearsing and performing in a string chamber ensemble. Students will be exposed to string ensemble repertoire and experience a collaborative approach to problem solving. Students must be able to read music and have intermediate musicianship experience on their instrument. Prerequisite: Enrollment by audition or instructor approval.

**MUSC 1771 - Percussion Ensemble**

This course is designed to give students the experience of rehearsing and performing in a percussion chamber ensemble. Students will be exposed to percussion ensemble repertoire from many different cultures and experience a collaborative approach to problem solving. Students must be able to read music and have intermediate musicianship experience on their instrument. Prerequisite: Enrollment by audition or instructor approval.

**MUSC 1781 - Chamber Ensemble**

This course is designed to give students the experience of rehearsing and performing in a chamber ensemble. Students will be exposed to chamber ensemble repertoire and experience a collaborative approach to problem solving. Students must be able to read music and have intermediate musicianship experience on their instrument. Prerequisite: Enrollment by audition or instructor approval.

**MUSC 1791 - Jazz Combo**

This course is designed to give students the experience of rehearsing and performing in a jazz combo. Students will be exposed to jazz combo repertoire and experience a collaborative approach to problem solving. Students must be able to read music and have advanced musicianship experience on their instrument. Prerequisite: Enrollment by audition or instructor approval.

**MUSC 1802 - Jazz Improvisation**

This course is designed to introduce and develop the skills needed for jazz improvisation. Designed for musicians wanting to explore beginning jazz improvisation in a non-competitive environment. Students must be able to read music and have intermediate musicianship experience on their instrument and a basic understanding of music theory.

**MUSC 1852 - Composition for Songwriters I**

Course uses students' song writing and popular music backgrounds to learn concert music composition, arranging and classical/popular crossover techniques. Each student will write songs and a short concert music piece for any combination of strings and piano.

**MUSC 2013 - Music Theory III**

Analysis, part-writing, and harmonization, including chromatic harmonies and modulation. Introduction to fugue, sonata form, rondo form, and variation technique. Prerequisite: MUSC 1023 and MUSC 1072 with a grade of "C" or better or instructor approval. Corequisite: MUSC 2062 for music majors. Concurrent enrollment in Class Piano or Private Piano is required unless waived by demonstration of piano proficiency.

**MUSC 2023 - Music Theory IV**

A continuation of MUSC 2013. Introduction to extended harmonies and 20th century techniques. Prerequisite: MUSC 2013 and MUSC 2062 with a grade of "C" or better or instructor approval. Corequisite: MUSC 2072 for music majors. Concurrent enrollment in Class Piano or Private Piano is required unless waived by demonstration of piano proficiency.

**MUSC 2062 - Aural Theory III**

Development of aural skills related to sight-singing, rhythmic and melodic dictation, and keyboard harmony, using examples from the common practice period. Required for music majors. Taken concurrently with MUSC 2013 for music majors. Prerequisite: MUSC 1023 and MUSC 1072 with a grade of "C" or better or instructor approval.

**MUSC 2072 - Aural Theory IV**

Development of aural skills related to sight-singing, rhythmic and melodic dictation, and keyboard harmony, using examples from the common practice period. Required for all music majors. Taken concurrently with MUSC 2023 for music majors. Prerequisite: MUSC 2013 and MUSC 2062 with a grade of "C" or better or instructor approval.

**MUSC 2133 - Introduction to the History and Literature of Music**

A detailed introductory study of the major music historical periods and representative works from the Middle Ages through the 20th Century. Emphasis on developing research, listening, and analytical techniques in preparation for undergraduate level music history survey courses. Required of all music majors; non-music majors admitted with instructor approval. Prerequisite: MUSC 1013 or instructor approval.

**MUSC 2181 - Show Choir**

A mixed choral ensemble designed to present vocal jazz standards as well as popular show tunes. Usually one to two formal concerts are presented each term which may include presentation with the TCC Signature Symphony. Some musical numbers may be staged and/or choreographed. Prerequisite: Enrollment by audition. Concurrent enrollment in MUSC 1551 is required.

**MUSC 2200 and 2240 - Private Piano and Voice Lessons**

Technique, literature, number of performances and practice hours are appropriate for college sophomore level. Students will be expected to analyze and interpret solo literature from various historical periods. An additional laboratory fee is required. Prerequisite: Requires instructor approval.

1 credit hour private music instruction requires a weekly 30-minute lesson; 3 hours minimum weekly practice recommended. Designed for the music major on a secondary instrument. No Lecture. Laboratory 2 hours.

2 credit hours private music instruction requires a weekly 1-hour lesson; 6 hours minimum weekly practice recommended. Designed for the music major on their primary instrument. Recital and performance examination (jury) will be required. No Lecture. Laboratory 4 hours.

**MUSC 2223 - Recording Studio Techniques II**

Designed to provide students with hands on digital editing, mixing, and mastering experience with the ProTools system. Prerequisite: MUSC 1053 or instructor approval.



**MUSC 2231 - Alexander Technique**

An introductory study of the principles of the Alexander Technique. Students will begin to learn about their own habits, use, and direction and begin to apply the ideas of primary control, breathing freely, moving easily, and kinesthetic awareness to their musical and acting practice. Cross-listed as THEA 2231.

**MUSC 2333 - Music Internship**

Students work in a qualifying occupational setting where they receive practical training and experience toward their occupational objectives. Requires instructor approval.

**MUSC 2990 - Selected Topics in Music**

The study and/or analysis of a selected topic in Music. May be repeated with a different topic.

## **NANOTECHNOLOGY**

See **Electronics Technology**

**NANT 1463 - Composite Materials**

This course explores the properties and the processes of manufacturing used with today's modern composite materials. Typical processes used in the Tulsa area will be reviewed along with site visits.

**NANT 2632 - Introduction to Nanotechnology**

This course is designed to help the student develop an understanding of the fundamental concepts behind nano and micro technology. Topics include fabrication, clean-rooms, microscopy, lithograph, and materials used in the building of silicon devices. Other areas of study will focus on where and how this new technology is used. Classroom demonstration will be used. Prerequisite: ELET 1212. Cross listed with ELET 2632.

**NANT 2643 - Nanoelectronics**

Nanoelectronics covers the processes of developing micro and nano scale electronics devices. The student will be introduced to carbon nanotubes, MEMS, memory, self-assembly, top-down and bottom-up techniques. Students will also be taken through the steps in building a micro-chip and how it applies to nano-structures. Equipment topics will include wet and dry etch, lithograph, deposition, evaporators, and vacuum systems. Prerequisite: ELET/NANT 2632 or instructor approval. Cross listed with ELET 2643. Includes a lab component.

**NANT 2653 - Nanoscience**

Nanoscience explores the many possibilities for which nanostructures can and are being used. The study will include nanotube and nanoparticle application in medicine, drug delivery and detection. Microscopy will include the scanning tunneling, atomic force and optical microscopes. Material and chemical make-up of micro and nano-structures will be introduced. Prerequisite: ELET/NANT 2632 or instructor approval. Cross listed with ELET 2653. Includes a lab component.

## **NATIVE AMERICAN STUDIES**

See **Liberal Arts**

**NAMS 1013 - Cherokee Language**

The first course in a sequence designed to facilitate the acquisition of the language skills necessary to communicate effectively in Cherokee. Areas of linguistic consideration will include, but not be limited to, reading and writing the modern syllabary, vocabulary building, sentence construction, pronunciation, and basic conversational expression-assessed both orally and in writing. Students will also become acquainted with various aspects of Cherokee culture, particularly oral traditions.

**NAMS 1023 - Cherokee Language II**

The second course in a sequence designed to facilitate the acquisition of the language skills necessary to communicate effectively in Cherokee. Areas of linguistic consideration will include, but not be limited to, reading/writing/typing the modern syllabary, vocabulary building, sentence construction, basic composition, translation, pronunciation, and basic conversational expression-assessed both orally and in writing. Students will continue to become acquainted with various aspects of Cherokee culture, particularly oral traditions. Prerequisite: NAMS 1013 or instructor approval.

**NAMS 1113 - Muscogee Creek Language I**

The first course in a sequence designed to facilitate the acquisition of the language skills necessary to communicate effectively in Muscogee. Areas of linguistic consideration will include, but not be limited to reading and writing transliterated texts, vocabulary building, sentence construction, pronunciation, and basic conversational expression –assessed both orally and in writing. Students will also become acquainted with various aspects of Creek culture, particularly oral traditions.

**NAMS 1123 - Muscogee Creek Language II**

The second course in a sequence designed to facilitate the acquisition of the language skills necessary to communicate effectively in Muscogee. Areas of linguistic consideration will include, but not be limited to reading/writing/typing transliterated texts, vocabulary building, sentence construction, basic composition, translation, pronunciation, and basic conversational expression - assessed both orally and in writing. Students will continue to become acquainted with various aspects of Creek culture, particularly oral traditions. Prerequisite: NAMS 1113.

**NAMS 1213 - Osage Language I**

The first course in a sequence designed to facilitate the acquisition of the language skills necessary to communicate effectively in Osage. Areas of linguistic consideration will include, but not be limited to reading and writing transliterated texts, vocabulary building, sentence construction, pronunciation, and basic conversational expression –assessed both orally and in writing. Students will also become acquainted with various aspects of Osage culture, particularly oral traditions.

**NAMS 2013 - Images of Indians in American Culture**

An examination of the images of "Indians" found in American culture, specifically art and literature, old-time radio, TV, film—even advertising and sports- leading to a critique of the persistence of stereotypes in contemporary social and political discourse.

**NAMS 2113 - Native American Cultures (H)**

An interdisciplinary survey designed to strengthen students' appreciation of the rich Native American cultural heritages. Areas of consideration may include history, philosophy, religion/spirituality, cosmology, science, politics, literature, drama, film, story-telling, music, dance, painting, sculpture, crafts, and architecture, among others.

**NAMS 2123 - Cherokee Culture**

An interdisciplinary study of Cherokee Culture, emphasizing Cherokee perspectives. Areas of consideration may include history, philosophy, religion/spirituality, cosmology, science, politics, literature, drama, film, story-telling, music, dance, painting, sculpture, crafts, and architecture, among others.

**NAMS 2133 - Muscogee Creek Culture**

An interdisciplinary study of Muscogee Creek Culture, emphasizing Creek perspectives. Areas of consideration may include history, philosophy, religion/spirituality, cosmology, science, politics, literature, drama, film, story-telling, music, dance, painting, sculpture, crafts, and architecture, among others.

**NAMS 2143 - Osage Culture**

An interdisciplinary study of Osage Culture, emphasizing Osage perspectives. Areas of consideration may include history, philosophy, religion/spirituality, cosmology, science, politics, literature, drama, film, story-telling, music, dance, painting, sculpture, crafts, and architecture, among others.

**NAMS 2213 - Native American Spiritualities**

An introduction to Native American spiritualities through the consideration of oral traditions, literatures, and ceremonial practices. Areas of consideration may include the customs, traditions, music, songs, and dances related to Stomp Dancing, the Seven Rites of the Lakota, the Native American Church, and Native American Christianity, among others.

**NAMS 2223 - Native American Philosophies**

A study of Native American philosophies as expressed in indigenous languages, social and ceremonial practices, story-telling traditions, oratory, literature, and art. Areas of emphasis may include epistemology, metaphysics, ethics, and aesthetics.

**NAMS 2313 - Native American Literature, Drama, and Film**

A study of the development of Native American traditional and contemporary oral and literary expressions through an examination of story-telling, non-fiction, fiction, poetry, drama and film.

**NAMS 2343 - Native American History**

An introduction to the cultures, experiences, and conflicts of Native Americans from pre-history to the present. Cross listed with HIST 2343.

**NAMS 2513 - Native American Law**

A historical analysis of the complex pattern of federal, state, and tribal laws that have affected Native Americans as individuals and as tribes. Areas of exploration may include federal treaties, federal policies, state compacts, and the principle of sovereignty. Cross listed with PLGL 2483.

**NAMS 2613 - Native American Art**

An introductory survey designed to cultivate a fundamental understanding of the diverse traditions of Native American arts. Areas of consideration may include, but not be limited to, painting and sculpture, pottery, basket-weaving, and crafts.

**NAMS 2990 - Selected Topics in Native American Studies**

The study and/or analysis of a selected topic in Native American Studies. May be repeated with a different topic. Must have Native American Studies instructor approval for enrollment.

**NUMERICAL CONTROL/MACHINIST TECHNOLOGY**

See Engineering Technology (ENGT)

**NURSING**

**NURS 1013 - Critical Thinking and Decision Making in Nursing**

This course is designed to introduce students to the concept of "critical thinking" in nursing. Students' thinking processes will be stimulated and they will learn to analyze situations/problems in a manner that will expand and enhance their assessment and problem-solving skills. The course is open to all RNs, LPNs, pre-nursing and enrolled nursing students.

**NURS 1023 - Stress Management**

This is an experiential course in which students learn the physiological, psychological, emotional, and spiritual impact of stressors, then discuss and implement stress/anxiety management techniques, including visualization, meditation, mindfulness, and a variety of therapies and research-based methods, maintain a journal of experiences and create their personal stress management plan. Twice weekly exercise and documentation of exercise by the student is required. Includes a lab component.

**NURS 1033 – Nursing Policy and Politics**

This course introduces the student to the political/policy process. It will provide the student with the opportunity to get involved and make a difference in issues facing nursing and health care in Oklahoma. This course will provide the student with information on the legislative process as well as issues affecting nursing and health care in Oklahoma. The student will have the opportunity to hear from legislative experts, legislators and ONA's lobbyist, educate legislators regarding legislation affecting delivery of care and issues vital to the nursing profession, increase personal awareness of the roles and values of nursing in the political arena, and join with other nurses who share the same concerns.

**NURS 1043 – Nursing Informatics**

This course is designed for current nursing students, for practicing nurses in the community, as well as for nursing faculty. This course is a blended course and incorporates collaborative interactive learning experiences including, but not limited to, simulation, electronic health records, tele-health, computer technology, and technological devices. The course is designed so that course participants will use an online learning management system, basic to advanced computing skills, e-library shelf, nursing informatics clearinghouses, and virtual course-distance learning. All course objectives incorporate strategies to promote privacy, confidentiality and security of information through the use of nursing informatics.

**NURS 1111 - Adult Health I Clinical**

Application of nursing process with assigned adult patients in the long term care facility. Demonstrates knowledge, skills, and attitudes regarding wellness promotion; illness prevention; infection control; medication administration, and head-to-toe physical assessment skills. Focus on health coaching; and nursing judgment (critical thinking, patient preferences, and best practice). Prerequisite: Admission to Program. Corequisites: NURS 1113; NURS 1143; NURS 1163.

**NURS 1113 - Adult Health I**

Broad exposure to adult health concepts. Explores selected exemplars for application of nursing process among healthy adult population. Emphasis on knowledge, skills and attitudes regarding wellness promotion; illness prevention; infection control; and head-to-toe physical assessment skills. Prerequisite: Admission to Program. Corequisites: NURS 1111; NURS 1143; NURS 1163. Includes lab component.

**NURS 1143 - Overview of Professional Role Development**

Introduces nursing process and knowledge, skills, and attitudes required for six areas of competency in nursing profession: patient centered care; teamwork and collaboration; best practice; quality improvement; safety; and informatics. Emphasis on communication; interprofessional relationships; nursing judgment (critical thinking, patient preferences, and best practice), and healthcare initiatives at local, state, national, and global levels. Prerequisite: Admission to Program. Corequisites: NURS 1113; NURS 1111; NURS 1163.

**NURS 1163 - Principles of Pharmacology & Medication Safety**

Equips students with knowledge; skills; and attitudes required to understand pharmacodynamics; pharmacokinetics; pharmacotherapeutics; dosage calculation; and safe administration of medications via multiple routes. Explores culture of safety and actions to take in case of medication error and/or sentinel event related to medications. Prerequisite: Admission to Program. Corequisites: NURS 1113; NURS 1111; NURS 1143. Includes lab component.

**NURS 1211 - Career Mobility I Clinical**

Application of nursing process with assigned adult patients in hospital; and community settings. Focus on physical assessment; medication administration; health coaching; and nursing judgment (critical thinking, patient preferences, and best practice). Prerequisite: Admission to the Program. Corequisite: NURS 1212.

**NURS 1212 - Career Mobility I**

In-depth exposure to adult health concepts. Explores selected exemplars for application of nursing process among adult population with major health disruptions. Integrates combination of condensed content from NURS 1113 Adult Health I and NURS 1163 Principles of Pharmacology and Medication Safety (Traditional Program). Prerequisite: Admission to the Program. Corequisite: NURS 1211. Includes lab component.

**NURS 1363 - Transition for Career Mobility**

Overview of nursing profession and healthcare initiatives at local, state, national, and global levels. Integrates condensed content from NURS 1143 Overview of Professional Role Development (Traditional Program Option). Focus on IOM/QSEN competencies with emphasis on nursing process; communication; change process; and nursing judgment (critical thinking, patient preferences, and best practice). Prerequisite: Admission to the Program. Corequisites: NURS 1211; NURS 1212; NURS 2431; NURS 2432.

**NURS 1471 - Activities of Daily Living Skills**

This course is designed to provide those with basic health training the opportunity to refresh their skills in daily living nursing activities required to care for clients in a variety of settings. This will be accomplished through the use of audiovisual materials, supervised practice sessions, and competency testing of skills. Requires permission of Nursing Division.

**NURS 2212 - Adult Health II Clinical**

Application of nursing process with assigned adult patients in hospital; and community settings. Focus on physical assessment; medication administration; health coaching; and nursing judgment (critical thinking, patient preferences, and best practice). Prerequisites: Completion of all previous Nursing courses with a grade of "C" or better. Corequisite: NURS 2213.

**NURS 2213 - Adult Health II**

In-depth exposure to adult health concepts. Explores selected exemplars for application of nursing process among adult population with major health disruptions. Select exemplars complement link between concept application in adult population and pediatric special population (NURS 2222). Emphasis on knowledge, skills, and attitudes regarding primary, secondary, and tertiary nursing care; medication administration; and nursing judgment (critical thinking, patient preferences, and best practice). Prerequisites: Completion of all previous Nursing courses with a grade of "C" or better. Corequisite: NURS 2212, NURS 2221, NURS 2222. Includes lab component.

**NURS 2221 - Pediatric Nursing Clinical**

Application of nursing process with assigned pediatric patients in school, hospital, and/or community setting. Focus on assessment, health coaching; and, nursing judgment (critical thinking, patient preferences, and best practice). Prerequisites: Completion of all previous Nursing courses with a grade of "C" or better. Corequisite: NURS 2222.

**NURS 2222 - Pediatric Nursing**

In-depth exposure to pediatric nursing concepts. Explores selected exemplars for application of nursing process among pediatric population. Emphasis on knowledge, skills, and attitudes regarding normal growth and development; special needs children; common illnesses; communication; focused assessment; and nursing judgment (critical thinking, patient preferences, and best practice). Prerequisites: Completion of all previous Nursing courses with a grade of "C" or better. Corequisite: NURS 2212, NURS 2213, NURS 2221. Includes lab component.

**NURS 2231 - Maternal-Newborn Nursing Clinical**

Application of nursing process with assigned maternal-newborn patients in hospital setting. Focus on physical assessment, medication administration, health coaching; and, nursing judgment (critical thinking, patient preferences, and best practice).

Prerequisites: Completion of all previous Nursing courses with a grade of "C" or better. Corequisites: NURS 2232; NURS 2242; NURS 2243.

**NURS 2232 - Maternal-Newborn Nursing**

In-depth exposure to maternal-newborn nursing concepts. Explores selected exemplars for application of nursing process among maternal-newborn population. Emphasis on knowledge, skills, and attitudes regarding medication administration; focused assessment of prenatal, intrapartum, postpartum, fetal, and newborn patient; health coaching; and nursing judgment (critical thinking, patient preferences, and best practice). Prerequisites: Completion of all previous Nursing courses with a grade of "C" or better. Corequisites: NURS 2231; NURS 2242; NURS 2243. Includes lab component.

**NURS 2242 - Adult Health III Clinical**

Application of nursing process with assigned adult patients in hospital; hospice; and community settings. Focus on physical assessment, medication administration, health coaching; and nursing judgment (critical thinking, patient preferences, and best practice). Prerequisites: Completion of all previous Nursing courses with a grade of "C" or better. Corequisite: NURS 2243.

**NURS 2243 -Adult Health III**

In-depth exposure to adult health concepts. Explores selected exemplars for application of nursing process among adult population with major health disruptions. Select exemplars complement link between concept application in adult population and maternal-newborn special population (NURS 2232). Emphasis on knowledge, skills, and attitudes regarding primary, secondary, and tertiary nursing care; medication administration; and nursing judgment (critical thinking, patient preferences, and best practice). Prerequisites: Completion of all previous Nursing courses with a grade of "C" or better. Corequisite: NURS 2231, NURS 2232, NURS 2242. Includes lab component.

**NURS 2303 - Pharmacology**

This course expands on the principles of clinical pharmacology and therapeutics. Content will include physiology of drug effect, drug classification uses in common disorders, and current issues related to drugs. Emphasis is placed on accuracy and accountability in drug management.

**NURS 2351 - Career Mobility II Clinical**

Application of nursing process with assigned adult patients in hospital; and community settings. Focus on physical assessment; medication administration; health coaching; and nursing judgment (critical thinking, patient preferences, and best practice).

Prerequisites: Completion of all previous Nursing courses with a grade of "C" or better. Corequisite: NURS 2352.

**NURS 2352 - Career Mobility II**

In-depth exposure to adult health concepts. Explores selected exemplars for application of nursing process among adult population with major health disruptions. Integrates combination of condensed content from NURS 2213 Adult Health II and NURS 2243 Adult Health III (Traditional Program). Prerequisites: Completion of all previous Nursing courses with a grade of "C" or better. Corequisite: NURS 2351. Includes lab component.

**NURS 2403 - Dosage Calculations for Nurses**

This course is designed to assist persons preparing to administer medications with mathematical instruction for calculating dosages. Course content includes review of fractions, decimals, Roman numerals, ratio proportions, introduction of medication symbols, and related abbreviations; interpretation of physician orders and medication labels; conversion of household, apothecary and metric equivalents, and dosage calculation formulas.

**NURS 2431 - Complex Mental Health Clinical**

Application of nursing process in care of patients with complex mental health needs in hospital and community settings. Focus on knowledge, skills, and attitudes regarding health coaching; and, nursing judgment (critical thinking, patient preferences, and best practice) in care of the adult with complex mental health needs. Requires completion of all previous Nursing courses with a grade of "C" or better. Corequisite: NURS 2432.



### **NURS 2432 -Complex Mental Health**

In-depth exposure to complex mental health concepts. Explores selected exemplars for application of nursing process among adults with complex mental illness. Emphasis on knowledge, skills, and attitudes regarding communication; safety; focused assessment of adults with mental illness; and nursing judgment (critical thinking, patient preferences, and best practice).

Prerequisites: Admission to the Program (Traditional and Career Mobility) and completion of NURS 1363 (Career Mobility Track Only) with a grade of "C" or better. Corequisite: NURS 2431. Includes lab component.

### **NURS 2442 - Adult Health IV & Leadership Clinical**

Emphasis on concept clustering in application of knowledge, skills, and attitudes acquired in all previous/current nursing courses. Focus on leadership skills; complex physical assessment; medication administration; health coaching; and nursing judgment (critical thinking, patient preferences, and best practice). Prerequisites: Completion of all previous Nursing courses with a grade of "C" or better. Corequisite: NURS 2444.

### **NURS 2444 - Adult Health IV & Leadership**

Proficiency at entry level-to-practice regarding nursing process and knowledge, skills, and attitudes required for six areas of competency in nursing profession: patient centered care; teamwork and collaboration; best practice; quality improvement; safety; and informatics. Explores concept clusters and selected exemplars for application of nursing process and principles of leadership among adult population with complex health problems. Emphasis on integration of complex physical assessment; medication administration; leadership skills; and nursing judgment (critical thinking, patient preferences, and best practice). Prerequisites: Completion of all previous Nursing courses with a grade of "C" or better. Corequisite: NURS 2442. Includes lab component.

### **NURS 2990 - Selected Topics in Nursing**

The study and/or analysis of a selected topic in Nursing. May be repeated with a different topic.

## **OCCUPATIONAL THERAPY ASSISTANT**

### **OCTA 1203 – Introduction to Occupational Therapy**

This course provides a broad overview of the profession with emphasis on its history, philosophy, and organization and explores the role of occupational therapy personnel in various disability areas. Course is open to non-majors.

### **OCTA 1293 – Introduction to Occupational Therapy II**

This course covers the fundamentals of Occupational Therapy practice including the OT framework, OT process, family, multicultural issues and factors, written and verbal communication skills, self-awareness, the AOTA's stated core values, professional ethics, and documentation. Prerequisite: Admission to the OTA Program.

### **OCTA 1303 – Clinical Conditions, Terminology, and Skills**

This course serves as an introduction to conditions commonly referred to and treated by occupational therapy practitioners. In addition students will gain knowledge in medical terminology and competence in basic patient care skills. Prerequisite: Admission to the OTA Program. Includes lab component.

### **OCTA 1352 – Neuroanatomy and Physiology for OTAs**

This course is a comprehensive review of both structure and function of the nervous system and its functional relevance to the practice of Occupational Therapy. Prerequisite: Admission to the OTA Program.

### **OCTA 1363 – Applied Anatomy for OTAs**

This course is a study of structure and function of the muscular and skeleton systems as they relate to the practice of occupational therapy. Bone and joint structure, bony landmarks, muscle origin, insertion, action and innervation are emphasized. Application of the information is demonstrated through extensive analysis. Prerequisites: Admission to the OTA Program. Includes lab component.

### **OCTA 1403 – Therapeutic Media**

The study of the theory and practice of selected activities used in occupational therapy to promote patient function. The course includes: concepts of activity analysis; instruction of individuals and groups; problem solving; therapeutic applications of activity and exercise; and laboratory and equipment maintenance. Various frames of reference used in occupational therapy will be applied. Prerequisites: All previous OCTA coursework with a grade of "C" or better or instructor approval. Includes lab component.

**OCTA 1443 – Psychosocial Theory and Practice**

This course introduces theory and application of occupational therapy in the evaluation and treatment of psychosocial dysfunction and covers the developmental continuum and major frames of reference. Group dynamics and process are emphasized. Psychosocial issues in other practice areas are discussed. Prerequisites: All previous OCTA coursework with a grade of "C" or better or instructor approval. Includes lab component.

**OCTA 1483 – Physical Disabilities**

This course introduces occupational therapy treatment design and implementation of techniques, treatment methods and adaptive equipment used with physical disability. Application of the OT Framework is emphasized throughout. Students will develop treatment plans and learn to give a standardized assessment and become familiar with the assessment process. The course incorporates observation of treatment methods under the supervision of practicing clinicians at various local clinical settings. Prerequisites: All previous OCTA coursework with a grade of "C" or better or instructor approval.

**OCTA 1511 – Fieldwork IA**

A supervised work experience including observation and application of occupational therapy services with a psychological/social emphasis. No Lecture. Laboratory: 40 hours per semester. Prerequisites: All previous OCTA coursework with grade of 'C' or better or instructor permission.

**OCTA 1521 – Fieldwork IB**

A supervised work experience including observation and application of occupational therapy services. No Lecture. Laboratory: 40 hours per semester. Prerequisites: All previous OCTA coursework with grade of "C" or better and instructor permission.

**OCTA 2203 – Therapeutic Adaptions**

This course builds on the theory and practice of therapeutic adaptions and includes ergonomics, basic environmental modification and practical alterations to equipment, including adapted mobility, orthotics, and very basic electronics. The OT Framework is implemented throughout the course. Students will become familiar with the assessment process. Prerequisites: All previous OCTA coursework with a grade of "C" or better or instructor approval. Includes lab component.

**OCTA 2233 – Developmental Disabilities Therapy and Practice**

This course covers the theory and application of occupational therapy services for people with developmental disabilities. Emphasis will be on occupational therapy services provided from birth through school age and young adulthood. Frames of reference such as neurodevelopment treatment, sensory integration, developmental, and motor learning theory will be introduced and practiced. Students will continue to implement the OT Framework. Students will learn to give population specific standardized assessments. Trends in special education and transition services will be explored. Prerequisites: All previous OCTA coursework with a grade of "C" or better or instructor approval. Includes lab component.

**OCTA 2263 – Current Trends in Occupational Therapy**

This course includes selected readings and discussion of trends in current practice. General topics include adult development, aging, geriatric practice, and activity programming. Students will design treatment activities and implement the OT Framework. Community applied clinical practice is included. Prerequisites: All previous OCTA coursework with a grade of "C" or better or instructor approval. Includes lab component.

**OCTA 2356 - Fieldwork IIA**

This course provides practice experience under the supervision of a qualified occupational therapy professional in affiliated healthcare facilities. This is an 8 week course. Fieldwork requirements must be completed within 12 months of didactic coursework. Prerequisites: All previous OCTA coursework with a grade of "C" or better or instructor approval.

**OCTA 2376 – Fieldwork IIB**

This course provides practice experience under the supervision of a qualified occupational therapy professional in affiliated healthcare facilities. This is an 8 week course. Fieldwork requirements must be completed within 12 months of didactic coursework. Prerequisites: All previous OCTA coursework with a grade of 'C' or better or instructor approval.

## **PARALEGAL**

Paralegal Studies majors are required to earn a "C" or better in all PLGL courses for graduation.

### **PLGL 1213 - Introduction to the Legal System**

Provides the student with an overview: of the legal system, the role of the paralegal, ethics, unauthorized practice, the rules of professional conduct, importance of communications, judgement and analytical ability, terminology, sources, and works of the law.

### **PLGL 1313 - Civil Procedure I**

Introduces students to the methods of pre-trial procedures, including interviewing, investigation, formal and informal discovery, and additional litigation support technology. Oklahoma and federal procedural rules will be covered. Students will prepare pleadings, orders, discovery requests or responses, or motions. Prerequisite: Admission to the Paralegal Studies Program or instructor approval. This course is offered during the fall semester only.

### **PLGL 2303 - Civil Procedure II**

Continues the review of civil procedure, including covering pre- and post-trial matters and evidentiary problems. Students will prepare pleadings, orders, discovery requests or responses, or motions. Prerequisite: Admission to the Paralegal Studies Program or instructor approval and PLGL 1313. This course is offered during the spring semester only.

### **PLGL 2333 - Introduction to Legal Research and Writing**

Introduces students to legal research, analysis, citation, and writing. Students will perform legal research and prepare case briefs and memoranda. Prerequisites: Admission to the Paralegal Studies Program or instructor approval. This course is offered during the fall semester only.

### **PLGL 2343 - Advanced Legal Research and Writing**

Students will learn advanced research and writing techniques, analysis, and strategies. Emphasis is placed on development of legal argument, format, and use of legal citations. Competency in WESTLAW and/or LEXIS, and the Internet as research tools will be achieved. Students will perform legal research and prepare case briefs, memoranda, and pleadings or motions. Prerequisite: Admission to the Paralegal Studies Program or instructor approval and PLGL 2333. This course is offered during the spring semester only.

### **PLGL 2353 - Contract Law**

The study of contract law and the drafting of contracts. Students will draft offers, acceptances, and various contract clauses. Prerequisite: Admission to the Paralegal Studies Program or instructor approval.

### **PLGL 2363 - Real Property Law**

The study of property law and the drafting of documents common to real estate transactions. Students will search property records, draft easements, deeds, and closing documents. Prerequisite: Admission to the Paralegal Studies Program or instructor approval.

### **PLGL 2373 - Computers in the Law**

A beginning class covering the use of computer applications in legal organizations designed to introduce the use of computer software and hardware, word processing, databases, timekeeping and billing, docket control, case management, litigation support, computer-assisted research, courthouse-related applications, and specialized legal software.

### **PLGL 2383 - Paralegal Studies Capstone**

Paralegal Studies majors will further study paralegal skills, legal ethics, and law office technology, as well as undertake a review of several areas of substantive and procedural law before completing a comprehensive assessment. Prerequisite: Admission to the Paralegal Studies Program or instructor approval and PLGL 1313. This course is offered during the summer semester only.

### **PLGL 2403 - Principles of Family Law**

Topics include rules of procedure applicable to family matters, divorce, separation, custody, adoption, change of name, guardianship, support, and settlement agreements.

### **PLGL 2413 - Law Office Systems and Procedure**

Topics include law office organization and theories of management; creating systems; timekeeping and billing; law office equipment; preparation of forms and checklists; docket control; personnel problems; self-management; computer usage for management, word processing, litigation support, and accounting.

**PLGL 2423 - Corporations, Partnerships & LLCs**

A study of the formation and operation of proprietorships, partnerships, corporations, and other business operations, including a survey of the fundamental principles of law applicable to each.

**PLGL 2433 - Bankruptcy**

A study of the Bankruptcy Code and Rules of Procedure; the study and preparation of appropriate pleadings and schedules.

**PLGL 2443 - Probate, Administration of Estates, and Trusts**

Covers the fundamental principles of the law of wills and trusts, including simple will and trust forms; the organization and jurisdiction of an Oklahoma probate court; the administration of estates in Oklahoma probate court; and practice in documentation.

**PLGL 2453 - Administrative Law**

Covers the history and functions of administrative agencies, constitutional standards applied to agency operation, rulemaking by agencies, agency decision making and the scope of judicial review of agency decisions, and the manner of pursuing a claim through various federal and Oklahoma administrative agencies.

**PLGL 2463 - Labor and Employment Law**

Designed specifically for paralegals, with coverage of the National Labor Relations Act (labor union-management relations), employment discrimination laws, wrongful discharge, wage/hour laws, safety and health laws pertaining to the workplace, employment contracts, and unemployment statutes. Emphasis will be given to research sources commonly used by labor attorneys.

**PLGL 2473 - Torts and Insurance Law**

Students will cover tort and insurance law, and the overlap of the two. Torts coverage includes intentional torts, negligence and product liability, together with related legal doctrines and defenses. Insurance coverage includes insurable interests relating to the various torts, subrogation of the insured to the insurer, and various claims procedures.

**PLGL 2483 - Native American Law**

An historical analysis of the complex pattern of federal, state, and tribal laws that have affected Native Americans as individuals and as tribes. Areas of exploration may include federal treaties, federal policies, state compacts, and the principle of sovereignty. Cross listed with NAMS 2513.

**PLGL 2493 - Criminal Law for Paralegals**

A review of both substantive and procedural criminal law, as well as the constitutional requirements pertaining to each.

**PLGL 2502 - Medical Record Analysis for Paralegals**

Covers basic medical terminology as contained in the medical record, analyzing the medical record in a litigation context, and creating a summary for the attorney's use in evaluating the case, both from a plaintiff and defense standpoint.

**PLGL 2511 - E-Discovery for Paralegals**

An overview of the use of E-Discovery in litigation. Students will be introduced to the various types and methods of obtaining electronic material for use in litigation.

**PLGL 2601 - Workers' Compensation for Paralegals**

An overview of the Oklahoma Workers' Compensation law, both substantive and procedural, including representation of the claimant and the respondent before the Workers' Compensation Court of Existing Claims and the Worker's Compensation Commission.

**PLGL 2613 - Social Security Administration**

An overview of the Social Security Administration. Topics include the law affecting disability payments as well as supplement income programs. Legal ethics involved in client representations will be covered.

**PLGL 2621 - Elder Law**

Students will be introduced to topics in the law affecting older persons. Such topics as financial and estate planning, health care, personal planning and protection, and consumer protection.

**PLGL 2802 - Internship**

A practicum course intended to provide the student with work experience as a legal assistant under the supervision of a practicing attorney. While the work experience will vary from internship to internship, legal ethics will be emphasized for all by a screening examination. Prerequisites: Admission to the Paralegal Studies Program and successful completion of PLGL 1313 and PLGL 2333.

**PLGL 2813 - Internship**

A practicum course intended to provide the student with work experience as a legal assistant under the supervision of a practicing attorney. While the work experience will vary from internship to internship, legal ethics will be emphasized for all by a screening examination. Prerequisites: Admission to the Paralegal Studies Program and successful completion of PLGL 1313 and PLGL 2333.

**PLGL 2990 - Selected Legal Topics**

Selected Legal Topics allows for a study of varying legal topics (substantive, procedural, or skill-oriented) of current interest to paralegals. Prerequisites: Admission to the Paralegal Studies Program and successful completion of PLGL 1313, and PLGL 2333, or instructor approval.

**PATIENT CARE TECHNICIAN**

See Nursing Course Descriptions

**PHARMACY TECHNOLOGY**

**PHMT 1324 - Introduction to Profession of Pharmacy**

This course provides an introduction to medical vocabulary and terminology, and stresses the use of abbreviations, suffixes and combining forms to give the student a working knowledge of medical terms. Provides federal and state laws for pharmacy and sets the ethical standards for pharmacy technicians. Includes the study of the theory and practical applications of procuring, manipulating and preparing drugs for dispensing in actual pharmacy environments or college laboratory.

**PHMT 1334 - Introduction to Pharmacology**

This course provides an introductory study of therapeutic drug categories which will involve not only a consideration of commonly used drugs, but also basic principles of pharmacology and pharmaceuticals.

**PHMT 1414 - Pharmacy Technician Practicum I**

This course introduces the student to the actual working of a pharmacy. Students are introduced and allowed to train towards the performance of operational procedures in a community pharmacy lab, hospital pharmacy lab, and a compounding lab. Application of basic mathematics as it applies to sterile and non-sterile compounding, dispensing and closing prescriptions.

**PHMT 1524 - Preceptorship I**

A supervised practical work site application for the technical tasks, duties and responsibilities of a pharmacy technician that totals 160 hours. Work site skills may include basic bio-pharmaceuticals, factors affecting drug activity, drug routes and formulations, prescription processing, parenterals and IV admixtures, drug compounding, inventory management, financial issues, organization and duties of institutional pharmacies, and other environments. Prerequisites: Acceptance into the Pharmacy Technology Program and concurrent enrollment in PHMT 1324, PHMT 1334, and PHMT 1414 or approval of instructor.

**PHMT 2990 - Selected Topics in Pharmacology Technology**

The study and/or analysis of a selected topic in Pharmacy Technology. May be repeated with a different topic.

**PHILOSOPHY**

**PHIL 1113 - Introduction to Philosophy (H)**

A survey course designed to acquaint the student with some of the fundamental problems in philosophy and with methods used to deal with them. Some principal views, both ancient and modern, are examined as possible solutions. Recommended for second term freshmen.



**PHIL 1133 - Philosophy in Literature (H)**

The analysis and relationship of ideas in literature (poems, plays, novels, and short stories) to philosophical themes. Course content to vary from term to term.

**PHIL 1143 - Introduction to Ethics: Business Issues (H)**

An introductory level course in ethics, focusing on the types of situations that pose ethical problems in business. An attempt will be made to help the student develop an ethical framework which will allow the student to address ethical issues in the business world. Cross listed with BUSN 1143.

**PHIL 1213 - Religions of the World: The Eastern Tradition (H,I)**

A survey of the Oriental religious heritage of India, Japan, China, and others. Some of the specific religions examined are Hinduism, Buddhism, Taoism, Confucianism, Shintoism, Jainism, and Sikhism. Cross listed with RELG 1213.

**PHIL 1223 - Religions of the World: The Western Tradition (H)**

A survey of the Western religious heritage. Christianity, Judaism, Islam, Greek mythology, and others will be studied. Cross listed with RELG 1223.

**PHIL 2113 - Logic**

A first course in logic using the study of language, semantics, deductive reasoning, the scientific method, and other processes of clear and precise thinking.

**PHIL 2133 - Introduction to Ethical Thinking (H)**

An examination of moral and social problems from the philosophical perspective, including: responsibility to one's self and to society, moral and social values, and conflicts of values. Classical as well as current topics will be discussed.

**PHIL 2143 - Introduction to Social and Political Philosophy (H)**

A survey of major philosophical theories concerning political and social organization, and discussion of such topics as the rights of humans, natural law, social contract, legitimate and illegitimate use of political force, and philosophical views of the "ideal society".

**PHIL 2153 - Medical Ethics (H)**

An introductory level course in ethics with special emphasis on issues that arise in the allied medical professions. Such topics as abortion, birth defects, euthanasia, medical experimentation, and confidentiality will be discussed from the ethical perspective.

**PHIL 2163 - Introduction to the History and Philosophy of Science (H)**

An introductory survey of the development of Western science, and some of the philosophical issues involved in this development. The development of the scientific method will be examined, as well as the effect that this method has had on man's perception of himself and the world around him.

**PHIL 2173 - Introduction to the Philosophy of Religion**

An introductory discussion in topics such as the existence of God, the problem of evil, the possibility and nature of religious knowledge, immortality, and the role of reason, faith, and authority in religion.

**PHIL 2990 - Selected Topics in Philosophy**

The study and/or analysis of a selected topic in Philosophy. May be repeated with a different topic.

## **PHLEBOTOMY**

See Medical Laboratory Technology Program and Course Descriptions

## **PHYSICAL EDUCATION**

**PHED 1002 - Physical Education Activity**

Participation in selected physical education activity events organized and conducted by Tulsa Community College, including, but not limited to, intramural activity sports. Includes lab component.

**PHED 1092 - Karate**

An introduction of the basics of modern day American karate. Learn punches, kicks, blocks, throws, jointlocks, pressure points, falls, rolls, forms, musical weapons, open hand forms, and mind development. Includes lab component.

*The time required for laboratory may vary by course. Please refer to the course syllabus for more information.*

**PHED 1143 - Foundations of Physical Education**

Designed for professional orientation in physical education, health and recreation. Brief history, philosophy and modern trends of physical education, teacher qualification, vocational opportunities, expected competencies and skill testing comprise the contents of the course. For students majoring in Physical Education.

**PHED 1252 - Weight Training I**

This course is designed for men and women who wish knowledge and understanding of weight lifting as it applies to the conditioning, toning, and strengthening of the body. Students will learn how the body and certain muscle groups react to moderate exercise and workouts. Lab exercise will include workouts utilizing various types of weight training equipment.

**PHED 1341 - Introduction to Rock Climbing**

This class will teach the basic techniques of safety and climbing. Knots: rewoven figure eight, figure eight on a bight, bowline, double fisherman, clove hitch, square. Proper sizing of harness. Belay and Rappel technique. Discussion on the history of climbing in the U.S. and an overview of climbing styles (lead, top rope, aid, alpine). Rating systems both U.S. and European. Climbing techniques: flagging, cantilevers, cross-thru, high steps, back steps, drop knees, stemming, etc. Includes lab component.

**PHED 1401 - Introduction to Physical Education Activity**

Participation in selected physical fitness activities. Includes a lab component.

**PHED 1412 - Yoga**

Physical exercise with techniques that integrate the mind, body and spiritual awareness. Includes lab component.

**PHED 1422 - Women on Weights**

Weight training and weight conditioning designed especially for women. Includes lab component.

**PHED 1552 - Bicycling for Fitness**

Basic skills for the beginner in acquiring knowledge and understanding of bicycling, both mountain and road, and the role these play for a healthier body. The sessions consist of warm-up, bicycling, and cool off exercises. Includes lab component.

**PHED 1652 - Cardio Kickboxing**

Exercise designed to condition the body for maximum health and fitness by movement involving punching and kicking. Includes lab component.

**PHED 2012 - Zumba**

Zumba is an interval dance/aerobic exercise class that uses Latin dance moves, rhythms, and music. This activity combines footwork and body movements from Salsa and other Latin dances. Includes lab component.

**PHED 2042 - Women on Weights II**

This advanced level course is a continuation of PHED 1422 and includes topics such as muscle development, nutrition, assessment of body composition, fitness level testing, cardiovascular activity and weight training essential to increased body strength, muscle tone and loss of body fat. Prerequisite: PHED 1422 or instructor approval. Includes lab component.

**PHED 2092 - Bicycling for Fitness II**

This is a continuation of PHED 1552. Prerequisite: PHED 1552 or instructor approval. Includes lab component.

**PHED 2111 - Professional Careers in Nutritional Sciences**

Career opportunities in dietetics and food and nutrition. Roles and responsibilities of nutritional sciences professionals. Routes to professional memberships and current issues in professionalism.

**PHED 2112 - Cardio Kickboxing II**

This course is a continuation of PHED 1652. Prerequisite: PHED 1652 or instructor approval. Includes lab component.

**PHED 2142 - Karate II**

This is a continuation of PHED 1092. Prerequisite: PHED 1092 or instructor approval. Includes lab component.

**PHED 2212 - First Aid**

The standard first aid course of the American Red Cross with special emphasis on resuscitation, control of bleeding and shock, poisons, choking, and transportation of injured persons. Training in emergency care of most acute illnesses and/or accidents included. CPR certification will be through American Heart Association and/or American Red Cross.

**PHED 2252 - Weight Training II**

This course is a continuation of PHED 1252. Prerequisite: PHED 1252 or instructor approval. Includes lab component.

**PHED 2263 - Principles in Health Education and Health Promotion**

Introduction to the field of health education and health promotion focusing on health principles, theories, career opportunities and a field experience.

**PHED 2312 - Body Conditioning**

A course which develops the body for physical fitness, muscle toning, muscle strengthening and assistance in controlling excessive weight and maintaining correct body posture. Includes lab component.

**PHED 2322 - Walking for Fitness**

This course is designed for those wanting to start a cardiovascular fitness program by walking. Students will meet three times over the class term with the instructor and the group. Students will keep and submit weekly logs to the instructor. Includes lab component.

**PHED 2332 - Jogging for Fitness**

This course is designed for those wanting to become more cardiovascular fit. Students should have been walking vigorously for six weeks or have completed the walking class (PHED 2322). Students will meet three times over the class term with the instructor and the group. Students will keep and submit weekly logs to the instructor. Prerequisite: PHED 2322 or instructor approval. Includes lab component.

**PHED 2342 - Recreation Therapy/Rope Course Training**

Certified low sequencing of icebreakers, warm-ups, and initiative for low challenge course elements. Trained in belaying, repelling, high set-ups, rescues, and all technical aspects of running a high challenge course. (Miscellaneous fees may be required.)

**PHED 2363 - Recreation Therapy/Outdoor Adventure**

Field based course to understand origins and components of involvement in outdoor pursuits. Numerous skills applied to various outdoor settings. (Miscellaneous fees may be required.)

**PHED 2422 - Walking for Fitness II**

This course is a continuation of PHED 2322. Prerequisite: PHED 2322. Includes lab component.

**PHED 2432 - Jogging for Fitness II**

This is a continuation of PHED 2332. Prerequisite: PHED 2332 or instructor approval. Includes lab component.

**PHED 2513 - Introduction to Leisure Services**

The nature, scope and significance of leisure and recreation. Delivery systems for leisure services, major program areas and the interrelationship of special agencies and institutions serving the recreation needs of society. Cross listed with HSVC 2413.

**PHED 2533 - Introduction to Therapeutic Recreation**

Theory and application of therapeutic recreation with emphasis on types of illnesses and disabilities, delivery systems, programming and services.

**PHED 2603 - Total Wellness**

Overview of individual, inter-personal, and socio-cultural issues that have an impact on health. Behavioral decision making, social relations, cultural diversity and environmental sensitivity.

**PHED 2653 - Applied Anatomy and Kinesiology**

Anatomical study of structure and function of musculoskeletal systems. Common anatomical injuries and diseases will be presented with each joint structure.

**PHED 2662 - Care and Prevention of Athletic Injuries**

This is an introductory course in sports medicine. Topics covered will include anatomy, physiology, injury evaluation, recognition, treatment and prevention. Acute problems will be discussed.

**PHED 2990 - Selected Topics in Physical Education**

The study and/or analysis of a selected topic in Physical Education. May be repeated with a different topic.

## **PHYSICAL SCIENCE**

### **PHSC 0123 - Basic Physical Science**

This course is designed to provide a laboratory based science for students who have not met the lab science requirements for state college admissions standards. The primary objective is to provide knowledge of the basic principles and concepts of physics and chemistry involving physical and chemical properties and phases of matter, acids and bases, heat, motion, electricity, magnetism, and light. Includes lab component.

### **PHSC 1114 - General Physical Science (L,N)**

A study of the basic principles and concepts of physics and nuclear science, chemistry, astronomy, meteorology, and geology. The course relates these basic sciences to man's physical world at an introductory level, and is intended primarily for the non-science major. Prerequisite: One year of high school algebra, or MATH 0013 or equivalent. Includes lab component.

### **PHSC 2111 - Science Projects I: Project Wild**

Project Wild is an exciting wildlife curriculum that helps teachers and youth leaders teach math, science, social studies, art, language, and P.E. This is a supplementary, interdisciplinary, easy-to-use, hands-on program that develops skills in creative problem solving, critical thinking, evaluation, and research. Miscellaneous expenses may be incurred.

### **PHSC 2121 - Science Projects II: Project Learning Tree**

PLT is a K-12 conservation education program that uses the forest as a "window" to the natural world, helping young people gain an awareness and knowledge of the world around them as well as their place in it. This is a supplementary, inter-disciplinary, easy-to-use, hands-on program that develops skills in creative problem solving, critical thinking, evaluation and research. The course guides offer many new ideas for current and previous participants. Miscellaneous expenses may be incurred.

### **PHSC 2131 - Science Projects III: Project Wet**

Project WET is an interdisciplinary water education program intended to supplement a school's existing curriculum. The goal of Project WET is to facilitate and promote awareness, appreciation, knowledge and stewardship of water resources. This course provides activities that are ready to be used. Miscellaneous expenses may be incurred.

### **PHSC 2141 Project Flying Wild**

Developed by the Council for Environmental Education, this course focuses on bird migration and related habitat issues. This course is an interdisciplinary, hands-on program that develops skills in creative problem solving, critical thinking, research skills and service learning. The course provides standards-based learning opportunities to engage students. Some course components are taught outdoors.

### **PHSC 2151 The Nature of Science**

This course will introduce students to an approach to "doing" science by using the scientific method. This scientific inquiry method will be used to examine problems from several different areas of science including: biology, physics, chemistry, astronomy, and geology. Lecture 1 hour. No Laboratory.

### **PHSC 2161 – Kitchen Science Activities I for Educators**

This course creates an atmosphere of learning by using the culinary process to develop hands-on, multisensory activities. Students will enhance their teaching style by learning how to create additional learning opportunities in math, science, art, health, and more through culinary experiences.

### **PHSC 2171 – Kitchen Science Activities II for Educators**

This course creates an atmosphere of educational learning through culinary games and strategies using the Internet. Students will learn how to locate and utilize free information from the Web to create and adapt activities for all grade levels and multiple disciplines.

### **PHSC 2181 – Early Childhood Gardening Activities for Teachers**

This course will provide hands-on activities for classroom teachers to implement low cost gardening projects and garden crafts. Most projects use materials that are recycled and found in your kitchen. Many projects can be used for inexpensive parent gifts. Projects include: an insect house, potpourri, pressed plant material bookmarks, and plant propagation. Participants will develop and present a lesson plan using a plant part and PASS objectives. Cross listed as CHLD 2181.

### **PHSC 2990 - Selected Topics in Physical Science**

The study and/or analysis of a selected topic in Physical Science. May be repeated with a different topic.

## **PHYSICAL THERAPIST ASSISTANT**

### **PHTA 1203 - Anatomy and Physiology for PTAs**

A supplementary study of the human body's structure and function as these relate to the practice of physical therapy. Emphasis will be placed on musculoskeletal, circulatory, and nervous systems. Prerequisite: Admission to the PTA program. Includes lab component.

### **PHTA 1211 - Clinical Orientation**

This course is an orientation to the physical therapy clinic environment. The course covers the professional clinical expectations, procedures of processing patients, treatment preparation, introduction to medical documentation, and activities associated with preparing students for future clinical experiences. Prerequisites: Completion of all Allied Health Risk requirements.

### **PHTA 1221 - Clinical Practice I**

A supervised clinical experience; two concurrent weeks of full time clinical education exposure including observations and applications of physical therapy services. Prerequisites: All previous PTA coursework with a "C" or better, or instructor approval.

### **PHTA 1242 - Human Growth and Development**

Study and application of current theories regarding human growth in social, cognitive, behavioral and motoric domains as related to the practice of physical therapy. Requires admission to the PTA program.

### **PHTA 1303 - Introduction to Physical Therapy**

History, philosophy, ethics, settings, and trends in physical therapy. Delineation of roles of the health care team, and of physical therapy personnel, with interpersonal skills needed to function as a health care provider and team member. Principles and procedures of basic patient care skills and documentation. Requires admission to the PTA Program. Includes lab component.

### **PHTA 1363 - Kinesiology for PTAs**

A study of anatomical structures and movement as related to physical therapy procedures. The basic principles of the relationship between joint motion and mechanical action. Application of principles with emphasis on the analysis and bio-mechanics of all human motion. For PTA students. Prerequisites: All previous PTA coursework with a grade of "C" or better or instructor approval. Includes lab component.

### **PHTA 1383 - Pathophysiology for PTAs**

A study of selected disease and injuries as they relate to clinical conditions seen in the practice of physical therapy. Prerequisite: All previous PTA coursework with a "C" or better or instructor approval.

### **PHTA 1392 - Clinical Procedures I**

Principles and techniques of basic physical therapy interventions, with emphasis on physiological changes and effects in commonly seen diagnosis and in response to treatment. Laboratory practice with emphasis on positioning and manual skills.

### **PHTA 2113 - Rehabilitation**

A study of principles of functional training as they apply to a variety of diagnoses seen in Physical Therapy. Theory and therapeutic techniques involving gait, functional mobility, assistive devices, and the progression of rehabilitation. Prerequisites: All previous PTA coursework with a grade of "C" or instructor approval. Includes lab component.

### **PHTA 2343 - Clinical Procedures II**

Theory, physiology, and application of heat, cold, light, water, electricity, and mechanical compression/distraction in therapeutic treatment of tissues. Overview of medical physics. Prerequisites: All previous PTA coursework with a grade of "C" or better or instructor approval.

### **PHTA 2373 - Therapeutic Exercise I**

General and specific exercises for conditions commonly referred to physical therapy. Principles involved in the theory and practical applications of specific therapeutic exercise and mechanical appliances. Prerequisites: All previous PTA coursework with a grade of "C" or better or instructor approval. Includes lab component.

### **PHTA 2383 - Therapeutic Exercise II**

Continuation of Therapeutic Exercise I and additional theory and application of exercise techniques, with emphasis on treatment of long-term disabilities. Prerequisites: All previous PTA course work with a grade of "C" or better or instructor approval. Includes lab component.



**PHTA 2432 - Clinical Practice III**

A supervised clinical experience; two concurrent weeks of full time clinical education exposure including observations and applications of physical therapy services. In addition, a weekly group discussion of selected topics, in a colloquium format. Prerequisite: All previous PTA coursework with a grade of "C" or better or instructor approval.

**PHTA 2442 - Psychosocial Aspects in Physical Therapy**

A survey course explaining the psychological and sociologic effects of disabilities, including the impact of culture and economics with regard to the patient, family, and society. The student will also participate in 8 hours of community service used to promote awareness of social responsibility, citizenship and advocacy.

**PHTA 2486 - Clinical Practice III**

Supervised application of physical therapy procedures in the treatment of patients at a variety of selected physical therapy clinics. Successful completion of this course with a grade of "C" or better is required for graduation from the PTA program. This is a 12-week course. 480 clinical hours. Prerequisites: Completion of all PTA courses with a grade of "C" or better, or instructor approval.

**PHTA 2522 - Special Studies in Clinical Practice**

Advanced study and application of physical therapy practices in a selected topic determined by the student and faculty in the areas of geriatrics, orthopedics, pediatric-neuro or acute care. Prerequisites: All previous PTA coursework with a grade of "C" or better or instructor approval.

**PHTA 2543 - Neuroscience**

A comprehensive review of the anatomy and physiology of the nervous system, with emphasis on the functional relationship between the nervous system and the musculoskeletal system. Basic review of the pathology of neurological disorders frequently encountered in the practice of physical therapy. Prerequisites: All previous PTA coursework with a grade of "C" or above or instructor approval.

**PHTA 2551 - Pharmacology for PTAs**

General pharmacologic concepts for the physical therapist assistant student who has no background in pharmacology. The therapeutic effects, side effects, and clinical applications to physical therapy are stressed for drugs affecting the major systems of the body. Prerequisites: All previous PTA coursework with a grade "C" or better or instructor approval.

**PHTA 2990 - Selected Topics in Physical Therapy**

The study and/or analysis of a selected topic in Physical Therapy. May be repeated with a different topic. Prerequisites: PHTA 1203, BIOL 1314, and PHTA 1303 with a grade of "C" or better.

## **PHYSICS**

**PHYS 1003 - Introduction to Physics**

A course designed to prepare science and science-related majors for physics sequences starting from PHYS 1114 and PHYS 2034. Includes the fundamentals of mechanics, electricity and magnetism, wave motion, and light. Emphasizes problem-solving and appropriate formatting for working and presenting problems. Prerequisites: MATH 1513 or MATH 1454 or equivalent or instructor approval.

**PHYS 1014 - Conceptual Physics (L)**

An introductory physics course intended for non-science majors. The general ideas of both Newtonian and Einsteinian physics will be discussed in relation to current philosophical and social topics. Emphasis will be put on the scientific method of investigation and on distinguishing science from pseudo-science. Not recommended for students who intend to do major work in mathematics or science. Includes lab component.

**PHYS 1114 - General Physics I (L)**

Physics I is an algebra based course and includes the study of the principles of elementary physics involving mechanics, heat, fluids, waves, and sound. Prerequisite: MATH 1513 or MATH 1454 or equivalent, or instructor approval. Includes lab component.

**PHYS 1214 - General Physics II (L)**

A continuation of PHYS 1114 involving electricity, magnetism, light, and modern physics. Prerequisite: PHYS 1114. Includes lab component.

**PHYS 2034 - Engineering Physics I (L)**

Physics for engineering and science students. Principles of mechanics, thermodynamics, and wave motion based on the calculus development. Prerequisite: MATH 2114. Includes lab component.

**PHYS 2124 - Engineering Physics II (L)**

Physics for engineering and science students. A continuation of PHYS 2034 dealing with magnetism, electricity, and light. Prerequisites: PHYS 2034 and MATH 2124. Includes lab component.

**PHYS 2990 - Selected Topics in Physics**

The study and/or analysis of a selected topic in Physics. May be repeated with a different topic.

## **POLITICAL SCIENCE**

**POLS 1113 - American Federal Government**

A study of the principles, structure, processes, and functions of the United States federal government.

**POLS 2013 - Introduction to Comparative Governments**

An introduction to the domestic politics of several countries, with particular focus on specific themes of state formation, political economy, policy making, governance, and representation. The course reviews current domestic and global political issues as they relate to consolidated democracies, transitional democracies and authoritarian regimes around the world. Prerequisite: POLS 1113.

**POLS 2023 - Introduction to American Politics**

The course will explore the role of partisan politics within the American political system. Emphasis will be placed on elections, political parties, the presidency, and Congress. Prerequisite: POLS 1113.

**POLS 2033 - Introduction to Political Thought**

A description and analysis of the development of American political thought from early American and European philosophies to contemporary theorists. Prerequisite: POLS 1113.

**POLS 2043 - Introduction to City Government**

City government and politics; organization, structure, functions and administrative problems of the City of Tulsa; charter of the City of Tulsa; legislative function of the city council and administrative function of the mayor; fiscal and administrative systems. Prerequisite: POLS 1113

**POLS 2103 - Introduction to State and Local Government**

General features of state constitutions, powers of governor, state legislative structure and processes, state judicial systems, and structure and form of municipal and county governments - with emphasis on Oklahoma governmental and political structure. Prerequisite: POLS 1113 and sophomore standing, or instructor approval.

**POLS 2133 - Introduction to Public Administration**

Principles of public administration and the significance of administration in the modern state. Analysis of administrative theory, organization, and problems. A study of public relations, fiscal, personnel, and administrative responsibilities. Prerequisite: POLS 1113 and sophomore standing, or instructor approval.

**POLS 2153 - Introduction to the Constitution and Judicial Process**

A history and interpretation of the federal constitution and judicial system, with a summary of the leading constitutional decisions by the courts. Prerequisites: POLS 1113 and sophomore standing, or instructor approval.

**POLS 2203 - Introduction to International Relations**

A survey of relations among nations; peace and peace-keeping; conflict and conflict resolution; basic concepts, theories and realities of national power, foreign policy, and international interactions. Prerequisites: POLS 1113 and sophomore standing.

**POLS 2893 - Government Internship**

Selected students will be assigned to work in governmental offices in the Tulsa area. Interns will accomplish specified learning and performance objectives. Each intern will analyze the major functions of the office and compare the practical experience with current governmental theories in a term paper. The internship may be repeated for up to six hours credit. Prerequisites: POLS 1113 or concurrent enrollment, and selection by Intern Coordinator.

**POLS 2990 - Selected Topics in Political Science**

The study and/or analysis of a selected topic in Political Science. May be repeated with a different topic.

## **PORTUGUESE**

**PORT 1103 - Portuguese I**

A beginning course in understanding, speaking, reading, and writing Portuguese. The first in a sequence of two related courses.

**PORT 1213 - Portuguese II**

Continued instruction in understanding, speaking, reading, and writing Portuguese. Prerequisite: PORT 1103 with a grade of "C" or better or instructor approval.

**PORT 2990 - Selected Topics in Portuguese**

The study and/or analysis of a selected topic in Portuguese. May be repeated with a different topic.

## **PROCESS TECHNOLOGY**

**PRCT 1123 - Introduction to Process Technology**

Introduction to process operations in the petrochemical industry including: operator roles, responsibilities and expectations; plant terminology; safety and environmental responsibilities; applied organic and inorganic chemistry; applied physics; plant equipment, utility systems; product handling; flow diagrams; general process overviews; basics of process control; and plant organizations. This course will expose students to an overview of the Process Technology certificate/degree program, including the mental and physical requirements of the Process Technician career. Plant tours will be conducted.

**PRCT 1133 - Safety, Health & Work Practices**

Introduction to occupational safety, health and environmental practices and associated equipment including: safety mindset and attitude; personal safety equipment; general safety policies and procedures; hazards communications; HAZWOPER/emergency response; first aid and CPR; industrial hygiene; exposure monitoring; and environmental compliance. This course will give students an overview of various governmental regulations mandated by OSHA, EPA, SARA, RCRA, DOT, NFPA, etc.

**PRCT 1134 - Process Organic Chemistry**

This terminal course in organic chemistry covers general principles, methods of preparation, reactions and uses of both acyclic and cyclic compounds. Not open for credit to students who have credit in CHEM 2145 or CHEM 2245. Does not substitute for CHEM 2145 or CHEM 2245. Prerequisite: Appropriate placement test score or a grade of "C" or better in MATH 0003.

**PRCT 2024 - Process Tech I (Equipment)**

This course involves the fundamental and operating considerations of Process Equipment such as: valves and piping; pumps and compressors; generators; turbines; motors; lubrication systems; heat exchangers; furnaces and boilers; towers; drums; separators; and reactors. This course will examine thermodynamic and hydraulic aspects, as well as the mechanical characteristics of plant equipment. Prerequisite: PRCT 1123.

**PRCT 2034 - Industrial Instrumentation**

This course is designed to introduce the student to a simple pneumatic control loop. Specifically, the student will be introduced to pressure, temperature, level and flow transmitters and the various transducers used in the detection of changes in process variables; pneumatic controllers, valve positioners, control valve types, pneumatic relays and the null-balance system are also included as part of the control loop. Prerequisite: PRCT 1123.

**PRCT 2134 - Process Tech II (Systems)**

A familiarization with the general types of processes found in the chemical and refining industry including: distillation and fractionation; reaction; absorption; adsorption; extraction; stripping; cracking; reforming; alkylation; delayed coking; hydroprocessing; and sulfur recovery. This course also includes an explanation of product blending and water treatment, as well as steam and electrical power generation. Prerequisite: PRCT 2024.

**PRCT 2224 - Process Tech III (Operations)**

This course will concentrate on the duties, responsibilities and expectations of the Process Operator with emphasis on understanding and adherence to procedures associated with start-up, shutdown, normal and temporary plant operations. Equipment monitoring, preventative maintenance, training and response to abnormal and emergency operating conditions are stressed as they apply to the work crew and operations team. Students will receive a "sense of reality" regarding the career of a Process Technician, including tips on adjusting to shift work, diversity in the workplace and communicating with the work team and customers. Prerequisite: PRCT 1123, PRCT 2024 and PRCT 2134.

## **PSYCHOLOGY**

**PSYC 1113 - Introduction to Psychology (S)**

Psychology's use of the scientific method to understand behavior and mental processes is the focus of this survey class. As the foundation class for more advanced classes in psychology, this class will cover the scientific method, biopsychology, learning, lifespan development, personality theories, and psychological disorders. Other topics covered may include states of consciousness, sensation and perception, memory, motivation, emotion, stress, social psychology, and therapies.

**PSYC 1313 - Human Relations (S)**

An experiential course involving the direct application of psychological principles to human relations problems. Special emphasis will be placed on group dynamics and personal adjustment factors as related to communication, decision making, and problem solving in human interchanges.

**PSYC 2023 - Developmental Psychology**

A theoretical and research based psychology course that covers social, emotional, physical and cognitive aspects of human development throughout the life-span. Prerequisite: PSYC 1113 or instructor approval.

**PSYC 2053 - Social Psychology**

A study of the psychological basis of social interaction and change that covers the following topics: conformity, social influence, social cognition, prosocial behavior, prejudice, group processes, interpersonal attraction, and aggression. Prerequisite: PSYC 1113 or instructor approval. Cross listed with SOCI 2053.

**PSYC 2143 - Guided Activities in Service Learning**

Service learning combines community service with classroom instruction, focusing on critical, reflective thinking, as well as personal and civic responsibility. This course is a directed study at self-selected sites within the Tulsa community. Within the context of field experiences, students are offered a reciprocal opportunity to develop skills and acquire knowledge while providing service and assistance to the community. Lecture/Experiential-based learning.

**PSYC 2150 - Crisis Intervention and Experience**

The study of crisis intervention including models of responding, counseling techniques and community resources. Crisis intervention specialization areas include mental illness, substance abuse, suicide, homelessness, grief, and violence. Course includes lecture plus a supervised practicum in an approved social services agency. Prerequisite: PSYC 1113 or SOCI 1113. Cross-listed to SOCI 2150.

**PSYC 2193 - Personality Theories**

A psychology course examining personality processes and the various theoretical approaches to the study of personality such as: psychodynamic, behavioral, phenomenological, trait, and social learning theories. Prerequisite: PSYC 1113 or instructor approval.

**PSYC 2213 - Brain and Behavior**

This course covers both the biological basis of human behavior (including the nervous system, homeostasis, biological clocks, etc.) and the psychological consequences of the biology of our species (feelings, learning and memory, thinking and consciousness, the malfunctioning brain, etc.). The course also includes speculation on future developments in brain research. Prerequisite: BIOL 1114 or BIOL 1224 and PSYC 1113. Cross listed as BIOL 2213.

**PSYC 2223 - Behavioral Statistics**

Application of descriptive and inferential analyses of data are major topics. Specific topics that are covered (but not limited to) are: central tendency, dispersion, the standard normal distribution, correlation, regression, probability theory, single-sample analyses, two-sample analyses, ANOVA and its variations, and a variety of nonparametric analyses. The student will be using the most current computer software available as a basis for these analyses. Prerequisites: MATH 1513 or instructor approval, and PSYC 1113 or SOCI 1113. Cross listed with SOCI 2223.

**PSYC 2323 - Conflict Resolution**

An experiential course aimed at the application of the principles of human relations to interpersonal conflicts. Emphasis will be placed on the nature of conflict and integrative methods of conflict resolution through third-party intervention. Specific areas of conflict commonly encountered in work and social situations (e.g., stress, sexism, racism, ageism) will be examined.

**PSYC 2423 - Introduction to Abnormal Psychology**

A psychology class exploring the major categories of mental disorders, including their causes and treatment. Prerequisite: PSYC 1113 or instructor approval.

**PSYC 2523 - Child Psychology**

Child psychology is the systematic investigation of the psychological processes of childhood. The course surveys childhood from a theoretical and empirical base including the cognitive, social, emotional, and physical changes from conception to late childhood. Prerequisite: PSYC 1113 or instructor approval.

**PSYC 2533 - Adolescent Psychology**

Adolescent psychology is the systematic investigation of the psychological processes of adolescence. The course surveys normal adolescence from a theoretical and empirical base including the cognitive, social, emotional, and physical changes from youth into pre-adulthood. Prerequisite: PSYC 1113 or instructor approval.

**PSYC 2613 - Adult Psychology**

Adult psychology is the systematic investigation of the psychological processes of the adult years with an emphasis on the social emotional and cognitive changes which occur after adolescence. Prerequisites: PSYC 1113 or instructor approval.

**PSYC 2633 - Industrial and Organizational Psychology (S)**

Applications of the principles of psychology to the problems of business and industry will be explored. Special attention will be given to the areas of communication, motivation, job satisfaction, personnel selection, placement, and training. Prerequisite: PSYC 1113 or instructor approval. Cross-listed to BUSN 2633.

**PSYC 2713 - Aging and Behavior (S)**

In the later adult years, we recognize age related sequential changes. These are physiological, psychological, and sociological. This course attempts to describe these changes, with an emphasis on optimal and satisfactory adaptations to them by the individual and by society. Prerequisite: PSYC 1113 or instructor approval. Cross listed with SOCI 2713.

**PSYC 2813 - Human Sexuality (S)**

Human sexuality is presented as an ever-varying constant of the entire life span. Human sexuality involves biological, sociological, psychological, and behavioral components influenced by feelings, attitudes, and social institutions which make sexuality a unique experience. Prerequisite: PSYC 1113 or instructor approval. Cross listed with SOCI 2813.

**PSYC 2990 - Selected Topics in Psychology**

The study and/or analysis of a selected topic in Psychology. May be repeated with a different topic. Prerequisite: PSYC 1113 or instructor approval.



## QUALITY TECHNOLOGY

### **QCTT 1223 - Blueprint Reading**

For students enrolled in Quality studies. Study includes principles of geometric dimensioning and tolerancing applied to hands-on interpretation of engineering drawings and manufactured components. Principles of standard drawing views, isometric and projected views and dimensional layouts. Students will utilize their knowledge of fractional and decimal mathematics to determine part geometrics.

### **QCTT 1313 - Introduction to Quality**

A survey of the fundamental concepts by which the quality of goods and services is evaluated and improved. The student will develop a basic understanding of the definitions, principles, and objectives of the quality field.

### **QCTT 1443 - Geometric Dimensioning & Tolerancing**

An in depth study of dimensional tolerancing as identified in the American National Standards Institute, ANSI Y 14.5 specification. This course will explore the meaning of symbols used in the International Standard, their application and the processes necessary to achieve the specified geometry, as well as common practices used in Engineering drawings and practical limits and challenges in the manufacturing environment. Prerequisite: QCTT 1223 or any DRFT class. Cross listed with ENGT 1443.

### **QCTT 2153 - Lean, Six Sigma, Quality Systems**

An introduction to the history, evolution and practice of advanced manufacturing and quality systems, including Lean Manufacturing, Kiazen, 5-S, Kanban, Toyota Production System and Six Sigma. Exploration into the theory and tools behind today's most advanced business philosophies. Cross listed with ENGT 2153.

### **QCTT 2333 - Inspection Principles**

Study of inspection techniques and requirements for receiving, in-process, and final inspection. Emphasis on quality planning and improvement of inspection and inspector efficiency, in both job-shop and mass production environments. Study will include reporting of vendor surveillance, quality characteristics, non-conformance, and costs. Prerequisite: QCTT 1313.

### **QCTT 2383 - Statistical Process Control, Quality, Costs and Audits**

A study of the statistical methods used in quality, lean manufacturing, and Six Sigma. Emphasis will be placed on quality planning and improvement of inspector efficiency in job shop or mass production environments. Other topics covered include identification of the true cost of quality and the principles of surveying and auditing of quality procedures and standards. Prerequisite: QCTT 1313.

### **QCTT 2423 - Quality Standards, Specifications & ISO 9000**

This course will introduce students to codes and industry standards, with emphasis on interpreting and understanding of formats and organization of the International Standards (ISO) and will include an in-depth probe of the meaning and intent of the standards that apply to engineering and manufacturing, and implementation and certification methods for ISO 9001, 9002, 9003. Prerequisite: QCTT 1313.

### **QCTT 2990 - Selected Topics in Quality Technology**

The study and/or analysis of a selected topic in Quality Technology. May be repeated with a different topic.

## RADIOGRAPHY

### **RADT 1201 - Introduction to Radiographic Clinical Education**

This course enables potential Radiography students to become familiar with clinical education centers available to TCC students, and to observe duties performed by radiographers. Student will choose four separate clinical sites to visit.

### **RADT 1211 - Introduction to Radiography Laboratory**

An introduction to the Radiography laboratory.

### **RADT 1212 - Introduction to Radiography**

An introductory course designed to acquaint the student to the field of medical radiography. Topics include patient care, ethics, radiation protection, positioning terminology, chest and abdomen radiography, and image critique.

**RADT 1222 - Radiographic Clinical Education I**

A clinical experience course to familiarize the student with the hospital and the radiology department which includes 128 clinical hours. Experience will concentrate on office procedures, digital image processing, patient care, chest and abdomen radiography, and image critique. Prerequisite: Admission to the program.

**RADT 1313 - Radiographic Anatomy and Positioning I**

Topics covered in this course include upper and lower extremities, complete spine, bony thorax, mammography, terminology, and image critique. Prerequisites: All previous RADT coursework with a grade of "C" or better or instructor approval. Includes lab component.

**RADT 1324 - Radiographic Clinical Education II**

A continuation of clinical experience to develop positioning and technique skills related to routine and fluoroscopic exams which includes 256 clinical hours. Image critique will also be covered. Prerequisites: All previous RADT coursework with a grade of "C" or better or instructor approval.

**RADT 1333 - Radiographic Anatomy and Positioning II**

Topics covered in this course include digestive, urinary, biliary, and reproductive systems, skulls, and pediatrics. Related terminology and image critique. Prerequisites: All previous RADT coursework with a grade of "C" or better or instructor approval. Includes lab component.

**RADT 1344 - Radiographic Clinical Education III**

A continuation of clinical experience to develop positioning and technique skills related to routine and fluoroscopic exams which includes 256 clinical hours. Pediatric patient care will be developed. Image critique will also be covered. Prerequisites: All previous RADT coursework with a grade of "C" or better or instructor approval.

**RADT 1372 - Radiographic Technique**

An introductory course on radiographic exposure factors including radiation protection, films, screens, and film processing. Prerequisites: All previous RADT coursework with a grade of "C" or better or instructor approval. Includes lab component.

**RADT 1383 - Advanced Radiographic Technique**

An in-depth study of radiographic exposure factors and radiographic quality assurance. Prerequisites: All previous RADT coursework with a grade of "C" or better or instructor approval. Includes lab component.

**RADT 2301 - Radiographic Seminar**

A study of trauma radiography, portable radiography, and surgical procedures. Prerequisites: All previous RADT coursework with a grade of "C" or better or instructor approval.

**RADT 2312 - Radiographic Clinical Education IV**

A continuation of clinical education in all areas of the radiology department including surgery. Image critique will also be covered. Includes 120 clinical hours. Prerequisites: All previous RADT coursework with a grade of "C" or better or instructor approval.

**RADT 2323 - Radiographic Special Procedures**

An introductory course on special procedures, digital imaging and related equipment. Other topics include CT, MRI, cross sectional anatomy and registry review. Prerequisites: RADT 2301, RADT 2314, CSCI 1203 or equivalent, and concurrent enrollment in RADT 2343. Includes a lab component.

**RADT 2336 - Radiographic Clinical Education V**

A continuation of clinical education in all areas of the radiology department including special procedures, CT, and MRI. Image critique will also be covered. Includes 384 clinical hours. Prerequisites: All previous RADT coursework with a grade of "C" or better or instructor approval.

**RADT 2343 - Radiographic Biology and Pathology**

A study of radiation biology, radiographic pathology, and departmental administration. Prerequisites: RADT 2301, RADT 2314, and concurrent enrollment in RADT 2383. Includes lab component.

**RADT 2356 - Radiographic Clinical Education VI**

The final course of clinical education in all areas of the radiology department and includes 384 clinical hours. Clinical rotations will be structured to the students' areas of need. Image critique will be covered. Prerequisites: All previous RADT coursework with a grade of "C" or better or instructor approval.

**RADT 2383 - Radiographic Physics**

Topics covered include units of measurement, mechanics, structure of matter, electrostatics, magnetism, electrodynamics, electromagnetism, rectification, x-ray tube, x-ray circuits, and equipment. Prerequisites: MATH 1473 or MATH 1513 and all previous RADT coursework with a grade of "C" or better or instructor approval.

**RADT 2990 - Selected Topics In Radiologic Technology**

The study and/or analysis of a selected topic in Radiologic Technology. May be repeated with a different topic.

## **RELIGIOUS STUDIES**

**RELG 1113 - Introduction to Religious Studies (H)**

An introductory study of the major materials and methods for the systematic examination of the roles and functions of religion in human life. Examples of religion drawn from ancient and modern times, Western and Eastern traditions, and ritual and ethical behaviors are explored. Comparative, phenomenological, historical, literary, philosophical, and theological methods are used.

**RELG 1213 - Religions of the World: The Eastern Tradition (H) (I)**

A survey of Oriental religious heritage of India, Japan, China, and others. Some of the specific religions examined are Hinduism, Buddhism, Taoism, Confucianism, Shintoism, Jainism, and Sikhism. Cross listed with PHIL 1213.

**RELG 1223 - Religions of the World: The Western Tradition (H)**

A survey of Western religious heritage. Christianity, Judaism, Islam, Greek mythology, and others will be studied. Cross listed with PHIL 1223.

**RELG 2113 - Old Testament (H)**

English translation of the Hebrew Scriptures (Christian Old Testament) with emphasis upon historical background, critical analysis, and theological interpretations. In addition, it will be shown how themes from these scriptures have been used in various forms of literature.

**RELG 2123 - New Testament (H)**

The writings of the New Testament in their historical contexts. Emphasis on interpreting selected New Testament passages and how these readings have affected subsequent forms of literature.

**RELG 2173 - Religion and Society (H)**

An introductory social scientific survey of religion viewed from the psychological, sociological, and anthropological perspectives. Patterns in the internal development of religious groups, as well as the relationships between religion and other social and cultural institutions will be examined. Cross listed as SOCI 2173.

**RELG 2233 - Religion in America (H)**

A survey of the varieties of religious expression in America. The course includes an examination of various Protestant, Catholic and Jewish experiences in America, as well as the impact of Native-American, African-American, Hispanic, and Asian religions on American history and culture. The phenomenon of new cults and spiritualities will also be explored.

**RELG 2243 - Christian Ethics and Social Thought (H)**

An examination of moral and social problems from the Christian perspective and discussion of practical applications in areas such as human rights, abortion, peace, justice, poverty, euthanasia, and the like.

**RELG 2313 - Religion in Film (H)**

An analysis of the treatment of religion in general, of particular religions, and of religious themes, ideas, and issues in popular film. The emphasis and films will vary from term to term.

**RELG 2330 - Field Studies in Religion**

This course is designed to provide students with on-site experiences of different religious expressions. The course includes lectures and readings to prepare students for the on-site experience and discussion and written field reports to evaluate the on-site experience. May be repeated with different on-site experiences for up to nine hours credit. Requires instructor approval.

**RELG 2990 - Selected Topics in Religious Studies**

The study and/or analysis of a selected topic in Religious Studies. May be repeated with a different topic.

## RESPIRATORY CARE

Students are required to earn a "C" or better in Respiratory Care courses in order to graduate.

### RESP 1232 - Applied Sciences for Respiratory Care

This course introduces the concepts and principles of basic mathematics, chemistry, physics, and microbiology as they apply to the practice of respiratory therapy. Prerequisites: Admission to the Respiratory Care Program, and concurrent enrollment in RESP 1313.

### RESP 1242 - Respiratory Care Patient Assessment

This course is designed to introduce the fundamentals of assessing the respiratory care patient. Topics to be covered include patient communication, assessment of vital signs, physical examination of the patient, clinical laboratory studies, assessment of chest x-rays, sleep studies and pulmonary function test. Prerequisites: Admission to the Respiratory Care Program, concurrent enrollment in RESP 1354 or instructor approval.

### RESP 1313 - Respiratory Care Techniques and Theory I

The fundamentals of respiratory care will be covered including various oxygen delivery equipment, oxygen cylinders, humidity and aerosol therapy, equipment cleaning techniques and patient assessment techniques. Prerequisites: Admission to the program and concurrent enrollment in RESP 1511.

### RESP 1354 - Cardiopulmonary Anatomy and Physiology

A comprehensive study of the structures and functions of the respiratory and cardiovascular systems. The principles in which cardiopulmonary physiology is integrated with renal function and acid-base balance are introduced. Prerequisites: Admission to the program and concurrent enrollment in RESP 1232, RESP 1242, RESP 1313, RESP 1511 or instructor approval.

### RESP 1403 - Respiratory Care Techniques and Theory II

A study of oxygen therapy and oxygen administering devices. IPPB therapy, chest physiotherapy, the therapeutic use of gas mixtures, and airway management. Clinical time will deal with observing and performing the procedures learned. Prerequisites: RESP 1242, RESP 1313, RESP 1511.

### RESP 1414 - Clinical I

Introduction to practical clinical application of oxygen therapy, humidity and aerosol therapy, patient assessment, airway management, hyperinflation therapies and pulmonary function studies under supervision. Laboratory to include Clinical Skills Lab. Prerequisites: RESP 1233, RESP 1313, RESP 1354, RESP 1511 and concurrent enrollment in RESP 1403.

### RESP 1443 - Respiratory Care Pathophysiology

This course provides a detailed study of primary and secondary cardiopulmonary disorders and disease states. Etiology, pathophysiology, clinical and functional manifestations and current treatment/management strategies will be covered in detail. Prerequisites: RESP 1232, RESP 1242, RESP 1313, RESP 1354.

### RESP 1511- Clinical Procedures Laboratory

Introduction to the theory and application of selected respiratory care procedures. Prerequisites: Admission to the Respiratory Care Program and concurrent enrollment in RESP 1313.

### RESP 1522 - Introduction to Mechanical Ventilation

This course introduces the theory and practice of mechanical ventilation as well as an overview of mechanical and physiological concepts. Topics covered include indications for mechanical ventilation, current types of ventilators, and general principles of ventilator management. Prerequisites: RESP 1232, RESP 1313 and RESP 1354.

### RESP 2102 - Clinical II

This course is a continuation of practical clinical application of therapies previously presented with an introduction to the intensive care unit. Laboratory to include Clinical Skills Lab. Prerequisites: RESP 1403, RESP 1414, RESP 1443, and RESP 2352.

### RESP 2204 - Clinical III

This course is a continuation of practical clinical application of the critical respiratory care patient in the intensive care unit with emphasis on ventilator management. Emphasis will also be placed on the respiratory care management of patients in the home setting and sleep laboratory with the student rotating through a respiratory home care company and sleep lab. This course will also include the Clinical Skills laboratory. Prerequisites: RESP 2102 and concurrent enrollment in RESP 2324.

**RESP 2212 - Neonatal and Pediatric Respiratory Care**

A study of the respiratory care of neonatal and pediatric patients, including the etiology, and pathophysiology of neonatal and pediatric respiratory disorders as well as the respiratory care procedures used in the management of these patients. Prerequisites: RESP 1232, RESP 1354, and RESP 1313.

**RESP 2311 - Mechanical Ventilator Lab**

A hands-on lab designed to practice ventilator management strategies and techniques using patient scenarios. Knowledge gained in RESP 1522 and RESP 2324 will be utilized in this lab.

**RESP 2324 - Advanced Topics in Mechanical Ventilation**

This course is a continuation of RESP 1522. Topics covered include: hazards and complications of mechanical ventilation, monitoring of mechanically ventilated patients, ventilator troubleshooting, invasive vs. non-invasive ventilation, and novel modes of ventilation. Prerequisite: RESP 1522.

**RESP 2352 - Respiratory Care Pharmacology**

This course includes an introduction to the total scope of pharmacology, the general classifications, uses, and responses to drugs, with a detailed presentation of drugs specific to respiratory care. Prerequisites: RESP 1354 and RESP 1313.

**RESP 2414 - Clinical IV**

This course is a continuation of respiratory care management of the critical respiratory patient in the intensive care unit with emphasis on hemodynamic monitoring. In addition, students will experience respiratory care management of critically ill newborns through rotations in the neonatal intensive care unit. The student will also have a rotation through the heart catheterization lab. This course will include the Clinical Skills laboratory. Prerequisites: RESP 2204, RESP 2324 and concurrent enrollment in RESP 2493.

**RESP 2452 - NBRC Review**

This course is designed to review all didactics and clinical materials relative to the discipline of respiratory care and prepare students for the National Board for Respiratory Care (NBRC) CRT and RRT examinations. Computerized practice exams will be utilized during the review. The NBRC, CRT, and RRT Self-Assessment examinations will be administered during this course. Prerequisites: All previous respiratory care courses.

**RESP 2493 - Respiratory Critical Care**

A study of cardiopulmonary critical care procedures. Covers diverse topics such as: intensive care patient monitoring procedures, cardiopulmonary resuscitation, invasive pulmonary techniques, transport of the critically ill patient and hyperbaric respiratory care. Prerequisites: RESP 2204, RESP 2324, and RESP 2563.

**RESP 2562 - Cardiopulmonary Diagnostics**

A study of advanced laboratory and clinical diagnostic procedures, including arterial blood gases, electrodes and quality control, hemodynamic calculations, non-invasive monitoring techniques, and advanced pulmonary function studies. Prerequisites: RESP 1232, RESP 1354, and RESP 1443.

**RESP 2990 - Selected Topics in Respiratory Therapy**

The study and/or analysis of a selected topic in Respiratory Care. May be repeated with a different topic.

**ROBOTICS AND AUTOMATION TECHNOLOGY**

See Electronics Technology Program Course Descriptions

**RUSSIAN**

**RUSS 1103 - Russian I**

A beginning course in understanding, speaking, reading, and writing Russian. The first in a sequence of related courses.

**RUSS 1201 - Russian for Communication II**

Continued instruction in basic language concepts and beginning conversational skills. Conducted in Russian. Prerequisite: RUSS 1103 with a grade of "C" or better or instructor approval.



**RUSS 1213 - Russian II**

Continued instruction in understanding, speaking, reading, and writing Russian. The second in a sequence of related courses. Prerequisite: RUSS 1103 with a grade of "C" or better or instructor approval.

**RUSS 1313 - Russian III**

Continued instruction in understanding, speaking, reading, and writing Russian. The third in a sequence of related courses. Prerequisite: RUSS 1213 with a grade of "C" or better or instructor approval.

**RUSS 2121 - Intermediate Russian Communication**

Practice in speaking Russian at the Intermediate level covering a wide range of subjects; i.e., everyday language, intermediate literature samples, other publications, and current events. Conducted in Russian. Prerequisite: Russian 1413 with a grade of "C" or better or instructor approval.

**RUSS 2421 - Russian Culture Comparisons**

Focus on the cultural aspects of the people of Russia. Includes a comparison with the American culture as well as other culture groups. Conducted in English.

**RUSS 2990 - Selected Topics in Russian**

The study and/or analysis of a selected topic in Russian. May be repeated with a different topic.

**SIGN LANGUAGE**

See American Sign Language Education

**SOCIAL WORK**

See Human Services Course Descriptions

**SOCIOLOGY**

**SOCI 1073 - Human Service Techniques**

A supervised field experience for volunteers in the public school system. Prerequisite: Acceptance as volunteer in participating public school system. Includes lab component.

**SOCI 1113 - Introduction to Sociology (S)**

This is a general survey of the field of Sociology. The course examines the basic concepts, theories and perspectives in sociology. Topics include the nature of society and the foundations of social life, along with such specialized areas as groups, culture, social class, social institutions and social change. Sociological concepts are used to help students to understand the social influences in everyday life. Prerequisite: Reading proficiency or concurrent enrollment in a reading course.

**SOCI 2013 - Marriage and Family (S)**

Historical background of the family as a social institution and analysis of marriage and family, with special emphasis on contemporary American marriage and family. Prerequisite: SOCI 1113 or instructor approval.

**SOCI 2043 - Juvenile Delinquency (S)**

A study of the nature, extent, and cause of juvenile delinquency. Primary emphasis is placed on the role of social and environmental factors in the origin of these activities. Also included are an examination of the nature of law as it pertains to delinquent behavior, both historically and in contemporary society, and the role of police, courts, and juvenile institutions in relation to these behaviors. Prerequisite: SOCI 1113.

**SOCI 2053 - Social Psychology (S)**

A study of the psychological basis of social interaction and change that covers the following topics: conformity, social influence, social cognition, prosocial behavior, prejudice, group processes, interpersonal attraction, and aggression. Prerequisite: SOCI 1113. Cross listed with PSYC 2053.

**SOCI 2063 - Corrections: Jails and Prisons (S)**

This course will introduce the student to the fundamental characteristics of correctional systems of the past and present. Attention will be paid to issues such as punishments and punishment philosophies, the structure of correctional institutions, prisoner characteristics, prisoner rights, and prisoner life.

**SOCI 2113 - Social Problems in America (S)**

A systematic analysis of some of the major social problems of contemporary America.

**SOCI 2123 - Introduction to Cultural Anthropology (S)**

An introduction to the peoples of the world with emphasis upon nonliterate cultures. The course is designed to demonstrate the interrelationships of ethnology to anthropology and the social sciences, and to survey the various culture areas and culture types of the world.

**SOCI 2133 - Introduction to Deviant Behavior (S)**

Description, analysis, and comparison of forms and sources of deviant behavior. Prerequisite: SOCI 1113 or PSYC 1113 or instructor approval.

**SOCI 2143 - Minorities in America (S) (D)**

An examination of the nature of inequality, the causes and consequences of prejudice and discrimination, and the varying patterns of majority-minority interactions in society. Prerequisite: SOCI 1113 or instructor approval.

**SOCI 2150 - Crisis Intervention and Experience (S)**

The study of crisis intervention including models of responding, counseling techniques and community resources. Crisis intervention specialization areas include mental illness, substance abuse, suicide, homelessness, grief, and violence. Course includes lecture plus a supervised practicum in an approved social services agency. Prerequisite: PSYC 1113 or SOCI 1113. Cross-listed to PSYC 2150.

**SOCI 2173 - Religion and Society (S)**

An introductory social scientific survey of religion viewed from the psychological, sociological, and anthropological perspectives. Patterns in the internal development of religious groups, as well as the relationships between religion and other social and cultural institutions will be examined. Cross listed as RELG 2173.

**SOCI 2223 - Behavioral Statistics (S)**

Application of descriptive and inferential analyses of data are major topics. Specific topics that are covered (but not limited to) are: central tendency, dispersion, the standard normal distribution, correlation, regression, probability theory, single-sample analyses, two-sample analyses, ANOVA and its variations, and a variety of nonparametric analyses. The student will be using the most current software available as a basis for these analyses. Prerequisite: MATH 1513, and SOCI 1113 or instructor approval. Cross listed with PSYC 2223

**SOCI 2243 - Introduction to Social Work (S)**

Survey of the field of social work, introducing the major methods and representative agencies of social work. Prerequisite: SOCI 1113.

**SOCI 2713 - Aging and Behavior (S)**

In the later adult years, we recognize age related sequential changes. These are physiological, psychological, and sociological. This course attempts to describe these changes with an emphasis on optimal and satisfactory adaptations to them by the individual and by society. Prerequisite: SOCI 1113 or instructor approval. Cross listed with PSYC 2713

**SOCI 2813 - Human Sexuality (S)**

Human sexuality is presented as an ever-varying constant of the entire life span. Human sexuality involves biological, sociological, psychological, and behavioral components influenced by feelings, attitudes, and social institutions which make sexuality a unique experience. Prerequisite: PSYC 1113 or SOCI 1113. Cross listed with PSYC 2813.

**SOCI 2990 - Selected Topics in Sociology**

The study and/or analysis of a selected topic in Sociology. May be repeated with a different topic.

## SPANISH

### **SPAN 1001- Spanish for Communication**

A companion course to SPAN 1103 with emphasis on speaking and comprehension skills. Recommended that it be taken simultaneously with SPAN 1103 or after. Prerequisite: SPAN 1103 with a grade of "C" or better or instructor approval.

### **SPAN 1003 – Spanish for Classroom Teachers**

This course offers an overview of basic Spanish grammar and pronunciation with emphasis on vocabulary necessary for communicating with students and parents with limited English. Cross listed to CHLD 1003.

### **SPAN 1031 - Spanish Pronunciation**

A beginning course in Spanish with special emphasis on pronunciation and the oral skills. May be taken simultaneously with SPAN 1103. Prerequisite: SPAN 1103 with a grade of "C" or better or instructor approval.

### **SPAN 1061- Spanish for Biblical Study**

Introduction to Spanish with special emphasis on vocabulary/structure for Bible study.

### **SPAN 1103 - Spanish I**

A beginning course in understanding, speaking, reading, and writing Spanish. The first in a sequence of related courses. Self-paced laboratory is required.

### **SPAN 1201 - Spanish for Communication II**

Continued instruction in basic language concepts and beginning conversational skills. Conducted in Spanish. Prerequisite: SPAN 1103 with a grade of "C" or better or instructor approval.

### **SPAN 1213 - Spanish II**

Continued instruction in understanding, speaking, reading, and writing Spanish. The second in a sequence of related courses. Prerequisite: SPAN 1103 with a grade of "C" or better or instructor approval.

### **SPAN 1301 - Spanish for Communication III**

Continued instruction to develop oral fluency and conversational skills. Conducted in Spanish. Prerequisite: SPAN 1213 with a grade of "C" or better or instructor approval.

### **SPAN 1313 - Spanish III**

Continued instruction in understanding, speaking, reading, and writing Spanish. The third in a sequence of related courses. Prerequisite: SPAN 1213 with a grade of "C" or better or instructor approval.

### **SPAN 1401- Spanish for Communication IV**

Continued instruction to develop oral fluency and conversational skills. Conducted in Spanish. Prerequisite: SPAN 1313 with a grade of "C" or better or instructor approval.

### **SPAN 1413 - Spanish IV**

Continued instruction in understanding, speaking, reading, and writing Spanish. The fourth in a sequence of related courses. Prerequisite: SPAN 1313 with a grade of "C" or better or instructor approval.

### **SPAN 2033 - Spanish Literature in Translation**

Readings of literary works in translation selected to increase the student's knowledge of Hispanic societies. Conducted in English.

### **SPAN 2041 - Spanish - Introduction to the Arts**

An introduction to the arts of Spanish-speaking countries with an attempt to develop an aesthetic awareness and an understanding of the role that the arts play in modern day Spanish activities. Conducted in English.

### **SPAN 2071 - Spanish-Mexican History and Geography Introduction**

A survey of Mexican history and geography as it relates to modern day Mexican societies and language with an awareness of the relationship between the physical, political, and linguistic regions. Conducted in English.

### **SPAN 2113 - Intermediate Spanish I**

An intermediate course in understanding, speaking, reading, and writing Spanish. Taught in Spanish. Prerequisite: SPAN 1413 with a grade of "C" or better or instructor approval.

**SPAN 2121 - Intermediate Spanish Communication**

Practice in speaking Spanish at the intermediate level covering a wide range of subjects; i.e., everyday language, intermediate literature samples, other publications, and current events. Conducted in Spanish. Prerequisite: SPAN 2113 with a grade of "C" or better or instructor approval.

**SPAN 2143 - Latin American Civilization and Culture**

Conversations and readings concerning Hispanic culture and civilization. Conducted in Spanish. Lecture 3 hours. No Laboratory. Prerequisite: SPAN 2113 with a grade of "C" or better or instructor approval.

**SPAN 2213 - Intermediate Spanish II**

An intermediate course in understanding, speaking, reading, and writing Spanish. Taught in Spanish. Prerequisite: SPAN 1413 with a grade of "C" or better or instructor approval.

**SPAN 2263 - Intermediate Spanish Literature**

Development of reading skills in the target language using intermediate level literary texts. Conducted in Spanish. Prerequisite: SPAN 2113 with a grade of "C" or better or instructor approval.

**SPAN 2320 - International Work and/or Study Seminar**

Practicum with an international firm and/or study abroad. Focus on application and enhancement of language skills (oral and written forms). Lecture and/or laboratory equivalent. Prerequisite: Permission of Dean of Global Education and Associate Dean before enrollment and in advance of work/study abroad experience.

**SPAN 2330 - Spanish International Seminar and/or Field Studies**

This course is designed to provide an on-site experience in the selected Spanish speaking country. Includes lectures, readings, oral interactions, and written reports. All or a portion of instruction and activities are conducted at the international site. Focus on language (oral and written forms) and culture development. Prerequisite: Permission of Dean of Global Education and Associate Dean before enrollment and in advance of in-country experience.

**SPAN 2413 - Translating Spanish to English**

This is a translating skills course with focus on translating the written language of Spanish to English. Prerequisite: SPAN 2113 with a grade of "C" or better or proficiency certification.

**SPAN 2421 - Spanish Culture Comparisons**

Focus on the cultural aspects of the Hispanic people. Includes a comparison with the American culture as well as other culture groups. Conducted in English. No Prerequisite.

**SPAN 2443 - Interpreting Spanish to English**

Student will be given opportunities to develop oral interpreting skills for escort, consecutive, simultaneous and court interpreting. Participants need to have advanced fluency in English and Spanish. Prerequisite: SPAN 2113 with a grade of "C" or better or certification of skill level through TCC proficiency Certification exam.

**SPAN 2453 - Interpreting English to Spanish**

Students will be given opportunities to develop oral interpreting skills for escort, consecutive, simultaneous and court interpreting. Participants need to have advanced fluency in Spanish. Prerequisite: SPAN 2213 with a grade of "C" or better or certification of skill level through TCC Proficiency Certification exam.

**SPAN 2463 - Courtroom Interpreting Skills Introduction**

An aid to developing interpreting skills, this course will address consecutive, simultaneous and sight interpretation. It will also cover the interpreter's role in and out of court and include an on-site visit to a courtroom. On-site lab required. Prerequisite: Oral fluency in English and native/near-native fluency in Spanish, SPAN 2443 & SPAN 2453 with a grade of "C" or better or equivalent or instructor approval.

**SPAN 2473 - Medical Interpreting Skills Introduction**

This course will address the attitudinal differences between the Latino and Anglo-American cultures and how they affect health care decisions. It will increase vocabulary needed to interpret for Spanish-speaking patients by using vocabulary related to illness and symptoms, necessary medical language, and cultural cues. On-site lab required. Prerequisite: Oral fluency in English and native/near-native fluency in Spanish, SPAN 2443 & SPAN 2453 with a grade of "C" or better or equivalent or instructor approval.

**SPAN 2483 - Community Interpreting Skills Introduction**

Course focuses on community interpreting in local schools, the workplace, financial institutions, insurance companies, and public welfare agencies, as well as in a variety of other settings, with a variety of clients and ethical considerations. Students will study real-life situations involving Spanish speakers who must communicate and reach agreements regarding living conditions, work, medical treatment, social services, and other scenarios. Coursework includes roleplays, standards, and code of ethics as well as real-life practice. Prerequisites: SPAN 2443 and SPAN 2453 with a grade of "C" or better.

**SPAN 2523 - Intermediate Spanish Grammar and Composition**

This course includes a thorough review of syntax and grammar and the development of composition skills. Conducted in Spanish and English. Prerequisite: SPAN 2113 with a grade of "C" or better or 18 hours of Spanish or proficiency certification.

**SPAN 2533 - Advanced Spanish Conversation**

This course is intended for students who have studied Spanish structure through the intermediate level and have gained a basic oral fluency and proficiency. Class activities will focus on acquiring sufficient speaking skills to interact with native speakers and the use of Spanish as the main language of communication without the aid of an interpreter. Conducted in Spanish. Prerequisite SPAN 2213 with a grade of "C" or better or 18 hours of Spanish.

**SPAN 2543 - Translating English to Spanish**

This is a translating skills course with focus on translating the written language of English to Spanish. Prerequisite: SPAN 2113 with a grade of "C" or better or proficiency certification.

**SPAN 2660 - Spanish Service Learning**

This course is designed for active participation in community-based organizations that require the use of Spanish with clients. Students will have the opportunity to encounter real-life experiences that will afford them opportunities to expand their knowledge and develop critical thinking and problem solving skills. The intention of this approach is to place an emphasis on diversity and pluralism that lends itself to student empowerment by developing camaraderie among students, faculty, and the community. The Service Learning experience will be reflected in written class assignments for journals and compositions. Conducted in Spanish and English. Prerequisite: instructor approval.

**SPAN 2773 - Spanish for Native Speakers**

This course addresses cultural misconceptions or confusion concerning cross-cultural leaning which may not portray either culture accurately or misrepresent and oversimplify interactions. Special emphasis is given to writing and reading and to certain grammatical structures that tend to present difficulties to native speakers.

**SPAN 2990 - Selected Topics in Spanish**

The study and/or analysis of a selected topic in Spanish. May be repeated with a different topic. Lecture 1-4 hours. No Laboratory.

**SPEECH**

See Communication Course Descriptions

**STAGE PRODUCTION TECHNOLOGY**

See Theatre

**SURVEYING TECHNOLOGY**

See Civil Engineering Technology Program

**SURV 1324 - Surveying I**

This course covers basic survey equipment, fundamental survey concepts and techniques with some exposure to GPS. Students will learn basic mathematical concepts, measure distances, make transverse calculations and computations, calculate horizontal and vertical angle measurements and learn use of the level. Field exercises include field notes, use of basic field equipment along with care and adjustment of equipment. Prerequisites: MATH 1454 or MATH 1715 or MATH 1513 and MATH 1613. Includes lab component.



**SURV 2224 - Route Survey and Subdivision Design**

This course explores techniques for preliminary, location and construction surveys related to roads and pipelines, and covers elements of horizontal and vertical location, including circular, spiral and parabolic curves. Students will learn to draw road plans, profiles and cross sections and use electronic total stations. This course also covers the planning of residential subdivisions from analysis of owner and municipal requirements to plat layout design. Topics include municipal codes, lot sizing, roads, incidental drainage, esthetic considerations, and other related topics. Upon completion, students should be able to prepare a set of subdivision plans. Prerequisites: SURV 1324 and SURV 2334. Includes lab component.

**SURV 2262 - Professional ENGR/SURV Ethics**

This course covers an introduction to contemporary ethics and provides an overview of professional issues dealing with responsibility and professionalism. It delves into everyday problems encountered by professional land surveyors and engineers. Cross listed with ENGR 2262.

**SURV 2334 - Surveying II**

Classes and laboratories include use of total station, GPS and data collector instruments. Measurements and calculations are performed in the study of boundary surveys, route locations, topographic surveys, layout and calculations of simple compound, vertical, reverse, parabolic, spiral curves, astronomical observations, and earth work volumes. Prerequisite: SURV 1324 or equivalent. Includes lab component.

**SURV 2344 - Introduction to Geographic Information Systems**

An introductory course designed to acquaint students with the theory and uses of Geographic Information Systems to capture, store, query, and analyze data referenced to a location on the Earth's surface. Topics include history and applications, map projections, coordinate systems, data sources, structures, and models, along with methods of data acquisition, management, manipulation, analysis, and visualization. The lab component will provide students hands-on experiences with ArcGIS software.

**SURV 2363 - Land Law I**

Classes study history of land surveying and law development as it applies to Oklahoma. It includes legal boundaries, title to the land, public land surveys, and general principles for subdivisions of a section. Prerequisite: None.

**SURV 2373 - Land Law II**

This is an intensive study of the basic principles of land, boundary agreement, boundaries adjacent to bodies of water, environmentally sensitive areas, highway and street right-of-ways, and deeds. Discussion includes both Oklahoma and Federal law applications. Prerequisite: SURV 2363.

**SURV 2393 - Surveying Exam Topics**

This course is designed to cover topics from the Fundamental of Surveying (FS) examination that are not included in other surveying courses. These topics may include geographic information systems, advanced survey computations, photo/image data acquisition and reduction and other topics from the FS examination. Prerequisite: Completion of, or concurrent enrollment in, SURV 2334 and SURV 2373.

**SURV 2443 - Basic Hydrology and Hydraulics**

A study of the hydrologic cycle: precipitation, evapotranspiration, infiltration, and runoff. Topics covered include: drainage problems and calculations confronting hydrologists in urban areas; techniques used to prevent flooding and control water flow; basic principles of fluid mechanics; gravity flow in storm sewers; open channel flow; fluid measurement; drainage structures; and design of collection systems for municipal drainage. Prerequisites: PHYS 1114 and one of the following MATH courses: MATH 1454, MATH 1715, MATH 1513, MATH 1613.

**SURV 2990 - Selected Topics of Surveying Technology**

The study and/or analysis of a selected topic in Surveying Technology. May be repeated with a different topic.

**TEACHER ASSISTANT**

See Child Development Program and Course Descriptions

**TEACHING**

**TCHG 2990 - Selected Topics in Education**

The study and/or analysis of a selected topic in education. May be repeated with a different topic.

*The time required for laboratory may vary by course. Please refer to the course syllabus for more information.*

## **THEATRE**

### **THEA 1023 - Acting for Non-Majors**

This course develops an understanding and appreciation of the art of acting, and establishes the basic elements of the actors' craft through the exploration of the three basic tools of the performer: imagination, voice, and body movement. This class includes the study of acting principles and stage techniques through the use of theatre games, improvisation, and scene performances. Students are required to participate in outside homework assignments, including production activities within the Theatre Department.

### **THEA 1033 - Stagecraft I**

A study of the technical skills and practical application of techniques in the constructing, painting, handling, and lighting of scenery. Student may be required to lift 50 lbs, work with power tools and climb ladders. Includes lab component.

### **THEA 1043 - Stagecraft II**

Exploration of the technical aspects of play production with emphasis on individual projects in design and construction. Student is required to lift 50 lbs, work with power tools and climb ladders. Prerequisite: THEA 1033 and THEA 1093 or instructor approval. Includes lab component.

### **THEA 1053 - Acting I**

This course is designed for the beginning actor with previous on-stage experience, who intends to continue studies in the performing arts. Course work includes acting theory, methodology, terminology, character analysis, vocal technique, body movement, and presentation of scenes and monologues. Students are required to participate in outside homework assignments, including production activities within the Theatre Department. Enrollment open only to Theatre majors or by instructor approval.

### **THEA 1061 - Tulsa Community College Community Theatre**

The rehearsal and performance of a theatre production. May be repeated. Participation is open to TCC students and any member of the community.

### **THEA 1073 - Entertainment Electrical Fundamentals**

This course provides the foundations of electrical theory including atomic theory, resistors, safety, basic AC circuits, single and three phase circuits. Students will be required to participate in outside projects. Self-paced Laboratory.

### **THEA 1081 - Theatre Practice I**

This course is a freshman level practical experience for each component of the departmental season in performance or production. It will include critical discussion of plays and guest speakers on various topics. This course will also focus on orientation to the Theatre Department theatrical production practices, theatre student handbook policies, guidelines, resources, faculty, and practicum. Course may be repeated. Theatre majors are required to take this course two semesters. The course is open to all students.

### **THEA 1093 - Introduction to Theatre (H)**

A survey of theatre history, literature, and practices from the Greek period to the contemporary, relating the relevance of the theatre as a social force in and a reflection of the human conditions since ancient times. Students will be required to participate in outside homework assignments that include production activities in the theatre department.

### **THEA 1113 - Theatre Graphics**

From conception to three dimensions, students develop the modes of visual communication through this introduction to drafting, rendering, and model building skills.

### **THEA 1123 - Introduction to Sound Reinforcement**

This course is an introduction to the application of the principles of stage sound. Training in the use and maintenance of sound equipment, recording/editing sound effects tapes and training in electronic sound reinforcement. Student must be able to lift 50+ lbs. Includes lab component.

### **THEA 1133 - Costume Techniques I**

This course is a study of costume construction techniques and will cover proper measuring skills, various construction techniques, and understanding of fabrics, costume cutting skills, and dyeing. Includes lab component.

**THEA 1143 - Introduction to Rigging and Fly Systems**

An introduction to rigging for the entertainment industry. Training for the use of counter-weight systems, hemp systems, and simple rigging. This course will emphasize safety and will examine OSHA, ESTA, LATSE and USITT standards and regulations. Student must be able to lift 50+ lbs, climb a straight ladder 66' to the grid and not have a fear of heights. Prerequisite: THEA 1033 or instructor approval. Includes lab component.

**THEA 1163 - Welding I**

This course covers the basics of metal and welding techniques for the entertainment industry. Student must be able to lift 50+lbs and work with power tools and welders. Self-Paced Laboratory. Prerequisite: THEA 1033.

**THEA 1240 - Private Acting**

Student works one-on-one with an acting coach to help improve basic acting techniques including character analysis, movement and vocal interpretations in classes, auditions or performances. An additional laboratory fee is required. Requires instructor approval.

1 credit hour private acting instruction requires a weekly 30-minute lesson on average; 1.5 hours minimum weekly work with material in preparation for lessons recommended. No lecture. Laboratory 2 hours

2 credit hours private acting instruction requires a weekly 1-hour lesson on average; 3 hours minimum weekly work with material in preparation for lessons recommended. No lecture. Laboratory 4 hours.

**THEA 1343 - Stage Movement I**

This course offers a beginning study of the physical component of acting and is designed to give the actor an understanding of the use of the body as an expressive instrument through development of flexibility, strength, and coordination. Explore an integration of breath work, body awareness, and imagination in relation to the physical self, neutral alignment, physical creativity, and relaxation. Includes lab component.

**THEA 1353 - Stage Movement II**

This course strengthens the basic skills developed in Stage Movement I as it relates to the process of acting through independent work, consideration of environmental factors, and relating to others. The focus concentrates on creating a character, physicalizing text and establishing an awareness of kinesthetic movement patterns. Prerequisite: THEA 1093 and THEA 1343 or instructor approval. Includes lab component.

**THEA 1411 - Musical Theatre Dance for Performance I**

Introduction to the art of Musical Theatre dance. This course is designed to complement a theatre program or enhance other degree disciplines. Coursework consists of Musical Theatre dance terminology, Musical Theatre dance steps, rehearsed choreography, and an introduction to important people in Musical Theatre dance history. An end of term performance is required. Includes lab component.

**THEA 1421 - Ballet for Performance I**

Introduction to the art of Ballet dance. This course is designed to complement a theatre program or enhance other degree disciplines. Coursework consists of Ballet terminology, proper body alignment, execution of Ballet steps, rehearsed choreography, and an introduction to important people in Ballet history. An end of term performance is required. Includes lab component.

**THEA 1431 - Jazz Dance and Movement for Performance I**

Introduction to the art of Jazz dance. This course is designed to complement a theatre program or enhance other degree disciplines. Coursework consists of Jazz terminology, execution of Jazz steps, rehearsed choreography, and an introduction to important people in Jazz dance history. An end of term performance is required. Includes lab component.

**THEA 1441 - Modern Dance for Performance I**

Introduction to the art of Modern dance. This course is designed to complement a theatre program or enhance other degree disciplines. Coursework consists of Modern dance terminology, execution of Modern dance steps, rehearsed choreography, and an introduction to important people in Modern dance history. An end of term performance is required. Includes lab component.

**THEA 1563 - Musical Theatre**

A course designed to develop the music and theatric talents of students who either are interested in a degree in Musical Theatre or simply want to broaden their individual experiences on the stage. Course work consists of learning, blocking and presenting scenes from the major genres in musical theatre. Historical and cultural perspectives on individual works will be included in abbreviated lecture form. Requires voice, dance and/or theatre experience.

**THEA 2003 - Audition Techniques**

This course will instruct students on how to prepare for and be successful in every aspect of auditioning. Students will work on choosing appropriate monologues, finding auditions, formatting resumes, and choosing audition apparel. Prerequisite: THEA 1053.

**THEA 2013 - Make-Up I**

Study of principles and techniques of make-up, and practice application.

**THEA 2043 - Costume History**

This course informs the student of the historical aspects of costuming in society and how this costuming can be used on the stage. Prerequisite: THEA 1093 or instructor approval.

**THEA 2053 - Acting II**

This course builds on the basic skills developed in Acting I and further hones the students' dexterity in applying specific techniques to the acting craft. Students are required to participate in outside homework assignments including production activities in the theatre department. This course may be repeated; maximum credit 9 hours. Prerequisite: THEA 1053 or instructor approval.

**THEA 2063 - Fundamentals of Stage Lighting**

This course provides students with a fundamental approach to stage lighting, experience in handling lighting equipment, and theories of lighting as they apply to the stage production. Student must be able to lift 50+ lbs., climb ladders and not have a fear of heights. Includes lab component.

**THEA 2073 - Introduction to Production Design**

This course informs the student of the three design areas in theatre production and the basic theories behind the design techniques. Use of lecture and practical lab work. Self-Paced Laboratory.

**THEA 2081 - Theatre Practice II**

This course is a sophomore level practical experience for each component of the departmental season in performance or production. It will include critical discussion of plays and guest speakers on various topics. This course will also focus on orientation to the Theatre Department theatrical production practices, theatre student handbook policies, guidelines, resources, faculty, and practicum. Sophomore students will be required to take on a leadership role in the various facets of theatre production. Course may be repeated. Theatre majors are required to take this course two semesters. The course is open to all students. Prerequisite: THEA 1081.

**THEA 2093 - Make-Up II**

The most effective method of creating most three-dimensional make-up additions for the artist or actor is the use of molded prosthetic pieces. After developing your skills in Theatre Make-Up I and the use of the same Corson text, delve deeper into the art of facial molds, special effects, and prosthetic make-up for television and stage. Prerequisites: THEA 1093 and THEA 2013 or instructor approval.

**THEA 2133 - Advanced Lighting for the Stage**

This course is a continuation of Fundamentals of Stage Lighting. It will examine control and instrumentation of intelligent lighting systems and will place more emphasis on design. Work outside of class on productions is required. Qualified students will be given design assignments. Student must be able to lift 50+ lbs., climb ladders and not have a fear of heights. Prerequisite: THEA 1093 and THEA 2063 or instructor approval. Includes lab component.

**THEA 2143 - Costume Techniques II**

This course will cover the costuming process from patterning to the completion of a wearable period costume complete with footwear, headgear and accessories. Prerequisite: THEA 1133 or pass a sewing skills proficiency test. Includes lab component.

**THEA 2153 - Advanced Sound Reinforcement**

This course covers power requirements, fly systems, sight line fundamentals, special effects, monitor systems, stage wiring, and other "tricks of the trade." Student must be able to lift 50+lbs. Prerequisite: THEA 1093 and THEA 1123 or instructor approval. Includes lab component.

**THEA 2173 - Arena Rigging**

A continuation of rigging, counter weight systems, and hemp systems. This course will also examine chain motor systems and wire rope winch systems with an emphasis on safety. This course will also take a look at flying people with an eye to the ESTA report. As in the first course OSHA, LATSE, ESTA, and USITT standards will be taught. Student must be able to lift 75+lbs., climb straight ladders 66' to grid and not have a fear of heights. Prerequisites: THEA 1033 and THEA 1143 or instructor approval. Includes lab component.

**THEA 2231 - Alexander Technique**

An introductory study of the principles of the Alexander Technique. Students will begin to learn about their own habits, use, and direction and begin to apply the ideas of primary control, breathing freely, moving easily, and kinesthetic awareness to their musical and acting practice. Cross-listed as MUSC 2231.

**THEA 2233 - Entertainment Computer-Aided Design**

Basic introduction to computer-aided design drafting. Hands-on experience to include basic mechanical drafting terminology and techniques. An introduction to user specific third party software as related to drafting and designing of scenery for productions. Prerequisite: THEA 1093 and 1113 or instructor approval. Includes lab component.

**THEA 2253 - Stage Management**

Emphasis on interpersonal skills in people management through the rehearsal and performance process and theatre decorum including union regulations for professional and artistic insight into the role of stage manager. Prerequisite: THEA 1093 or instructor approval.

**THEA 2273 - Stage Production Technology Internship**

Students work in a qualifying occupational setting where they receive practical training and experience toward their occupational objectives. Requires instructor approval.

**THEA 2313 - Voice and Diction I**

This course develops the actors voice for effective communication and performing for the stage through an awareness of inner space, alignment, breath, resonance, articulation, expressive intonation, awareness of General American Dialect, and a beginning look at Phonetics and the IPA (International Phonetic Alphabet). Includes lab component.

**THEA 2323 - Voice and Diction II**

This course expands on the basic skills developed in Voice and Diction I to develop the actor's voice for effective communication in performing for the stage, creating a character while vocalizing the text, and a continued understanding of Phonetics and the IPA (International Phonetic Alphabet). Prerequisite: THEA 1093 and THEA 2313 or instructor approval. Includes lab component.

**THEA 2333 - Improvisation for the Theatre**

This course is designed to prepare students for using improvisational techniques in rehearsal and performance. We will explore the nature of intuition (intuitive knowledge) by freeing ourselves of all preconceptions, interpretations and assumptions relating to human behavior.

**THEA 2343 - Introduction to Costume Design**

Basic theories, techniques, and procedures of costume design for stage, film, and television. Practical training in college productions.

**THEA 2351 - Die Laughing Improv Troupe**

A mixed ensemble that studies and performs a variety of improvisational skills suitable for an advanced troupe. Students will improv their skills at adlibbing, skit writing and performance, as well as general performance skills. Students performing in this troupe will represent TCC both internally and externally for entertainment and recruitment purposes. Prerequisite: Enrollment by audition.

**THEA 2453 - Creative Writing: Scriptwriting I**

This course teaches screenplay writing techniques. Attention is given to subject and character development. Students learn the basic components of plot development, scene building and screenplay formats. Cross listed with ENGL 2453.



**THEA 2463 - Creative Writing: Scriptwriting II**

Advanced studies in concepts and techniques of scriptwriting, working toward completion of a work written specifically for a public reading by TCC acting students. Students receive individual attention as they conceive and develop their work, with an emphasis on characters, plot, theme and language. Prerequisite: THEA 2453 or ENGL 2453.

**THEA 2990 - Selected Topics in Theatre**

The study and/or analysis of a selected topic in Theatre. May be repeated with a different topic.

**VETERINARY TECHNOLOGY**

**VETT 1125 - Veterinary Anatomy and Physiology**

A comparative, systems approach to the study of mammalian life processes and the related body structures. Includes gross and microscopic study of selected organ systems from the cat, dog, horse and cow. Dissections are performed on fixed and fresh specimens. Examination of normal and abnormal structures histologically and pathologically. Emphasis will be placed on the use of applied anatomy and physiology. Includes a systematic study of word parts and their combinations to form terms used in veterinary medical practice. Prerequisite: Admission to VT program or Coordinator approval. Includes lab component.

**VETT 1132 - Introduction to Veterinary Technology**

An introduction to the profession and practice of veterinary technology. The role of the technician within a veterinary health care team, professional opportunities, organizations and continuing education for graduate technicians. Economics, ethics, regulatory organizations, and laws governing technicians. Humane care practices, sanitation and prevention of zoonosis, animal behavior, pet loss-grief issues, and client relations.

**VETT 1161 - Clinical Calculations for Veterinary Technicians**

An introduction to common calculations needed for veterinary nursing. Use of metric system and conversion of units, apothecary equivalents and vocabulary. Preparation of solutions: strengths, procedures, and computations. Drug administration: calculating and measuring dosages and fluid rates.

**VETT 1183 - Principles of Small Animal Care**

An introduction to management, husbandry, and basic veterinary care for small animal species, emphasizing the dog and cat. A survey of signs and treatments of commonly encountered diseases. Principles of basic dietary requirements, sanitation, handling and housing procedures. Techniques in restraint, taking of vital signs, administering medications, grooming and sample collection for basic laboratory tests. Additionally, each student will rotate sanitation and nursing care for resident Program animals. Prerequisite: Admission to VT program or Coordinator approval. Includes lab component.

**VETT 1193 - Principles of Large Animal Care**

An introduction to the management, husbandry, and basic veterinary care for large animal species; including the horse, cow, pig, sheep, and goat. Principles of basic dietary requirements, sanitation, handling and housing of large animals. Techniques in restraint, taking of vital signs, administering medications, grooming and sample collection for basic laboratory tests. Additionally, each student will rotate sanitation and nursing care for resident Program animals. Prerequisites: Admission to the VT Program or Coordinator approval. Includes lab component.

**VETT 1223 - Veterinary Hospital Technology I**

Small animal anesthesiology is the emphasis of this course with intensive study and application of a wide range of anesthetics; including commonly used injectable and inhalant protocols. Surgical preparation and assistance, patient monitoring, postoperative procedures, parenteral fluid administration, blood transfusion, and many other nursing techniques will be practiced. Additionally each student will rotate sanitation and nursing care for resident Program animals. Prerequisites: All prior VETT courses with a grade of "C" or better. Includes lab component.

**VETT 1232 - Clinical Pathology I**

Introduction to laboratory procedures which will include: urinalysis and normal hematology of a variety of animal species; including blood cell counts and blood cell identification. Prerequisites: All prior VETT courses with a grade "C" or better. Includes lab component.

**VETT 1242 - Clinical Pathology II**

Continuation on VETT 1232. Introduction to laboratory procedures which will include: parasitology of a variety of animal species to include ectoparasites, endoparasites and hemoparasites; including fecal analysis techniques. Prerequisites: VETT 1232 and all prior VETT courses with a grade of "C" or better. Includes lab component.

**VETT 1263 - Veterinary Office and Computer Skills**

Office management principles and procedures relevant to veterinary medicine are surveyed. Includes practical interpersonal communication and customer relations skills, professional correspondence, appointment scheduling, financial record keeping, and the orientation to and application of veterinary practice management software. Legal and ethical considerations regarding medical records and office organization are introduced. Hands-on microcomputer training will be provided. Requires admission to VT program or Coordinator approval. Includes lab component.

**VETT 2125 - Practicum: Animal Clinics and Nursing**

Practical veterinary technical skills development in an approved work site. Students must work a total of 316 hours directly under the supervision of a licensed veterinarian while applying skills acquired from previous academic preparation. The student, employer, and program coordinator will develop a written competency-based learning plan with specific learning objectives. Prerequisites: Permission of program coordinator.

**VETT 2224 - Microbiology and Sanitation**

Introduction to microorganisms. Consideration will be given primarily to pathogenic microorganisms related to veterinary medicine; including bacteria, viruses, fungi, and protozoa. Emphasis will be placed on sanitation, disinfectants, aseptic technique, sterilization techniques, zoonosis, and related public health concerns. Prerequisite: All prior VETT courses with a grade of "C" or better. Includes lab component.

**VETT 2234 - Clinical Pathology III**

Continuation of VETT 1232 and VETT 1242 laboratory procedures which will include blood chemistry analysis, cytology, specialized blood testing techniques, as well as a review of parasitology, urinalysis, and hematology. Prerequisites: All prior VETT courses with a grade of "C" or better. Includes lab component.

**VETT 2254 - Laboratory, Wild, and Exotic Animal Technology**

Techniques required to assist the veterinarian in the care and treatment of laboratory animals, birds, exotic, and wild animals. Restraint and handling, identification, blood collection, medication, anesthesia, and specimen collection. Supervisory skills for laboratory animal research are covered. Additionally, each student will rotate sanitation and nursing care for resident Program animals. Prerequisites: All prior VETT courses with a grade of "C" or better. Includes lab component.

**VETT 2313 – Veterinary Hospital Technology II**

Continuation of small animal anesthesiology, surgical assisting, and practice of techniques in radiology, bandaging, casting, intravenous and urinary catheterization, surgical preparations, postoperative procedures, as well as application of common nursing techniques. Lecture will discuss non-infectious diseases of dogs and cats to include gastroenterology, nephrology, cardiology, endocrinology, wound management and bandaging, emergency nursing and toxicology. Additionally, each student will rotate sanitation and nursing care for resident program animals. Prerequisites: All prior VETT courses with a grade of 'C' or better. Includes lab component.

**VETT 2333 - Veterinary Pharmacology**

Basic principles of drug therapy in the veterinary practice are studied. Coverage of the major classes of drugs, drug interactions, delivery routes, dosage calculations, dispensary protocols and inventory control. Prerequisites: All prior VETT courses with a grade of "C" or better.

**VETT 2352 - Radiology, Ultrasound and Diagnostic Imaging**

Intensive study and practice in medical diagnostic imaging techniques. Includes radiographic exposure techniques, film processing, contrast radiography, and ultrasonography. Prerequisites: All VETT courses with a grade of "C" or better. Includes lab component.

**VETT 2364 - Large Animal Technology**

Techniques required to assist the large animal or mixed practice veterinarian. Studies and applications will include the use of the horse, cow, pig, sheep, and goat. Practice of restraint, sampling techniques, anesthesiology, radiology, medication administration, and other nursing techniques. Additionally, each student will rotate sanitation and nursing care for resident Program animals. Prerequisites: All prior VETT courses with a grade of "C" or better. Includes lab component.

**VETT 2382 - Board Review for Veterinary Technicians**

This course is designed to prepare veterinary technology students and graduate technicians for the National Veterinary Technician Examination (NVTE) and the Oklahoma State Veterinary Technician Examination.