Catalog Icon Guide


Catalog Disclaimer This catalog was prepared for informational purposes and should not be construed as the basis of a contract between a student and Tulsa Community College. Every effort is made to provide information that is accurate at the time the Catalog is prepared.

The College reserves the right at all times to discontinue, modify, or otherwise change any provisions of its policies, procedures, regulations, fees, courses, or other matters, without prior notice. Academic programs are kept relevant by continuous revision of the curricula and the College reserves the right at all times to discontinue, modify, or otherwise change its degree programs when it determines it is in the best interest of the College to do so.

## Notice of Non-Discrimination

Tulsa Community College is committed to establishing an environment for its students and employees that fosters inclusion, values equity and diversity, embraces and respects the dignity of people, and provides equal educational and employment opportunity. In compliance with all applicable federal and state laws and regulations the College does not discriminate on the basis of race, color, national origin, sex, age, religion, disability, status as a veteran, sexual orientation, gender identity, genetic information, or any other basis protected by applicable discrimination law in its policies, practices, or procedures. This includes, but is not limited to admissions, employment, financial aid and educational programs, activities, or services. The Civil Rights Compliance Administrator, 909 S. Boston Ave, Room 506, Tulsa, Oklahoma; Phone 918-595-8487; email: TCCnondiscrimination@tulsacc.edu has been designated to handle inquiries regarding non-discrimination policies. The Title IX Coordinator, 909 S. Boston Ave, Room 505, Tulsa, Oklahoma; Phone 918-595-7842; email: TCCTitleIX@tulsacc.edu has been designated to handle inquiries regarding sex discrimination, including sexual harassment, sexual assault, pregnancy, domestic violence, and stalking.
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## About TCC

## Our Vision

An educated, employed, and thriving community

## Our Beliefs and Values

- You Belong Here - We foster a culture of diversity, equity, and inclusion that welcomes and respects everyone for who they are and who they will become.
- Everyone Can Learn - We meet people where they are by creating a safe and supportive learning and working environment leading to success.
- Community Is Our Middle Name - We build community, inside and out, through collaboration, service, sustainability, and social and financial responsibility.
- Quality Education Is Affordable - We create a rigorous and engaging learning experience that provides exceptional value.
- Excellence Is Our Culture - We live out excellence at every level by embracing change, always improving, and persisting to reach our full potential.


## Our Mission

Building success through education

## Our Function Within Our Community

As defined by the Oklahoma State Regents for Higher Education, TCC's function 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 developmental education for students who lack required high school academic requirements for college admission or competency in the basic academic skills.
- Provide both formal and informal programs of study especially designed for adults and out-ofschool 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 independently or with universities to meet the needs of each institution's geographic service area.


## Accreditation

Tulsa Community College is accredited by the Higher Learning Commission, located at 230 South LaSalle Street, Suite 7-500, Chicago, Illinois 60604, telephone (800) 621-7440, www.hlcommission.org. The College is a member of the American Association of Community 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 is authorized by the Oklahoma State Regents for Higher Education located at 655 Research Parkway, Suite 200, Oklahoma City, Oklahoma 73104, telephone (405) 225-9100, to offer certificate, associate in arts, associate in science, and associate in applied science programs.

Tulsa Community College supports all accreditation processes for the purpose of program education and improvement in order to maximize student achievement. TCC 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 (Fully Approved) Joint Review Committee on Education in Cardiovascular Technology (978) 456-5594 1449 Hill Street, Whitinsville, MA 01488 www.jrccvt.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) Approval without Reporting Requirements Commission on Dental Accreditation 211 East Chicago Avenue Chicago, Illinois 60611 800.621.8099 or 312.440.4653

Diagnostic Medical Sonography (Fully Approved) The Commission on Accreditation of Allied Health Education Programs (CAAHEP), upon the recommendation of the Joint Review Committee on Education in Diagnostic Medical Sonography (JRC-DMS). CAAHEP (727) 210-2350 25400 US Highway 19 N., Suite 158 Clearwater, FL 33763 www.caahep.org JRC-DMS (443) 973-3251 6021 University Blvd., Suite 500, Ellicott City, MD 21043 www.jrcdms.org
Health Information Technology (Fully Approved) Associate Degree Program Commission on Accreditation for Health Informatics and Information Management Education (CAHIIM) (312) 235-3255 200 East Randolph Street, Suite 5100 Chicago, IL 60601
Coding \& Reimbursement Specialist Certificate Program (Fully Approved) American Health Information Management Association (800) 335-5535 233 N. Michigan Avenue, Suite 2150 Chicago, IL 60601-5809

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 Education (ACOTE) of the American Occupational Therapy Association (AOTA) (301) 652-2682 4720 Montgomery Lane, Suite 200 Bethesda, Maryland 20814-3449 www.acoteonline.org

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

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

## General Information

## College Overview

Tulsa Community College is a premier two-year college that combines exciting campus life with the academic excellence to prepare for a four-year university or new career. TCC was established in 1970, and through four fully equipped campuses in the Tulsa area, along with community campuses and satellite locations throughout Tulsa County, the College serves more than 22,000 students annually.

The largest two-year college in Oklahoma, TCC has the state's largest enrollment of high school concurrent students and leads in offering online credit. TCC students can take advantage of the Tulsa Achieves program, which offers free tuition to Tulsa County high school graduates, take part in Honors Program and study abroad opportunities, and transfer to a four-year school under one of 50+ transfer program agreements.

TCC is consistently ranked in the top two percent of 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.

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 St. 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 Riverside Community Campus and Aviation Center serves students living in Jenks and the surrounding communities.

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 academic advising
- 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 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.

## 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, funded by federal, state, institutional and private sources. At TCC, 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.

## 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, but many of our students are employed and take longer. TCC also offers shorter Certificate of Achievement programs 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. Special permission may be granted to others. Prior to registration, your official transcripts should be sent to: Tulsa Community College, Student Completion Services, Attn: Transcripts, 909 S. Boston, Tulsa, OK 74119, directly from the high school or college you previously attended.

## 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.

## 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 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.

## 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.

## 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. 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 from classes that are 16 weeks long (one term) or from those scheduled for shorter periods, including eight- and four-week terms. In addition, many courses are offered online.

## Summer Classes

The College offers a summer program in professional, occupational, and general education for: (1) current TCC students; (2) high school graduates who plan to attend TCC or another college or university during the fall; (3) Tulsa area students who are home from other colleges or universities for summer vacation; and (4) 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 eightweek summer term.

## Student Enrollment and Achievement Data

The number of students enrolled in Tulsa Community College collegiate credit classes for the academic year 2018-19 was $22,918^{*}$. Of these students, $29 \%$ were enrolled full-time and $71 \%$ were enrolled parttime. Approximately $3 \%$ of those enrolled in credit programs already possessed a baccalaureate or higher degree. $52 \%$ of the students are 21 years of age or less, $39 \%$ are between the ages of 22-39 years, and $9 \%$ are 40 or older.
*unduplicated, collegiate credit seeking student enrollment for the academic year.

## Academic Calendar

Fall 2020

- March 30: Fall priority enrollment opens for students with 30+ hours
- April 6: Fall priority enrollment opens for students with $12+$ hours
- April 13: Fall enrollment opens for all students
- August 17: Classes begin
- August 17: First 8-week session begins*
- August 17-28: $100 \%$ refund on drop(s)*
- September 7: Labor Day (College is closed)
- September 8: Professional Development Day/Convocation - no classes (College is closed - all employees work)**
- September 25: Last day to withdraw and/or change from credit to audit (first 8 -week session)
- October 11: First 8-week session ends*
- October 12: Second 8 -week session begins*
- October 30: Deadline to file for graduation
- November 6: Last day to change from credit to audit \& last day to withdraw with W grade* (16 week semester)
- November 20: Last day to withdraw and/or change from credit to audit (second 8-week session)
- November 25- 29: Thanksgiving Break - no classes (College is closed)**
- December 7-13: Final week of term - final exams scheduled during this week
- December 11: Commencement Ceremony
- December 13: Semester closes
- December 24 - January 3: Winter Break (College is closed)**


## Spring 2021

- November 2: Spring priority enrollment opens for students with 30+ earned credit hours
- November 9: Spring priority enrollment opens for students with $12+$ earned credit hours
- November 16: Spring enrollment opens for all students
- January 19: Classes begin
- January 19: First 8-week session begins*
- January 19-29: $100 \%$ refund on Drop(s)*
- January 18: Martin Luther King Day - no classes (College is closed)
- February 26: Last day to withdraw and/or change from credit to audit (first 8-week session)
- March 14: First 8-week session ends*
- March 22: Second 8-week session begins*
- March 15-21: Spring Break - no classes (Student Services available at Metro Campus)
- April 2: Deadline to file for graduation
- April 16: Last day to change from credit to audit \& last day to withdraw with W grade * (16 week semester)
- April 30: Last day to withdraw and/or change from credit to audit (second 8-week session)
- May 10-May 16: Final week of term - final exams scheduled during this week
- May 14: Commencement Ceremony
- May 16: Semester closes


## Summer 2021

- March 29: Summer priority enrollment opens for students with 30+ earned credit hours
- April 5: Summer priority enrollment opens for students with 12+ earned credit hours
- April 12: Summer enrollment opens for all students
- May 17: Summer Intersession begins*
- May 31: Memorial Day (College is closed)
- June 6: Summer Intersession ends
- June 7: Classes begin
- June 7-11: 100\% Refund on Drop(s)*
- July 5: Independence Day - no classes (College is closed)
- July 9: Deadline to file for graduation
- July 16: Last day to change from credit to audit \& last day to withdraw with W grade*
- July 28-August 1: Final week of term - final exams scheduled during this week
- August 1: Semester closes
*Terms of a duration less than a regular semester will have different drop dates. 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 other classes.
** Use MyTCC online services to add, drop or pay daily. Go to the TCC homepage: Go to the TCC homepage: www.tulsacc.edu.


## 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.

## Qualifications for Admission

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 Answer Center/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 Advising office.

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 and can be requested in print from any campus Dean of Student Affairs Office.

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/High School Equivalency

## 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 (GED, HiSet, TASC) and whose high school class has 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.) Recipients whose high school class has not graduated should contact the TCC Admission Office to inquire about admissions exceptions

## High School Curriculum Requirements for Programs Leading to Associate in Arts and Associate in Science Degrees

| Units <br> (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 the school district; <br> 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, Pre- <br> Calculus, Statistics and Probability - must have completed Geometry and Algebra II) <br> Calculus, Advanced Placement Statistics) |
| 3 | History and Citizenship Skills (including one unit of American History and two additional units <br> from the subjects of Economics, Geography, Government, History and Non-Western Culture |
| 2 | Other (from any of the subjects listed above or selected from the following: Computer <br> Science, Foreign Language or any Advanced Placement Course except applied courses in <br> fine arts) |
| $\mathbf{1 5}$ | Total Required Units |

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

| Units | Course Areas |
| :---: | :--- |
| 2 | Fine Arts (Art, Drama, Music, Speech) |
| 1 | Lab Science (as described above) |
| 1 | Mathematics (as described above) |
| 4 | Recommended Units |

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.

## 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 noted above before transferring into an Associate in Arts or Associate in Science program.

## Removing High School Curricular Deficiencies

- 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; Mathematics - MATH 0123 or b) testing (ACT or appropriate placement examination score) at the appropriate proficiency levels.
- Zero-level courses do not count toward satisfaction of degree program requirements.
- 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.
- All other elective curricular deficiencies may be met by completing a course in the stated subject area.


## II. Special Admission Categories

## Adult Admission

- 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 approved by the State Regents. The College must consider the probability of the academic success of the student and students admitted under this category must demonstrate proficiency to the satisfaction of the College in the subject area the student desires to pursue. Students should contact the Answer Center/Enrollment Services Office on any campus for admissions processing.
- Any student who (a) is not a high school graduate but whose high school class has graduated and (b) has participated in the ACT or appropriate placement examination is eligible for admission. Remediation may be required depending on level of test score. Contact the Answer Center/Enrollment Services Office for admissions processing.


## Special Non-Degree-Seeking Students

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 GPA requirements will be enforced for all students. (See the Policy for Continued Enrollment in the Academic Information section of this catalog for additional information.) Students should understand that to be eligible for financial aid they must be degree seeking and provide all credentials. Contact Answer Center/Enrollment Services Office on any campus to discuss the non-degree objective.

## Students with Prior Felony Records

Applicants who, as a result of a felony, are required to register with any local, state, or college law enforcement agency will be required to submit additional documentation upon request from Tulsa Community College. After review of requested documents and a possible in-person interview, an admission decision will be provided to student.

## Home Study or Unaccredited High School Graduates

Graduates of private, parochial, or other non-public high schools which are not accredited by a recognized accrediting agency are eligible for admission to Tulsa Community College as follows:

- The student must have participated in the American College Testing (ACT) or Scholastic Aptitude Test (SAT).
- The student's high school class of his or her peers must have graduated.
- The student must satisfy the high school curricular requirements as stated above, 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)


## 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 have completed enough high school coursework to be equivalent to an individual who is classified as a junior or a senior at an accredited high school. Admission standards for concurrent enrollment are outlined in the tables below:

| Accredited High School |  |
| :--- | :--- |
| National ACT | 19 composite |
| Pre-ACT | 19 composite |
| Residual ACT* | 19 composite |
| SAT** $^{*}$ | 990 composite |
| PSAT 10** $^{* *}$ | 990 composite |
| Or High School GPA | 3.0 unweighted |

Unaccredited High School and Home Schools

| National ACT | 19 composite |
| :--- | :--- |
| Pre-ACT | 19 composite |
| Residual ACT* | 19 composite |
| SAT** $^{* *}$ | 990 composite |
| PSAT $10^{* *}$ | 990 composite |

*The National ACT can be repeated. However, only one residual ACT per year (from November 1 to October 31 ) is valid for admission and course placement.

## Enrollment Requirements

Juniors and seniors eligible for admission must show reading proficiency to enroll in any course(s) including all Math, English, and Science courses. Proficiency standards for enrollment are outlined in the table below:

| Curricular Area | ACT | Pre-ACT | Residual ACT* | SAT | PSAT 10 or NMSQ | TCC Placement Exam |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Reading | 19 | 19 | 19 | 510 | 510 | $80+$ or multiple measures |
| English | 19 | 19 | 19 | 510 | 510 | $80+$ or multiple measures |
| Science | 19 | 19 | 19 | 510 | 510 | $80+$ or multiple measures |
| Math | $19+$ | $19+$ | $19+$ | 510 | 510 | Multiple tests and measures |

*The National ACT can be repeated. However, only one residual ACT per year (from November 1 to October 31) is valid for admission and course placement.

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

- Concurrent Enrollment Application
- Current official high school transcript
- Official test scores

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

## ACE Tuition Waiver

- TCC Financial Aid awards and disburses Attend College Early (ACE) tuition waivers for concurrently enrolled juniors and seniors. Waivers are disbursed after the college drop period.
- Seniors may receive tuition waivers for a maximum of eighteen (18) credit hours in their senior year. The senior year begins June 1 following the 11th grade, so the tuition waiver may be used in the summer, fall, or spring of the senior year.
- Juniors may receive tuition waivers for maximum of six (6) credit hours per term (summer, fall, and spring) during the junior year. The junior year begins June 1 following the 10th grade.
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. Each high school course ( $1 / 2$ unit) listed on the semester high school schedule will be counted as a 3 hours of load. Non-academic units are excluded from course load (i.e. athletics, office aid, etc.).
- Students may not enroll in zero-level courses designed to remove deficiencies.
- Physical education courses are not eligible for concurrent enrollment.
- Re-enrollment is contingent upon the student maintaining a 2.0 GPA or higher in all college work. All other students not qualified by grade level may be considered for admission under the Opportunity Admissions category. A detailed explanation of the Oklahoma State Regents' policy on concurrent enrollment is available from any TCC Admission/Answer Center/Enrollment Services Office. Note: Questions regarding admissions or enrollment should be directed to the Answer Center/Enrollment Services Office on the campus the student plans to attend. Admission to the College does not guarantee eligibility for course placement.


## Opportunity Admissions

Students who have not graduated from high school but 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.

## Undocumented Eligible High School Graduates

(HB 1804 Title 70, Section 3242 [2007])
Eligible high school graduates with an undocumented immigration status may file an Affidavit of Intent and receive out-of-state tuition waivers. Students should contact the Admission Office for more information about the requirements for filing the Affidavit of Intent form.

## 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" for detailed procedures. Questions regarding this process should be directed to the Answer Center/Enrollment Services Office on the campus the student plans to attend.

## International Students

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) 5957478 or online at www.tulsacc.edu/iss.

## 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 Englishspeaking high school and demonstrating competency as described in "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 5.5 on the IELTS.

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

- a score of 460 or higher on the traditional TOEFL, or
- a score of 140 or higher on the computerized TOEFL version, or
- a score of 48 or higher on the Internet based TOEFL version, or
- a score of 5.0 or higher on the IELTS, and
- immediately, after taking the TOEFL or IELTS 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 administrating 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.

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 Exam. This test is free, but a testing appointment should be made in advance. The exam can be taken at any of the following locations: Northeast Campus Language Center \& ESL Department Office, NE 1521, (918) 595-7536; Southeast Campus, International Language Center, SE 1120, (918) 595-7750; Metro Campus International Language Center, MC 413, (918) 595-7309; West Campus International Language Center, WC 1244, (918) 595-8088; TCC Education Outreach Center, 2201 S Garnett Rd, Tulsa, (918) 595-2020.

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

An Oklahoma State System student who wishes to transfer to Tulsa Community College may do so under the following conditions:

## Admission Requirements

1. Provide official transcripts from each college/university previously attended and, if fewer than seven (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 the high school equivalency exam 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 the Policy for Continued Enrollment in the Academic Information section of this catalog for retention standards.)

## Academic Status of Transfer Students

1. 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.
2. 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.
3. 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.
4. 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

## 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 nonresident 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.

## 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 (HLC) or other regional associations will be given full value. Each nonresident applicant must:
a. be in good standing in the institution from which he/she plans to transfer;
b. have made satisfactory progress (an average grade of " C " or better) in the institution from which he/she plans to transfer; and
c. meet the high school curricular requirements outlined in Section I of this policy.
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. Each nonresident applicant must meet the same conditions listed above for students transferring from HLC or other regionally accredited institutions, and will also 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.

## Admission Procedures

## I. First Enrollment at Tulsa Community College

## Application for Admission

1. An application is required for admission and should be submitted prior to expected enrollment. The admission application is available online at www.tulsacc.edu/apply.

- A twenty dollar (\$20) one-time, non-refundable processing fee will be assessed with the first term's tuition and fees.
- Omission or falsification of information on the application is grounds for rejection of the application and/or disciplinary action against an enrolled student.
- 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- Students seeking Financial Aid must use their Social Security numbers.

2. High school transcript, ACT, SAT, appropriate placement exam scores, and/or college transcript should be sent to TCC Records, Attn: Transcripts, Tulsa Community College, 909 South Boston, Tulsa, OK 74119 prior to enrollment. (See "Qualifications for Admissions"). Credentials submitted to the College will not be copied or returned. Credentials provided in person must be in a sealed envelope of the issuing institution and may be delivered to the Answer Center/Enrollment Services Office on any campus.
3. First-time entering college, degree-seeking students are required to participate in New Student Orientation (NSO) before they enroll in classes for the first time and are required to be assessed for placement in courses. (See New Student Orientation for details.) Note: This includes any new freshman who has participated in concurrent enrollment.

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

Application information is verified to update student information. Re-entering degree-seeking students must submit transcripts from each college attended since the last enrollment at Tulsa Community College, along with any credentials not submitted previously. Previous attendance at TCC does not mean a student was officially admitted to the College.

## III. Admission After Suspension

## 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. The Re-Admission Petition and all supporting credentials must be received 30 days before enrolling. Incomplete applications will not be accepted. It is the student's responsibility to contact the Answer Center/Enrollment Services Office to verify all credentials are received.
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 the Policy for Continued Enrollment in the Academic Information section of this catalog for more information.)

Students suspended from another college or university may attend TCC immediately after academic suspension.

## Academic Dismissal

In addition to the steps outlined above, Students on Academic Dismissal (Second Suspension) must submit a new application for admission. They must also provide the petition for re-admission, as well as official transcripts from all institutions attended, and must have attended another regionally accredited institution and achieved an overall retention GPA of 2.0 in order to be considered for re-admission.

## Disciplinary Suspension

Students who have been placed on disciplinary suspension from Tulsa Community College must contact the Senior Student Affairs Officer 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 for admission into the classes. There are no applications or application fees associated with our classes. Visit the website, pick out the classes you 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.

## Transfer Credit Evaluation and Prior Learning Assessment

## Transfer Credit Policies

a. Transcripts of record from colleges or universities accredited by the Higher Learning Commission (HLC) or other regional associations will be given full value.
b. 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.
c. 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.
d. Courses evaluated with passing grades ( P or S ) will be accepted for credit.
e. Transcripts from institutions not accredited by a regional association may be reviewed for Prior Learning Assessment (PLA). Courses will be evaluated when applicable to the student's degree program and when the College has had an opportunity to validate the courses or programs. Please see below for additional details.

## Prior Learning Assessment

Students who believe they are qualified to establish college credit as a result of previous training or experience should inquire about Prior Learning Assessment (PLA) options. PLA credit awarded for military training schools, business and industry, labor union, governmental agencies, and other noncollegiate learning shall not exceed the criteria or recommendations contained in publications of the American Council on Education. A student must be admitted to Tulsa Community College and currently enrolled in TCC courses or eligible to re-enroll before credit is awarded and an official transcript is available. Credit is limited to existing TCC courses in the curriculum for the student's declared major. The combination of PLA credit and college transfer credit for degree or certificate requirements at TCC shall
not exceed $75 \%$ of the total credit hours required for graduation. Students who establish credit through PLA will be assigned a grade of " S " on their academic record to indicate successful completion.

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 school or designate and the resulting recommendation will be considered final. Contact an Academic Advising office for procedures.

## Prior Learning Credit may be established by several different methods:

## 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 an Academic Advising office on campus and may be required to have approval for the examination by the Dean or Associate Dean of the academic school for that subject area. 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.

Fees for advanced standing examinations are listed in the Tuition and Fees section of this catalog. No refund of fees will be given for advanced standing examinations that are not passed. More information about advanced standing examinations can be found in the Academic Advising office on each campus or online at www.tulsacc.edu/student-resources/testing-services.

## Advanced Placement Program (AP)

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 once the student is degree-seeking, currently enrolled or eligible to re-enroll, and has submitted a final eight-semester high school transcript or transfer transcript(s) for evaluation. Official AP score reports can be requested through College Board.

## 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 an Academic Advising office or view online at www.tulsacc.edu/student-resources/testing-services.

## International Baccalaureate (IB)

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. Students should request that official IB scores be mailed to TCC Student Completion Services, 909 S. Boston, Tulsa, OK 74119.

## 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. Tulsa Community College may accept, modify, or reject military training credit depending upon the evaluation. Transcripts are submitted to TCC through the Joint Services Transcript (JST) Operations Center.

For more information on Credit by Prior Learning Assessment, visit the Student Resources web page for Transfer Credit Evaluation and Prior Learning Assessment.

## Official Transcripts - International Institutions (effective Oct. 1, 2019)

Official college transcripts from international institutions:

- Must be evaluated and translated, if appropriate, by a third-party organization that is a member of the National Association of Credential Evaluation Services (NACES). World Evaluation Services (WES) is preferred.
- A course-by-course evaluation by the credential evaluation service is required to determine U.S. equivalency
- All international credentials must be recognized by the Minister of Education.

Evaluations should only be submitted directly from the credential evaluation service to TCC at records@tulsacc.edu or mailed directly from the service to Tulsa Community College, Office of Records, 909 S. Boston Ave., Tulsa, OK 74119. Hand-delivered evaluations will only be accepted by Answer Center/Enrollment Services staff if they are in the original, unopened envelope from the credential evaluation service.

## Technical Transfer Credit Policy for Technology Centers

Tulsa Community College's policies for evaluating, awarding, and accepting technical credit for transfer are consistent with the college's mission and with the State's focus on aligning coursework to ensure a quality education through common learning outcomes reviewed by faculty experts in the discipline.

Tulsa Community College may only accept transfer of technical credits from an Oklahoma technology center towards technical major degree requirements in a college technical certificate, an associate in applied science degree, or a technology baccalaureate degree in which Tulsa Community College faculty have documented expertise.

Transfer of technical credits from a technology center that is part of the Oklahoma Technology Center System will be evaluated using the Statewide Technical Course Articulation Matrix from the Oklahoma State Regents for Higher Education (OSRHE). Academic credit earned for technical courses appearing on an official transcript from an Oklahoma technology center and listed on the Statewide Technical Course Articulation Matrix will be processed by Tulsa Community College's Office of Admissions. The Office of Admissions will follow The Undergraduate Transfer and Articulation policy from the OSRHE.

Transfer of technical credits based on a different unit of credit than the one used at Tulsa Community College is subject to conversion before being transferred. Only official transcript and technical course evaluations based on the OSRHE Statewide Technical Course Articulation Matrix and processed by the Tulsa Community College's Office of Admissions are official. Any preliminary reviews by campus personnel are unofficial and not binding, and subject to change.

Technical credits may be subject to minimum grade requirements as determined by the accreditation, licensure, or other programmatic requirements of Tulsa Community College. Grades do not transfer in
and are not calculated in the Tulsa Community College's grade point average (GPA). A neutral grade of " S " will be recorded. Credits earned will be added to the student's overall credit hours earned.

## New Student Orientation

The first step on your successful academic journey is New Student Orientation. You will gain information on a wide variety of critical topics, including searching for classes, payment options, accessing your TCC email, types of financial aid available, student support services, and much more. All first time entering, degree-seeking students are required to attend New Student Orientation. Transfer students who have earned more than seven credit hours are not required to attend New Student Orientation.

Before attending New Student Orientation, there are certain milestones you must complete. Steps to attend new student orientation:

- Apply to TCC.
- Turn in official high school transcripts, GED scores, and/or any college transcripts.
- If you have not taken the ACT, or scored below 19 in reading or writing, or below a 20 in math, you will need to take a placement test. For more information, visit an academic advising office.
- Sign up for a New Student Orientation session.

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 your New Student Orientation 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.
- For more information, visit www.tulsacc.edu/orientation.


## On-Time Enrollment

TCC has an On-Time Enrollment process. This means that a student must be enrolled in a class prior to the first time the class meets. Eligible class schedules may be adjusted by visiting Enrollment Services on any campus after the first day of class.

## Waitlist Feature

Students may add themselves to a waitlist if the desired course is full while attempting to enroll. Upon a seat opening students are given 24 hours to enroll after an email notification is sent to the student's account.

## 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 collegelevel courses in these disciplines. Students must also demonstrate college-level reading competency before enrolling in General Education courses. ACT scores, SAT scores, appropriate placement examination scores, and qualified prior college coursework can be used to demonstrate proficiency. High school unweighted grade point average may also be used to meet proficiency and placement requirements for math and English courses. Any degree-seeking, first-time college student who has not satisfied their proficiency requirements is required to enroll in and successfully complete COLL 1003 College Success or equivalent course within the first two semesters of attendance.

Students for whom English is a second language and who do not meet proficiency requirements for placement in English and Reading using methods above will be referred to the English as a Second Language (ESL) Department Office, an International Language Center, or the Education Outreach Center to take the ESL Placement Exam. See Admission of Students for Whom English is a Second Language above for further information.

## Withdrawal from Classes

## Results of Withdrawing

- A "W" or "Withdrawal" grade will be awarded on a student's transcript for the courses from which the student withdraws.
- The "W" grade will not affect the 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.
- 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

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 students come to an Academic Advising office to discuss the potential impact of withdrawal.

## In Person Process

- Notify and discuss withdrawal with instructor.
- Complete, sign and submit a TCC Request for Withdrawal to a TCC Academic Advising office. Forms are available in Academic Advising offices.


## Off Campus Process

If it is not possible to come to a campus, students may download the TCC Request for Withdrawal located under Student Resources at www.tulsacc.edu. Read through the instruction sheet carefully, then fill out the first page of the form completely. Fax both front and back pages of the
form to any TCC Academic Advising office. Fax numbers are listed on the form. TCC will only process withdrawals that are requested on this 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 and submit with your fax. Withdrawals will not be processed without this form of identification.

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.

## Audit of a Course

## 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. The 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.

## 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:

- 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.
- 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.).
- 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.
- 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.


## 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.

## Fees, Expenses, Financial Aid

## Tuition and Fees

Tuition and Fees for the 2020-2021 Academic Year are not approved until July 1, 2020 and are subject to change.

Fee amounts are approved by the State Regents for Higher Education and may be changed by direction of the State Regents. Payment arrangements are required for tuition and fees at time of enrollment.

## Tuition

Oklahoma Residents: $\$ 112.55$ per credit hour Non-Oklahoma Residents: $\$ 337.55$ per credit hour Audit (Without Credit)
Same fees apply as a credit course
Advanced Standing (Credit for Prior Learning Assessment)

| Advanced Standing Credit Evaluation/Transcription | $\$ 5.00$ per credit hour (non-refundable) |
| :--- | :--- |
| Department Exams | $\$ 5.00$ per credit hour (non-refundable) |
| CLEP Exams | National Testing Agency Rate |
| ACT Exams | National Rate $+\$ 5.00$ |

Special Fees

| Admission Fee | $\$ 20.00$ one-time only, non-refundable |
| :--- | :--- |
| Facility Fee | $\$ 2.00$ per credit hour |
| International Student Status Maintenance Fee (Fall, Spring \& | $\$ 50.00$ per semester |
| Library Fee | $\$ 2.75$ 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 |

## Fees for Student Services

| Cultural \& Recreational Service Fee | $\$ 1.25$ per credit hour |
| :--- | :--- |
| Parking Fee | $\$ 1.50$ per credit hour (up to $\$ 18.00$ ) |
| Student Activity Fee | $\$ 5.15$ per credit hour |
| Student Center Fee | $\$ 7.30$ per credit hour |
| Student ID Card (non-refundable) | $\$ 5.00$ per semester |

## Continuing Education (non-credit)

Fees vary by course

## Special Course Supplies and Institutional Services

Students are expected to furnish expendable supplies in certain courses. The College 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

| Allied Health | $\$ 12.00$ per course |
| :--- | :--- |
| Art | $\$ 20.00$ per course |
| Dental Hygiene | $\$ 20.00$ per course |
| Electronics | $\$ 12.00$ per course |
| Engineering | $\$ 12.00$ per course |
| Health Information Technology | $\$ 12.00$ per course |
| Interior Design | $\$ 12.00$ per course |
| Nursing | $\$ 12.00$ per course |
| Science | $\$ 22.00$ per course |
| Veterinary Technology | $\$ 25.00$ per course |

** Waived for online and online live sections for Fall 2020 except for CHEM 1114 and CHEM 1134. CHEM 1114 and CHEM 1134 will reduce fee to $\$ 10.00$.

## Special Instruction Fees

| Special Course Fees |  |
| :---: | :---: |
| Accounting (Software Courses) Course Fee | $\$ 12.00$ per course |
| Adobe Media Cloud Access | $\$ 20.00$ per course |
| Allied Health Programs: | $\$ 50.00$ |
| Drug Screening Fee | $\$ 49.00$ |
| Criminal Background Check Fee | $\$ 35.00$ |
| Immunization Tracking Services Fee | $\$ 20.00$ |
|  |  |
| Pharmacy Technology) |  |
| Student Malpractice Insurance Fee | $\$ 13.00$ (assessed annually) |
| Aviation Programs: | $\$ 75.00$ per course |
| Air Traffic Control Course Fee | $\$ 150.00$ |
| Air Traffic Control Program Fee | $\$ 214.00$ per flight hour |
| Professional Pilot: Single-Engine Aircraft, Flight \& | $\$ 169.00$ per flight hour |
| Professional Pilot: Single-Engine Aircraft, Flight, Solo | $\$ 350.00$ per flight hour |
| Professional Pilot: Multi-Engine Aircraft, Flight \& Instruction, | $\$ 12.00$ per course |
| Computer Information Systems Course Fee | $\$ 100.00$ per clinical course |
| Dental Hygiene Clinical Equipment Utilization Fee | $\$ 12.00$ per course |
| Drafting Course Fee |  |
| 俍 |  |


| Emergency Medical Services Professional (EMSP) Fees: |  |
| :---: | :---: |
| ACLS Card Fee | \$9.00 |
| Assessment Fee | \$20.00 |
| Assessment Fee | \$141.75 |
| BLS Card Fee | \$5.00 |
| Criminal Background Check Fee | \$44.00 |
| Drug Screening Fee | \$40.00 |
| PALS Card Fee | \$9.00 |
| Student Malpractice Insurance Fee | \$13.00 |
| Engineering Technology Program: |  |
| Fabrication Lab Fee | \$100.00 |
| MSSC Testing Fee | \$55.00 |
| OSHA Card Fee | \$33.00 |
| Fire Academy Essentials Fee 1 | \$800.00 |
| Fire Academy Essentials Fee 2 | \$800.00 |
| First Aid Course Fee | \$27.00 per course |
| Human Services |  |
| Student Malpractice Insurance Fee | \$13.00 (assessed annually) |
| Legal Research Law Library Fee | \$60.00 per course |
| Music Lessons Fee (Private) | \$50.00 per credit hour |
| Nursing Program: |  |
| Assessment Fee, Traditional Track | \$77.50 per assessment |
| Assessment Fee, Career Mobility Track | \$103.00 per assessment |
| Clinical Tracker Fee | \$20.00 |
| Criminal Background Check Fee | \$49.00 |
| Drug Screening Fee | \$50.00 |
| Immunization Tracking Services Fee | \$35.00 |
| Student Malpractice Insurance Fee | \$13.00 (assessed annually) |
| Online Learning Online Course Fee | \$12.00 per credit hour |
| Online Learning Blended Course Fee | \$6.00 per credit hour |
| Paralegal Course Fee | \$12.00 per course |
| Paramedic Program: |  |
| Assessment Fee | \$26.25 |
| Criminal Background Check Fee | \$44.00 |
| Drug Screening Fee | \$40.00 |
| Scheduler/Tracker Fee | \$84.00 |
| Student Malpractice Insurance Fee | \$13.00 |
| Respiratory Care Program: |  |
| Clinical Software | \$104.00 |
| Clinical Tracking Fee | \$130.00 |
| NBRC Review Fee | \$295.00 |


| Theatre Private Acting Course Fee | $\$ 50.00$ per credit hour |
| :---: | :---: |
| Veterinary Technology Program: |  |
| Criminal Background Check Fee | $\$ 49.00$ |
| Drug Screening Fee | $\$ 50.00$ |
| Medical Insurance Fee | $\$ 45.00$ (assessed annually) |
| Student Malpractice Insurance Fee | $\$ 13.00$ (assessed annually) |
| Vaccination Fee | Market rate, currently $\$ 1000.00$ |

## 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 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.

## Costs and Payments

## Student Statement of Financial Responsibility

- 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's 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 returned 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 the 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 15 th of the month will result in my account being assessed a $1.5 \%$ monthly ( $19.56 \%$ APR) 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 drop 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.
- Tulsa Community College corresponds electronically with students using their TCC email address. I understand that I am responsible for regularly reading important information sent to my TCC email account and for taking action on any important correspondence sent to this address.
- I further consent that any phone number or email address provided can be used to contact me by TCC or any debt collection agency hired by TCC either directly or through an automated or predictive dialing system or prerecorded messaging in an effort to recover any unpaid obligation owed to TCC. This can also include text messages or emails.


## 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 charged to students who select a payment plan.


## Payment Plans

These plans are detailed on the MyTCC 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 schedule adjustment or if charges and/or payments are applied to a student's account, the student's TOP installment amounts may 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 (FA)

- 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 methods of payment under the condition 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 Student Verified 3rd Party Payments
General Tuition Waiver
Tulsa Achieves Program
Employee Payments
Scholarships
Oklahoma's Promise/OHLAP* Americoprs
Grants (Tribal, Veterans, Voc Rehab)*
Other


## ACE Waiver (Concurrent)

Senior Citizen Waiver
Government Assistance Program
*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 if all current charges are not paid in full.

## Refunds

## Refund Procedure

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 Tuition Option Plan (TOP) fees. Refunds will not be honored until all financial obligations to Tulsa Community College have been cleared.

TCC uses a variety of methods to distribute refunds to students. Students with questions about how they will receive a refund should contact the Bursar's office on any campus.

## Refund Policy

## Complete Withdrawal from the Institution

- $\mathbf{1 0 0}$ 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 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 $5 \mathrm{p} . \mathrm{m}$. on the second day of class for an online class or before 5 p.m. of the next regular work day following the first class session for all other classes.
- Zero percent refund for students withdrawing after the second week of a regular 16-week term or after the first week of a summer or eight-week 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 an online class or after $5 \mathrm{p} . \mathrm{m}$. of the next regular work day following the first class session for all other classes.

NOTE: Financial aid recipients who complete a full withdrawal from the institution may be required to return Title IV funds. See the Financial Aid Warning and Suspension section of this catalog.

## 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.


## Withdrawing from Classes

See the Withdrawal from Classes information in the Admission and Registration section of this catalog for more details. The Academic Calendar shows relevant dates for withdrawal.

- After the Schedule Adjustment Deadline, 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.
- To initiate the withdrawal process, students should visit Academic Advising on any campus.
- 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 a High School Concurrent Schedule Adjustment Form and have it signed by the high school counselor. Forms are available online and in any TCC Enrollment Services office.


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

- $\mathbf{1 0 0}$ 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 cancel-led 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.


## Refund Policy for Students Entering Military Service

- If a student enters military service during the term in which he/she is enrolled and 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 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.

## Course Book Refunds

## Course Books

- Students should purchase course books at the campus they will be attending or at www.tccstores.com.
- Internet course books may be purchased at www.tcc.stores.com or at the Northeast Campus Store.
- Community Campus course books may be purchased at www.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 www.tccstores.com. A photo I.D. is required.

## Financial Aid and Scholarships*

## * Note: Financial aid eligibility and processing at TCC are subject to change based upon changes in federal and/or regulations.

The Financial Aid and Scholarships office at Tulsa Community College (TCC) is available to assist qualified students meet their educational expenses. Financial aid is designed to supplement the financial resources of the student and/or student's parent(s). All students seeking financial assistance should complete the Free Application for Federal Student Aid (FAFSA) at https://studentaid.ed.gov/sa/fafsa.

Financial aid consists of grants, scholarships, tuition waivers, student loans, and part-time employment from federal, state, institutional and private sources. The types and amounts of aid awarded is determined by financial need, availability of funds, student classification, and academic performance.

Financial aid is available to degree-seeking students and students seeking certain certificates at TCC. Students auditing coursework, taking non-credit classes, enrolling in college classes while still in high school, or taking classes, but not pursing a degree or certificate from TCC are not eligible for Title IV Federal Student Aid.

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

There are a number of financial aid programs, scholarships and tuition waivers available at Tulsa Community College. The FAFSA is used to apply for the following financial aid programs:

- Federal Pell Grant (PELL)
- 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 in addition to the FAFSA:

- TCC Honors Scholar Tuition Waiver
- TCC Foundation Scholarship
- TCC True Blue Lead

TCC's Financial Aid and Scholarships office will award students for all federal, state, and institutional programs. Based on eligibility, the student may qualify for a combination of financial aid awards
and programs. Some programs are based on financial need. Financial need is the difference between expected educational expenses and available family financial resources as determined by FAFSA.

The student and parent(s) (if listed on the FAFSA) should be prepared to verify information reported on the FAFSA. Students will be notified through their TCC email of requests for documentation. The specific document request(s) will be viewable through the student's MYTCC portal account in the Financial Aid Dashboard. When the awards are determined, an award notification is sent to the student through their TCC email account. The award notification will direct the student to their Financial Aid Dashboard account to view and/or accept the awards. Failure to provide the requested documentation may result in a delay or the termination of the financial aid review process.

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. Early application is encouraged as some funds may be limited.

Financial Aid priority consideration deadlines are:

- Fall term- June 1
- Spring term- November 1
- Summer term- April 1


## Grants

## Federal Pell Grant

The Federal Pell Grant, unlike a loan, does not have to be repaid. Undergraduate students, who have not earned a bachelor's degree or graduate degree, and who are U.S. citizens or eligible non-citizens, may apply for a Pell Grant by submitting a FAFSA. 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

The Pell Grant is paid in prorated payments, meaning if you are not full time you will generally receive less than the maximum amount. There are no exceptions for prorating Pell Grants. Proration applies to ALL semesters, including summer. Pell proration is based on a student's enrollment status as follows:

- Full-time $=12$ or more credit hours
- Three-quarter time = 9-11 credit hours
- Half-time = 6-8 credit hours
- Less than half time $=5$ or less credit hours

TCC Financial Aid and Scholarships will recalculate Pell grant for all students who are enrolled and attending as of the Pell census date; the Thursday of the third week of the fall and spring term and second Wednesday of summer term.

To be eligible for federal student aid funds, a student must be enrolled before the census date. It is extremely important that students finalize their class schedule before the census date. The census date is the point at which a student's enrollment status is locked for Pell Grant eligibility purposes. Credit hours added after the census date cannot be used to increase the enrollment status for Pell Grant eligibility, likewise, credit hours withdrawn from after the census date will not cause a decrease in enrollment status for Pell Grant eligibility.

For students who are not enrolled and attending on the census date, a Pell Grant recalculation will occur at the time of disbursement for the first "part of term" they are attending. Once the recalculation determines enrollment status and Pell Grant eligibility, credit hours added after this recalculation date cannot be used to increase the enrollment status for Pell Grant eligibility, likewise, credit hours withdrawn from after this recalculation date will not cause a decrease in enrollment status for Pell Grant eligibility.

For more information on the Pell Grant program visit https://www.tulsacc.edu/admissions-aid/aid/financial-aid/financial-aid-policies.

## Federal Supplemental Educational Opportunity Grant (FSEOG)

FSEOG provides grants to students with the greatest financial need as determined by the FAFSA and is subject to the availability of funds.

## Oklahoma Tuition Aid Grant (OTAG)

OTAG is a need based grant program available to Oklahoma resident students making satisfactory academic progress. To apply, submit the FAFSA as early as possible after October 1st of each year, as funds are limited. This program is administered by the Oklahoma State Regents for Higher Education.

## 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 and Tuition Waivers

Tulsa Community College offers many scholarships and tuition waivers to students with scholastic achievement and/or economic need. A current descriptive list of scholarships and tuition waivers opportunities is available online at https://tulsacc.academicworks.com.

## TCC Foundation Scholarships

The Tulsa Community College Foundation offers a variety of scholarships opportunities to TCC students funded through private donors, endowments and foundations. Students may qualify by demonstrating scholastic ability, leadership, academic promise and/or economic need.

## Academic Scholars Scholarship

Each year, up to five Tulsa Community College freshmen who are accepted into the TCC Honors Program may be selected for the Academic Scholars Scholarship. Recipients will receive a tuition waiver and a cash stipend. The scholarship is transferable to other colleges and universities upon graduation from TCC. The Academic Scholars Program was created and funded by the Oklahoma Legislature and is administered by the Oklahoma State Regents for Higher Education as an incentive for students of high academic ability to attend both public and private higher education institutions in Oklahoma.

Students must apply during the spring semester of (or early summer following) the senior year of high school. The scholarship is renewable for eight semesters of higher education, provided the student remains enrolled full time in an Oklahoma college or university and meets all other continuing eligibility requirements.

## TCC Concurrent Tuition Waiver

Concurrently enrolled high school students may be eligible for the concurrent tuition waiver while attending TCC as a concurrent high school student. For more information visit https://www.tulsacc.edu/admissions-aid/admissions/college-courses-high-school-students.

## TCC Need-Based and Scholastic Tuition Waiver

Tulsa Community College offers an annual tuition waiver 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 a 2.50 cumulative grade point average (GPA). 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 Tuition Waivers are also available for Oklahoma residents who are 65 years of age or older, former POWMIA; 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 a campus Director of Enrollment Services for more information.

## TCC Honors Scholar Tuition Waiver

Tulsa Community College offers a tuition waiver of three to 18 credit hours per fall and spring term for students who are TCC Honors Scholars in good standing. To apply, submit the TCC Honors Scholar application to the TCC Honors office on Metro Campus. 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 credit requirements are fulfilled.

## TCC TrueBlue Lead

TrueBlue Lead is a leadership development program based on scholarship, leadership, and community service involvement, with students selected via an interview process. This program provides the recipient with a tuition waiver. Students should complete the online application at https://tulsacc.academicworks.com. Students are required to complete six credit hours in the fall to maintain eligibility in the spring.

## Work Study

## Federal Work-study Program (FWS)

Students will earn an hourly wage, 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 careers website for more information at: https://careers.tulsacc.edu.

## Loans

## Federal Direct Loan Program (DLP)

The DLP offers subsidized, unsubsidized and Parent 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 up to $\$ 6,500$, 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 first year, first time borrowers must be delayed for thirty days. Students must also complete the Master Promissory Note (MPN) at www.studentloans.gov.

Regardless of the type of loan, students 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 https://studentaid.gov/h/manage-loans and provide student borrowers with important information about their loan, borrower rights, and repayment.

## Federal Direct Subsidized and Unsubsidized Loans

A subsidized loan is awarded on the basis of financial need as determined by the FAFSA. Interest will not be charged on a subsidized loan before the borrower begins 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

Parent 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 the loan. Loan funds are sent to TCC by the U.S. Department of Education in two installments.

## Financial Aid Application Procedure and Process

The 2020-2021 FAFSA application is for the fall 2020, spring 2021, and summer 2021 terms.

1. Complete the TCC Application for Admission through the college's website at 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 2020-2021 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.
4. Students should monitor the progress of their financial aid application through the Financial Aid Dashboard by logging on to the MyTCC portal using their CWID and password. The Financial Aid and Scholarships office will notify the student via TCC 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 eligibility requirements, the Financial Aid and Scholarships office will complete the file and award the student. 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.
5. 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.
6. Request official academic transcripts from previously attended schools, post-secondary schools, colleges, and universities. All transcripts must be on file to receive financial aid.
7. 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: 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.

## Financial Aid Satisfactory Academic Progress (SAP) Policy (34 CFR 688.34)

To be eligible for Title IV federal student aid, a student must maintain satisfactory academic progress (SAP) toward the successful continued progression of an educational degree or certificate. Progress is measured by an objective set of standards at the end of each payment period for the fall, spring and summer semesters. All acceptable hours appearing on transcripts from prior schools will be used to determine SAP status. Hours are included in the calculation whether Federal Student Aid was received or not. Violation of any section of this policy will result in the loss of Federal Student Aid eligibility.

CC's full SAP policy can be found at https://www.tulsacc.edu/admissions-aid/aid/financial-aid/financial-aid-policies.

## Requirements for Satisfactory Academic Progress

Title IV federal student aid recipients are required to meet the following standards at the end of each payment period, fall, spring and summer:

## Qualitative Progress Requirement

- 1.70 cumulative GPA for all students who have attempted less than 31 credit hours.
- 2.00 cumulative GPA for all students who have attempted 31 or more credit hours.

Quantitative Progress Requirement

- PACE at which a student must progress through his or her educational program to ensure completion of the program within the maximum time frame: complete at least $67 \%$ of the total number of credit hours attempted. PACE is calculated by dividing the cumulative number of hours the student has completed by the cumulative number of hours the student has attempted.


## Maximum Time Frame Requirement

- Complete a degree program within a maximum time frame of 95 attempted credit hours. A student's number of attempted credit hours cannot exceed $150 \%$ of the hours required for the degree being pursued. The average two-year degree at TCC requires 63 credit hours; 63 multiplied by $150 \%$ is equal to 95 .
Transfer Course Work
Students are required to have official transcripts from all prior accredited institutions of higher learning on file with the TCC Enrollment Services Office. All course work accepted for credit by TCC will be considered in the qualitative (GPA) quantitative (PACE) and maximum time frame requirements of SAP including remedial (zero level) and repeated course work.


## Repeated Courses

When a previously non-passed course is repeated, both grades will remain on the permanent record and both grades will be used to compute the cumulative GPA in the calculation of a student's Satisfactory Academic Progress status. Each repetition will count towards the attempted hours.

When a previously passed course is repeated, both grades will remain on the permanent record and both grades will be used to compute the cumulative GPA in the calculation of a student's Satisfactory Academic Progress status. Each repetition will count towards the attempted hours; however, the course will only count toward completed hours once.

| Grade | Effect of Grade |
| :--- | :--- |
| A,B,C,D, <br> and S | Letter grades used to indicate successful completion of a course. All passing grades are <br> considered in the qualitative (GPA), quantitative (PACE) and maximum time frame <br> requirements of SAP including remedial (zero level) and repeated course work. |
| DA, DB, <br> and DC | Letter grades used to indicate successful completion of a remedial course. All passing grades <br> are considered in the qualitative (GPA), quantitative (PACE) and maximum time frame <br> requirements of SAP including remedial (zero level) and repeated course work. |
| F | Letter grade used to indicate unsuccessful completion of a course. All non-passing grades <br> are considered in the qualitative (GPA), quantitative (PACE) and maximum time frame <br> requirements of SAP including remedial (zero level) and repeated course work. |
| DD and | Letter grade used to indicate unsuccessful completion of a remedial course. All non-passing <br> grades are considered in the qualitative (GPA), quantitative (PACE) and maximum time frame <br> requirements of SAP including remedial (zero level) and repeated course work. |
| DF | Grade used to indicate that a student has officially withdrawn from a course. This grade is <br> considered non-passing and will count in the quantitative (PACE) and maximum time frame <br> requirements of SAP including remedial (zero level) and repeated course work. This grade is <br> GPA neutral. |
| AW | Grade used to indicate that a student was administratively withdrawn from a course. This <br> grade is considered non-passing and will count in the quantitative (PACE) and maximum time <br> frame requirements of SAP including remedial (zero level) and repeated course work. This <br> grade is GPA neutral. |
| I | Grade used to indicate the student has not completed all course requirements in order to <br> earn credit. This grade is considered non-passing and will count in the quantitative (PACE) <br> and maximum time frame requirements of SAP including remedial (zero level) and repeated <br> course work. This grade is GPA neutral. |
| I | Grade used to indicate the student has audited a course and is not seeking course credit. <br> This grade is considered non-passing and will count in the quantitative (PACE) and maximum <br> time frame requirements of SAP including remedial (zero level) and repeated course <br> work. This grade is GPA neutral. Any aid received for audited courses will be returned to the <br> appropriate program and the student will be responsible for repayment to TCC. |
| AU |  |

## Financial Aid Warning

Students who fail to meet either the PACE component, GPA component, or both, will be placed on financial aid warning for one payment period. Students on financial aid warning remain eligible to receive Title IV funds and should work to improve his or her GPA and PACE. Failure to meet all SAP standards
at the end of the warning period will result in financial aid suspension and the loss of Title IV federal student aid eligibility. There is no warning period once a student reaches his/her maximum time frame.

## Financial Aid Probation

If a student successfully files a SAP appeal, the student will be placed on financial aid probation. Students on financial aid probation are eligible for Title IV Federal Student Aid. Students who require more than one payment period to meet the minimum GPA and PACE standards will be placed on an academic plan. Students on an academic plan will be placed on financial aid probation until the student completes the academic plan, at which time they must meet all the minimum qualitative and quantitative standards. Failure to successfully complete or comply with the provisions of the academic plan will result in financial aid suspension and the loss of Title IV Federal Student Aid eligibility.

## Suspension of Aid

Students who fail to meet the requirements of this policy will be suspended from financial aid. Funds affected by this policy include all applicable federal, state, and college funds including but not limited to Federal Pell Grant, Federal Supplemental Education Opportunity Grant (SEOG), Federal Direct Loans, Federal Direct PLUS (Parent) Loans, Federal Work Study, Oklahoma's Promise, OTAG and Tulsa Achieves.

Students on financial aid suspension have the right to appeal. A student may appeal the suspension of financial aid due to extenuating circumstance. Exceptional circumstances may include but are not limited to illness, death of an immediate family member, or traumatic events in the student's life.

## Regained Eligibility

Students may re-establish financial aid eligibility by:

1. Successfully completing course work until the minimum standards are met, or
2. Successfully appealing financial aid suspension.

When a student appeals financial aid suspension, there is no guarantee the appeal will be approved. Once suspended, there is no guarantee a student may receive financial aid until he or she is meeting minimum standards again. Upon reaching the minimum standards, the student will need to resubmit an appeal in order for his/her progress to be reviewed.

## Return of Title IV Funds when a student Withdraws (34 CFR 668.22)

Title IV federal student aid is awarded to students at Tulsa Community College under the assumption that they will attend class for the entire period for which the assistance is awarded. When a student withdraws and/or stops attending class before $60 \%$ of the term has elapsed, he/she may no longer be eligible for the full amount of Title IV funds that they were originally eligible to receive.

If a recipient of Title IV federal student aid withdraws from a school after beginning attendance, the amount of Title IV federal student aid earned by the student must be determined. Federal student aid is defined as any federal grant and/or federal student loan. If the amount of aid disbursed to the student is greater than the amount the student earned, unearned funds must be returned to the appropriated federal student aid program.

Return of Title IV (R2T4) calculations are processed by the TCC Financial Aid Office within 30 days of determining the student has completely withdrawn from school. TCC will have an additional 15 days to return funds to the U.S. Department of Education. The R2T4 calculation must be completed and funds returned within 45 days of the student's withdrawal.

TCC's Return of Title IV Funds policy can be found at https://www.tulsacc.edu/admissions-aid/aid/financial-aid/financial-aid-policies.

## Definition of a Withdrawal

A student is considered to have withdrawn if they do not complete all the days in the payment period that they were scheduled to complete.

## Official Withdrawal Process

A student who wishes to withdraw from college must initiate the official withdrawal process by:

1. Notify and discussing the withdrawal with the instructor
2. Complete and sign the Request for Withdrawal form. Forms are available in any TCC Advisement Office.
3. Submit completed Request for Withdrawal form to any TCC Enrollment Services Office.

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.

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.

A letter grade of W (withdrawal) will be issued when a student initiates a withdrawal during TCC's allowable withdrawal period.

## Unofficial Withdrawal

An unofficial withdrawal occurs when a student fails to earn any hours at the end of the term, i.e. earns a 0.0 GPA. Letter grades contributing to no earned hours include; W, AW, I, or F.

A letter grade of AW may be assigned by the instructor to indicate a student has been involuntarily withdrawn by the institution during the designated semester for disciplinary, inadequate attendance or other extenuating circumstances. In the case of non-attendance, instructors are required to report any student who fails to begin attendance to the Financial Aid Office before the end of the drop period using the WN process. Students who fail to being attendance will have their Pell Grant re-calculated. Students who fail to begin attendance will remain enrolled in the course and will be responsible for payment of tuition and fees. At the end of the term, reported non-attendance (WN) will be assigned an AW on the student's transcript.

## Students who fail to begin attendance

If a student fails to begin attendance in any course, the respective faculty member will report the student as non-attending by the designated deadline. Non-attendance will result in a Pell Grant recalculation and/or return of funds.

Beginning attendance for on-campus courses is defined as physically attending at least one class session within the add/drop period.

Beginning attendance for online courses is defined as participating in discussions, asking or answering a question from the professor or otherwise be involved in an academic activity within the add/drop period. Logging into the class is not sufficient to determine attendance.

## 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 and Scholarships 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 may be referred to the Inspector General's Office for appropriate action(s).

## 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 Gl 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 $100 \%$ 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 and reported.
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. 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.
B. Register for classes.
C. First time veteran students at TCC need to contact the Academic Advising office 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 Academic Advising office or the Veterans Services office.
D. 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) and Certificate of Eligibility.
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 and Certificate of Eligibility.
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
E. All certifications for veteran's benefits will be processed through the Veterans Services office on the Metro Campus.
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.
"GI Bill® is a registered trademark of the U.S. Department of Veterans Affairs (VA). More information about education benefits offered by VA is available at the official U.S. government Web site at http://www.benefits.va.gov/gibill."

## Student Affairs

## Academic Advising

The Academic Advising office on each 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, graduation, and transfer college information. Academic Advising is required and available by appointment on campus as well as via email for online learning students. Degree-seeking students are assigned to an academic advisor and make an appointment through their Starfish account in MyTCC.

## Accessibility 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, complete the Accommodation Request Form using this link: https://www.tulsacc.edu/student-resources/accessibilityresources. Within Accessibility Resources, students will also find the Resource Center for the Deaf and Hard of Hearing. Contact information for Accessibility Resources and the Resource Center for the Deaf and Hard of Hearing can be found below:

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

Resource Center for the Deaf and Hard of Hearing Tulsa Community College Northeast Campus 3727 E. Apache, AB224 Tulsa, OK 74115-3151 (918) 595-7428 - Voice (918) 894-5724 - Video Phone (918) 809-1864 - Text Email: rcdhh@tulsacc.edu

## 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.

## Call 2000

The TCC Service Center (Call2000) is available to provide assistance to current and potential students in finding information regarding Financial Aid, Enrollment, Advisement and much more. Our goal is to serve students with outstanding customer service as well as resolution's to student's questions. To contact Call2000, simply call (918) 595-2000 or email us at call2000@tulsacc.edu.

Hours of operation are Monday through Friday 7:30 a.m. to 7:30 p.m. and Saturday 8 a.m. to Noon. During the months of June and July Call2000 closes at 1:00 p.m. on Friday and is closed on Saturdays.

## 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 (www.tulsacc.edu). Monthly activities calendars are available in the Student Life Office on each campus.

## Campus Safety

## Campus Police

TCC Campus Police provides an environment conducive to protection, safety and public service for a culturally diverse college community. TCC Campus Police is committed to protecting lives, property and rights of all people, maintaining order, and enforcing the law impartially. To fulfill our mission, we work within the framework of the U.S. Constitution and will strive to attain the highest degree of ethical behavior and professional conduct at all times. Campus Police provide numerous services as a routine part of College operations. Included in these services are personal escorts to ensure the safety of students and staff. The Campus "Lost and Found" is located in the Campus Police office at each campus.

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

TCC Campus Police complies with the Jeanne Clery Disclosure of Campus Security Policy and Campus Crime Statistics Act, 20 USC § 1092(f), by publishing an Annual Security Report. 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 Police officers, and where students should go to report crimes. The report is also available on the web at www.tulsacc.edu/campus-life/campus-safety. A paper copy can be requested at any Campus Police office.

## 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 DrugFree 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 Senior 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, 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, ecigarettes, 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.

## Campus Store

The TCC Campus Stores are operated by the Follett Corporation. Follett is higher education's largest campus store retailer as they operate nearly 1,200 local campus stores across North America. Each TCC campus has its own Campus Store. TCC Campus Stores 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 TCC 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

Career Development Specialists work with students to choose majors, explore occupations, prepare and search for jobs, and connect with employers in the Tulsa community. Career Services are available to students at all campuses on a regularly scheduled basis. Students may explore interests, abilities, goals, and work-related values in addition to gathering information on various occupations. Designed to assist students, TCC graduates and employers with their employment needs, our services also include resume review, interview preparation, and job search assistance. More information is available online at www.tulsacc.edu/careerservices.

## Dental Hygiene Clinic

The Tulsa Community College Dental Hygiene Clinic provides only the following dental hygiene services: oral cleanings or non-surgical periodontal therapy depending on the patient's oral health status; oral health education; x-rays, sealants, local anesthesia, and/or nitrous oxide sedation based on dentist authorization; fluoride treatments; desensitization of teeth; subgingival drug placement; and several other services within the dental hygiene scope of practice. All dental hygiene services are provided by students under the supervision of a licensed dentist and registered dental hygienist. No dental services are provided in the Dental Hygiene Clinic such as: fillings, extractions, orthodontics, prosthetic appliances, etc. These types of services must be secured by the patient through another entity.

Interested patients must schedule a new patient application appointment by calling (918) 595-7022. The new patient application appointment does not bind the Dental Hygiene Clinic to accept all patients; only patients that are appropriate for dental hygiene care in an educational facility will be accepted. The Dental Hygiene Clinic is located at the Tulsa Community College Metro Campus on the third floor of the Alfred M. Philips Building at 909 S. Boston Avenue, Room MP 300, Tulsa, OK 74119.

## Education Outreach Center

The Education Outreach Center at 21st and Garnett serves 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. You can call the Outreach Center at 918-595-2020. For more information, visit www.tulsacc.edu/campus-locations/education-outreach-center.

## 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.

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) 5958GYM (595-8496), Southeast Campus Fitness Center at (918) 595-8640 and West Campus Fitness Center (918) 595-8225. Fitness Center hours and group class schedules are available at www.tulsacc.edu/campus-life/health-and-wellness/fitness-center-hours-and-group-fitness-schedules.

## 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 attending class or conducting college-related business on campus. Information about parking services and regulations is available in the Department of Public Safety/Campus Police Office located on each campus.

## Student Conduct

Tulsa Community College's Student Handbook includes rules that address the responsibilities and conduct required of all TCC students. The Student Code of Conduct, Academic Code of Integrity, Sexual Misconduct, and other relevant policies are all accessible on the Internet at TCC Student Handbook \& Code of Conduct.

## Student Email and Portal

In order to assure timely and efficient communication, the College establishes e-mail as an acceptable means of official communication. All College students will be assigned an official College email account accessible through the MyTCC Student Portal (www.tulsacc.edu/mytcc). Official College communications may be sent to this account, including enrollment status, financial aid and classroom assignments. E-mail sent to this account is expected to be read in a timely fashion, except in circumstances where access to e-mail is impracticable.

Faculty and staff may assume that a student's official College email is a valid mechanism for communicating with that student. Account holders who choose to have e-mail forwarded to another e-mail address do so at their own risk. An account holder's failure to receive or read, in a timely manner, official College communications sent to an official e-mail account does not absolve the account holder from knowing and complying with the content of the official communication.

## 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 Student Life on each campus.

## Educational and Co-Curricular Programs

Special workshops and interest sessions are periodically offered throughout each term. These activities are coordinated through Student Life. They include such topics as "Study Skills," "TestTaking Techniques," "Stress Management," and other areas of student interest.

## 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 at Student Life. Questions concerning the recreational program should be referred to Student Life or the Fitness Center at the Metro, Northeast, Southeast, or West Campus.

## Discounts and Services

A variety of discounts and services is available at Student Life on each campus. 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.

## 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 Student Life on any campus. Current student organizations are listed below and more information can be found at www.tulsacc.edu/campus-life/clubs-and-organizations.

## 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 Student Life.

## Metro Campus

African American Student Association (AASA) • American Dental Hygienist's Association (ADHA) • Campus Activities Board (CAB) • Campus Ministry International • Chinese Language Association • Diagnostic Medical Sonography Student Organization • French Language Association • Hispanic Student Association • Journalism \& Mass Communication Association • Native American Student Association (NASA) • Occupational Therapy Association • Phi Beta Lambda • Philosophy Club • Physical Therapy Assistants • Phi Theta Kappa (Omega Alpha Chapter) • Respiratory Care Club - Student Art Association • Student Association of Paralegals \& Legal Assistants (SAPLA) • Student Government Association (SGA) • Student Nurses Association • Student Nurse Christian Fellowship • Students of Occupational Therapy Assistant Club (SOTA) • Students of Physical Therapy Assistant Club • Student Radiologic Technologist Association (SRTA) • Student Wellness Advisory Board • TRIO Student Association

## Northeast Campus

African American Student Association (AASA) • Amateur Radio Club • American Sign Language (ASL) Club • Aviation Club • Baptist Collegiate Ministry (BCM) • Behavioral Science Association $(\mathrm{BSA})) \cdot$ Campus Activities Board (CAB) • Campus Civitan Engineering Club • Fire Protection Association • Hispanic Student Association • International Association • National Society of Leadership and Success • Phi Theta Kappa (Alpha Zeta Alpha Chapter) • Silent Friends Club • Speech/Forensics Club • Student Government Association (SGA) Total Addiction Counseling \& Knowledge from Life Experiences (TACKLE) • Student Wellness Advisory Board • Student Veterans Association

## Southeast Campus

Baptist Collegiate Ministry (BCM) • Campus Activities Board (CAB) • Chi Alpha • Christians in Action • Delta Psi Omega • Forensics (Speech \& Debate Team) • Future Medical Laboratory Technologies Club • Gamers of TCC • German Club • Health Careers Exploration • Hispanic Student Association • Interior Design Club • International Association•Investing Club • Japanese Club • Living Poets Society • Medical and Natural Sciences Club • Muslim Student Association • Phi Theta Kappa • Research and Scholarly Activities Club • Rock Climbing Club • Secular Student Alliance • Spanish Club • Student Film Association • Student Government Association (SGA) • Student Historical Society • Student Music Association • Student Wellness Advisory Board • TCC Pride

## West Campus

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

## Student Unions

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

## 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-services. 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 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-services.

## 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. Additional information is available at Credit by Prior Learning Assessment in this catalog and at www.tulsacc.edu/testing-services.

## 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.

## General Educational Development Test (GED)

The GED is administered at the Northeast and Metro Campuses to provide Certificates of High School Equivalency. Candidates should register at http://www.ged.com.

## 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-services.

## TRiO

If you are the first in your family to go to college or fit other eligibility requirements, you can benefit from TRiO at TCC.

The TRIO Programs (TRiO) are federal outreach and student services programs designed to identify and provide services for individuals from disadvantaged backgrounds. TRiO includes eight programs targeted to serve and assist low-income individuals, first-generation college students and individuals with disabilities to progress through the academic pipeline from middle school to a bachelor's degree and beyond.

TCC offers two TRiO programs that are funded by the U.S. Department of Education:
The Educational Opportunity Centers program can provide you with counseling and information on college admissions -- to TCC or another college or university. The program also provides services to improve the financial and economic literacy of participants. An important objective of the program is to counsel participants on financial aid options, including basic financial planning skills, and to assist in the college application process. The goal of the EOC program is to increase the number of adult participants who enroll in post-secondary education institutions.

The TRiO Student Support Services program provides students who have already been admitted to TCC with opportunities for academic development, assistance with basic college requirements and support while working toward the successful completion of their college degrees. The mission of TRiO SSS at TCC is to encourage student success and progress through college. The overall program goal is to increase the persistence, graduation and transfer rates of TRiO students. Selection to the program includes an application and interview process. Program services are offered at no cost to students.

For more information on TRiO please visit the TCC TRiO programs web page at www.tulsacc.edu/student-resources/trio.

## Veterans Support Services

Tulsa Community College takes great pride in providing outstanding support services for veterans and their families. TCC maintains a full-time Office of Veterans Support Services located in the northeast campus academic building in the Office of Diversity \& Inclusion. This office provides and maintains the following services:

- Veteran Students of America Association
- Veteran Students Support office on each campus. (handicap accessible with study area, computers, tv and lounge area, and staff for one-on-one mentoring)
- Veteran students academic \& support services including advisors trained to assist with veteran student issues or concerns
- Veteran students retention assistance specialist
- Comprehensive veterans outreach services
- Battle buddy program
- Academic strategies for veterans
- Special events \& guest speakers

Find additional information about services that may available to you at Veterans Support Services.

## Wellness Services

Wellness Services empowers student success by identifying challenges and helping students find appropriate resources to assist them in meeting their educational goals. Wellness Services offers a full spectrum of services that encompass education, prevention and intervention strategies so that students may choose the service level that is right for their needs. Services provided are: college wide health education programming, short-term counseling and connection to community resources, and trainings for faculty and staff. TCC students also have access to a free and confidential Student Assistance Program. The Student Assistance Program can help students with problem assessment, crisis assistance and referrals to community resources. To contact the Student Assistance Program, please call 1-800-327225124 hours a day, 7 days a week. For more information about TCC Wellness Services, please contact 918-595-7269 or visit http://www.tulsacc.edu/Wellness.

## Academic Information

## Grade and Record Policies

## Recording of Grades

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

| Grades | Definitions | 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 |
| S/U | Satisfactory-Unsatisfactory | GPA Neutral |
| N | Grade Not Reported by Faculty | GPA Neutral |

"I" - "I" grades may be assigned provided the student is passing the course and has completed a substantial portion of the coursework for the term ( $60 \%$ or more). The instructor and student complete and sign an "Incomplete (I) Grade Form" and agree on the work to be performed, a deadline for completion, and an incomplete final grade that will be earned if the work is not completed by the deadline. 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 default to the grade listed on the Incomplete (I) Grade Form.
"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 below). Students who have not attended or participated in class prior to the end of the refund period may be administratively withdrawn due to non-attendance. 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 is 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.

## 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 Academic 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.

## Student Grades and Transcripts

- Grades are available to students one week after the course ends via the TCC website at 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.
- Students and former students may also request an electronic transcript via Parchment. Electronic transcripts are $\$ 5.00$ per transcript and usually processed within a few hours of the request. Visit https://www.tulsacc.edu/transcripts for more information.
- Transcripts will be withheld if the student has not paid financial obligations to the College.


## 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. The establishment of specific policy concerning class attendance requirements, as well as announced and unannounced examinations, is the responsibility of the individual instructor. Instructors also 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.

## 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 students who have a term grade point average of 4.0 with a minimum of 12 credit hours earned during the fall or spring semester.
2. The Dean's Honor Roll includes the names of students who have a term grade point average of 3.0 to 3.99 with a minimum of 12 credit hours earned during the fall or spring semester.
3. The Part Time Honor Roll includes students who have a term grade point average of 3.0 to 4.0 and have earned between six (6) and 11 credit hours during the fall or spring semester.
4. The Summer Honor Roll includes students who have a term grade point average of 3.0 to 4.0 with a minimum of six (6) credit hours earned during the summer term.

## 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.

## 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.

## 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.
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.

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.

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, but are not calculated in the student's cumulative GPA. 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 Academic Advising office.

## Policy for Continued Enrollment

## 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:

| Retention GPA |  |
| :--- | :--- |
| Credit Hours | Retention GPA Requirement |
| 0 through 30 semester credit hours | 1.7 |
| Greater than 30 semester credit <br> hours | 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.

## 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.


## 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.

## 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.

FERPA also allows schools to disclose records without written consent to the following parties or under the following conditions: other schools to which a student is transferring or is currently enrolled as long as the disclosure is for purposes related to the student's enrollment or transfer; lending institutions of which the student has applied for financial aid; specified officials for audit or evaluation purposes; appropriate parties in connection with financial aid to a student; organizations conducting certain studies for or on behalf of the school; accrediting organizations; to comply with a judicial order or lawfully issued subpoena; appropriate officials in cases of health and safety emergencies; and state and local authorities, within a juvenile justice system, pursuant to specific state law.

A directory is available upon request 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 fall or spring 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.

## Right to Know Graduation/Completion Rates

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

## 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 ( $25 \%$ ) of the total credit hour requirements for any degree or certificate must be earned at Tulsa Community College. Prior learning assessment (advanced standing) credit, college transfer from other institutions, and zero-level course work 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). Developmental courses are not included in any GPA calculation. Physical education "activity" and any reprieved or repeated courses may not be utilized toward the credit hour requirement of any program.
- An additional associate degree may be granted by completing all the requirements for the degree with at least 15 credit hours of the course work in residence at Tulsa Community College.


## Degree Plan Procedures

Students will create their individualized degree plan with their assigned academic advisor based upon their education and career goals. Students who are following an Associate of Arts or Science degree and plan to transfer to another institution must work closely with their TCC academic advisor and advisors from the selected transfer institution.

Degree-seeking students 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 may be required to follow the degree plan specified by the current academic year catalog. Students who wish to change their major will do so when they meet with their advisor. Any substitution of course requirements listed for the degree or certificate are requested by the student through their academic advisor.

Discontinued Programs A student must complete a discontinued degree program within two years of Tulsa Community College's deletion date for that program. Students who have stopped out for two (2) or more consecutive semesters (excludes summer) may not be readmitted into a program that has been discontinued. A currently enrolled student may not declare a degree program that has been discontinued, regardless of the student's catalog year. Exceptions to this policy may be considered on a case-by-case basis and require the approval of the Chief Academic Officer or designee. Tulsa Community College will make a reasonable attempt and use available contact information to notify students currently enrolled in a degree program that is scheduled to be discontinued.

## Graduation Candidacy Procedure

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

- Submit official transcripts from all schools attended before requesting an official degree plan.
- File for graduation with an academic advisor after the add/drop date of their final semester.
- Students admitted to the Honors Scholar program complete a graduation check with the Honors Office at the beginning of their final semester.
- When students file for graduation, they will be advised of any outstanding requirements they must complete by the end of the semester.
- All declared candidates will be notified by the Student Affairs Office with information about the commencement ceremony.
- Once grades are recorded for the final term of enrollment, a final review will take place and students will be contacted as to their graduation status.
- Degree notes are recorded on the TCC transcript, and diplomas and certificates of completion are issued by the Student Completion Center.
The TCC Commencement Ceremony takes place at the end of the fall and spring semester 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.

## Associate in Arts/Science Requirements for Graduation

A. Required Grade Point Average: Students recommended for the Associate in Arts (AA) or Associate in Science (AS) 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 reprieved and excluding physical education activity courses. Some programs may require a higher grade or grade point average on specific courses to meet graduation requirements.
B. General Education Core Courses: A total of 37 credit hours of General Education courses, as listed in the General Education 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 HIST 1493 and POLS 1113.
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-credit 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, including any prerequisite courses necessary for the anticipated upper-division program. Requirements are listed in specific degree plans. Students should check with the institution they intend to transfer into to verify whether there are minimum course grade requirements.
D. As required by State Regents policy, to receive an AA or AS degree, 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 Requirement below.

## Associate in Applied Science Grade Point Requirement for Graduation

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 degree plan (excludes P.E. activity courses). Some programs may require a higher grade or grade point average on specific courses to meet graduation requirements.

## Certificate of Achievement Grade Point Requirement for Graduation

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 certificate plan.

## Computer Proficiency Requirement

The Oklahoma State Regents for Higher Education require computer proficiency prior to graduation with an AA or AS degree. This requirement could be met by:

1. successfully completing a high school computer science course that meets the State Regents' high school curricular requirements, or 2 . satisfy an institution's computer proficiency assessment, or 3. successfully completing college-level course work that the institution designates.

The use of computers is an integral part of every degree program at TCC; hence a student demonstrates proficiency by satisfactorily completing degree requirements.

## Recommended Academic Load and Fifteen to Finish

Students who enroll in 12-15 credit hours in 16 -week semesters and 6 credit hours in the 8 -week summer terms in the first year will be on track to successfully completing their goals toward graduation. The table below shows how long students may generally expect to complete degrees and certificates based on credit hours earned.

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

Students who are in good academic standing may enroll in up to 18 credit hours in a regular 16-week semester. In an eight-week or shorter term of enrollment, the maximum number of hours of enrollment is proportionate to the 16 -week semester. Students may enroll in up to nine (9) credit hours in a regular eight-week summer term. Requests for exceptions to course credit hour limits may be submitted by students to their academic advisor.

It is important to consider personal commitments outside of college coursework such as work schedule, family/personal commitments, learning styles, and past academic experience when determining the best academic load.

## 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 Labs

Computer Labs are equipped with computers to support courses where computer technology is used, computer-aided instruction packages to supplement classroom work for certain courses, instructional assistance with equipment and software usage, and a centralized workspace for students. The labs are staffed with personnel to provide free assistance as needed. Students should inquire on campus regarding the location of the computer lab.

## Developmental (Foundations) Studies

Tulsa Community College is proud to offer Developmental Studies courses (also called Foundations courses) in reading, writing, and mathematics. These courses enable students, especially those who have been out of school for a period of time, to attain the foundational skills necessary to succeed in their certificate and degree programs. Choosing the most applicable reading, writing, and/or mathematics foundations course is vital to student success in future classes. Therefore, TCC bases course placement on several factors.

All foundations coursework must be completed within the first year or the first 24 college-level credit hours. Students requiring foundations coursework in reading, writing, and/or mathematics must enroll in those required courses during their first semester and continue their foundations coursework each subsequent semester until the required coursework is completed with a "C' grade or better in all applicable subject areas, or passing placement scores are achieved. That said, some credit-bearing courses are open to foundations students while they are enrolled in foundations courses. We encourage students to enroll in credit-bearing courses as soon as possible.

Contact the Academic Advising office on any campus for additional information concerning Developmental (Foundations) Studies. The Oklahoma State Regents for Higher Education requirements state that credits and grades earned in developmental studies courses (courses beginning with a zero) cannot be used for the credit hour requirement of any program. Developmental (Foundations) courses affect your Financial Aid.

Tulsa Community College offers foundations courses in the following areas:

## Reading:

Reading is fundamental to college success in all disciplines. TCC's Reading Foundations courses are designed to develop interest in reading, explore strategies to improve comprehension of course and textbook materials, increase reading stamina, and build vocabulary.

READ 0113 Introduction to Academic Reading
READ 0123 Critical Academic Reading

## Writing:

Writing Foundations courses are designed to help students improve skills in sentence, paragraph, and essay writing so they may successfully complete their certificate or degree coursework.

## ENGL 0923 Writing Foundations I

ENGL 0933 Writing Foundations II
For those with applicable placement, TCC offers ENGL 0943 a "co-requisite" course model in which select students complete their writing proficiency requirement and Composition I in the same semester. Students must register in both ENGL 0943 and its linked ENGL 1113 (Comp I) section. For some students, this model is an excellent option and will accelerate them through their writing foundations coursework.

ENGL 0943 Writing Foundations Workshop (also enroll in linked ENGL 1113)

## Mathematics:

Math Foundations courses are designed to reinforce basic skills in arithmetic and elementary algebra, and to prepare students for the rigor of college mathematics.

## MATH 0003 Math Foundations I

## MATH 0013 Math Foundations II

Essentials courses are "co-requisite" courses linked to the college math course specific to the students' declared major, and provide just-in-time and supplemental instruction for success in college math.

## MATH 0123 Essentials for Precalculus

## MATH 0403 Essentials for Quantitative Reasoning

For those with applicable placement, TCC offers MATH 0123 and MATH 0403 as "co-requisite" courses to MATH 1513 (Precalculus I) and MATH 1473 (Quantitative Reasoning). Students must register in both MATH 0123 and its linked MATH 1513 section, or MATH 0403 and its linked MATH 1473. This enables students to complete their proficiency requirement and college-level mathematics course in the same semester. This model is an excellent option and will accelerate them through their mathematics foundations coursework.

## English as a Second Language

(See Course Descriptions for English as a Second Language, ESLA and ESLN.) Please call (918) 5957536 for more information.

## Fast Track Courses

Fast Track courses provide options for day and evening students in four-week blocks, allowing students to enroll in one or two courses per block. 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. Students may complete degrees in less time by taking courses in the Fast Track schedule sequence and when supplementing the blocks with other options available, i.e. online, intersession, other short-term courses, CLEP or credit by prior learning assessment, may further reduce the time to complete a degree. The current Fast Track schedule may be found on the TCC website under Specialty Class Schedules.

## 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 to take an honors class; however, a 3.0 grade point average is recommended.

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 online at www.tulsacc.edu/honors. 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 and the Academic Scholars Scholarship, 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 word "HONORS," for example, HONORS Composition II or HONORS Public Speaking. 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

International Campus, also known as Study Abroad, allows students to earn college credit for TCC coursework taught outside of the United States by TCC faculty. The program enables students to achieve a higher level of cultural literacy, gain a substantive understanding of world perspectives, deepen selfawareness, and grow in their educational goals. Contact the Office of Global Learning at (918) 595-7851 or www.tulsacc.edu/globaled for more information.

## World Language Labs

Computer-equipped language laboratories are important components of the World Languages resources at Tulsa Community College. These labs provide technology as well as technical support to help learners listen to, watch, and record audio- and video-based exercises. Most importantly, the language labs provide "human-to-human" services, such as one-on-one tutoring, conversation coaching, and small-
group practice to help develop the communication skills required for real-life applications. These services are offered on-campus and online. The gamut of resources found in the labs is intended to enhance the language acquisition experience in the classrooms and it is the result of coordinated efforts between faculty and lab staff.

## International Student Services

International Student Services, located at Northeast Campus, provides information, programs and services college-wide that support international student success. Staff assist international students in navigating their educational pathway from entrance into the institution, degree completion, and transfer to a senior university. Services provided include admission processing, individual planning support, immigration assistance, and cultural and community activities. The staff encourages 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 for more information.

This school is authorized under Federal law to enroll non-immigrant visa students, such as F-1's. F-1 visa students can only go to schools that are Federally authorized. We could move this to our webpage on the schools website.

## International Studies

TCC offers two international degrees, the Associate in Science in International Business, and the International Studies concentration under the Liberal Arts Associate in Arts. The programs are designed to prepare future workers for the international marketplace and increase awareness of the 21st century's global interdependence.

## Library

The Library is a college-wide academic resource supporting learning and teaching at Tulsa Community College. The library's core functions are to provide access to information and discovery through the Library's services, resources and technology; to teach information literacy and help students develop critical thinking skills; to provide space for knowledge exchange, collaborative learning, and meaningful study; and to connect with students, faculty, and staff by building relationships which facilitate learning and transform thinking. More information about the Library is available on the Library's website:
http://library.tulsacc.edu/home.

## Reading and Writing 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- or longer-term projects that are either required or offered as options. Students reflect on their experiences in order to illustrate what they have learned from the project and how it affected their knowledge and thinking about the people and situations involved in the experience.

The Engaged Learning Division office, 918-595-8045, can also provide general information about servicelearning to students, faculty, staff, and to community partners.

## Science and Mathematics Learning Laboratories

The campus Science and Mathematics Learning Laboratories offer complete mathematical assistance to any TCC student, as well as tutoring in various science subjects as scheduled. The purposes of the labs are: 1) to continue the learning process that begins in the classroom by providing individual instruction, computer tutorial support, and access to a variety of learning tools; and 2) to provide a relaxing, friendly, and encouraging atmosphere in which to help students learn and understand mathematics. Additionally, the labs provide informal advisement on the sequence of mathematical studies. All services are free to TCC students. Students should inquire on campus regarding the location of the Science and Mathematics Learning Laboratory.

## Tutorial Assistance

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

## Online Learning

## Online Courses

The office of Online Learning supports the faculty and students of online or blended courses at TCC. For information regarding Online learning, visit www.tulsacc.edu/onlinelearning or call 918-595-8999. You can also reach us via email at onlinelearning@tulsacc.edu.

Tulsa Community College offers students the flexibility to take classes anytime day or night, seven 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.

## Blended (Hybrid) Courses

Blended courses are a combination of online coursework and in-class activities. This class format replaces some on-campus class time with Internet/online activities. For example, in a typical 16 -week 3 credit hour class, you would spend 3 hours per week attending class on campus. Blended classes provide some flexibility by reducing the number of times you attend class on campus and replacing it with online activities that you can adjust to fit your schedule. 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 but also the flexibility that online classes provide. Blended courses are offered in a variety of disciplines.

## Workforce Development and Continuing Education

## (Non-Credit Classes/Programs)

Non-Credit Continuing Education courses at TCC are offered to support life-long learning and complement 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 or attract talent.

Customized Training - TCC can customize training for your business or industry. We can help you assess your area of need and design a training program that helps take your business to the next level. Call 918-595-7200 for more information. Professional Development - TCC offers learning and development classes that serve to enhance the skill sets of your current workforce which helps you manage your talent supply chain, promote employee mobility within your company, and increase employee retention. 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 through Prior Learning Assessment (PLA) (certain requirements apply).

For further information, contact the Continuing Education Office at (918) 595-7200 or visit www.tulsacc.edu/ce

## Transfer for Four-Year Degree Completion

A principle function of Tulsa Community College is to provide general education courses and associate degrees for transfer to four-year universities. All of TCC's Associate in Arts and Associate in Science degrees are designed to transfer to other Oklahoma colleges and universities. TCC has made articulation (transfer) agreements with both public and private (in-state and out-of-state) institutions to provide many transfer options for TCC students. 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.

Degrees for which TCC has signed articulation 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. Links to transfer agreements are provided within the degree map for each Associate in Arts and Associate in Science degree within this catalog.

| Tulsa Community College Degree | Transfer Institution/Degree |
| :---: | :---: |
| Art, A.A. | Northeastern State University <br> - Art, B.F.A., Art 3D Option <br> - Art, B.F.A,. Art 2D Option <br> - Art, B.F.A., Graphic Design Option <br> - Art, B.A. Ed., Art Education |
| American Sign Language Education, A.A, Interpreter Education Option | University of Arkansas, Little Rock <br> - Interpretation: ASL/English, B.A. |
| Biology, A.S. | Northeastern State University <br> - Biology, B.S., Molecular Emphasis <br> - Biology, B.S., Organismic Emphasis <br> - Biology, B.S., Cellular Emphasis |
| Biotechnology, A.S. | Northeastern State University <br> - Biology, B.S., Molecular Emphasis Oklahoma State University |


|  | $\bullet$ |
| :--- | :---: |
|  | Plant Biology- Cell Biology \& Molecular |
| Genetics, B.S. |  |


|  | - Secondary Education, B.S., Social Studies Option |
| :---: | :---: |
| Engineering, A.S., Computer, Electrical, and Mechanical Engineering options | Oklahoma State University <br> - B.S., Mechanical Engineering |
| Mathematics, A.S. | Northeastern State University <br> - Mathematics Education, B.S. <br> - Mathematics, B.S. |
| Nursing, A.A.S. | Northeastern State University <br> - Nursing, B.S.N. |
| Physics, A.S | Oklahoma State University <br> - Physics, B.S. |
| Political Science, A.A. | Northeastern State University <br> - Political Science, B.A. |
| Psychology, A.A. | Northeastern State University <br> - Psychology, B.S. Oklahoma State University <br> - Psychology, B.A., B.S. |
| Sociology, A.A. | Northeastern State University <br> - Sociology, B.A. Oklahoma State University <br> - Applied Sociology, B.A., B.S. <br> - Sociology, B.A., B.S. |
| Theatre, A.A. | Northeastern State University <br> - Theatre, B.A. |

## TCC Institutional Learning Outcomes

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

## Communication Skills

Institutional Learning Outcome: Graduates will be able to exchange information or ideas through listening, speaking, reading, writing, and other modes of interpersonal expression.

## Critical Thinking

Institutional Learning Outcome: Graduates will be able to evaluate existing information in order to form judgments, raise new questions, and/or implement creative and effective solutions.

## Personal Responsibility

Institutional Learning Outcome: Graduates will be able to implement the skills necessary for physical, financial, mental, and/or emotional well-being.

## Social Responsibility

Institutional Learning Outcome: Graduates will be able to evaluate one's ethics and traditions in relation to others in order to respectfully interact with diverse groups.

## What is General Education?

Tulsa Community College is committed to educating students for life as well as for their future careers. General Education is the part of a college curriculum shared by all students seeking a degree, regardless of major. It provides broad exposure to multiple disciplines and forms the basis for developing important intellectual and civic competencies. These include skills such as communication, critical thinking, personal responsibility, and social responsibility.

## General Education Requirements

Students pursing an Associate in Arts or an Associate in Science must complete 37 credit hours of General Education courses. 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 $\qquad$ ENGL 1113 - Composition I, ENGL 1213 - Composition II, COMM 1113 - Public Speaking |  |
| :---: | :---: |
| U.S. History . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3 Hours |  |
| HIST 1483 - U.S. History 1492 to the Civil War Era or HIST 1493 - U.S. | - Civil War Era to the 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 | CHEM 1315-General Chemistry I (L) |
| BIOL 1114 - General Biology for Non-Majors (L) | CHEM 1415-General Chemistry II (L) |
| BIOL 1224 - Introduction to Biology for Majors (L) | CHEM 2145-Organic Chemistry I (L) |
| BIOL 1404 - General Botany (L) | CHEM 2245 - Organic Chemistry II (L) |
| BIOL 1383 - Nutrition | GEOG 1014 - Geography (Physical) (L) |
| BIOL 1604 - Zoology (L) | GEOG 2013 - Meteorology |
| BIOL 1113 - Introduction to Environmental Science | GEOL 1014 - General Geology (Physical) (L) |
| BIOL 2134 - Human Anatomy (L) | GEOL 1024 - General Geology (Historical) (L) |
| BIOL 2154 - Human Physiology (L) | GEOL 1113 - Introduction to Oceanography |
| BIOL 2164 - Microbiology (L) | PHYS 1114 - General Physics I (L) |
| BIOL 2213 - Brain and Behavior | PHYS 1214 - General Physics II (L) |
| BIOL 2313 - Principles of Ecology | PHYS 2034 - Engineering Physics I (L) |
| CHEM 1114 - Principles of Chemistry (L) | PHYS 2124 - Engineering Physics II (L) |
|  | PHSC 1114 - General Physical Science (L,N) |
| Humanities . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 6 Hours |  |
| ART 1053 - Art History Survey I (H) | HUMN 2883 - Cultural Identities and the Arts in America (H) |
| ART 1063 - Art History Survey II (H) | MUSC 1113 - Music Appreciation (H) |
| ART 1113 - Art Appreciation (H) | MUSC 1153 - American Popular Music (H) |
| COMM/BUSN 2053 - Intercultural Communication (H) (I) | NAMS 2013 - Images of Indians in American Culture (H) |
| ENGL 2413 - Introduction to Literature (H) | NAMS 2113 - Native American Cultures (H) |
| ENGL 2543 - British Literature to 1800 (H) | NAMS 2213 - Native American Spiritualities (H) |
| ENGL 2653 - British Literature from 1800 (H) | NAMS 2313 - Native American Literature, Drama, and Film (H) |
| ENGL 2773 - American Literature to 1865 (H) | PHIL 1113 - Introduction to Philosophy (H) |
| ENGL 2883 - American Literature from 1865 (H) | PHIL 1133 - Philosophy in Literature (H) |
| GEOG 1043 - Introduction to Cultural Geography (S,I,H) | PHIL 1143 - Introduction to Ethics: Business Issues (H) |
| GEOG 2033 - World Regional Geography (S,I,H) | PHIL 2133 - Introduction to Ethical Thinking (H) |
| HIST 1053 - Ancient and Medieval Western Civilization (H) | PHIL 2143 - Introduction to Social and Political Philosophy (H) |
| HIST 1063 - Modern Western Civilization (H) | PHIL 2163 - Introduction to the History and Philosophy of Science (H) |
| HIST 1073 - Twentieth Century World History (H) (I) | PHIL/SOCI 2263 - Medical Ethics (H) |
| HIST 2333 - African-American History (H) | RELG 1113 - Introduction to Religious Studies (H) |
| HUMN 2113 - Humanities I: Prehistory through the Middle Ages (H) | RELG/PHIL 1213 - Religions of the World: The Eastern Tradition (H) (I) |
| HUMN 2223 - Humanities II: From the Renaissance to the Present (H) | RELG/PHIL 1223 - Religions of the World: The Western Tradition (H) |
| HUMN 2323 - Humanities III: Early $20^{\text {th }}$ Century to the Present (H) | RELG 2113 - Old Testament (H) |
| HUMN 2333 - Humanities: Literature and Film (H) | RELG 2123 - New Testament (H) |
| HUMN 2443 - Art of Film (H) | RELG 2173 - Religion and Society (H) or SOCl 2173 |
| HUMN 2553 - Introduction to American Humanities (H) | RELG 2233 - Religion in America (H) |
| HUMN 2613 - International Film (H,I) | RELG 2243 - Christian Ethics and Social Thought (H) |
| HUMN 2663 - Hollywood's America (H) | RELG 2313 - Religion in Film (H) |
| HUMN 2773 - American Popular Culture (H) | SOCl 2123 - Introduction to Cultural Anthropology (H)(S) THEA 1093 - Introduction to Theatre (H) |
| Mathematics . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3 . 3 Hours |  |
| MATH 1473 - Quantitative Reasoning (A) | MATH 2114 - Analytic Geometry and Calculus I (A) |
| MATH 1483 - Mathematics Functions and Their Uses (A) | MATH 2124 - Analytic Geometry and Calculus II (A) |
| MATH 1513 - Precalculus I (A) | MATH 2193 - Elementary Statistics |
| MATH 1613 - Precalculus II (A) | MATH 2513 - Finite Mathematics (A) |
| MATH 1715 - Precalculus I and II (A) | MATH 2523 - Calculus for Business, Life, and Social Sciences (A) |
| Required Electives . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3 Hours |  |
| Select three (3) credit hours from courses in Fine Arts (Art, Music, Theatre) | ign Language, Psychology, or Social Sciences. |

## Recommended Electives 3 Hours

CSCI 1203 - Computer Concepts and Applications Or select three (3) credit hours from the list of Liberal Arts \& Sciences Electives.

## Liberal Arts and Science Electives

## Allied Health

ALDH 1323 - Medical Terminology
American Sign Language
ALL ASLE courses except
ASLE 1603-ASL Choir I
ASLE 2023 - ASL Choir II
ASLE 2243 - ASL Choir III
Arabic
All ARBC courses

## ART

ART 1053 - Art History Survey I (H)
ART 1063 - Art History Survey II (H)
ART 1113 - Art Appreciation (H)
ART 2053 - Art History Survey III
ART 2530 - Field Studies in Art
ART 2913 - Film/Video History and Analysis I
Astronomy
All ASTR courses
Aviation Sciences
AVST 2113 - History of Aviation
Biology
All BIOL courses
Chemistry
All CHEM courses
Chinese
All CHNS courses
College Experience
COLL 1003 - College Success

## Communications

All COMM courses
Computer Information Systems
CSCl 1203 - Computer Concepts and
Applications
Criminal Justice
CRIM 1013 - Introduction to Criminal Justice
Economics
All ECON courses
English
All ENGL courses, except zero-level courses
French
All FREN courses
Geography
All GEOG courses
Geology
All GEOL courses

CSCI 1203 - Computer Concepts and Applications
Criminal Justice
CRIM 1013 - Introduction to Criminal Justice
Economics
All ECON courses
English
All ENGL courses, except zero-level courses
French
All FREN courses

## Geography

Geology
All GEOL courses

## German

All GRMN courses

## Greek

All GREE courses
Health \& Human Performance
HHPE 1143 - Foundations of Physical Education
HHPE 2263 - Principles in Health Education and
Health Promotion
HHPE 2603 - Total Wellness
HHPE 2653 - Applied Anatomy and Kinesiology
Hebrew
All HEBR courses
History
All HIST courses
Human Services
All HSVC courses
Humanities
All HUMN courses
Interpreter Education
All INED courses
Italian
All ITAL courses
Japanese
All JAPN courses
Latin
All LATN courses
Management
MGMT 2123 - Leadership Development
MGMT 2323 - Organizational Behavior
Mass Communication
MCOM 1013 - Introduction to Mass
Communication
MCOM 1103 - Introduction to Broadcasting
MCOM 1113 - Writing for the Mass Media

## Mathematics

All MATH courses, except zero-level courses
Music
MUSC 2133 - Introduction to the History and
Literature of Music
MUSC 2013 - Music Theory III
MUSC 2023 - Music Theory IV
MUSC 2062 - Aural Theory III
MUSC 2072 - Aural Theory IV
MUSC 1002 - Fundamentals of Music
MUSC 1013 - Music Theory I
MUSC 1023 - Music Theory II
MUSC 1062 - Aural Theory I
MUSC 1072 - Aural Theory II
MUSC 1113 - Music Appreciation (H)
MUSC 1153 - American Popular Music (H)
Native American Studies
All NAMS courses

## Liberal Arts and Sciences <br> Electives Continued

Philosophy
All PHIL courses
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 SOCl courses
Spanish
All SPAN courses
Theatre
THEA 1053 - Acting I
THEA 1093 - Introduction to Theatre (H)
THEA 1563 - Musical Theatre
THEA 2053 - Acting II
THEA 2313 - Voice and Diction I
THEA 2453 - Scriptwriting I
THEA 2553 - Scriptwriting II
General Education Requirements
View the list of courses that fulfill General Education Requirements.

## Business and IT Courses

Accounting<br>All ACCT courses<br>Business<br>All BUSN classes<br>\section*{Computer Information Systems}<br>ALL CSCI and CSYS courses<br>\section*{Economics}<br>All ECON courses<br>Human Resources<br>All HRES courses<br>\section*{Management}<br>All MGMT courses<br>\section*{Marketing}<br>All MKTG courses<br>\section*{Mathematics}<br>MATH 1613 - Precalculus II (A)<br>MATH 2114 - Analytic Geometry and Calculus I (A)<br>MATH 2124 - Analytic Geometry and Calculus II (A)<br>MATH 2193 - Elementary Statistics<br>MATH 2513 - Finite Mathematics<br>MATH 2523 - Calculus for Business, Life, and Social Sciences

## Academic Programs

## Accounting AAS, Accounting Software Application Specialist Option

## 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, 30 of which are in accounting.

## Degree Requirements

## General Education Requirements Credit Hours: 18

## Economics 3 hours

- ECON 2013 - Principles of Macroeconomics (S)


## English 6 hours

- ENGL 1113 - Composition I and select one course from the following:
- ENGL 2343 - Business Communication I
- ENGL 1213 - Composition II
- ENGL 2333 - Technical/Professional Writing

History and Political Science 6 hours

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


## Mathematics 3 hours

- MATH 1513 - Precalculus I (A)

Specialized Course Requirements Credit Hours: 42

## Accounting 30 hours

- ACCT 2213 - Financial Accounting
- ACCT 2223 - Managerial Accounting
- ACCT 2243 - Payroll Administration
- ACCT 2253 - Sage 50
- ACCT 2263 - Quickbooks Pro - Comprehensive
- ACCT 2363 - Income Tax I
- ACCT 2393 - Accounting Information Systems
- ACCT 2433 - Computerized Business Income Tax
- ACCT 2523 - Accounting Capstone
- ACCT 2563-Accounting Internship

Computer Information Systems 9 hours

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

Controlled Electives 3 hours
Select one course from the following:

- DGMD 1103 - Adobe Acrobat
- PHIL 1143 - Introduction to Ethics: Business Issues (H)

Total Credit Hours: 60

## Accounting AAS, Accounting Specialist Option

## 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 30 are in accounting.

## Degree Requirements

General Education Requirements Credit Hours: 18

## Economics 3 hours

- ECON 2013 - Principles of Macroeconomics (S)


## 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

History and Political Science 6 hours

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


## Mathematics 3 hours

- MATH 1513 - Precalculus I (A)
(Recommend taking first term)
Specialized Course Requirements Credit Hours: 42


## Accounting $\mathbf{3 0}$ hours

- ACCT 2213 - Financial Accounting
- ACCT 2223 - Managerial Accounting
- ACCT 2243 - Payroll Administration
- ACCT 2313 - Intermediate Accounting I
- ACCT 2323 - Intermediate Accounting II
- ACCT 2333 - Cost Accounting
- ACCT 2363 - Income Tax I
- ACCT 2393 - Accounting Information Systems
- ACCT 2403 - Income Tax II
- ACCT 2523 - Accounting Capstone

Computer Information Systems 9 hours

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


## Controlled Elective 3 hours

Select one course from the following:

- DGMD 1103 - Adobe Acrobat
- PHIL 1143 - Introduction to Ethics: Business Issues (H)

Total Credit Hours: 60

## Accounting Certificate, Accounting Assistant Option

## Program Description

This program is designed to develop the marketable skills necessary to function in the field of accounting. The program provides entry-level training for those individuals interested in the area of accounting. It also provides training for those who need basic accounting computer knowledge for effective small business operations. The Certificate requires a total of 27 hours, including nine (9) hours in accounting.

## Certificate Requirements

## Accounting 9 hours

- ACCT 2213 - Financial Accounting
- ACCT 2223 - Managerial Accounting
- ACCT 2523 - Accounting Capstone

Computer Information Systems 9 hours

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


## English 6 hours

- ENGL 1113 - Composition I
- ENGL 2343 - Business Communication I


## Controlled Electives 3 hours

Select one course from the following:

- PHIL 1143 - Introduction to Ethics: Business Issues (H)

Total Credit Hours: 27

## Accounting Certificate, Accounting Software Application Specialist Option

## Program Description

This program is designed to develop marketable skills in accounting software and computer applications while providing upgraded training for those individuals already employed in the area of accounting who desire advancement. It also provides training in accounting and computer software to provide knowledge for effective small business operations for business owners, managers and employees. The certificate requires a total of 30 credit hours, including 21 hours in accounting.

## Certificate Requirements

## Accounting 21 hours

- ACCT 2213 - Financial Accounting
- ACCT 2223 - Managerial Accounting
- ACCT 2243 - Payroll Administration
- ACCT 2253 - Sage 50
- ACCT 2263 - Quickbooks Pro - Comprehensive
- ACCT 2433 - Computerized Business Income Tax
- ACCT 2523-Accounting Capstone

Computer Information Systems 9 hours

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

Total Credit Hours: 30

## Accounting Certificate, Accounting Specialist Option

## Program Description

This program is designed to develop the marketable skills necessary to function in the field of accounting while providing upgraded training for those individuals already employed in the area of accounting who desire advancement. It also provides basic accounting knowledge for effective small business operations for business owners, managers and employees. The certificate requires a total of 30 credit hours, including 21 hours in accounting.

## Certificate Requirements

## Accounting 21 hours

- ACCT 2213 - Financial Accounting
- ACCT 2223 - Managerial Accounting
- ACCT 2313 - Intermediate Accounting I
- ACCT 2323 - Intermediate Accounting II
- ACCT 2333 - Cost Accounting
- 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

Total Credit Hours: 30

## Accounting Certificate, Income Tax Specialist Option

## Program Description

This program is designed to develop the marketable accounting skills necessary to work in the area of income tax and provides upgraded training for those people already employed in the area of accounting or taxation who desire career advancement. It also provides basic accounting or taxation knowledge for effective small business operations for business owners, managers, or employees. The certificate requires a total of 24 credit hours, including 15 in accounting, with nine (9) hours specific to taxation.

## Certificate Requirements

## Accounting 15 hours

- ACCT 2213 - Financial Accounting
- ACCT 2223 - Managerial Accounting
- ACCT 2363 - Income Tax I
- ACCT 2403 - Income Tax II
- ACCT 2433 - Computerized Business Income Tax

Computer Information Systems 9 hours

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


## Total Credit Hours: 24

## Accounting Certificate, Payroll Administration Specialist Option

## Program Description

This program is designed to develop the marketable accounting skills necessary to work in the field of payroll administration while providing upgraded training for individuals already employed in the area of accounting or payroll who desire career advancement. It also provides basic accounting and payroll knowledge to business owners, managers, or employees needed for effective small business operations. The certificate requires a total of 21 credit hours, including 12 hours in accounting.

## Certificate Requirements

## Accounting 12 hours

- ACCT 2213 - Financial Accounting
- ACCT 2223 - Managerial Accounting
- ACCT 2243 - Payroll Administration
- ACCT 2393 - Accounting Information Systems


## Computer Information Systems 9 hours

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

Total Credit Hours: 21

## Air Traffic Control AAS Program Description

This program provides training in the application of tower and terminal radar approach control procedures. The curriculum is provided through the 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.

The program goal is to prepare graduates to successfully complete training at the FAA Mike Monroney Aeronautical Center. Applicants seeking employment positions as FAA air traffic controllers in the National Airspace System must successfully complete all training criteria administered by the FAA Mike Monroney Aeronautical Center.

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 Requirements

## 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 (S)

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 - Precalculus I (A)

History and Political Science 6 hours

- POLS 1113 - American Federal Government and select one course from the following:
- HIST 1483 - U.S. History 1492 to the Civil War Era
- HIST 1493-U.S. History - Civil War Era to the Present
Specialized Course Requirements Hours: 42


## Aviation Sciences Technology 42 hours

- AVST 1113 - Private Pilot Ground School
- AVST 1232 - ATC 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 - ATC Enroute and Nonradar
- AVST 2273 - Air Traffic Control Career Prep

Total Credit Hours: 60

## Aircraft Dispatch Certificate

## Program Description

This certificate 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 prior to being awarded permission into the next sequential course.

## Procedures for enrolling in Aviation courses:

1. All prospective students must meet with the TCC aviation academic counselor at the Riverside Community Campus and Aviation Center located at 112 W. Beechcraft Drive. Contact: 918-5953718.
2. Potential Aircraft Dispatch students must provide proof of U.S. citizenship or permanent resident status to the TCC aviation academic counselor in the 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.

## Certificate Requirements

## 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

## American Sign Language Education AA, ASL Studies Option

## 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 Requirements

## General Education Requirements Credit Hours: 33-34

## English 6 hours

- ENGL 1113 -Composition I
- ENGL 1213 - Composition II


## History and Political Science 6 hours

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


## Humanities 6 hours

- ART 1113 - Art Appreciation (H)
- ENGL 2413 - Introduction to Literature (H)

Mathematics 3 hours

- MATH 1473 - Quantitative Reasoning (A) or higher level General Education Math


## Science 7 hours

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


## General Education Controlled Electives 5-6 hours

Select 5-6 credit hours from the following:

- CSCI 1203 - Computer Concepts and Applications
- Courses from the Liberal Arts \& Sciences Electives.


## 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
- DGMD 2333 - Digital Video I/Final Cut Pro


## Geography 3 hours

- GEOG 1043 - Introduction to Cultural Geography (S,I,H)

Philosophy 3 hours

- PHIL 2143 - Introduction to Social and Political Philosophy (H)

Total Credit Hours: 60-61

## American Sign Language Education AA, Deaf Education Option

## Program Description

The Deaf Education program 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 Requirements

## General Education Requirements Credit Hours: 34 <br> English 6 hours

- ENGL 1113 - Composition I
- ENGL 1213 - Composition II

History and Political Science 6 hours

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


## Humanities 6 hours

- ART 1113 - Art Appreciation (H)
- ENGL 2413 - Introduction to Literature (H)


## Mathematics 3 hours

- MATH 1473 - Quantitative Reasoning (A) or higher level General Education Math


## Science 7 hours

- BIOL 1114 - General Biology for Non-Majors (L)
- Select three (3) credit hours from courses that will transfer to the college/university you plan to attend. See General Education Requirements for the course list.
General Education Controlled Electives 6 hours
Select from the following for a total of six (6) credit hours:
- CSCI 1203 - Computer Concepts and Applications
- Courses from the 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 (S)
- PSYC 2023 - Developmental Psychology

Total Credit Hours: 60

## American Sign Language Education AA, Interpreter Education Option

## Program Description

American Sign Language/English interpreters facilitate communication between two languages and cultures in a multitude of settings. Through the Interpreter Education option at Tulsa Community students gain basic knowledge and skills 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 theories and processes of interpreting. This option complements upper division coursework related to ASL/English interpreting at four-year university.

## Degree Requirements

## General Education Requirements Credit Hours: 28

(Additional General Education Requirements are satisfied through Specialized Course Requirements.)

## English 6 hours

- ENGL 1113 -Composition I
- ENGL 1213 - Composition II


## History and Political Science 6 hours

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


## Humanities 6 hours

- HUMN 2113 - Humanities I: Prehistory through the Middle Ages (H)
- HUMN 2223 - Humanities II: Renaissance to the Early 20th Century (H)

Mathematics 3 hours

- MATH 1473 - Quantitative Reasoning (A) or higher level General Education Math


## Science 7 hours

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


## Specialized Course Requirements Credit Hours: 41 hours <br> 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 - American Sign Language to English Interpreting I
- INED 2233 - American Sign Language 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

## American Sign Language Education AA, Services to the Deaf Option

## Program Description

The Services to the Deaf program 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 Requirements

## General Education Requirements Credit Hours: 34

(Additional General Education Requirements are satisfied through Specialized Course Requirements.)

## Communication 9 hours

- COMM 1113 - Public Speaking
- ENGL 1113 - Composition I
- ENGL 1213 - Composition II


## Computer Science 3 hours

- CSCI 1203 - Computer Concepts and Applications

History and Political Science 6 hours

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

Humanities 6 hours

- HIST 1063 - Modern Western Civilization (H)
- Select three (3) credit hours from Humanities courses listed in the General Education Requirements.

Mathematics 3 hours

- MATH 1473 - Quantitative Reasoning (A) Other higher level Math course substitutions may be permitted for college transfer. Select a course for transfer to the college/university you plan to attend.


## Science 7 hours

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


## 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 (S)
- SOCI 1113 - Introduction to Sociology (S)

Human Services 6 hours

- HSVC 1213 - Basic Counseling Skills
- HSVC 2003 - Family Relationships

Total Credit Hours: 63

## American Sign Language, Interpreter Education Certificate

## Program Description

American Sign Language/English interpreters facilitate communication between two languages and cultures in a multitude of settings. Through the Interpreter Education option at Tulsa Community students gain basic knowledge and skills 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 theories and processes of interpreting.

## Certificate Requirements

## 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 - American Sign Language to English Interpreting I
- INED 2233 - American Sign Language 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

## Applied Technology, AAS

## Program Description

The AAS Applied Technology is geared for economic development in the institution's service area. This workforce degree program is designed to provide students who have obtained working knowledge, skills, and competencies through the OK Career Tech system an opportunity to complete an individualized program of study to fulfill a unique career goal by combining general education with specific technical knowledge and skills in preparation for employment or career advancement. Click here to see if your OK Career Tech program qualifies.

## General Education Requirements Credit Hours: 18

## Communication 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


## History and Political Science 6 hours

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


## General Education Recommended Electives 6 hours

Select (6) credit hours from Liberal Arts \& Sciences Electives
Specialized Course Requirements Credit Hours: 42
Technical Block Credit: 6-42 hours. Click here to see if your OK Career Tech program qualifies
Additional specialized credit hours can be taken from the following TCC course disciplines to complete the 42 hour requirement:
ENGT, QCTT, DRFT, ELET, DGMD, BUSN, ACCT, MGMT, MKTG, HRES, GIS, BMET, CSCI, CSYS, ITCV, INTD, AVST, BIOT, HITC, FEMS, EMSP.

Total Credit Hours: 60

## Art AA

## Program Description

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 Requirements

## General Education Requirements Credit Hours: 34

## Communication 9 hours

- COMM 1113 - Public Speaking
- ENGL 1113 - Composition I
- ENGL 1213 - Composition II


## History and Political Science 6 hours

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


## Humanities 6 hours

- See the General Education Requirements for the course list. ART 1063 - Art History Survey II (H) Preferred


## Mathematics 3 hours

- MATH 1473 - Quantitative Reasoning (A) or higher level General Education Math


## Science 7 hours

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


## General Education 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


## Specialized Course Requirements Credit Hours: 27

## Art Core Curriculum 21 hours

- ART 1013 - Art Foundations: 2-D Design
- ART 1023-Painting I
- ART 1053 - Art History Survey I (H)
- ART 1083-Art: Foundations: 3-D Design
- ART 1123 - Drawing I
- ART 2083 - Sculpture I
- ART 2503 - Professional Practice


## Art Controlled Electives 6 hours

- ART 1033 - Painting II
- ART 1133 - Drawing II
- ART 2063 - Watercolor I
- ART 2073 - Watercolor II
- 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 - Metal Arts and Jewelry I
- ART 2323 - Metal Arts and Jewelry II
- ART 2543 - Introduction to Glassblowing
- ART 2853 - Photography

Total Credit Hours: 61

## Aviation Sciences Technology AAS, Professional Pilot Option

## Program Description

At the TCC Aviation Center Campus, the Aviation Sciences Technology AAS, Professional Pilot Option degree program combines flight training with academic study to provide a firm foundation in commercial aviation for a career as an Airline Transport Pilot. The curriculum includes preparation for certification as a single-engine commercial pilot with multi-engine additional rating and flight instructor certification. Our fleet includes Cessna 172 and Piper Seminole PA44-180 G1000 avionics equipped aircraft.
The curriculum provides skills in mathematics, physics, communications, and aeronautics, including preparation for pilot and instructor certifications. Critical-thinking and problem-solving skills are developed via Advanced Aviation Training Device (AATD) simulations, navigation, and aircraft systems operation. Effective resource management, human factors, teamwork, and safety awareness are constantly emphasized throughout the curriculum. The TCC flight program is a Federal Aviation Administration (FAA) Part 141 approved pilot flight school.

## Degree Requirements

The Associate of Applied Science degree in Aviation Science may be attained in five semesters. However, applicants are encouraged to work through their Flight Labs over the entire summer to lessen the semester time-line duration for completion. To earn the degree, successful completion of a minimum of 60 credit hours is required. The purpose of the Professional Pilot option degree program is to prepare the graduate for a productive career as a professional airline pilot. Students must earn the Private Pilot, Instrument Rating, Commercial Pilot, and Flight Instructor certificates and ratings in addition to completing all other academic requirements.

## FAA Exemption for the Restricted Airline Transport Pilot Certificate

Upon completion or all degree requirements, the TCC Professional Pilot option degree can qualify a graduate for the Restricted Airline Transport Pilot (R-ATP) certificate under FAR 61.160. Note that satisfying the A.A.S. degree requirements alone may not qualify the graduate for the R-ATP. This is a FAA exemption to the regulations and subject to change. For detailed information, please contact the TCC Aviation Chief Flight Instructor.

## Professional Flight Training at Tulsa Community College

Flight training is a continuous process that normally begins sometime during the student's first year of attendance and will progress until culminating with meeting requirements to obtain a flight instructor certificate. The curriculum is designed to allow students to meet core objectives in a reasonable amount of time.
Various factors influence students' progress. These factors include student academic preparation, student availability, student determination and dedication, the availability of aircraft and instructor pilots, and the cooperation of the weather. Consequently, some students will finish before others. After completing the core curriculum, students may take an additional semester or more to acquire additional advanced certificates and ratings.
Refer to the Chief Flight Instructor and Aviation Advisors for academic credit for flight training at other institutions. After matriculation to TCC, all flight training must be completed at the TCC Aviation Center to earn the Aviation Science - Professional Pilot option degree.

## Program Flight Training Fees

Aircraft Rental Rates
Cessna 172S $\$ 189.00 /$ Hour
Cessna 172RG \$189.00/Hour
Piper PA-44-180 \$320.00/Hour
Solo 172S \$164.00/Hour

Training Devices
RedBird FMX AATD \$95.00/Hour
RedBird XWIND \$45.00/Hour
Additional pre/post flight and Oral Briefings rates apply $\$ 45.00 /$ Hour

## 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

History and Political Science 6 hours

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

Mathematics 3 hours

- MATH 1473 - Quantitative Reasoning (A)
or
- MATH 1513-Precalculus I (A)

Social Science 3 hours

- PSYC 1113 - Introduction to Psychology (S)
or
- SOCI 1113 - Introduction to Sociology (S)

Specialized Course Requirements Credit Hours: 42

## Aviation Sciences Technology 42 hours

All students who are not U.S. Citizens must meet all Transportation Safety Administration clearance requirements before being enrolled in the aviation courses.

- 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 2162 - Commercial Cross-Country Flight Lab
- AVST 2181 - Flight Certification Training
- AVST 2182 - Commercial Flight Lab
- AVST 2213 - Instrument Pilot Ground School
- AVST 2253 - Aviation Meteorology
- AVST 2283 - Aviation Human Factors
- AVST 2313 - Commercial Pilot Ground School
- AVST 2343 - Flight Instructor Pilot Ground School
- AVST 2413 - Aircraft Dispatch I
- AVST 2442 - Flight Instructor Pilot Flight Lab
- AVST 2454 - Aircraft Dispatch II

Total Credit Hours: 60
${ }^{* *}$ May be required for an Airline Transport Pilot Certificate with Reduced Aeronautical Experience authorization. See TCC Aviation Academic Counselor for more information.

## Aviation Sciences Technology, Commercial Pilot Certificate

## Program Description

The Commercial Pilot Certificate program will prepare the applicant with the required flight and ground training necessary to be eligible to test for a Federal Aviation Administration Commercial Pilot Certificate. The 7-credit hour program consists of three courses: AVST 2162 Commercial Cross-Country Flight Lab, AVST 2182 Commercial Flight Lab, and AVST 2313 Commercial Pilot Ground School. Must possess an FAA Private Pilot Certificate with an Instrument Rating.

## Certificate Requirements

## Aviation Sciences Technology 7 Hours

- AVST 2162 - Commercial Cross-Country Flight Lab
- AVST 2182 - Commercial Flight Lab
- AVST 2313 - Commercial Pilot Ground School

Total Credit Hours: 7

## Aviation Sciences Technology, Flight Instructor Certificate

## Program Description

The Flight Instructor Certificate program will prepare the applicant with the required flight and ground training necessary to be eligible to test for a Federal Aviation Administration Certified Flight Instructor Pilot Certificate. The 5-credit hour program consists of two courses: AVST 2442 Flight Instructor Pilot Flight Lab and AVST 2343 Flight Instructor Pilot Ground School. Must possess an FAA Commercial Pilot

## Certificate Requirements

## Aviation Sciences Technology 5 Hours

- AVST 2343 - Flight Instructor Pilot Ground School
- AVST 2442 - Flight Instructor Pilot Flight Lab Total Credit Hours: 5


## Aviation Sciences Technology, Private Pilot Certificate

## Program Description

The Private Pilot Certificate program will prepare the applicant with the required flight and ground training necessary to be eligible to test for a Federal Aviation Administration Private Pilot Certificate. The 5-credit hour program consists of two courses: AVST 1113 Private Pilot Ground School and AVST 1222 Private Pilot Flight Lab.

## Certificate Requirements

## Aviation Sciences Technology 5 Hours

- AVST 1113 - Private Pilot Ground School
- AVST 1222 - Private Pilot Flight Lab


## Total Credit Hours: 5

## Biology AS

## 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 technical fields in Allied Health.

## Degree Requirements

General Education Requirements Credit Hours: 30-31
Communication 9 hours

- COMM 1113 - Public Speaking
- ENGL 1113-Composition I
- ENGL 1213 - Composition II

History and Political Science 6 hours

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


## Humanities 6 Hours

Suggested Humanities courses below. Students are not limited to choosing from these courses. Additional Humanities courses are listed in the General Education Requirements.

- ART 1113 - Art Appreciation (H)
- GEOG 2033 - World Regional Geography (S,I,H)
- HIST 1053 - Ancient and Medieval Western Civilization (H)
- HUMN 2113 - Humanities I: Prehistory through the Middle Ages (H)
- HUMN 2223 - Humanities II: Renaissance to the Early 20th Century (H)
- HUMN 2333 - Humanities: Literature and Film (H)
- HUMN 2443 - Art of Film (H)
- MUSC 1113 - Music Appreciation (H)
- NAMS 2113 - Native American Cultures (H)
- PHIL 2133 - Introduction to Ethical Thinking (H)
- PHIL 2163 - Introduction to the History and Philosophy of Science (H)
- RELG 2173 - Religion and Society (H)
- SOCI 2123 - Introduction to Cultural Anthropology (H) (S)


## Mathematics 3 hours

Select one course from the following:

- MATH 1513-Precalculus I (A)
- MATH 1613 - Precalculus II (A)
- MATH 1715 - Precalculus I and II (A)
- MATH 2114 - Analytic Geometry and Calculus I (A)


## General Education Recommended Electives 3-4 hours

Students should select courses that will transfer to the college/university they plan to attend.
General Education Required Electives 3 hours

- Select three (3) credit hours from courses in Fine Arts (Art, Music, Theatre), Foreign Language, Psychology, or Social Sciences. If intended transfer is into a preprofessional health program, PSYC 1113 is strongly recommended.


## Specialized Course Requirements Credit :29-30

Biology 15-16 hours

- BIOL 1224 - Introduction to Biology for Majors (L)
- BIOL 2164 - Microbiology (L) and select 7-8 hours from the following courses that will transfer to the college/university you plan to attend:
- BIOL 1113 - Introduction to Environmental Science
- BIOL 1404 - General Botany (L)
- BIOL 1604 - Zoology (L)
- BIOL 2134 - Human Anatomy (L)
- BIOL 2154 - Human Physiology (L)
- BIOL 2313 - Principles of Ecology


## Chemistry 10 hours

- CHEM 1315-General Chemistry I (L)
- CHEM 1415-General Chemistry II (L)


## Physics 4 hours

- PHYS 1114 - General Physics I (L)


## Additional Recommended Courses

(Not required for degree. Three credit hours may be utilized for General Education Recommended Electives.)

- CHEM 2145 - Organic Chemistry I (L) +
- CHEM 2245 - Organic Chemistry II (L) +
- CSCI 1203 - Computer Concepts and Applications
- MATH 2193 - Elementary Statistics
- PHYS 1214 - General Physics II (L)
- PSYC 1113 - Introduction to Psychology + +Courses highly recommended for transfer to baccalaureate programs.


## Total Credit Hours 60

## Biotechnology AS

## Program Description

Students will be educated in the fundamentals of biology, chemistry and biochemistry with heavy emphasis on a wide range of laboratory procedures. Lab safety, protein isolation and separation techniques, cell culture, molecular biology and recombinant DNA will be covered. Quality control will be addressed as it applies to both a manufacturing and research environment.

## Degree Requirements

## 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


## History and Political Science 6 hours

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


## Humanities 6 hours

- See the General Education Requirements for the course list.
- PHIL 2263 - Medical Ethics (H) is recommended


## Mathematics 3 hours

- MATH 1513 - Precalculus I (A)


## General Education Required Electives 3 hours

- Select three (3) credit hours from courses in Fine Arts (Art, Music, Theatre), Foreign Language, Psychology, or Social Sciences.
Specialized Course Requirements Credit Hours: 38
Courses must be completed with a " C " or better


## Biology 8 hours

- BIOL 1224 - Introduction to Biology for Majors (L)
- BIOL 2164 - Microbiology (L)

Biotechnology 15 hours

- BIOT 1113 - Introduction to Biotechnology
- BIOT 1533-Cell Culture Techniques
- BIOT 2245 - Molecular Biology and Techniques
- BIOT 2334 - Biotechnology Proteomics and Instrumentation


## Chemistry 10 hours

- CHEM 1315 - General Chemistry I (L)
- CHEM 1415-General Chemistry II (L)

Controlled Electives 3-5 hours

- BIOL 2134 - Human Anatomy (L)
- BIOL 2154 - Human Physiology (L)
- BIOL 1113 - Introduction to Environmental Science
- BIOL 1404 - General Botany (L)
- BIOL 1604 - Zoology (L)
- BIOT 2513 - Biotechnology Apprenticeship
- CHEM 2145 - Organic Chemistry I (L)
- PHYS 1114 - General Physics I (L)

Total Credit Hours: 60-62

## Business Administration AS

## Program Description

This program is designed to provide students with a fundamental understanding of the core concepts in Accounting, Economics, and Business Management as a foundation for further study in a related
field. Students will develop the skills and knowledge necessary to think critically, analyze quantitatively, and communicate effectively about the social, political, and economic environments in which organizations operate.

General Education Requirements Credit Hours: 33
(Additional General Education requirements satisfied through Specialized Course Requirements.)
Communication 9 hours

- COMM 1113 - Public Speaking
- ENGL 1113 - Composition I
- ENGL 1213 - Composition II


## History and Political Science 6 hours

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


## Humanities 6 hours

- See the General Education Requirements for the course list. Select courses that will transfer to the college/university you plan to attend.


## Mathematics 3 hours

- MATH 1483 - Mathematics Functions and Their Uses (A)


## Science 7 hours

See the General Education Requirements for the course list. One course must be a laboratory (L) science. Select courses that will transfer to the college/university you plan to attend.

## General Education Recommended Electives 2 hours

Select courses from the list of Liberal Arts \& Sciences Electives that will transfer to the college/university you plan to attend.

## Specialized Course Requirements Credit Hours: 27

## Accounting 6 hours

- ACCT 2213 - Financial Accounting
- ACCT 2223 - Managerial Accounting


## Business 6 hours

- BUSN 1053-Introduction to Business
- BUSN 2433 - Introduction to Entrepreneurship

Computer Information Systems 3 hours

- CSCI 1203 - Computer Concepts and Applications


## Economics 6 hours

- ECON 2013 - Principles of Macroeconomics (S)
- ECON 2023 - Principles of Microeconomics (S)


## Controlled Electives 6 hours

Select two Business and IT courses or upper level Math courses that will transfer to the college/university you plan to attend. See Business and IT Courses for the complete course list.

Total Credit Hours: 60

## Business Certificate

## Program Description

The Business workforce development certificate provides foundational knowledge in computer skills and business concepts in a variety of work settings while preparing the student for further study in Business Administration. This credential demonstrates a commitment to the study of Business to current or prospective employers. Furthermore, students will earn 18 credit hours toward an Associate in Applied Science degree in Business.

## Certificate Requirements

## Business 6 hours

- BUSN 1053-Introduction to Business
- BUSN 1353 - Business Mathematics

Computer Information Systems 3 hours

- CSCI 1203 - Computer Concepts and Applications


## Human Resources 3 hours

- HRES 2113 - Principles of Human Resources

Management 3 Hours

- MGMT 2363 - Principles of Management

Marketing 3 Hours

- MKTG 2423 - Principles of Marketing

Controlled Electives 6 hours

## Choose an area of Emphasis

Retail Management

- MKTG 2453 - Retail Management
- MKTG 2433 - Product Innovation and Creativity Small Business Management
- MGMT 2323-Organizational Behavior
- BUSN 2433 - Introduction to Entrepreneurship

Total Credit Hours: 24

## Business Computer User Certificate

## Program Description

This certificate 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.

## Certificate Requirements

## Computer Information Systems 6 hours

- CSCI 1203 - Computer Concepts and Applications
- CSYS 2073-MS Office

Total Credit Hours: 6

## Cardiovascular Technology AAS

## 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.

## Admission to the Program

## Program Application Instructions

1. All prospective Cardiovascular Technology students who have not been enrolled at TCC within the past year must complete an application for admission to the College and submit their high school transcripts, ACT scores, and previous college transcripts to the Metro Campus Student Completion Services office at 909 South Boston, Tulsa, OK 74119. Incomplete submissions will not be considered for admission into the Cardiovascular Technology Program. Admission to Tulsa Community College does not guarantee admission to the Cardiovascular Technology Program.
2. Applications to the Cardiovascular Technology program must be completed online at tulsacc.edu/ApplyAlliedHealth by February 1 each year for fall admission. For more information, contact the Allied Health department office at (918) 595-7002.
3. A selection committee will review all applications and eligible applicants will be granted an interview with the Cardiovascular Technology Program admissions committee.
4. Qualified students will be ranked based on admission requirements and awarded admission to the program accordingly. All interviewed applicants will be notified by email regarding their selection.

## Program Admission Requirements

- Minimum overall GPA of 2.0 for all prior high school and college coursework.
- Successful completion of ALDH 1323 Medical Terminology and BIOL 1314 Human Anatomy and Physiology.
- Student must be able to travel to local and distant clinical sites.
- 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 students participating in clinicals are required to complete these background checks, immunizations, and a drug screening test by the Department of Allied Health 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.


## English Language Proficiency

An official iBT® TOEFL (internet-based Test of English as a Foreign Language) test score or an IELTS (International English Language Testing System) Band score is required as proof of English proficiency for any International student for whom English is a second language who is applying to any Tulsa Community College health sciences program. Students who have graduated from a U.S. high school will not be required to take the iBT Toefl or IELTS tests. Your scores must be current within 2 years of the semester for which you are applying.

For health sciences students, the minimum sub-scores on the internet based TOEFL (iBT®) are 21 for Writing; 24 for Speaking; 20 for Reading; and 20 for Listening, with a total minimum score of 85.

For students choosing the IELTS test, acceptable scores include: 6.5 for Reading; 6.5 for listening; 7.5 for Speaking; and 6 for Writing, for a total IELTS Bans score of 6.5 . These required minimum scores must be met for each of the four sub-tests on a single exam. A total score that does not meet the sub-score minimums does not meet the requirement. Exceptions to this policy may be considered on an individual basis.

Students must go to www.ets.org/toefl to find a TOEFL iBT testing site, register and pay for the test. Students may go to www.ielts.org/us to find an IELTS testing center and register and pay for the test. Both tests cost approximately $\$ 190$. Students are highly encouraged to take practice tests to prepare for these important tests. Your official scores, including ALL Sub-scores, must be sent directly to the TCC Registrar's Office.

Contact Information Program Director Julie Hall, BSIS, RT, RCIS 918-595-2065 julie.hall5@tulsacc.edu Additional Information Available

## Degree Requirements

## General Education Requirements Credit Hours: 21

## Communication 9 hours

- COMM 1113 - Public Speaking
- ENGL 1113-Composition I
- ENGL 1213 - Composition II


## History and Political Science 6 hours

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


## Mathematics 3 hours

- MATH 1473-Quantitative Reasoning (A)

Psychology 3 hours

- PSYC 1113 - Introduction to Psychology (S)


## Specialized Course Requirements Credit Hours: 43

## Allied Health 3 hours

- ALDH 1323 - Medical Terminology (Course is a prerequisite for program admission.)


## Biology 4 hours

- BIOL 1314 - Human Anatomy and Physiology (Course is a prerequisite for program admission.)


## 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
- CVTC 1044 - 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: 64

## Chemistry AS

## 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 Requirements

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


## History and Political Science 6 hours

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


## Humanities 6 Hours

- See the General Education Requirements for the course list.

General Education Recommended Electives 3 hours
Select three (3) credit hours from Liberal Arts \& Sciences Electives.
General Education Required Electives 3 hours
Select three (3) credit hours from courses in Fine Arts (Art, Music, Theatre), Foreign Language, Psychology, or Social Sciences.

## Specialized Course Requirements Credit Hours: 33-37

## Chemistry 20 hours

- CHEM 1315-General Chemistry I (L)
- CHEM 1415-General Chemistry II (L)
- CHEM 2145 - Organic Chemistry I (L)
- CHEM 2245 - Organic Chemistry II (L)


## Mathematics 5-9 hours

- MATH 1513 - Precalculus I (A)
- MATH 1613 - Precalculus II (A)
- MATH 1715 - Precalculus I and II (A)
- MATH 2114 - Analytic Geometry and Calculus I (A)
- MATH 2124 - Analytic Geometry and Calculus II (A)
- MATH 2134 - Analytic Geometry and Calculus III


## Physics 8 hours

- PHYS 1114 - General Physics I (L) and
- PHYS 1214-General Physics II (L)
- OR -
- PHYS 2034 - Physics I with Calculus (L) and
- PHYS 2124 - Physics II with Calculus (L)

Total Credit Hours: 60-64

## Child Development AAS, Early Childhood Option

## Program Description

The Child Development academic program at Tulsa Community College is accredited by the National Association for the Education of Young Children (NAEYC) Early Childhood Associate Degree Accreditation (ECADA) program.
This degree is for students choosing a career in programs providing services to children and families. This is a workforce degree and does not transfer to a Bachelor's level program. The two-year Associate of Applied Science degree program in Child Development will prepare students to work with young children from birth through eight years of age in a variety of settings including child care centers, family child care settings, preschools, Head Start programs, school age programs, and home visiting and parent education programs. Students will complete 18 hours of General Education courses and 36 hours of Child Development courses, with 6 elective hours.

Note: Tulsa Community College's Child Development academic program requires that all child development students enrolling in a child development laboratory or teaching methodology 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 School of Education and Child Development office (L 144).

## Degree Requirements

## General Education Requirements Credit Hours: 18

## Communication 3 hours

Select one course from the following:

- COMM 1113 - Public Speaking
- COMM 2103 - Interpersonal Communication


## English 9 hours

- ENGL 1113-Composition I
- ENGL 1213-Composition II
- ENGL 2413 - Introduction to Literature (H)

History and Political Science 6 hours

- POLS 1113 - American Federal Government and select one course from the following:
- HIST 1483 - U.S. History 1492 to the Civil War Era
- HIST 1493 - U.S. History - Civil War Era to the Present
Specialized Course Requirements Credit Hours:


## 42

Child Development 36 hours
Courses must be completed with a " C " or better.

- 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 2413 - Professionalism \& Leadership in Early Care \& Education
- CHLD 2513 - Programming for Infants and Toddlers
- CHLD 2613 - Health, Safety, and Nutrition: Birth to Eight
Recommended Electives 6 hours
Select courses from the following:
- ACCT 1003-Introduction to Accounting
- ASLE 1363 - American Sign Language I
- Other CHLD courses completed with a "C" or better
- COLL 1003 - College Success
- HSVC Select any course
- MATH Select any 1000 level or above
- PSYC 1113 - Introduction to Psychology (S)
- SPAN Select Any Courses

Total Credit Hours: 60

Students who have earned a CDA credential may be awarded advanced standing credit that may be applied to the Controlled Electives. Contact the West Campus Enrollment Services office for more information.
Students wanting to transfer to a four-year college or university should contact an academic advisor in the West Campus Advisement Office.

## Child Development AS, 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 advisor at TCC or NSU to carefully select courses that will meet the requirements for both 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.

As a nationally accredited program, the TCC School of Child Development and Education subscribes to the standards of the National Association for the Education of Young Children Early Childhood Associate degree accreditation.

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 Requirements

General Education Requirements Credit Hours: 38 Communication 9 hours

- COMM 1113 - Public Speaking
- ENGL 1113 - Composition I
- ENGL 1213 - Composition II

History and Political Science 6 hours

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


## Humanities 6 hours

- ENGL 2413 - Introduction to Literature (H)
- GEOG 2033 - World Regional Geography (S,I,H)
Mathematics 3 hours
- MATH 1473 - Quantitative Reasoning (A) or higher level General Education Math
Psychology 3 hours
- PSYC 1113 - Introduction to Psychology (S)

Science 11 hours

- BIOL 1114 - General Biology for Non-Majors
- BIOL 1383 - Nutrition
- PHSC 1114-General Physical Science Specialized Course Requirements Credit Hours: 23

Child Development 14 hours
Courses must be completed with a "C" or better.

- 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 (S)

Total Credit Hours: 61

## Child Development AS, 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 advisor 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 (OGET) during the last year 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 be admitted and graduate from the University of Oklahoma - College of Education: Early Childhood Education program.
As a nationally accredited program, the TCC School of Child Development and Education subscribes to the standards of the National Association for the Education of Young Children Early Childhood Associate degree accreditation.

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 Requirements

## General Education Requirements Credit Hours: 24

Mathematics and Science general education

## Communication 9 hours

- COMM 1113 - Public Speaking
- ENGL 1113-Composition I
- ENGL 1213-Composition II

History and Political Science 6 hours

- POLS 1113 - American Federal Government and select one course from the following:
- HIST 1483-U.S. History 1492 to the Civil War Era
- HIST 1493 - U.S. History - Civil War Era to the Present
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 2263 - Medical Ethics

Psychology or Sociology 3 hours
Select one course from the following:

- PSYC 1113 - Introduction to Psychology (S)
- SOCI 1113 - Introduction to Sociology (S)

Specialized Course Requirements Hours: 38
Mathematics 12 hours

- MATH 1473 - Quantitative Reasoning (A)
- MATH 2423 - Mathematics Concepts for Educators
- MATH 2553-Geometry and Measurement and select one course from the following:
- MATH 1483 - Mathematics Functions and Their Uses (A)
- MATH 1513 - Precalculus I (A)
- MATH 1613 - Precalculus II (A)

Child Development 14 hours
Courses must be completed with a "C" or better.

- 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
(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.)
Science 12 hours
- BIOL 1114 - General Biology for Non-Majors
- BIOL 1383 - Nutrition
- PHSC 1114 - General Physical Science
- PHSC 2151 - The Nature of Science

Total Credit Hours: 62

Foreign Language: Students must meet the university requirement of two college-level courses in a single foreign language.

## Child Development AS, Family and Community 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.
As a nationally accredited program, The TCC School of Child Development and Education subscribes to the standards of the National Association for the Education of Young Children Early Childhood Associate Degree Accreditation.

NOTE: Tulsa Community College's Child Development 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 Requirements

## General Education Requirements Credit Hours: 43

## Communication 9 hours

- COMM 1113 - Public Speaking
- ENGL 1113 - Composition I
- ENGL 1213-Composition II

History and Political Science 6 hours

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

Humanities 6 hours

- GEOG 1043 - Introduction to Cultural Geography (S,I,H) and select one course designated Humanities in the General Education Requirements


## Mathematics 6 hours

- MATH 1473 - Quantitative Reasoning (A)
- MATH 2193 - Elementary Statistics


## Psychology or Sociology 3 hours

Select one course from the following:

- PSYC 1113 - Introduction to Psychology (S)
- SOCI 1113 - Introduction to Sociology (S)


## Science 7 hours

- BIOL 1114 - General Biology for Non-Majors (L)
- BIOL 1383 - Nutrition

Sociology 6 hours

- SOCI 2013 - Marriage and Family (S)
- SOCI 2813 - Human Sexuality (S) (May be taken as PSYC 2813)

Specialized Course Requirements Credit Hours: 18
Child Development 18 hours
Courses must be completed with a " C " or better.

- CHLD 2003 - Child Development in the Lifespan
- 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 2513 - Programming for Infants and Toddlers

Total Credit Hours: 61

## Child Development Certificate, Certificate of Mastery

## 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. Students who achieve a grade of " C " or better in Child Development (CHLD) courses may apply the credits toward any TCC Child Development Associate in Applied Science degree as controlled electives.
As a nationally accredited program, The TCC School of Child Development and Education subscribes to the standards of the National Association for the Education of Young Children Early Childhood Associate Degree Accreditation.

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.

## Certificate Requirements

## Child Development 15 hours

- CHLD 2003 - Child Development in the Lifespan
- CHLD 2103 - Child Guidance
- CHLD 2233 - Physical Development and Creative Expression: Birth to Eight and select two courses from the following:
- CHLD 2023 - Child Development and Parenting
- CHLD 2113 - Introduction to Child Care Management
- CHLD 2203 - Child and Family in the Community
- CHLD 2213 - Children with Special Needs
- CHLD 2243 - Language and Cognitive Development: Birth to Eight
- CHLD 2263 - Social and Emotional Development: Birth to Eight
- CHLD 2413 - Professionalism \& Leadership in Early Care \& Education
- CHLD 2513 - Programming for Infants and Toddlers
- CHLD 2613 - Health, Safety, and Nutrition: Birth to Eight All CHLD courses must be completed with a " C " or better for graduation.
English 3 hours
- ENGL 1113 - Composition I

Total Credit Hours: 18

## Communication Arts \& Technologies AA, Communication Option

## Program Description

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, small group, intercultural, nonverbal, public, rhetorical, broadcast and electronic media, strategic communications, and other topics of importance within academic and business settings. Graduates of the program enjoy careers in public relations, business management, public policy, law, corporate training, broadcast and electronic communication, strategic communication, among other communication - intensive careers and fields of study.

## General Education Requirements Credit Hours: 36

## Communication 9 hours

- COMM 1113 - Public Speaking
- ENGL 1113-Composition I
- ENGL 1213 - Composition II


## History and Political Science 6 hours

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


## Humanities 6 hours

- See the General Education Requirements for course list.


## Mathematics 3 hours

- MATH 1473-Quantitative Reasoning (A) or higher level General Education Math


## Science 7 hours

See the General Education Requirements for the course list. One course must be a laboratory science (L).
General Education Recommended Electives 2 hours

- COLL 1003-College Success or select courses that will transfer to the university you plan to attend


## General Education Required Electives 3 hours

Select three (3) credit hours from courses in Fine Arts (Art, Music, Theatre), Foreign Language, Psychology, or Social Sciences.
Specialized Course Requirements Credit Hours: 24
Communication 21 hours

- COMM 2103 - Interpersonal Communication
- COMM 2053 - Intercultural Communication (H) (I) and select 15 hours from the following:
- COMM 2073-Oral Interpretation
- COMM 2093 - Leadership and Professional Communication
- COMM 2243 - Small Group Communication
- COMM 2333 - Forensics
- COMM 2343 - Forensics Performance Competition
- COMM 2351 - Forensics Competition Practicum
- COMM 2353 - Forensics II
- COMM 2373 - Forensics IV
- COMM 2503-Contemporary Issues in Communication

Journalism 3 hours

- MCOM 1013 - Introduction to Mass Communication

Total Credit Hours: 60

## Communication Arts \& Technologies AA, Mass Communication: Electronic and Broadcast Communication Option

## Program Description

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, small group, intercultural, nonverbal, public, rhetorical, broadcast and electronic media, strategic communications, and other topics of importance within academic and business settings. Graduates of the program enjoy careers in public relations, business management, public policy, law, corporate training, broadcast and electronic communication, strategic communication, among other communication - intensive careers and fields of study.

## Degree Requirements

## General Education Requirements Credit Hours: 36

## Communication 9 hours

- COMM 1113 - Public Speaking
- ENGL 1113 - Composition I
- ENGL 1213 - Composition II


## History and Political Science 6 hours

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


## Humanities 6 hours

- See the General Education Requirements for course list.

Mathematics 3 hours

- MATH 1473 - Quantitative Reasoning (A) or higher level General Education Math


## Science 7 hours

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

## General Education Recommended Electives 2 hours

- COLL 1003-College Success
or select courses that will transfer to the university you plan to attend
General Education Required Electives 3 hours
Select three (3) credit hours from courses in Fine Arts (Art, Music, Theatre), Foreign Language, Psychology, or Social Sciences.
Specialized Course Requirements Credit Hours: 24
Communication 9 hours
- COMM 2053 - Intercultural Communication (H) (I)
- COMM 2103 - Interpersonal Communication
- MCOM 1013 - Introduction to Mass Communication

Mass Communication 15 hours

- MCOM 1103 - Introduction to Broadcasting
- MCOM 1113 - Writing for the Mass Media
- MCOM 2023 - Electronic Communication
- MCOM 2123 - News Writing and Reporting And select one course from the following:
- MCOM 2173 - Advanced Broadcasting
- MCOM 2573 - Videography
- DGMD 2353 - Adobe Premiere

Total Credit Hours: 60

## Communication Arts \& Technologies AA, Mass Communication: Strategic Communication Option

## Program Description

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, small group, intercultural, nonverbal, public, rhetorical, broadcast and electronic media, strategic communications, and other topics of importance within academic and business settings. Graduates of the program enjoy careers in public relations, business management, public policy, law, corporate training, broadcast and electronic communication, strategic communication, among other communication - intensive careers and fields of study.

## Degree Requirements

## General Education Requirements Credit Hours: 36

## Communication 9 hours

- COMM 1113 - Public Speaking
- ENGL 1113 - Composition I
- ENGL 1213 - Composition II


## History and Political Science 6 hours

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


## Humanities 6 hours

- See the General Education Requirements for course list.

Mathematics 3 hours

- MATH 1473 - Quantitative Reasoning (A) or higher level General Education Math


## Science 7 hours

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

## General Education Recommended Electives 2 hours

- COLL 1002 - First Year Experience Seminar or select courses that will transfer to the university you plan to attend


## General Education Required Electives 3 hours

Select three (3) credit hours from courses in Fine Arts (Art, Music, Theatre), Foreign Language, Psychology, or Social Sciences.
Specialized Course Requirements Credit Hours: 24
Communication 9 hours

- COMM 2053 - Intercultural Communication (H) (I)
- COMM 2103 - Interpersonal Communication
- MCOM 1013 - Introduction to Mass Communication

Mass Communication: 15 hours

- MCOM 1113 - Writing for the Mass Media
- MCOM 2013 - Principles of Advertising
- MCOM 2023 - Electronic Communication
- MCOM 2123 - News Writing and Reporting
- MCOM 2183 - Principles of Public Relations

Total Credit Hours: 60

## Computer Information Systems AS

## Program Description

If you are fascinated by computer technology and want to use your skills to play a critical role in the success of a business, TCC's Computer Information Systems program is designed for you. CIS specialists do everything from managing network security to directing Internet operation to the planning, coordinating and facilitating of all computer-related operations of the enterprises for which they work. This program provides you with the broad range of computer knowledge and skill sets that allow you to put technology to work in the marketplace. We invite you to meet with an academic advisor on any TCC campus to help you shape your degree plan and ensure you are enrolled in the correct courses for your degree program. If you plan to transfer to a four-year college or university, we encourage you to begin early dialogue with your chosen institution. Early coordination between TCC academic advisors and advisors from the selected four-year institution can streamline your transfer process.

## Degree Requirements

## General Education Requirements Credit Hours: 37

## Communication 9 hours

- COMM 1113 - Public Speaking
- ENGL 1113 - Composition I
- ENGL 1213 - Composition II

History and Political Science 6 hours

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


## Humanities 6 hours

- See the General Education Requirements for the course list.


## Mathematics 3 hours

- MATH 1513 - Precalculus I (A)


## Science 7 hours

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

## General Education Recommended Electives 3

 hours- CSCI 1203 - Computer Concepts and Applications or select three (3) credit hours from the list of Liberal Arts \& Sciences Electives
General Education Required Electives 3 hours Select three (3) credit hours from courses in Fine Arts (Art, Music, Theatre), Foreign Language, Psychology, or Social Sciences.


## Specialized Course Requirements Credit Hours:

 23-24Credit hours vary to allow you to select courses that will transfer to the specific college/university you plan to attend.

## English 0-3 hours

- ENGL 2333 - Technical/Professional Writing


## Mathematics 0-12 hours

- MATH 2114 - Analytic Geometry and Calculus I (A)
- MATH 2124 - Analytic Geometry and Calculus II (A)
- MATH 2134 - Analytic Geometry and Calculus III
- MATH 2193 - Elementary Statistics

Computer Information Systems 12-24 hours

- CSCI 1203 - Computer Concepts and Applications
- CSCI 1483 - Introduction to UNIX (Linux)
- CSCI 2133 - Introduction to JAVA
- 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

## Criminal Justice AA <br> Program Description

Interested in law enforcement, corrections, or maybe, law school? Curious about how the legal system operates? Do you have questions about constitutional law? Criminal Justice touches on all of these topics. Tackle your interests by pursuing a course of study leading to an associate degree in Criminal Justice.

This degree provides the freshman and sophomore general education and prerequisite courses for a baccalaureate degree at a four-year university. The TCC Criminal Justice program will satisfy requirements to make application to most law enforcement agencies in the region assuming other criteria established by the employer or agency or met.

## Degree Requirements

## General Education Requirements Credit Hours: 37 <br> Communication 9 hours

- COMM 1113 - Public Speaking
- ENGL 1113 - Composition I
- ENGL 1213 - Composition II

History and Political Science 6 hours

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


## Humanities 6 hours

- See the General Education Requirements for the course list.


## Mathematics 3 hours

- MATH 1473 - Quantitative Reasoning (A) or higher level General Education Math

Science 7 hours
See the General Education Requirements for the course list. One course must be a laboratory science (L).
General Education 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


## General Education Required Electives 3 hours

Select three (3) credit hours from courses in Fine Arts (Art, Music, Theatre), Foreign Language, Psychology, or Social Sciences.

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

## Dental Hygiene AAS

## Program Description

Are you looking for an opportunity to be a key part of a health care team to meet the oral health needs of patients and thereby improve their quality of life? The TCC Dental Hygiene program offers you extraordinary clinical and academic opportunities in preventive oral healthcare and the promotion of good health.

The program prepares the individual to be a dental hygienist whose primary functions include the assessment of patients' overall health; and formulating and performing treatment per evidence-based patient-centered 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; administrating local anesthetics, nitrous oxide and antimicrobial agents; and performing oral prophylaxis, periodontal therapy, and risk assessments. The graduate will receive an Associate in Applied Science degree 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; or
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.

## Admission to the Program

## Program Application Instructions

1. All prospective Dental Hygiene students who have not been enrolled at TCC within the past year must complete an application for admission to the College, submit their high school transcripts, ACT scores and previous college transcripts to the Metro Campus Student Completion Services at 909 South Boston, Tulsa, OK 74119. Incomplete submissions will not be considered for admission into the Dental Hygiene Program. Admission to the College does not guarantee admission to the Dental Hygiene Program. ACT scores must come from the same ACT test, are only valid for 5 years from the date of the test and cannot be expired prior to the application deadline.
2. Applications to the Dental Hygiene program must be completed online at tulsacc.edu/ApplyAlliedHealth by March $1^{\text {st }}$. For more information, contact the Dental Hygiene Program office at dentalhygiene@tulsacc.edu. You will need your TCC student ID number to complete the application.
3. Ensure the Dental Office Experience Verification Form has been received by the Dental Hygiene Program at Tulsa Community College, School of Allied Health, Attention: Daniele Dennison, MP 458, 909 South Boston Avenue, Tulsa, OK 74119 before the March 1 deadline. Email dentalhygiene@tulsacc.edu to confirm. All applicants must have a Dental Office Experience Verification Form on file to be considered complete but do not have to have dental office experience. The Dental Office Experience Verification Form is only valid for 5 years from the date(s) on the form and cannot be expired prior to the application deadline.
4. Eligible applicants to be interviewed for consideration for admission into the Dental Hygiene Program will be notified through their TCC email. All interviewed applicants will also be notified through their TCC email regarding their selection status.
5. It is the applicant's responsibility to monitor the application status to make certain the Dental Hygiene Program has received all necessary information.

## Program Admission Requirements

- Applicants must have a minimum 3.2 cumulative GPA to apply.
- Applicants must have a minimum 20 ACT composite score to apply.
- BIOL 1314 - Human Anatomy and Physiology and CHEM 1134 - General, Organic and Biological Chemistry must be completed the semester before the application deadline.
- Other prerequisite coursework must be completed before the end of the spring term in which the application is reviewed.
- 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 students participating in clinicals are required to complete these background checks, immunizations and a drug screening test by the Department of Allied Health 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.


## English Language Proficiency

An official $\mathrm{iBT®}$ TOEFL (internet-based Test of English as a Foreign Language) test score or an IELTS (International English Language Testing System) Band score is required as proof of English proficiency for any International student for whom English is a second language who is applying to any Tulsa Community College health sciences program. Students who have graduated from a U.S. high school will not be required to take the iBT Toefl or IELTS tests. Your scores must be current within 2 years of the semester for which you are applying.

For health sciences students, the minimum sub-scores on the internet based TOEFL (iBT®) are 21 for Writing; 24 for Speaking; 20 for Reading; and 20 for Listening, with a total minimum score of 85.
For students choosing the IELTS test, acceptable scores include: 6.5 for Reading; 6.5 for listening; 7.5 for Speaking; and 6 for Writing, for a total IELTS Bans score of 6.5 . These required minimum scores must be met for each of the four sub-tests on a single exam. A total score that does not meet the sub-score minimums does not meet the requirement. Exceptions to this policy may be considered on an individual basis.

Students must go to www.ets.org/toefl to find a TOEFL iBT testing site, register and pay for the test. Students may go to https://www.ielts.org/en-us/ to find an IELTS testing center and register and pay for the test. Both tests cost approximately $\$ 190$. Students are highly encouraged to take practice tests to prepare for these important tests. Your official scores, including ALL Sub-scores, must be sent directly to the TCC Registrar's Office.

Contact Information Program Director Rachel Ostberg, MS, RDH Dental Hygiene Office 918-595-7022 or Program Director office 918-595-7019 dentalhygiene@tulsacc.edu or rachel.ostberg@tulsacc.edu

## Degree Requirements

## General Education Requirements Credit Hours: 30

## Biology 8 hours

- BIOL 1314 - Human Anatomy and Physiology + *
- BIOL 1324 - Basic Microbiology + *
*Higher level course of the same subject matter may be substituted for these prerequisites. For example: BIOL 2134 - Human Anatomy (L) and BIOL 2154 - Human Physiology (L) may be substituted for BIOL 1314 - Human Anatomy and Physiology.


## Chemistry 4 hours

- CHEM 1134-General, Organic and Biological Chemistry
*Higher level course of the same subject matter may be substituted for this prerequisite.


## Communication 6 hours

- COMM 1113 - Public Speaking
- ENGL 1113 - Composition I +


## Psychology 3 hours

- PSYC 1113 - Introduction to Psychology (S)


## History and Political Science 6 hours

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


## Sociology 3 hours

- SOCI 1113 - Introduction to Sociology (S)

Specialized Course Requirements Credit Hours: 54
Dental Hygiene 54 hours

- DHYG 1013 - Oral Anatomy, Embryology and Histology
- DHYG 1022 - Head and Neck Anatomy
- 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 Support 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: 84
+Prerequisite to Dental Hygiene Curriculum schedule. (21 hours).

## Diagnostic Medical Sonography AAS

## Program Description

The Diagnostic Medical Sonography (DMS) AAS degree is designed to prepare students with the necessary skills to be employed as a sonographer. There are several areas of specialization, including Abdominal, OB/GYN and Vascular Sonography, which are available at TCC. Graduates find work in hospitals, physician offices, or outpatient clinics. 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.

Sonographers use high-frequency sound waves (ultrasound) to create images of organs, tissues, or blood flow inside the body for diagnostic purposes. 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.

## Admission to the Program

## Program Application Instructions

1. All prospective Diagnostic Medical Sonography students who have not been enrolled at TCC within the past year must complete an application for admission to the College, submit their high school transcripts, ACT scores and previous college transcripts to the Metro Campus Student Completion Services office at 909 South Boston, Tulsa, OK 74119. Incomplete submissions will not be considered for admission into the Diagnostic Medical Sonography program. Admission to Tulsa Community College does not guarantee admission to the Diagnostic Medical Sonography program.
2. Applications to the DMS program must be completed online at tulsacc.edu/ApplyAlliedHealth by April 1. For more information, contact the School of Health Sciences office at (918) 595-7002.
3. 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.

## Program Admission Requirements

- College GPA of 2.5 .
- ACT Composite Score of 18. (completed within the last 5 years)
- Completion of prerequisite courses with a " C " or better. Must be completed prior to application deadline.
- BIOL 1314 - Anatomy and Physiology
- ENGL 1113 - Composition I
- MATH 1513 - Pre-Calculus I
- ALDU 1013 - Applied Medical Physics or PHYS 1114 - General Physics I
- Student must be able to travel to local and distant clinical sites.
- 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 students participating in clinicals are required to complete these background checks, immunizations and a drug screening test by the Department of Allied Health 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.


## English Language Proficiency

An official iBT® TOEFL (internet-based Test of English as a Foreign Language) test score or an IELTS (International English Language Testing System) Band score is required as proof of English proficiency for any International student for whom English is a second language who is applying to any Tulsa Community College health sciences program. Students who have graduated from a U.S. high school will not be required to take the iBT Toefl or IELTS tests. Your scores must be current within 2 years of the semester for which you are applying.

For health sciences students, the minimum sub-scores on the internet based TOEFL (iBT®) are 21 for Writing; 24 for Speaking; 20 for Reading; and 20 for Listening, with a total minimum score of 85. For students choosing the IELTS test, acceptable scores include: 6.5 for Reading; 6.5 for listening; 7.5 for Speaking; and 6 for Writing, for a total IELTS Bans score of 6.5. These required minimum scores must be met for each of the four sub-tests on a single exam. A total score that does not meet the sub-score minimums does not meet the requirement. Exceptions to this policy may be considered on an individual basis.

Students must go to www.ets.org/toefl to find a TOEFL iBT testing site, register and pay for the test. Students may go to www.ielts.org/us to find an IELTS testing center and register and pay for the test. Both tests cost approximately $\$ 190$. Students are highly encouraged to take practice tests to prepare for these important tests. Your official scores, including ALL Sub-scores, must be sent directly to the TCC Registrar's Office.

Contact Information Program Director Aimee M Francois, MS, RDMS, RDCS, RVT Owasso Campus 918-595-2059 aimee.francois@tulsacc.edu

## Degree Requirements

General Education Requirements Credit Hours: 19 Biology 4 hours

- BIOL 1314 - Human Anatomy and Physiology +
Communication 6 hours
- COMM 1113 - Public Speaking
- ENGL 1113 - Composition I +

History and Political Science 6 hours

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


## Mathematics 3 hours

- MATH 1513 - Precalculus I (A) +

Specialized Course Requirements Credit Hours: 46-47
Diagnostic Medical Sonography 40 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 2034 - Sonography Clinical Practice III
- DMS 2123-Abdominal Sonography II
- DMS 2131 - Ultrasound Seminar
- DMS 2133 - OB/GYN Sonography II
- DMS 2145 - Sonography Clinical Practice IV
- DMS 2153 - Vascular Ultrasound

Medical Terminology 3 hours

- ALDH 1323-Medical Terminology

Physics 3-4 hours

- ALDH 1013 - Applied Medical Physics + or
- PHYS 1114-General Physics I (L) +

Total Credit Hours: 65-66

+ Prerequisite to Diagnostic Medical Sonography
Program.


## Digital Media AAS

## Program Description

Digital Media is an interdisciplinary area of study combining computer science, art, video, music, journalism/mass communication, 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 Requirements

## General Education Requirements Credit Hours: 18

 Communication 6 hours- ENGL 1113 - Composition I Select one course from the following:
- ENGL 1213-Composition II
- COMM 1113 - Public Speaking
- COMM 2103 - Interpersonal Communication

History and Political Science 6 hours

- POLS 1113 - American Federal Government and select one course from the following:
- HIST 1483 - U.S. History 1492 to the Civil War Era
- HIST 1493-U.S. History - Civil War Era to the Present
Mathematics 3 hours
- MATH 1473-Quantitative Reasoning (A)

General Education Required Elective 3 hours Select three (3) credit hours from courses in Fine Arts (Art, Music, Theatre), Foreign Language, Psychology, or Social Sciences

- ART 1013 - Art Foundations: 2-D Design Preferred for Graphic Design Option
Specialized Course Requirements Hours: 42


## Select courses from one or both of the Concentrations below for a total of 42 credit hours.

## Broadcast Production Specialist Concentration:

 42 hours- CSCI 1203 - Computer Concepts and Applications
- MCOM 1103 - Introduction to Broadcasting
- MCOM 1113 - Writing for the Mass Media
- MCOM 2023 - Electronic Communication
- MCOM 2123 - News Writing and Reporting
- MCOM 2173 - Advanced Broadcasting
- MCOM 2573 - Videography
- MCOM 2973 - Mass Communication Internship I
- MUSC 1053 - Recording Studio Techniques I
- DGMD 1113 - Digital Foundations 1:

Photoshop

- DGMD 1223 - Digital Photography
- DGMD 2303 - Adobe Audition
- DGMD 2333 - Digital Video I/Final Cut Pro
- DGMD 2353 - Adobe Premiere

Graphic Design Specialist Concentration: 42 hours

- ART 1123 - Drawing I
- ART 2413 - Typography I
- ART 2423 - Graphic Design I
- DGMD 1013 - Introduction to Graphic Design
- DGMD 1113 - Digital Foundations 1:

Photoshop

- DGMD 1203 - Digital Foundations 2: Illustrator
- DGMD 1223 - Digital Photography
- DGMD 2263 - Digital Illustration I
- DGMD 2313 - Digital Foundations 3: InDesign
- DGMD 2343-3D Digital Foundations
- DGMD 2393 - Graphic Design Capstone
- DGMD 2413 - Interaction Design I
- DGMD 2423 - Motion Graphics
- DGMD 2493 - Graphic Design Internship Total Credit Hours: 60


## Digital Media Certificate

## Program Description

Digital Media is an interdisciplinary area of study combining computer science, art, video, music, journalism/mass communication, 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. Students may select courses from the Broadcast Production Specialist and Graphic Design Specialist Concentrations.

## Certificate Requirements

Broadcast Production Specialist Concentration: $\mathbf{3 0}$ hours

- DGMD 2333 - Digital Video I/Final Cut Pro
- DGMD 2353 - Adobe Premiere
- MCOM 1103 - Introduction to Broadcasting
- MCOM 2173 - Advanced Broadcasting
- MCOM 2573 - Videography
- DGMD 1113 - Digital Foundations 1: Photoshop
- DGMD 1223 - Digital Photography
- DGMD 2303 - Adobe Audition
- MCOM 1113 - Writing for the Mass Media
- MUSC 1053 - Recording Studio Techniques I

Graphic Design Specialist Concentration: 30 hours

- ART 1013 - Art Foundations: 2-D Design
- ART 1123 - Drawing I
- ART 2413 - Typography I
- ART 2423 - Graphic Design I
- DGMD 1013 - Introduction to Graphic Design
- DGMD 1113 - Digital Foundations 1: Photoshop
- DGMD 1203 - Digital Foundations 2: Illustrator
- DGMD 1223 - Digital Photography
- DGMD 2313 - Digital Foundations 3: InDesign and select one course from the following:
- DGMD 2343-3D Digital Foundations
- DGMD 2413 - Interaction Design I
- DGMD 2423-Motion Graphics

Total Credit Hours: $\mathbf{3 0}$

## Electronics Technology AAS, Biomedical Equipment Option

## Program Description

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). This program also allows incoming credit from approved Military Electronics Training Facilities.

## Degree Requirements

General Education Requirements Credit Hours: 19-21
Computer Information Systems 3 hours

- CSCI 1203 - Computer Concepts and Applications


## English 6 hours

- ENGL 1113-Composition I and select one course from the following:
- ENGL 1213 - Composition II **
- ENGL 2333 - Technical/Professional Writing
**Recommended for students who plan to transfer to a four-year program.


## History and Political Science 6 hours

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


## Mathematics 4-6 hours

- MATH 1454 - Technical Mathematics or the following two courses:
- MATH 1513 - Precalculus I (A) **
- MATH 1613 - Precalculus II (A) **
**Recommended for students who plan to transfer to a four-year program.


## Specialized Course Requirements Credit Hours: 45

## Biomedical Equipment Technology 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 - Network Fundamentals
- ITCV 2023 - Wireless Networking

Drafting and Computer-Aided Design 4 hours

- DRFT 1324 - Engineering Drawing with CAD

Electronics Technology 22 hours

- ELET 1212 - Introduction to Electricity
- ELET 1303-DC Circuit Analysis
- ELET 1313-AC Circuit Analysis
- ELET 2215 - Digital Circuits
- ELET 2244 - Amplifiers I
- ELET 2525 - Wireless Communications

Total Credit Hours: 64-66

## Electronics Technology AAS, Electrical Substation Technology Option

## Program Description

This program will train students to work as technicians in the field of electrical power and substations. Students will learn about high voltage safety, operations, testing of power components such as transformers, relays, breakers, 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. This program also allows incoming credit from approved Military Electronics Training Facilities.

## Degree Requirements

## General Education Requirements Credit Hours: 19-21

## Computer Information Systems 3 hours

- CSCI 1203 - Computer Concepts and Applications

English 6 hours

- ENGL 1113 - Composition I and select one course from the following:
- ENGL 1213 - Composition II **
- ENGL 2333 - Technical/Professional Writing
**Recommended for students who plan to transfer to a four-year program.


## History and Political Science 6 hours

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


## Mathematics 4-6 hours

- MATH 1454-Technical Mathematics or the following two courses:
- MATH 1513 - Precalculus I (A) **
- MATH 1613 - Precalculus II (A) **
**Recommended for students who plan to transfer to a four-year program.
Specialized Course Requirements Credit Hours: 43
Computer Information Systems 3 hours
- CSCI 1263 - Network Fundamentals

Drafting and Computer-Aided Design 4 hours

- DRFT 1324 - Engineering Drawing with CAD

Electronics Technology 36 hours

- ELET 1212 - Introduction to Electricity
- ELET 1232 - Introduction to Substation Safety
- ELET 1303 - DC Circuit Analysis
- ELET 1313-AC Circuit Analysis
- ELET 1443 - Introduction to Alternative Energy
- ELET 1503 - Programmable Control
- ELET 2112 - Substation Breaker Circuits
- ELET 2132 - Substation Relay Circuits
- ELET 2152 - Substation Transformer Circuits
- ELET 2172 - Substation Relay Circuits II
- ELET 2215 - Digital Circuits
- ELET 2244 - Amplifiers I
- ELET 2533 - Automation Control

Total Credit Hours: 62-64

## Electronics Technology AAS, Electronics Technologist Option

## 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 for advancement to positions of increasing responsibility. Students will design and build solid state amplifiers, antennas, and microprocessor instructed robotics. Graduates can add to their portfolios by qualifying for industry certifications administered by the International Society of Certified Electronic Technicians (ISCET), the Electronics Technicians Association (ETA), General Radio Operators License (GROL-FCC) and the National Institute for Certification in Engineering Technologies (NICET). This program also allows incoming credit from approved Military Electronics Training Facilities.

## Degree Requirements

General Education Requirements Credit Hours: 19-21
Computer Information Systems 3 hours

- CSCI 1203 - Computer Concepts and Applications
English 6 hours
- ENGL 1113 - Composition I and select one course from the following:
- ENGL 1213 - Composition II **
- ENGL 2333 - Technical/Professional Writing **Recommended for students who plan to transfer to a four-year program.
History and Political Science 6 hours
- POLS 1113 - American Federal Government and select one course from the following:
- HIST 1483-U.S. History 1492 to the Civil War Era
- HIST 1493 - U.S. History - Civil War Era to the Present
Mathematics 4-6 hours
- MATH 1454 - Technical Mathematics or the following two courses:
- MATH 1513 - Precalculus I (A) **
- MATH 1613 - Precalculus II (A) **
**Recommended for students who plan to transfer to a four-year program.


## Specialized Course Requirements Credit Hours:

## 41

Drafting and Computer-Aided Design 4 hours

- DRFT 1324 - Engineering Drawing with CAD

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

Electronics Technology 9 hours

- ELET 1443 - Introduction to Alternative Energy
- ELET 1503 - Programmable Control
- ELET 2533 - Automation Control

Controlled Electives 11-12 hours Electronics Design Emphasis

- ELET 2514 - Microprocessors
- ELET 2525 - Wireless Communications
- ELET 2333 - Amplifiers II OR Industrial Maintenance Emphasis
- ELET 1223 - Hydraulics and Pneumatics
- ELET 2232 - Industrial Robotics
- ENGT 1213 - Introduction to Fabrication Lab
- ENGT 1513-Manufacturing Safety

Total Credit Hours: 60-63

## Electronics Technology Certificate, Biomedical Equipment Technology Option

## 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. This program also allows incoming credit from approved Military Electronics Training Facilities.

## Certificate Requirements

## Biomedical Equipment 10 hours

- BMET 1304 - Introduction to Biomedical Electronics
- BMET 2343 - Biomedical Electronics Theory I
- BMET 2353 - Biomedical Electronics Theory II


## Electronics Technology 12 hours

- ELET 1212 - Introduction to Electricity
- ELET 1303-DC Circuit Analysis
- ELET 1313-AC Circuit Analysis
- ELET 2244-Amplifiers I

Mathematics 4-6 hours

- MATH 1454 - Technical Mathematics or the following two courses:
- MATH 1513-Precalculus I (A) **
- MATH 1613 - Precalculus II (A) **
**Courses highly recommended
Total Credit Hours: 26-28


## Electronics Technology Certificate, Electrical Substation Technology Option

## Program Description

This program will train students to work as technicians in the field of electrical power and substations. Students will learn about high voltage safety, operations, testing of power components such as transformers, relays, breakers, 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. This program also allows incoming credit from approved Military Electronics Training Facilities.

## Certificate Requirements

## 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


## Mathematics 4-6 hours

- MATH 1454-Technical Mathematics or the following two courses:
- MATH 1513 - Precalculus I (A) **
- MATH 1613 - Precalculus II (A) ** ${ }^{* *}$ Courses highly recommended

Total Credit Hours: 25-27

## Electronics Technology Certificate, Electronics Technician Option

## Program Description

This certificate program prepares the student with the necessary knowledge and skills to gain employment as an electronics or electro-mechanical technician. This option also supports students who may already have a degree in another field of study to expand their employability potential. The program also allows incoming credit from approved Military Electronics Training Facilities.

## Certificate Requirements

## Electronics Technology 12 hours

- ELET 1212 - Introduction to Electricity
- ELET 1303 - DC Circuit Analysis
- ELET 1313-AC Circuit Analysis
- ELET 2244 - Amplifiers I


## Mathematics 4-6 hours

- MATH 1454 - Technical Mathematics or the following two courses:
- MATH 1513 - Precalculus I (A) **
- MATH 1613 - Precalculus II (A) ** ${ }^{* *}$ Courses highly recommended
Controlled Electives 6-10 hours
- ELET 1223 - Hydraulics and Pneumatics
- ELET 1443 - Introduction to Alternative Energy
- ELET 1503 - Programmable Control
- ELET 1523 - Unmanned Aerial Vehicles and Systems
- ELET 2215 - Digital Circuits
- ELET 2333 - Amplifiers II
- ELET 2514 - Microprocessors
- ELET 2525 - Wireless Communications
- ELET 2533 - Automation Control
- ENGT 1213 - Introduction to Fabrication Lab

Total Credit Hours 22-28

## Electronics Technology Certificate, Industrial Maintenance Technology

## Program Description

This program prepares students to work in career fields of manufacturing support or industrial technical maintenance. Students will receive training in industrial safety, mechanical drive, fluid power, robotic, and electrical control systems. Students will learn the basic concepts that support these systems, installation and troubleshooting. Upon completion, students will be prepared for entry level jobs as industrial maintenance technicians (IMTec).

## Certificate Requirements

## Electronics Technology 16 Hours

- ELET 1212 - Introduction to Electricity
- ELET 1223 - Hydraulics and Pneumatics
- ELET 1503 - Programmable Control
- ELET 2232 - Industrial Robotics
- ENGT 1213 - Introduction to Fabrication Lab
- ENGT 1513-Manufacturing Safety

Total Credit Hours: 16

## Engineering AS, Computer Engineering Option

## Program Description

This program comprises the first two years of coursework for a professional program in Computer Engineering (CE) at a four-year institution and lays the foundation for being a successful engineer. Computer engineering is closely tied to electrical engineering although more emphasis is placed on computer hardware and software including microcontrollers which are used to support robotics and embedded designs. Along with introductory courses, you will take courses in the basic engineering sciences, physics, math and chemistry.

## Degree Requirements

## 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

History and Political Science 6 hours

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

Humanities 6 Hours
See the General Education Requirements for the course list.

## General Education Required Electives 3 hours

Select three (3) credit hours from courses in Fine Arts (Art, Music, Theatre), Foreign Language, Psychology, or Social Sciences.

Specialized Course Requirements Credit Hours: 46
Chemistry 10 hours

- CHEM 1315-General Chemistry I (L)
- CHEM 1415-General Chemistry II (L)

Computer Information Systems 7 hours

- CSCI 1901 - Beginning UNIX (Linux)
- CSCI 2473-C Language
- CSCI 2843-C++ Programming Language

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 (A)
- MATH 2124 - Analytic Geometry and Calculus II (A)
- MATH 2134 - Analytic Geometry and Calculus III
- MATH 2613 - Elementary Differential Equations

Physics 8 hours

- PHYS 2034 - Physics I with Calculus (L)
- PHYS 2124 - Physics II with Calculus (L)

Total Credit Hours: 67

## Engineering AS, Electrical Engineering Option

## Program Description

The Electrical Engineering (EE) program comprises the first two years of coursework for a professional program in engineering at a four-year institution and lays the foundation for being a successful engineer and for doing well in the EE professional program. Electrical engineers do everything from designing software and enhancing cellphones to developing test equipment used in the electrical power system which is connected to homes. Along with introductory courses, you will take courses in the basic engineering sciences, physics, math and chemistry.

## Degree Requirements

## 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

History and Political Science 6 hours

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

Humanities 6 Hours
See the General Education Requirements for the course list.

## General Education Required Electives 3 hours

Select three (3) credit hours from courses in Fine Arts (Art, Music, Theatre), Foreign Language, Psychology, or Social Sciences.

Specialized Course Requirements Credit Hours: 48
Chemistry 10 hours

- CHEM 1315 - General Chemistry I (L)
- CHEM 1415-General Chemistry II (L)

Computer Information Systems 6 hours

- CSCI 2473-C Language
- CSCI 2843-C++ Programming Language


## 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 (A)
- MATH 2124 - Analytic Geometry and Calculus II (A)
- MATH 2134 - Analytic Geometry and Calculus III
- MATH 2613 - Elementary Differential Equations

Physics 8 hours

- PHYS 2034 - Physics I with Calculus (L)
- PHYS 2124 - Physics II with Calculus (L)

Total Credit Hours: 69

## Engineering AS, Electrical Engineering Technology Option

## Program Description

This program comprises the first two years of coursework for a program in electrical engineering technology at a four-year institution and lays the foundation for being a successful engineer. Electrical engineering technology uses an applied approach to design and development of new equipment. Laboratory experience at the associate level includes solid state amplifier design, system troubleshooting and robotics. Along with introductory courses, you will take courses in the basic sciences, physics, math and chemistry.

## Degree Requirements

## General Education Requirements Credit Hours: 21

(Additional General Education Requirements are satisfied through the Specialized Course Requirements.)

## Communication 9 hours

- COMM 1113 - Public Speaking
- ENGL 1113-Composition I
- ENGL 1213-Composition II

History and Political Science 6 hours

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


## Humanities 6 hours

See the General Education Requirements page for the course list.

## Specialized Course Requirements Credit Hours: 48

## Chemistry 5 hours

- CHEM 1315-General Chemistry I (L)

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


## Mathematics 8 hours

- MATH 2114 - Analytic Geometry and Calculus I (A)
- MATH 2124 - Analytic Geometry and Calculus II (A)

Physics 8 hours

- PHYS 1114 - General Physics I (L)
- PHYS 1214-General Physics II (L)

Total Credit Hours: 65

## Engineering AS, Mechanical Engineering Option

## Program Description

The Mechanical Engineering (ME) program comprises the first two years of coursework for a professional program in engineering at a four-year institution and lays the foundation for being a successful engineer. Mechanical engineers may use kinematics, thermodynamics, material science and computeraided design (CAD) to solve problems from heating and cooling systems to robotics. Along with introductory courses, you will take courses in the basic engineering sciences, physics, math and chemistry.

## Degree Requirements

## 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

History and Political Science 6 hours

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


## Humanities 6 Hours

See the General Education Requirements for the course list.

## General Education Required Electives 3 hours

Select three (3) credit hours from courses in Fine Arts (Art, Music, Theatre), Foreign Language, Psychology, or Social Sciences.

## Specialized Course Requirements Credit Hours: 48

## Chemistry 5 hours

Select one course from the following:

- CHEM 1315-General Chemistry I (L)
- CHEM 1365-General Chemistry for Engineers


## 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 (A)
- MATH 2124 - Analytic Geometry and Calculus II (A)
- MATH 2134 - Analytic Geometry and Calculus III
- MATH 2613 - Elementary Differential Equations


## Physics 8 hours

- PHYS 2034 - Physics I with Calculus (L)
- PHYS 2124 - Physics II with Calculus (L)

Total Credit Hours: 69

# Engineering Technology AAS, Drafting and Design Engineering Technology Option 

## Program Description

This program provides students with a general education in mathematics, physics, English, engineering drawing, and design as well as specific training in Computer Aided Design Drafting (CADD). Students completing this major 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.

## 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


## History and Political Science 6 hours

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


## Mathematics 4 hours

- MATH 1454-Technical Mathematics MATH 1513 and MATH 1613 can be substituted for this requirement and will also satisfy the two hours of General Education Recommended Electives.
General Education Recommended Electives 2 hours
select two(2) credit hours from the list of Liberal Arts and Sciences Electives or
- COLL 1003-College Success


## Specialized Course Requirements Credit Hours:

45
Computer Information Systems 3 hours

- CSCI 1203 - Computer Concepts and Applications


## Drafting \& Design Engineering Technology 22

 hours- DRFT 1324 - Engineering Drawing with CAD
- DRFT 1442 - Descriptive Geometry
- DRFT 2204 - AutoCAD 2
- DRFT 2223 - Mechanical Design I (Computer Aided Design)
- DRFT 2293 - Survey of CAD Applications and select two (2) courses from the following:
- DRFT 1363 - Civil Drafting and Design
- DRFT 2043-CATIA Fundamentals
- DRFT 2053 - CATIA Solids and Surfacing
- DRFT 2233 - Autodesk Inventor Modeling
- DRFT 2393 - Basic SolidWorks

Electronics Technology 2 hours

- ELET 1212 - Introduction to Electricity Engineering Technology 14 hours
- ENGT 1213 - Introduction to Fabrication Lab
- ENGT 1223 - Industry Print Reading
- ENGT 1313-Manufacturing Processes and Procedures
- ENGT 1443 - Geometric Dimensioning and Tolerancing (May be taken as QCTT 1443)
- ENGT 2463 - Project Engineering and Management


## Science 4 hours

- PHYS 1114 - General Physics I (L)

Total Credit Hours: 63

# Engineering Technology AAS, Manufacturing Engineering Technology Option 

## Program Description

This program 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.

## Degree Requirements

General Education Requirements Credit Hours: 19

## 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

History and Political Science 6 hours

- POLS 1113 - American Federal Government and select one course from the following:
- HIST 1483 - U.S. History 1492 to the Civil War Era
- HIST 1493-U.S. History - Civil War Era to the Present
Mathematics 4 hours
- MATH 1454 - Technical Mathematics MATH 1513 and MATH 1613 can be substituted for this requirement and will also satisfy the two hours of General Education Recommended Electives.
General Education Recommended Electives 3 hours
- COLL 1003 - College Success
- CSCI 1203 - Computer Concepts and Applications
Specialized Course Requirements Credit Hours:
41
Engineering Technology 22 hours
- DRFT 1324 - Engineering Drawing with CAD
- ENGT 1213 - Introduction to Fabrication Lab
- ENGT 1223 - Industry Print Reading
- ENGT 1313 - Manufacturing Processes and Procedures
- ENGT 1443-Geometric Dimensioning and Tolerancing
- ENGT 2463 - Project Engineering and Management
- QCTT 1313 - Introduction to Quality

Select courses from the Quality Concentration or the Industrial Maintenance Concentration Industrial Maintenance Concentration: 19 hours

- ELET 2232 - Industrial Robotics
- ELET 1212 - Introduction to Electricity
- ELET 1223 - Hydraulics and Pneumatics
- ELET 1503 - Programmable Control
- ENGT 1513 - Manufacturing Safety
- 6 hours of ENGT courses

Quality Technology 21 hours

- 9 hours of ENGT courses
- QCTT 2333 - Inspection Principles
- QCTT 2383-Statistical Process Control, Quality, Costs and Audits
- QCTT 2423 - Quality Standards, Specifications \& ISO 9000
- QCTT 2433 - Non-Destructive Testing Total Credit Hours: 60-62


## Engineering Technology, Aerospace Drafting Certificate

## Program Description

This certificate focuses on the foundational skills in aerospace design and drafting. Students will learn foundations in cutting edge 3D modeling and drafting software used in the field of aerospace manufacturing.

## Certificate Requirements

## Drafting 16 hours

- DRFT 1324 - Engineering Drawing with CAD
- DRFT 1442 - Descriptive Geometry
- DRFT 2043 - CATIA Fundamentals
- DRFT 2053 - CATIA Solids and Surfacing
- DRFT 2204 - AutoCAD 2

Total Credit Hours: 16

## Engineering Technology, AutoCAD Professional Certificate

## Program Description

This certificate focuses on the foundational skills in mechanical and civil drafting, focusing on the AutoCAD suite of products. This certificate will take students from 2D drawings to 3D models using state of the art drafting software.

## Engineering Technology 16 hours

- DRFT 1324 - Engineering Drawing with CAD
- DRFT 1363-Civil Drafting and Design
- DRFT 1442 - Descriptive Geometry
- DRFT 2204 - AutoCAD 2
- ENGT 1223-Industry Print Reading

Total Credit Hours: 16

# Engineering Technology, Drafting and Design Engineering Technology Certificate 

## Program Description

This certificate 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.

## Certificate Requirements

## Drafting and Computer-Aided Design 8 hours

- DRFT 1324 - Engineering Drawing with CAD
- DRFT 2204 - AutoCAD 2

Engineering Technology 6 hours

- ENGT 1223 - Industry Print Reading
- ENGT 1443 - Geometric Dimensioning and Tolerancing


## Mathematics 4-6 hours

- MATH 1454 - Technical Mathematics or the following two courses:
- MATH 1513 - Precalculus I (A)
- MATH 1613 - Precalculus II (A)

Controlled Electives 8-9 hours

- DRFT 1363-Civil Drafting and Design
- DRFT 2043 - CATIA Fundamentals
- DRFT 2053 - CATIA Solids and Surfacing
- DRFT 2223 - Mechanical Design I (Computer Aided Design)
- DRFT 2233 - Autodesk Inventor Modeling
- DRFT 2393 - Basic SolidWorks
- ENGR 1132 - Engineering Design with Computer Aided Design

Total Credit Hours: 26-29

## Engineering Technology, Manufacturing Production Technician I Certificate

## Program Description

This certificate will introduce students to the process of manufacturing and production. Students will learn how to safely and efficiently operate in an advanced and fast paced manufacturing environment. Students will also learn entry level concepts related to Quality, Maintenance, Fabrication and Design, and Manufacturing Processes. Students completing this certificate will earn both their OSHA 10 and OSHA 30 General Industry cards. Students completing this certificate will be prepared to take four credentialing exams produced by the Manufacturing Skills Standards Council and earn their Certified Production Technician credential.

## Certificate Requirements

Engineering Technology 17 hours

- ELET 1212 - Introduction to Electricity
- ENGT 1213 - Introduction to Fabrication Lab
- ENGT 1313 - Manufacturing Processes and Procedures
- ENGT 1513 - Manufacturing Safety
- ENGT 1543 - Manufacturing Maintenance
- QCTT 1313 - Introduction to Quality

Total Credit Hours: 17

## Engineering Technology, Manufacturing Production Technician II Certificate

## Program Description

Building upon the skills gained in MPT I, students in this certificate will both broaden and deepen their knowledge of advanced manufacturing principles. Students will begin to learn project management and leadership skills as they are prepared to move into supervisory positions. Students will delve deeper into industrial plans by learning to read highly complex industry prints. Students will also learn Geometric Demensioning and Tolerancing and begin to learn quality systems such as Lean and Six Sigma. Students completing this certificate will be prepared to take the credentialing exam as a Lean Green Belt

## Certificate Requirements

## Engineering Technology 29 hours

- ELET 1212 - Introduction to Electricity
- ENGT 1213 - Introduction to Fabrication Lab
- ENGT 1223 - Industry Print Reading
- ENGT 1313 - Manufacturing Processes and Procedures
- ENGT 1443 - Geometric Dimensioning and Tolerancing
- ENGT 1513 - Manufacturing Safety
- ENGT 1543 - Manufacturing Maintenance
- ENGT 2153 - Lean, Six Sigma, Quality Systems
- ENGT 2463 - Project Engineering and Management
- QCTT 1313 - Introduction to Quality

Total Credit Hours: 29

## Engineering Technology, Quality and Inspection Technician Certificate I

## Program Description

## Certificate Requirements

Quality Technology 17 hours

- ELET 1212 - Introduction to Electricity
- ENGT 1223 - Industry Print Reading
- ENGT 1513 - Manufacturing Safety
- QCTT 1313 - Introduction to Quality
- QCTT 2333 - Inspection Principles
- QCTT 2433 - Non-Destructive Testing

Total Credit Hours: 17

## Engineering Technology, Quality and Inspection Technician Certificate II

## Program Description

Building upon the skills gained in QIT I, students in this certificate will gain advanced knowledge of quality and inspection principles. Students will begin to learn project management and leadership skills as they are prepared to move into supervisory positions. Students will learn Statistical Process Control using industry relevant software and will deepen their knowledge of quality principles by studying ISO 9000

## Quality Technology 32 hours

- ELET 1212 - Introduction to Electricity
- ENGT 1223 - Industry Print Reading
- ENGT 1513 - Manufacturing Safety
- ENGT 2153 - Lean, Six Sigma, Quality Systems
- ENGT 2463 - Project Engineering and Management
- QCTT 1313 - Introduction to Quality
- QCTT 1443 - Geometric Dimensioning \& Tolerancing (May be taken as ENGT 1443)
- QCTT 2333 - Inspection Principles
- QCTT 2383 - Statistical Process Control, Quality, Costs and Audits
- QCTT 2423 - Quality Standards, Specifications \& ISO 9000
- QCTT 2433 - Non-Destructive Testing

Total Credit Hours: $\mathbf{3 2}$ hours

## English AA

## Program Description

In addition to preparing students for a wide variety of careers, an English degree builds vital skills in research and evaluation, creative and critical thinking, and effective written communication. The English curriculum immerses students in the diversity of the human experience through the study of literature, creative writing, research, and rhetoric. Students must earn a "C" or better in any course required for the English major.

## Degree Requirements

## General Education Requirements Credit Hours: 37 <br> Communication 9 hours

- COMM 1113 - Public Speaking
- ENGL 1113 - Composition I
- ENGL 1213 - Composition II


## History and Political Science 6 hours

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


## Humanities 6 hours

See the General Education Requirements for course list.

## Mathematics 3 hours

- MATH 1473-Quantitative Reasoning (A) or higher level General Education Math


## Science 7 hours

See the General Education Requirements for course list. One course must be a lab (L) science.
General Education Recommended Electives 3 hours

- CSCI 1203 - Computer Concepts and Applications
or select courses from the list of Liberal Arts \& Sciences Electives


## General Education Required Electives 3 hours

Select three (3) credit hours from courses in Fine Arts (Art, Music, Theatre), Foreign Language, Psychology, or Social Sciences.
Specialized Course Requirements Credit Hours: 24
Students must earn a "C" or better in required English courses.

## Required English Courses 15 hours

- ENGL 2413 - Introduction to Literature (H)
- ENGL 2543 - British Literature to 1800 (H)
- ENGL 2653 - British Literature from 1800 (H)
- ENGL 2773 - American Literature to 1865 (H)
- ENGL 2883 - American Literature from 1865 (H)


## Required English Elective 3 hours

Select one course from the following:

- ENGL 2333 - Technical/Professional Writing
- ENGL 2343 - Business Communication I
- ENGL 2383 - Advanced Composition
- ENGL 2433 - Novel Writing
- ENGL 2443 - Poetry Writing
- ENGL 2453 - Scriptwriting I
- ENGL 2463 - Creative Nonfiction Writing
- ENGL 2473 - Short Story Writing
- ENGL 2493 - Introduction to Creative Writing

Recommended Electives 6 hours
Students should select courses that will transfer to the college/university they plan to attend.
Total Credit Hours: 61

## Enterprise Development AS

## 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. Admission to this program is by special approval.

For more information go to: tulsacc.edu/reachhigher

## General Education Requirements Credit Hours: 37

## Communication 9 hours

- COMM 1113 - Public Speaking
- ENGL 1113 - Composition I
- ENGL 1213 - Composition II

History and Political Science 6 hours

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


## Humanities 6 hours

See the General Education Requirements for the course list.

## Mathematics 3 hours

See the General Education Requirements for the course list.

## Science 7 hours

See the General Education Requirements for the course list. One course must be a laboratory (L) science.
General Education Electives 6 hours
Select two courses from the following:

- CSCI 1203 - Computer Concepts and Applications
- PSYC 1113 - Introduction to Psychology (S)
- SOCI 1113 - Introduction to Sociology (S)
- Any world language - 3 credit hours


## Specialized Course Requirements Credit Hours: 23

- Select twenty-three (23) credit hours from courses in the student's field of interest.

Total Credit Hours: 60

## Environmental Science \& Natural Resources AS

## Program Description

If the earth and its assets interest you, dig a little deeper by studying environmental sciences and natural resources! After you graduate, you may choose to pursue further study or a career in agriculture, conservation, environmental science, or natural resource management like forestry, range or wildlife sciences.

## Degree Requirements

## General Education Requirements Credit Hours: 38

## Biology 8 hours

- BIOL 1224 - Introduction to Biology for Majors (L)
- BIOL 1604 - Zoology (L)


## Communication 9 hours

- COMM 1113 - Public Speaking
- ENGL 1113 - Composition I
- ENGL 1213 - Composition II


## Economics 3 hours

- ECON 2023 - Principles of Microeconomics (S)


## History and Political Science 6 hours

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


## Humanities 6 hours

See the General Education Requirements for the course list. Mathematics 6 hours

- MATH 1513-Precalculus I (A)
- MATH 2193 - Elementary Statistics


## Specialized Course Requirements Credit Hours: 24-25

Chemistry 10 hours

- CHEM 1315 - General Chemistry I (L)
- CHEM 1415 - General Chemistry II (L)

Environmental and Resource Sciences 11 hours

- BIOL 1404 - General Botany (L)
- GEOL 1014 - General Geology (Physical) (L) and select one course from the following:
- BIOL 1113 - Introduction to Environmental Science
- BIOL 2313 - Principles of Ecology

Controlled Electives 3-4 hours
Students should take courses that will transfer to the college/university they plan to attend.

- MATH 1613 - Precalculus II (A)
- PHYS 1114 - General Physics I (L)
- GIS 2343 - Introduction to Geographic Information Systems May be taken as GEOG 2343

Total Credit Hours: 62-63

## Fire and Emergency Medical Services 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 is required for entry into the Associate of Applied Science Fire and Emergency Medical Services Technology degree.

## 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: School of Engineering, Aviation, \& Public Service Northeast Campus: (918) 595-7290

## Certificate Requirements

## Fire and Emergency Medical Services 17 hours

- FEMS 1214 - Principles of Fire and Emergency Medical Services
- FEMS 1224 - Emergency Services Safety and Survival
- EMSP 1119-Emergency Medical Technician

Total Credit Hours: 17

## Fire and Emergency Medical Services Certificate, Advanced Firefighter

## Program Description

This program offers education in the principles and practical applications of safe firefighting. Successful students will earn required state and national certifications necessary for securing employment with fire departments.

## Procedures for Application:

Complete all Tulsa Community College application and entry requirements. Complete a departmental application and interview process.

For More Information Contact: School of Engineering \& Applied Technology Northeast Campus: (918) 595-7290

## Certificate Requirements

Fire and Emergency Medical Services Certificate, Advanced Firefighter 16 hours

- FEMS 1214 - Principles of Fire and Emergency Medical Services
- FEMS 1224 - Emergency Services Safety and Survival
- FEMS 1314 - Fundamentals of Firefighting
- FEMS 1324 - Fundamentals of Firefighting Applications

Total Credit Hours: 16

## Fire and Emergency Medical Services Technology AAS

## 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).

## 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. Students must complete a reading, writing, and math placement test at a successful level in the Testing Center or demonstrate adequate proficiency to enroll in FEMS courses.

For More Information Contact: School of Engineering, Aviation, \& Public Service Northeast Campus: (918) 595-7290
Degree Requirements

## 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 2343 - Business Communication I
- ENGL 2333 - Technical/Professional Writing


## History and Political Science 6 hours

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

General Education Recommended Electives 6 hours Choose courses from the list of Liberal Arts \& Sciences Electives.

## 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 and Arson
- FEMS 2263 - Fire and Emergency Services Administration
- EMSP 1119 - Emergency Medical Technician

Total Credit Hours: 65

## Geographic Information Systems Certificate

## Program Description

Do you love reading and interpreting maps? Do you enjoy manipulating data to answer questions? From the GPS and digital maps in your car to those found on your phone, Geographic Information Systems (GIS) are all around us!

Be equipped for the future of mapping and data collection by developing your understanding of GIS through TCC's certificate program. Your education will prepare you for employment in the geospatial industries or to apply this mapping technology to other academic disciplines and fields of study.

## Certificate Requirements

## Geographic Information Systems 16 hours

- GIS 2343 - Introduction to Geographic Information Systems (May be taken as GEOG 2343).
- GIS 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: 16
Students must make a "C" or better in all courses to graduate.

## Geology AS

## Program Description

Do you enjoy looking at rocks and minerals? Are you fascinated by fossils and the evolution of Earth and life? Did you know that geologists are responsible for discovering the materials used in our modern technologies? The geology program will provide students with the skills to discover, recognize and use the Earth's natural resources to promote the quality of human life. Students will study Earth's composition, history, surface processes, and internal workings. Study of geology leads to careers ranging from hydrologist, petroleum geologist, seismologist and volcanologist.

## Degree Requirements

General Education Requirements Credit Hours: 34

## Communication 9 hours

- COMM 1113 - Public Speaking
- ENGL 1113-Composition I
- ENGL 1213 - Composition II

History and Political Science 6 hours

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


## Humanities 6 Hours

See the General Education Requirements for the course list.
Mathematics 5-8 hours
Select these two courses:

- MATH 1513 - Precalculus I (A)
- MATH 1613 - Precalculus II (A) or select this course:
- MATH 1715 - Precalculus I and II (A) or select these two courses:
- MATH 2114 - Analytic Geometry and Calculus I (A)
- MATH 2124 - Analytic Geometry and Calculus II (A)
General Education Recommended Electives 2-5 hours
- ASTR 1104 - General Astronomy
- BIOL 1114-General Biology for Non-Majors (L)
- CSCI 1203 - Computer Concepts and Applications
- GEOL 1113 - Introduction to Oceanography
- GEOL 2021 - Map and Airphoto Interpretation


## General Education Required Electives 3 hours

Select three (3) credit hours from courses in Fine Arts (Art, Music, Theatre), Foreign Language, Psychology, or Social Sciences.

## Specialized Course Requirements Credit Hours:

## 26

## Chemistry 10 hours

- CHEM 1315-General Chemistry I (L)
- CHEM 1415 - General Chemistry II (L)


## Geology 8 hours

- GEOL 1014 - General Geology (Physical) (L)
- GEOL 1024 - General Geology (Historical) (L)

Physics 8 hours
Select these two courses:

- PHYS 1114-General Physics I (L)
- PHYS 1214 - General Physics II (L) or select these two courses:
- PHYS 2034 - Physics I with Calculus (L)
- PHYS 2124 - Physics II with Calculus (L)

Total Credit Hours: 60

## Health Information Technology AAS

## Program Description

Have you ever wondered who is watching out for the privacy, confidentiality, quality and integrity of your personal health information? Professionals trained in health information management (HIM) care for patients by caring for their medical data. These professionals have a versatile but focused skill set incorporating clinical knowledge, information technology, leadership and management, compliance and legal regulations and coding and reimbursement issues. HIM graduates can choose from a variety of work settings across an array of healthcare environments, as well as other settings, such as insurance companies, healthcare software companies, pharmaceutical companies, government agencies and academic institutions.

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, privacy, confidentiality and security of data, and medical-legal aspects of documentation); 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, in a variety of media forms including 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 take the national qualifying examination for certification as a Registered Health Information Technician (RHIT). The Health Information Technology program has an annual entry and courses begin in the fall semester.

## Program Application Instructions

1. All prospective Health Information Technology students who have not been enrolled at TCC within the past year must complete an application for admission to the College, submit their high school transcripts or GED scores, ACT or SAT scores (if exams were taken), and previous college transcripts to the Metro Campus Student Completion Services office at 909 South Boston, Tulsa, OK 74119. Admission to Tulsa Community College does not guarantee admission to the Health Information Technology program.
2. Students should complete placement testing to establish proficiency levels in reading comprehension, sentence skills and mathematics. Meet with an Academic Advisor to begin this process.
3. Applications to the Health Information Technology program must be completed online at tulsacc.edu/ApplyAlliedHealth by May 1. For more information, contact the Allied Health department office at (918) 595-7002.
4. Following the May 1st deadline, students will receive additional information regarding the interview and selection process. The Health Information Technology program has an annual entry and courses begin in the fall semester.

## Program Admission Requirements

- Successful applicants must have a minimum GPA of 2.0.
- 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 students participating in clinicals are required to complete these background checks, immunizations and a drug screening test by the Department of Allied Health office deadline prior to the first clinical rotation.
English Language Proficiency
An official iBT® TOEFL (internet-based Test of English as a Foreign Language) test score or an IELTS (International English Language Testing System) Band score is required as proof of English proficiency for any International student for whom English is a second language who is applying to any Tulsa Community College health sciences program. Students who have graduated from a U.S. high school will
not be required to take the iBT Toefl or IELTS tests. Your scores must be current within 2 years of the semester for which you are applying.

For health sciences students, the minimum sub-scores on the internet based TOEFL (iBT®) are 21 for Writing; 24 for Speaking; 20 for Reading; and 20 for Listening, with a total minimum score of 85.
For students choosing the IELTS test, acceptable scores include: 6.5 for Reading; 6.5 for listening; 7.5 for Speaking; and 6 for Writing, for a total IELTS Bans score of 6.5. These required minimum scores must be met for each of the four sub-tests on a single exam. A total score that does not meet the sub-score minimums does not meet the requirement. Exceptions to this policy may be considered on an individual basis.

Students must go to www.ets.org/toefl to find a TOEFL iBT testing site, register and pay for the test. Students may go to www.ielts.org/us to find an IELTS testing center and register and pay for the test. Both tests cost approximately $\$ 190$. Students are highly encouraged to take practice tests to prepare for these important tests. Your official scores, including ALL Sub-scores, must be sent directly to the TCC Registrar's Office.

Contact Information Program Director Sandra Smith, M.Ed., RHIA, CCS sandy.smith@tulsacc.edu (918) 595-7201 Additional Information Available

## Degree Requirements

## 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 2343 - Business Communication I
- ENGL 1213 - Composition II
- ENGL 2333 - Technical/Professional Writing

History and Political Science 6 hours

- POLS 1113 - American Federal Government and select one course from the following:
- HIST 1483 - U.S. History 1492 to the Civil War Era
- HIST 1493 - U.S. History - Civil War Era to the 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 1242 - Health Information Management in Alternate Care Settings
- HITC 1333-CPT and HCPCS Coding
- HITC 1353 - Legal Aspects of Health Information Managment
- 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 2411 - Professional Practice Experience II
- HITC 2512-HIT Professional Review

Total Credit Hours: 69
**Courses must be completed with a "C" or better.

# Health Information Technology Certificate, Coding and Reimbursement Specialist 

## Program Description

Coding and reimbursement specialist are extremely important to healthcare organizations, as their mastery of coding proficiency and accuracy has an impact on revenue (facility or practitioner income) and informatics related to health outcomes. These professionals have a versatile but focused skill set incorporating clinical knowledge, information technology, leadership and management, compliance and legal regulations and coding and reimbursement issues. Graduates from the program can choose from a variety of work settings across an array of healthcare environments, as well as other settings, such as insurance companies, healthcare software companies, pharmaceutical companies, government agencies and academic institutions. This program will focus on ICD-10-CM/PCS and CPT/HCPCS coding guidelines, reimbursement systems, and revenue cycle management.

Students successfully completing the certificate may take 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), Professional Certificate Approval Program (PCAP).

## Admission to the Program

The Health Information Technology Coding \& Reimbursement Specialist Certificate program has an annual entry and courses begin in the fall semester.

## Program Application Instructions

1. All prospective Health Information Technology (HIT) students who have not been enrolled at TCC within the past year must complete an application for admission to the College, submit their high school transcripts or GED scores, ACT or SAT scores (if exams were taken), and previous college transcripts to the Metro Campus Student Completion Services office at 909 South Boston, Tulsa, OK 74119. Admission to Tulsa Community College does not guarantee admission to the Health Information Technology Coding and Reimbursement Specialist Certificate program.
2. Students should complete placement testing to establish proficiency levels in reading comprehension, sentence skills and mathematics. Meet with an Academic Advisor to begin this process.
3. Applications to the HIT program must be completed online at tulsacc.edu/ApplyAlliedHealth by May 1. For more information, contact the Allied Health department office at (918) 595-7002.
4. Following the May 1st deadline, students will receive additional information regarding the interview and selection process.
Program Admission Requirements

- Successful applicants must have a minimum GPA of 2.0.
- 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 students participating in clinicals are required to complete these background checks, immunizations and a drug screening test by the Department of Allied Health office deadline prior to the first clinical rotation.


## English Language Proficiency

An official iBT® TOEFL (internet-based Test of English as a Foreign Language) test score or an IELTS (International English Language Testing System) Band score is required as proof of English proficiency for any International student for whom English is a second language who is applying to any Tulsa Community College health sciences program. Students who have graduated from a U.S. high school will
not be required to take the iBT Toefl or IELTS tests. Your scores must be current within 2 years of the semester for which you are applying.

For health sciences students, the minimum sub-scores on the internet based TOEFL (iBT®) are 21 for Writing; 24 for Speaking; 20 for Reading; and 20 for Listening, with a total minimum score of 85.
For students choosing the IELTS test, acceptable scores include: 6.5 for Reading; 6.5 for listening; 7.5 for Speaking; and 6 for Writing, for a total IELTS Bans score of 6.5. These required minimum scores must be met for each of the four sub-tests on a single exam. A total score that does not meet the sub-score minimums does not meet the requirement. Exceptions to this policy may be considered on an individual basis.

Students must go to www.ets.org/toefl to find a TOEFL iBT testing site, register and pay for the test. Students may go to www.ielts.org/us to find an IELTS testing center and register and pay for the test. Both tests cost approximately $\$ 190$. Students are highly encouraged to take practice tests to prepare for these important tests. Your official scores, including ALL Sub-scores, must be sent directly to the TCC Registrar's Office.

Contact Information Program Director Sandra Smith, M.Ed., RHIA, CCS sandra.smith@tulsacc.edu (918) 595-7201 Additional Information Available

## Certificate Requirements

## General Education Requirements Credit Hours: 4 <br> Biology 4 hours** <br> - 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 Reimbursement
- HITC 2153 - Pathophysiology and Pharmacology II
- HITC 2342 - Professional Practice Experience III - Coding
- HITC 2403 - Coding II

Total Credit Hours: 40
**Course must be completed with a "C" or better.

## Health, Human Performance \& Physical Education AS

## Program Description

Share the knowledge you gain from your health, human performance, and physical education studies to help equip people to live longer, fitter, and better lives. Your education will combine a study of the human body (including anatomy, kinesiology and nutrition) with the practical skills you'll need to effectively communicate with the people you serve.

The Health and Human Performance concentration is a great choice if you are interested in continuing your education in health promotion or education, exercise science, kinesiology, athletic training, recreation, or public health after graduating from TCC. With a Bachelor's degree, careers can be found in a variety of settings, including corporations, government agencies, and healthcare.

If you are interested in continuing your education in sports and fitness, exercise physiology, health and wellness, or leisure services after graduating from TCC, then the Physical Education concentration is right for you. Career options for those with Bachelor's degrees include teaching, coaching, athletic training, and directing outdoor sports activities, including professional athletics.

## Degree Requirements

## General Education Requirements Credit Hours: 37 Biology 7 hours

- BIOL 1224 - Introduction to Biology for Majors (L)
- BIOL 1383 - Nutrition


## Communication 9 hours

- COMM 1113 - Public Speaking
- ENGL 1113 - Composition I
- ENGL 1213 - Composition II


## Economics 3 hours

Select one course from the following:

- ECON 2013 - Principles of Macroeconomics (S)

Recommended for the Health and Human Performance concentration

- ECON 2023 - Principles of Microeconomics (S)

Recommended for the Physical Education concentration
History and Political Science 6 hours

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


## Humanities 6 hours

See the General Education Requirements page for course list.

## Mathematics 3 Hours

- MATH 1513 - Precalculus I (A) or higher level General Education Math


## Psychology 3 Hours

- PSYC 1113 - Introduction to Psychology (S)

Specialized Course Requirements Credit Hours:
23-25
Biology 4 hours

- BIOL 2154 - Human Physiology (L)

Chemistry 5 hours

- CHEM 1315-General Chemistry I (L)

Health, Human Performance and Physical
Education 8 hours

- HHPE 2212 - First Aid
(Advanced standing credit may be awarded for current certification.)
- HHPE 2603 - Total Wellness
- HHPE 2653-Applied Anatomy and Kinesiology


## Mathematics 3 hours

- MATH 2193 - Elementary Statistics

Controlled Electives 3-5 hours
Select courses from one of the following two concentrations:

Health and Human Performance Concentration 3 hours

- HHPE 2263 - Principles in Health Education and Health Promotion Physical Education Concentration 5 hours
- HHPE 1143 - Foundations of Physical Education
- HHPE 2662 - Care and Prevention of Athletic Injuries
Total Credit Hours: 60-62


## Healthcare Specialist/Paramedic AAS

## 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.

The Tulsa Community College Paramedic Program is accredited by the Commission on Accreditation of Allied Health Education Programs (www.caahep.org) upon the recommendation of the Committee on Accreditation of Educational Programs for the Emergency Medical Services Professions (CoAEMSP)." Commission on Accreditation of Allied Health Education Programs 25400 US Highway 19 N., Suite 158 Clearwater, FL 33763 727-210-2350 www.caahep.org

## 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.

## Degree Requirements

## General Education Requirement Credit Hours: 20

## Biology 4 hours

- BIOL 1314 - Human Anatomy and Physiology

Chemistry 4 hours

- CHEM 1114 - Principles of Chemistry (L)


## 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


## History and Political Science 6 hours

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


## Specialized Course Requirements Credit Hours: 40

Emergency Medical Services Professional 36 hours

- 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

Fire and Emergency Medical Services 4 hours

- FEMS 1214 - Principles of Fire and Emergency Medical Services

Total Credit Hours: 60

## Healthcare Specialist/Paramedic Certificate

## 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 certificate will help prepare graduates for work in many roles in fire and health care agencies as well as other similar occupations. The program may be completed in three semesters of full-time academic work after completing prerequisite courses BIOL 1314 and FEMS 1214.

The Tulsa Community College Paramedic Program is accredited by the Commission on Accreditation of Allied Health Education Programs (www.caahep.org) upon the recommendation of the Committee on Accreditation of Educational Programs for the Emergency Medical Services Professions (CoAEMSP)." Commission on Accreditation of Allied Health Education Programs 25400 US Highway 19 N., Suite 158 Clearwater, FL 33763 727-210-2350
www.caahep.org

## Procedures for Application

Complete all Tulsa Community College application and entry requirements. Requires current National Registry of Emergency Medical Technician certification and application to the program. Application materials may be obtained from the School of Engineering \& Applied Technology at Northeast Campus (contact information below). Applicants will be screened according to FEMS program policies.

For More Information Contact: School of Engineering, Aviation, \& Public Service Northeast Campus: (918) 595-7290

## Certificate Requirements

## Biology 4 hours

- BIOL 1314 - Human Anatomy and Physiology *
* BIOL 2134 and BIOL 2154 may be substituted for this requirement.


## Emergency Medical Services Professional 36 hours

Courses must be completed with a "C" or better.

- 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

Fire and Emergency Medical Services 4 hours

- FEMS 1214 - Principles of Fire and Emergency Medical Services

Total Credit Hours: 44

## Healthcare Specialist/Paramedic, Advanced Emergency Medical Technician Certificate

## Program Description

The primary focus of the Advanced Emergency Medical Technician is to provide basic and limited advanced emergency medical care and transportation for critical and emergent patients who access the emergency medical system. This individual possesses the basic knowledge and skills necessary to provide patient care and transportation. Advanced Emergency Medical Technicians function as part of a comprehensive EMS response, under medical oversight, and perform interventions with the basic and advanced equipment typically found on the ambulance. The Advanced Emergency Medical Technician is a link from the scene to the emergency health system.

The Tulsa Community College Paramedic program has been issued a Letter of Review by the Committee on Accreditation of Educational Programs for the Emergency Medical Services Professions (CoAEMSP Executive Office). This letter is NOT a CAAHEP accreditation status, it is a status signifying that a program seeking initial accreditation has demonstrated sufficient compliance with the accreditation Standards through the Letter of Review Self Study Report (LSSR) and other documentation. Letter of Review is recognized by the National Registry of Emergency Medical Technicians (NREMT) for eligibility to take the NREMT's Paramedic credentialing examination(s). However, it is NOT a guarantee of eventual accreditation.

To contact CoAEMSP Executive Office: 8301 Lakeview Parkway Suite 111-312 Rowlett, TX 75088 214-703-8445 FAX 214-703-8992 www.coaemsp.org"

## Certificate Requirements

## Biology 4 hours

- BIOL 1314 - Human Anatomy and Physiology

Emergency Medical Services Professional 14 hours

- EMSP 2115 - Principles of Paramedic I
- EMSP 2129 - Paramedic Theory and Application I

Total Credit Hours: 18

## History AA

## 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 Requirements

## General Education Requirements Credit Hours: 37

- See the General Education Requirements for the complete list.


## Specialized Course Requirements Credit Hours: 23

History 12 hours

- HIST 1053 - Ancient and Medieval Western Civilization (H)
- HIST 1063 - Modern Western Civilization (H)
- HIST 1073 - Twentieth Century World History (H) (I)
- HIST 1483 - U.S. History 1492 to the Civil War Era
- HIST 1493 - U.S. History - Civil War Era to the Present
- HIST 2043 - Contemporary Affairs (D)
- HIST 2333 - African-American History (H)
- HIST 2343 - Native American History (H)
- HIST 2523 - History of Oklahoma

Recommended Electives 11 hours
Students should select courses that will transfer to the college/university they plan to attend.

- ECON 2013 - Principles of Macroeconomics (S)
- ENGL 2413 - Introduction to Literature (H)
- ENGL 2543 - British Literature to 1800 (H)
- ENGL 2653 - British Literature from 1800 (H)
- ENGL 2773 - American Literature to 1865 (H)
- ENGL 2883 - American Literature from 1865 (H)
- GEOG 1014 - Geography (Physical) (L)
- GEOG 1043 - Introduction to Cultural Geography (S,I,H)
- GEOG 2033 - World Regional Geography (S,I,H)
- PHIL 1113 - Introduction to Philosophy (H)
- PHIL 2163 - Introduction to the History and Philosophy of Science (H)
- POLS 2013 - Introduction to Comparative Governments
- POLS 2023 - Introduction to American Politics
- POLS 2033 - Introduction to Political Thought
- POLS 2153 - Introduction to the Constitution and Judicial Process
- POLS 2203 - Introduction to International Relations
- PSYC 1113 - Introduction to Psychology (S)
- PSYC 2053 - Social Psychology
- RELG 2233 - Religion in America (H)
- SOCI 1113 - Introduction to Sociology (S)
- SOCI 2123 - Introduction to Cultural Anthropology (H) (S)

Total Credit Hours: 60
Proficiency in a foreign language is recommended.

## Human Resources Certificate

## Program Description

This certificate is designed to provide a comprehensive overview of Human Resources. Individuals looking to enter the field, as well as those looking to advance within the profession, will gain a broad understanding of the core functions of Human Resources within an organization. The curriculum is designed and taught by Society of Human Resource Management (SHRM®) certified professionals to align with the SHRM® competency model and culminates with SHRM® certification preparation.
*Coursework and/or program completion does not substitute for or waive exam eligibility requirements as required by SHRM ${ }^{\text {® }}$.

## Certificate Requirements

## Human Resources 21 hours

- HRES 2113 - Principles of Human Resources
- HRES 2123 - Employee Law
- HRES 2233 - Talent Management
- HRES 2243-Training and Development
- HRES 2373-Compensation and Benefits Management
- HRES 2413 - Employee and Labor Relations
- HRES 2493-SHRM Certification Preparation

Total Credit Hours: 21
NOTE: A student may substitute current certification in PHR (Professional in Human Resources) or SPHR (Senior Professional in Human Resources) for the course HRES 2113 - Principles of Human Resources . (PHR or SPHR exams will not substitute for any other HRES courses).

## Human Resources Option, Business AAS

## Program Description

This program is designed to provide a foundation for enterprise management with a comprehensive overview of Human Resources. Individuals looking to enter the field, as well as those looking to advance within the profession, will gain a broad understanding of the core functions of Human Resources within an organization. The Human Resources curriculum is designed and taught by Society of Human Resource Management (SHRM®) certified professionals to align with the SHRM® competency model. The degree program culminates with SHRM® certification preparation.
*Coursework and/or program completion does not substitute for or waive exam eligibility requirements as required by SHRM®

## Degree Requirements

## General Education Requirements Credit Hours: 21

## English 6 hours

- ENGL 1113 -Composition I and select one course from the following:
- ENGL 1213-Composition II
- ENGL 2343 - Business Communication I

History and Political Science 6 hours

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


## Mathematics 3 hours

Select one course from the following:

- BUSN 1353 - Business Mathematics
- MATH 1473 - Quantitative Reasoning (A)

Psychology 6 hours

- PSYC 1113 - Introduction to Psychology (S)
- PSYC 1313 - Human Relations (S)

Specialized Course Requirements Credit Hours: 39
Business 3 hours

- BUSN 1053 - Introduction to Business

Computer Information Systems 3 hours

- CSCI 1203 - Computer Concepts and Applications

Human Resources 21 hours

- HRES 2113 - Principles of Human Resources
- HRES 2123 - Employee Law
- HRES 2233 - Talent Management
- HRES 2243-Training and Development
- HRES 2373 - Compensation and Benefits Management
- HRES 2413 - Employee and Labor Relations
- HRES 2493-SHRM Certification Preparation


## Management 6 hours

- MGMT 2123 - Leadership Development
- MGMT 2363 - Principles of Management

Marketing 6 hours

- MKTG 2343 - Customer Service
- MKTG 2423 - Principles of Marketing

Total Credit Hours: 60
NOTE: A student may substitute current certification in PHR (Professional in Human Resources) or SPHR (Senior Professional in Human Resources) for the course HRES 2113 - Principles of Human Resources. (PHR or SPHR exams will not substitute for any other HRES courses).

## Human Services AAS <br> Program Description

To dedicate one's career to service is a high calling. Whether working directly with clients or in indirect support roles, the commitment to serve and enhance the lives of other people is a noble choice! While at TCC, gain the basic knowledge, skills, and values needed to communicate and help people experiencing personal and social problems. Advance towards a career with the ability to assess needs and provide appropriate interventions. Opportunities to grow through hands-on experiences with community agencies and populations afford students in the Human Services program excellent preparation for employment in the field.

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
- Crisis Intervention
- Internship

Human Services graduates work in a variety of social service delivery settings. Job titles vary: case manager, social work assistant, peer recovery specialist, community outreach worker, life skills coach, crisis intervention worker, intake worker, family support staff, direct support professional, 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 ..."

## Degree Requirements

## General Education Requirements Credit Hours: 24

Communication 3 hours

- 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
- ENGL 2343 - Business Communication I

History and Political Science 6 hours

- POLS 1113 - American Federal Government and select one course from the following:
- HIST 1483 - U.S. History 1492 to the Civil War Era
- HIST 1493-U.S. History - Civil War Era to the Present
Psychology 3 hours
- PSYC 1113 - Introduction to Psychology (S)


## Sociology 6 hours

- HSVC 2713 - Crisis Intervention Strategies and Practice and select one of the following:
- SOCI 1113 - Introduction to Sociology (S)
- SOCI 2113 - Social Problems (S)

Specialized Course Requirements Credit Hours: 36
Computer Information Systems 3 hours
Select three (3) credit hours from any Computer Information Systems courses (CSCI/CSYS).

## Human Services 33 hours

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.

- 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 - Human Services Internship
- HSVC 2513 - Management of Community Programs
- 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

Total Credit Hours: 60

## Human Services AS, Child and Family Services Option

## Program Description

Join an exciting field helping children and families! Careers in Child \& Family Services afford the opportunity to assist 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.
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. See Human Services General Information for additional information.

## Degree Requirements

General Education Requirements Credit Hours: 37

## Communication 9 hours

- COMM 1113 - Public Speaking
- ENGL 1113 - Composition I
- ENGL 1213 - Composition II

History and Political Science 6 hours

- POLS 1113 - American Federal Government and select one course from the following:
- HIST 1483 - U.S. History 1492 to the Civil War Era
- HIST 1493 - U.S. History - Civil War Era to the Present
Humanities 6 hours
- GEOG 1043 - Introduction to Cultural Geography (S,I,H) and select one course from the following:
- HUMN 2113 - Humanities I: Prehistory through the Middle Ages (H)
- HUMN 2223 - Humanities II: Renaissance to the Early 20th Century (H)


## Mathematics 6 hours

- MATH 1473 - Quantitative Reasoning (A) or higher level General Education Math
- MATH 2193 - Elementary Statistics

Psychology/Sociology 3 hours
Select one course from the following:

- PSYC 1113 - Introduction to Psychology (S)
- SOCI 1113 - Introduction to Sociology (S)


## Science 7 hours

- BIOL 1114 - General Biology for Non-Majors (L)
- BIOL 1383 - Nutrition

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 - Human Services Internship

Psychology/Sociology 3 hours

- PSYC 2813 - Human Sexuality (S) (May be taken as SOCI 2813)
Controlled Electives 3 hours
Select three (3) credit hours from courses that will transfer to the college/university you plan to attend.
- 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 2203 - Parent-Child Relations
- HSVC 2513 - Management of Community Programs
- HSVC 2991-2992 - Selected Topics in Human Services (up to 3 hours)
- PSYC 2153/SOCI 2153 - Crisis Intervention and Experience
- PSYC 2053-Social Psychology
- Other HSVC electives and select CHLD courses may be allowed.


## Total Credit Hours: 64

Students must earn a "C" or better in HSVC courses to progress to advanced courses in the program, or gain permission of instructor or dean.

## Human Services AS, Pre-Social Work Option

## Program Description

Find more than a job - find your calling in the Social Work profession! Set an academic goal of earning a bachelor's or master's degree in generalist social work practice and enjoy the broad and flexible array of career options local to global. 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.

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. See Human Services General Information for more information.

## Degree Requirements

## General Education Requirements Credit Hours 37

## Communication 9 hours

- COMM 1113 - Public Speaking
- ENGL 1113 - Composition I
- ENGL 1213 - Composition II

History and Political Science 6 hours

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


## Humanities 6 hours

- GEOG 1043 - Introduction to Cultural Geography (S,I,H) and select one course from the following:
- HUMN 2113 - Humanities I: Prehistory through the Middle Ages (H)
- HUMN 2223 - Humanities II: Renaissance to the Early 20th Century (H)
Mathematics 3 hours
- MATH 1473-Quantitative Reasoning (A) or higher level General Education Math
Psychology 3 hours
- PSYC 1113 - Introduction to Psychology (S)

Science 7 hours

- BIOL 1114 - General Biology for Non-Majors
- BIOL 1383 - Nutrition


## Sociology 3 hours

- SOCI 1113 - Introduction to Sociology (S)

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 - Human Services Internship


## Controlled Electives 12 hours

Select one course from the following that will transfer to the college/university you plan to attend.

- MATH 2193 - Elementary Statistics
- PSYC 2223 - Behavioral Statistics (May be taken as SOCI 2223)
and select three (3) courses from the following:
- CSCI 1203 - Computer Concepts and Applications
- HSVC 1313-Chemical Dependency and Treatment
- HSVC 2073 - Issues in Human Services


## Total Credit Hours: 64

Students must earn a "C" or better in HSVC courses to progress to advanced courses in the program, or gain permission of instructor or dean.

## Information Technology AAS, Information Technology Option

## Program Description

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 of study.

## Degree Requirements

## 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:
- COMM 1113 - Public Speaking
- COMM 2103 - Interpersonal Communication


## History and Political Science 6 hours

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


## Mathematics 3 hours

Select one course from the following:

- BUSN 1353 - Business Mathematics
- MATH 1473 - Quantitative Reasoning (A) or higher level General Education Math


## Specialized Course Requirements Credit Hours: 42

## Business 3 hours

Select one course from the following:

- BUSN 1053 - Introduction to Business
- MGMT 2363 - Principles of Management

Computer Information Systems 39 hours

- CSCI 1203 - Computer Concepts and Applications
- CSCI 1263 - Network Fundamentals
- CSYS 1013 - HTML and CSS
- CSYS 1203 - Introduction to Computer Programming
- and select 27 credit hours from any CSCI, CSYS, or ITCV courses

Total Credit Hours: 60

## Information Technology AAS, Programming Option Program Description

## 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:
- COMM 1113 - Public Speaking
- COMM 2103 - Interpersonal Communication


## History and Political Science 6 hours

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


## Mathematics 3 Hours

Select one course from the following:

- BUSN 1353 - Business Mathematics
- MATH 1473-Quantitative Reasoning (A) or higher level General Education Math


## Specialized Course Requirements Credit Hours: 42

## Business 3 hours

Select one course from the following:

- BUSN 1053 - Introduction to Business
- MGMT 2363 - Principles of Management

Computer Information Systems 30 hours

- CSCI 1203 - Computer Concepts and Applications
- CSCI 1263 - Network Fundamentals
- CSCI 2133 - Introduction to JAVA
- CSCI 2473-C Language
- CSCI 2683 - Data Structures
- CSCI 2843-C++ Programming Language
- CSYS 1013 - HTML and CSS
- CSYS 1203 - Introduction to Computer Programming
- CSYS 2613-C\# Programming
- CSYS 2643 - Database Design and SQL


## Controlled Electives 9 hours

Select three courses from the following:

- BUSN 2503 - Principles of Project Management
- CSCI 1483 - Introduction to UNIX (Linux)
- CSYS 1793 - Mobile Development - iPhone
- CSYS 2033 - JavaScript
- CSYS 2463 - PHP Programming
- CSYS 2743 - Python Programming
- CSYS 2793 - Mobile Development - Android
- MATH 1513 - Precalculus I (A)

Total Credit Hours 60

## Information Technology AAS, Systems Support Technician Option

## Program Description

## Degree Requirements

## 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:
- COMM 1113 - Public Speaking
- COMM 2103 - Interpersonal Communication


## History and Political Science 6 hours

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


## Mathematics 3 Hours

Select one course from the following:

- BUSN 1353 - Business Mathematics
- MATH 1473 - Quantitative Reasoning (A) or higher level General Education Math


## Specialized Course Requirements Credit Hours: 45

## Business 3 hours

Select one course from the following:

- BUSN 1053 - Introduction to Business
- MGMT 2363 - Principles of Management

Computer Information Systems 39 hours

- CSCI 1203 - Computer Concepts and Applications
- CSCI 1263 - Network Fundamentals
- CSCI 1273-Customer Support
- CSCI 1483 - Introduction to UNIX (Linux)
- CSCI 2143 - A+ II
- CSCI 2783 - Advanced UNIX (Linux)
- CSYS 1013-HTML and CSS
- CSYS 1203 - Introduction to Computer Programming
- CSYS 2023-A+I
- CSYS 2063 - Windows Server Administration
- CSYS 2493 - Principles of Information Assurance
- ITCV 2023 - Wireless Networking
- ITCV 2293 - Cloud Computing

Total Credit Hours: 60

## Information Technology AAS, Web Development Option

## Program Description

This option 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 HTML, JavaScript, and CSS and the student will be able to design code server side components for delivering content to database driven websites and web applications using PHP and the Ruby on Rails and .NET frameworks.

## Degree Requirements

## 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:
- COMM 1113 - Public Speaking
- COMM 2103 - Interpersonal Communication History and Political Science 6 hours
- POLS 1113 - American Federal Government and select one course from the following:
- HIST 1483 - U.S. History 1492 to the Civil War Era
- HIST 1493-U.S. History - Civil War Era to the Present


## Mathematics 3 Hours

Select one course from the following:

- BUSN 1353 - Business Mathematics
- MATH 1473 - Quantitative Reasoning (A) or higher level General Education Math
Specialized Course Requirements Hours: 42 Business 3 hours
Select one course from the following:
- BUSN 1053 - Introduction to Business
- MGMT 2363 - Principles of Management
- MKTG 2423 - Principles of Marketing
- BUSN 2503 - Principles of Project Management
Computer Information Systems 33 hours
- CSCI 1203 - Computer Concepts and Applications
- CSCI 1263 - Network Fundamentals
- CSCI 1483 - Introduction to UNIX (Linux)
- CSYS 1013-HTML and CSS
- CSYS 1203 - Introduction to Computer Programming
- CSYS 1393 - Web Design and Marketing (May be taken as MKTG 1393)
- CSYS 2033 - JavaScript
- CSYS 2293 - Social Media (May be taken as MKTG 2293)
- CSYS 2463 - PHP Programming
- CSYS 2643 - Database Design and SQL
- CSYS 2743 - Python Programming


## Controlled Electives 6 hours

Select two courses from the following:

- CSYS 1393 - Web Design and Marketing (May be taken as MKTG 1393)
- CSYS 1443 - Electronic Commerce (May be taken as MKTG 1443)
- DGMD 1113 - Digital Foundations 1: Photoshop
- CSYS 2613-C\# Programming
- CSYS 2793 - Mobile Development - Android

Total Credit Hours 60

## Information Technology Certificate, Business Application Specialist Option

## Program Description

The Business Application Specialist Certificate is designed to provides graduates with the diversity of business and applications software skills needed to effectively use application software in a business setting and prepare for the Microsoft Certified Application Specialist Exam (MCAS) exams in Word, Excel, Access, Outlook, Windows and PowerPoint and the Application Professional certification.

## Certificate Requirements

## Computer Information Systems 18 hours

- CSCI 1203 - Computer Concepts and Applications
- CSCI 2013 - Word
- CSCI 2033 - Excel
- CSCI 2163 - Windows Operating Systems
- CSCI 2483 - PowerPoint / Multimedia
- CSYS 2073 - MS Office

Total Credit Hours: 18 hours

## Information Technology Certificate, Web Development Option

## Program Description

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 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 using PHP and the Ruby on Rails and .NET frameworks.

## Certificate Requirements

Computer Information Systems 24 hours

- CSCI 1203 - Computer Concepts and Applications
- CSCI 1263 - Network Fundamentals
- CSYS 1013 - HTML and CSS
- CSYS 1203 - Introduction to Computer Programming
- CSYS 1393 - Web Design and Marketing (May be taken as MKTG 1393)
- CSYS 2033-JavaScript
- CSYS 2463 - PHP Programming
- CSYS 2643 - Database Design and SQL

Controlled Electives 3 hours

- CSYS 2743 - Python Programming
- DGMD 1113 - Digital Foundations 1: Photoshop
- CSYS 2613-C\# Programming
- CSYS 2793 - Mobile Development - Android
- CSYS 2293 - Social Media (May be taken as MKTG 2293)

Total Credit Hours: 27 hours

## Interior Design AAS

## 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 perspectives sketching, historic periods of design, knowledge of fire, life safety and handicap codes, knowledge of lighting, textiles, computer aided design and sales presentations. These skills combined with field internships and market field trips prepare the student to enter the interior design field and combine their education with work experience.

## Degree Requirements

## 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

History and Political Science 6 hours

- POLS 1113 - American Federal Government and select one course from the following:
- HIST 1483 - U.S. History 1492 to the Civil War Era
- HIST 1493 - U.S. History - Civil War Era to the Present
Interior Design 6 hours
- INTD 1433 - History of Interiors I
- INTD 1443 - History of Interiors II


## Specialized Course Requirements Credit Hours:

 54
## Interior Design 48 hours

- INTD 1303 - Sales and Negotiations * *This course may be taken as MKTG 1313; however, students planning to sit for the NCIDQ exam should take this course as INTD 1303.
- 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 and Interior Finishes
- INTD 2453 - Advanced CAD for Interior Design
- INTD 2463 - Codes for Interior Designs
- INTD 2503 - Computer Graphics
- INTD 2513 - Lighting for Interior Design
- INTD 2523 - Design III
- INTD 2533 - Design IV

Controlled Electives 6 hours
Select two courses from the following:

- INTD 1533 - Photoshop for Interior Design
- INTD 2343 - Interior Design Internship I ***
- INTD 2353 - Interior Design Internship II ***
- INTD 2403 - Market Field Trip **
- INDT 2993 - Selected Topics in Interior Design
**Course may be taken twice.
***Courses highly recommended for students not employed in the field.


## Total Credit Hours: 72

## International Business AS

## Program Description

This cross-disciplinary degree program provides students with a foundational knowledge of business coupled with proficiency in a world language. This foundation serves as a platform for further study of International Business at a university which can lead to career opportunities in a variety of fields, domestically and abroad, such as global commerce, foreign relations, and international aid organizations.

## Degree Requirements

## General Education Requirements Credit Hours: 37 <br> English 6 hours

- ENGL 1113 - Composition I
- ENGL 1213 - Composition II

History and Political Science 6 hours

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


## Humanities 6 Hours

- COMM 2053 - Intercultural Communication (H) (I)
- Select three (3) additional hours of Humanities. See the General Education Requirements for course list.


## Mathematics 3 hours

- MATH 1513 - Precalculus I (A) or higher level General Education Math

Science 7 hours
See the General Education Requirements page for the course list. One course must be a laboratory science (L).

## World Language 9 hours

Select nine (9) credit hours from one World Language
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 6 hours

- ECON 2013 - Principles of Macroeconomics (S)
- ECON 2023 - Principles of Microeconomics (S)


## Mathematics 3 hours

Select one course from the following:

- MATH 2193 - Elementary Statistics
- MATH 2523 - Calculus for Business, Life, and Social Sciences


## Controlled Electives 5 hours

 Select one course from the following:- BUSN 2433 - Introduction to Entrepreneurship
- GEOG 1043 - Introduction to Cultural Geography (S,I,H) And select two hours from the following:
- COLL 1002 - First Year Experience Seminar OR
- Two (2) hours from the Liberal Arts \& Sciences Electives

Total Credit Hours: 60

## Liberal Arts AA

## Program Description

A Liberal Arts degree cultivates in students practices of critical thinking that integrate knowledge of history, language arts, philosophy, visual and performing arts, religious studies, and social sciences into a coherent, but adaptable perspective. Students acquire a broad-based education to become proficient readers, writers, speakers, and problem solvers. They are prepared for both further study in these fields and careers that call for creative/innovative thinking, effective communication, sound interpersonal skills, and flexibility. Studying the Liberal Arts also kindles a deep, lasting commitment to life-long learning, personal growth, cultural diversity, civic engagement, and ethical living.

## Degree Requirements

## General Education Requirements Credit Hours: 37

## English 6 hours

- ENGL 1113-Composition I
- ENGL 1213-Composition II


## History and Political Science 6 hours

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


## Humanities 6 Hours

See the General Education Requirements page for the course list.

## Mathematics 3 hours

- MATH 1473-Quantitative Reasoning (A) or higher level General Education Math


## Science 7 hours

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

## General Education Recommended Electives 6 hours

Select courses from the list of Liberal Arts \& Sciences Electives.

## General Education Required Electives 3 hours

Select three (3) credit hours from courses in Fine Arts (Art, Music, Theatre), Foreign Language, Psychology, or Social Sciences.

## Specialized Course Requirements Credit Hours: 23

## 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
Recommended Electives may be selected from any courses except Physical Education (PHED) activity courses.
Total Credit Hours: 60

## Management Option, Business AAS

## Program Description

The Management program is designed to prepare students for a wide range of management positions. This program will equip students already in the business world with additional management skills while honing the skills they already possess and is designed to help managers succeed in their current position and prepare for career advancement. Major focus will be placed on leadership skills, improving decision-making processes, learning how to motivate members of a team, and developing new techniques to resolve conflicts. Students will have the option to develop managerial skills through internship opportunities.

## Degree Requirements

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

History and Political Science 6 hours

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


## Mathematics 3 hours

Select one course from the following:

- BUSN 1353 - Business Mathematics
- MATH 1473-Quantitative Reasoning (A)

Psychology 3 hours

- PSYC 1113 - Introduction to Psychology (S)

Specialized Course Requirements Credit Hours: 42
Business 6 hours

- BUSN 1053 - Introduction to Business
- BUSN 2633 - Industrial and Organizational Psychology (S) (May be taken as PSYC 2633)
Computer Information Systems 3 hours
- CSCI 1203 - Computer Concepts and Applications

Human Resources 6 hours

- HRES 2113 - Principles of Human Resources
- HRES 2233 - Talent Management

Management 12 hours

- MGMT 1353 - Interpersonal Skills for Managers
- MGMT 2123 - Leadership Development
- MGMT 2323 - Organizational Behavior
- MGMT 2363 - Principles of Management


## Marketing 9 hours

- MKTG 2343 - Customer Service
- MKTG 2423 - Principles of Marketing
- MKTG 2433 - Product Innovation and Creativity


## Controlled Electives 6 hours

Select two School of Business and IT courses.
Total Credit Hours: 60

## Marketing AS

## Program Description

## Degree Requirements

## General Education Requirements Credit Hours: 36

## Communication 9 hours

- COMM 1113 - Public Speaking
- ENGL 1113 - Composition I
- ENGL 1213-Composition II


## History and Political Science 6 hours

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


## Humanities 6 hours

See the General Education Requirements page for the course list.

## Mathematics 3 hours

Select one course from the following:

- MATH 1473-Quantitative Reasoning (A)
- MATH 1513 - Precalculus I (A)


## Science 7 hours

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


## General Education Required Electives 3 hours

Select three (3) credit hours from courses in Fine Arts (Art, Music, Theatre), Foreign Language, Psychology, or Social Sciences.

## 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 (S)
- ECON 2023 - Principles of Microeconomics (S)

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
** 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.

## Marketing Option, Business AAS

## Program Description

This program is designed to provide students the opportunity to engage in a hands-on approach to marketing and prepare the student for successful employment in a marketing position. Students will 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. 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 Requirements

## 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

History and Political Science 6 hours

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


## Mathematics 3 hours

Select one course from the following:

- BUSN 1353 - Business Mathematics
- MATH 1473 - Quantitative Reasoning (A)

Psychology 3 hours

- PSYC 1113 - Introduction to Psychology (S)

Specialized Course Requirements Credit Hours: 42
Business 3 hours

- BUSN 1053 - Introduction to Business


## Computer Information Systems 3 hours

- CSCI 1203 - Computer Concepts and Applications

Human Resources 6 hours

- HRES 2113 - Principles of Human Resources
- HRES 2233 - Talent Management


## Management 6 hours

- MGMT 2123 - Leadership Development
- MGMT 2363 - Principles of Management

Marketing 18 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
- MKTG 2433 - Product Innovation and Creativity

Controlled Electives 6 hours
Select two School of Business and IT courses.
Total Credit Hours: 60

## Mathematics AS

## Program Description

From calculating your car loan payment to understanding how search engines work, the principles of mathematics touch every part of your life. If you enjoy seeing the beauty of patterns, logic and processes in the world, why not become a mathematician?
Your degree in mathematics will provide you with analytical and critical thinking skills for lifelong learning. After graduation, you may continue to further education or straight into a career in fields like chemistry, engineering, computer science, statistics or physics.

## Degree Requirements

General Education Requirements Credit Hours: 34
(Mathematics General Education Requirement met through Specialized Course Requirements.)

## Communication 9 hours

- COMM 1113 - Public Speaking
- ENGL 1113 - Composition I
- ENGL 1213 - Composition II

History and Political Science 6 hours

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


## Humanities 6 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.
General Education Recommended Electives 3 hours

- CSCI 1203 - Computer Concepts and Applications
or
- Select three (3) credit hours from the list of Liberal Arts \& Sciences Electives
General Education Required Electives 3 hours Select three (3) credit hours from courses in Fine Arts (Art, Music, Theatre), Foreign Language, Psychology, or Social Sciences.


## Specialized Course Requirements Credit Hours:

26
Mathematics 15 hours

- MATH 2114 - Analytic Geometry and Calculus I (A)
- MATH 2124 - Analytic Geometry and Calculus II (A)
- MATH 2134 - Analytic Geometry and Calculus III
- MATH 2613 - Elementary Differential Equations
Recommended Electives 11 hours
- CHEM 1315-General Chemistry I (L)
- CHEM 1415-General Chemistry II (L)
- CSCI 1203 - Computer Concepts and Applications
- CSYS 1203 - Introduction to Computer Programming
- MATH 1513 - Precalculus I (A)
- MATH 1613 - Precalculus II (A)
- MATH 1715 - Precalculus I and II (A)
- MATH 2193 - Elementary Statistics
- PHYS 1114 - General Physics I (L) and
- PHYS 1214 - General Physics II (L) or
- PHYS 2034 - Physics I with Calculus (L) and
- PHYS 2124 - Physics II with Calculus (L)

Total Credit Hours: 60

## Medical Laboratory Technician AAS

## Program Description

This program prepares the student to perform diagnostic laboratory tests and related duties in a medical laboratory with the supervision of a medical technologist. The Medical Laboratory Technician (MLT) 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.

## Admission to the Program

## Program Application Instructions

1. All prospective Medical Laboratory Technician students who have not been enrolled at TCC within the past year must complete an application for admission to the College and submit their high school transcript, ACT scores and previous college transcripts to the Metro Campus Student Completion Services office at 909 South Boston, Tulsa, OK 74119. Incomplete submissions will not be considered for admission into the Medical Laboratory Technician program. Admission to Tulsa Community College does not guarantee admission into the Medical Laboratory Technician program.
2. Applications for admission to the MLT program must be completed online at tulsacc.edu/ApplyAlliedHealth by May 15. For more information, contact the Department of Allied Health office at (918) 595-7002.
3. Eligible applicants to be interviewed for consideration into the Medical Laboratory Technician program will be notified by email to their TCC email address. All interviewed applicants will be notified regarding their selection status.

## Program Admission Requirements

- Completion of all prerequisite coursework
- Minimum overall GPA of 2.0
- Minimum Science and Math GPA of 2.4
- 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 students participating in clinicals are required to complete these background checks, immunizations and a drug screening test by the Department of Allied Health 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.
- Applicants will be ranked for program admission according to the following criteria:

1. Science and Math GPA
2. Overall GPA
3. Interview with Program Director and Clinical Coordinator

## English Language Proficiency

An official $\mathrm{iBT} ®$ TOEFL (internet-based Test of English as a Foreign Language) test score or an IELTS (International English Language Testing System) Band score is required as proof of English proficiency for any International student for whom English is a second language who is applying to any Tulsa Community College health sciences program. Students who have graduated from a U.S. high school will not be required to take the iBT Toefl or IELTS tests. Your scores must be current within 2 years of the semester for which you are applying.

For health sciences students, the minimum sub-scores on the internet based TOEFL (iBT®) are 21 for Writing; 24 for Speaking; 20 for Reading; and 20 for Listening, with a total minimum score of 85.
For students choosing the IELTS test, acceptable scores include: 6.5 for Reading; 6.5 for listening; 7.5 for Speaking; and 6 for Writing, for a total IELTS Bans score of 6.5. These required minimum scores must be met for each of the four sub-tests on a single exam. A total score that does not meet the sub-score minimums does not meet the requirement. Exceptions to this policy may be considered on an individual basis.

Students must go to www.ets.org/toefl to find a TOEFL iBT testing site, register and pay for the test. Students may go to www.ielts.org/us to find an IELTS testing center and register and pay for the test. Both tests cost approximately $\$ 190$. Students are highly encouraged to take practice tests to prepare for these important tests. Your official scores, including ALL Sub-scores, must be sent directly to the TCC Registrar's Office.

Contact Information Program Director Andrew England 918-595-8667 andrew.england@tulsacc.edu

## Degree Requirements

## 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 12 hours**

- BIOL 1314 - Human Anatomy and Physiology
- BIOL 2164 - Microbiology (L)
- BIOL 1224 - Introduction to Biology for Majors (L)
Chemistry 4 hours**
- CHEM 1114 - Principles of Chemistry (L)

English 6 hours

- ENGL 1113 - Composition I
- ENGL 1213 - Composition II

History and Political Science 6 hours

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

```
Specialized Course Requirements Credit Hours:
41
Medical Laboratory Technology 41 hours**
    - MDLT 1203 - Phlebotomy *
    - MDLT 1222 - Phlebotomy Clinical *
        *MDLT 1203 and MDLT 1222 must be taken
        concurrently. Can be waived with previous
        phlebotomy experience or permission from
        the program director.
    - MDLT 2002 - Clinical Laboratory Operations
        and Professionalism
    - MDLT 2212 - Urinalysis and Body Fluids
    - MDLT 2222 - Clinical Immunology and
        Serology
    - MDLT 2302 - Hematology Lab
    - MDLT 2303 - Hematology
    - MDLT 2323 - Clinical Chemistry
    - MDLT 2331-Clinical Chemistry Lab
    - MDLT 2392 - Clinical Microbiology Lab
    - MDLT 2393 - Clinical Microbiology
    - MDLT 2422 - Clinical
        Immunohematology/Blood Bank Lab
    - MDLT 2423 - Clinical
        Immunohematology/Blood Bank
    - MDLT 2433 - Clinical Practicum I
    - MDLT 2462 - Clinical Practicum II
    - MDLT 2516-Clinical Practicum III
Total Credit Hours: 69
** Courses must be completed with a "C" or better.
```


## Medical Laboratory Technician Certificate (Phlebotomy)

## Program Description

This program 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.

## Admission to the Program

## Procedures For Application

1. All prospective Medical Laboratory Technician Phlebotomy students who have not been enrolled at TCC within the past year must complete an application for admission to the College and submit their high school transcripts, ACT scores, and previous college transcripts to the Metro Campus Student Completion Services office at 909 South Boston, Tulsa, OK 74119. Incomplete submissions will not be considered for admission into the Phlebotomy program. Admission to Tulsa Community College does not guarantee admission into the Medical Laboratory Technician Phlebotomy program.
2. Applications for admission to the Phlebotomy program must be completed online at tulsacc.edu/ApplyAlliedHealth by:

- July 1 for the fall semester
- December 1 for the spring semester
- March 1 for the summer semester Students are admitted on a rolling admission basis determined by application date and meeting the program admission requirements. Classes for a semester could fill prior to the deadline. For more information, contact the Department of Allied Health office at (918) 595-7002.

3. Applicants eligible for consideration for admission into the Medical Laboratory Technician Phlebotomy program will be notified by email and will be required to attend a Phlebotomy orientation.

## Program Admission Requirements

- High school diploma or GED equivalent with a minimum 2.0 GPA
- Reading and writing ability evidenced by meeting one of the following requirements:
- Minimum six (6) hours of college level coursework with 2.0 GPA or better
- ACT score of 14 or higher in English and 15 or higher in Reading
- Completion of READ 0113 and ENGL 0923 or higher level English course(s)
- Completion of the Accuplacer Course Placement test, scoring into READ 0123 and ENGL 0933 at a minimum
- 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 students participating in clinicals are required to complete these background checks, immunizations and a drug screening test by the Department of Allied Health 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.


## English Language Proficiency

An official iBT® TOEFL (internet-based Test of English as a Foreign Language) test score or an IELTS (International English Language Testing System) Band score is required as proof of English proficiency for any International student for whom English is a second language who is applying to any Tulsa Community College health sciences program. Students who have graduated from a U.S. high school will not be required to take the iBT Toefl or IELTS tests. Your scores must be current within 2 years of the semester for which you are applying.

For health sciences students, the minimum sub-scores on the internet based TOEFL (iBT®) are 21 for Writing; 24 for Speaking; 20 for Reading; and 20 for Listening, with a total minimum score of 85.
For students choosing the IELTS test, acceptable scores include: 6.5 for Reading; 6.5 for listening; 7.5 for Speaking; and 6 for Writing, for a total IELTS Bans score of 6.5 . These required minimum scores must be met for each of the four sub-tests on a single exam. A total score that does not meet the sub-score minimums does not meet the requirement. Exceptions to this policy may be considered on an individual basis.

Students must go to www.ets.org/toefl to find a TOEFL iBT testing site, register and pay for the test. Students may go to www.ielts.org/us to find an IELTS testing center and register and pay for the test. Both tests cost approximately $\$ 190$. Students are highly encouraged to take practice tests to prepare for these important tests. Your official scores, including ALL Sub-scores, must be sent directly to the TCC Registrar's Office.

Contact Information Program Director Andrew England 918-595-7002 andrew.england@tulsacc.edu Additional Information Available

## Certificate Requirements

## Medical Laboratory Technology 5 hours

Courses must be taken concurrently and completed with a "C" or better for admission to the Medical Laboratory Technician AAS program.

- MDLT 1203 - Phlebotomy
- MDLT 1222 - Phlebotomy Clinical ( 100 clinical hours)

Total Credit Hours: 5

## Music AA

## 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.

## Degree Requirements

## General Education Requirements Credit Hours: 28

(Additional General Education Requirements are satisfied through Specialized Course Requirements.)

## English 6 hours

- ENGL 1113 - Composition I
- ENGL 1213 - Composition II


## History and Political Science 6 hours

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


## Humanities 6 Hours

See the General Education Requirements page for the course list.

## Mathematics 3 hours

- MATH 1473 - Quantitative Reasoning (A) or higher level General Education Math


## Science 7 hours

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

## Specialized Course Requirements Credit Hours: 35-43

## Applied Music Lessons on Primary Instrument 8 hours

Music majors at four-year colleges/universities are required to take 2 credit hours of private instruction per 16-week term.

- MUSC 1200 to 1490 - Private Music Lessons
- MUSC 2200 and 2240 - Private Piano and Voice Lessons


## 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


## 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


## Recital Class

A Music major is required to have four semesters of transcripted Recital Class.

- MUSC 1030-Recital Class

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 the 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 (H)
- MUSC 1153 - American Popular Music (H)
- MUSC 1171 - Beginning Guitar
- MUSC 1512 - Voice Class
- MUSC 1563 - Musical Theatre
- MUSC 1661 - Jazz Band
- MUSC 1731-Guitar Ensemble
- MUSC 1781-Chamber Ensemble
- MUSC 1791 - Jazz Combo
- MUSC 1802 - Jazz Improvisation
- MUSC 2181-Jazz Choir
- MUSC 2223 - Recording Studio Techniques II
- MUSC 2333 - Music Internship

Total Credit Hours: 63-71
Scholarships may be available. Please contact the Music office at 595-8698.

## Nursing (RN) AAS

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.
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. The seven program outcomes essential for entry-level nursing practice include: Patient-Centered Care; Teamwork and Collaboration; Best Practices; Quality Improvement; Safety; Informatics; Integrated Concepts. Student learning outcomes for each individual nursing course integrate knowledge, skills, and attitudes specific to the patient population served and collectively contribute to the overall attainment of the program outcomes. 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 School of Nursing office (918-595-7075) or access the Nursing Program web page (www.tulsacc.edu/nursing).

## Traditional Nursing (RN) Track

The Traditional Nursing Track admits a new class each fall and spring semester. This track allows for completion of nursing courses in as few as four semesters, 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 a new class each fall and spring semester. 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 online 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 a Paramedic is required to successfully complete NURS 1471.

## 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 Student Completion Services office; and, (2) the application for the Nursing Program must be submitted to the Department of Nursing 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 School of Nursing office or access the Nursing Program web page (www.tulsacc.edu/nursing) for more information regarding application to the Traditional Nursing Track and/or the Nursing Career Mobility Track.
All students applying must first take the ATI Test of Essential Academic Skills (TEAS) exam. This exam is offered multiple times per application period and students should register for the exam at
www.atitesting.com. There is a $\$ 77$ charge for this exam from the testing company. Testing policy: test results must be no more than 2 years old at the application deadline; student may take the exam no more than 3 times in a 12-month period; and must wait 30 days between each attempt.
The Tulsa Community College School of Nursing is approved by the Oklahoma Board of Nursing. Graduates of this state-approved program are eligible to apply to write the National Council Licensure Examination (NCLEX) for (registered or practical) 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 [59 O.S. $\S \S 567.5$ \& 567.6]. 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, 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 authority to deny a license, recognition or certificate; issue a license, recognition or certificate with conditions and/or an administrative penalty; or to issue and otherwise discipline a license, recognition or certificate to an individual with a history of criminal background, disciplinary action on any professional or occupational 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. Potential applicants to state-approved education programs, with a criminal history, may obtain an initial determination of eligibility for licensure or certification from the Oklahoma Board of Nursing for a fee. The initial determination of eligibility for licensure petition can be accessed at http://nursing.ok.gov/initialdeterm.pdf.

## English Language Proficiency

An official iBT® TOEFL (internet-based Test of English as a Foreign Language) test score or an IELTS (International English Language Testing System) Band score is required as proof of English proficiency for any International student for whom English is a second language who is applying to any Tulsa Community College health sciences program. Students who have graduated from a U.S. high school will not be required to take the iBT Toefl or IELTS tests. Your scores must be current within 2 years of the semester for which you are applying.
For health sciences students, the minimum sub-scores on the internet based TOEFL (iBT®) are 21 for Writing; 24 for Speaking; 20 for Reading; and 20 for Listening, with a total minimum score of 85.
For students choosing the IELTS test, acceptable scores include: 6.5 for Reading; 6.5 for listening; 7.5 for Speaking; and 6 for Writing, for a total IELTS Bans score of 6.5. These required minimum scores must be met for each of the four sub-tests on a single exam. A total score that does not meet the sub-score minimums does not meet the requirement. Exceptions to this policy may be considered on an individual basis.

Students must go to www.ets.org/toefl to find a TOEFL iBT testing site, register and pay for the test. Students may go to www.ielts.org/us to find an IELTS testing center and register and pay for the test.

Both tests cost approximately $\$ 190$. Students are highly encouraged to take practice tests to prepare for these important tests. Your official scores, including ALL Sub-scores, must be sent directly to the TCC Registrar's Office.

## Application Periods

|  | Application Period | Semester of Enrollment |
| :--- | :---: | :---: |
| Traditional Nursing Track+ Career <br> Mobility Track | May 1-September 1 | Spring/January |
| Traditional Nursing Track+ Career <br> Mobility Track | January 1- April 1 | Fall/August |

## Application to Traditional Nursing Track

The Traditional Track admits a new class each fall and spring semester. 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. The application period for submission of application for the fall semester is January 1 to April 1. The application period for submission of application for the spring semester is May 1 to September 1. 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 (Ranking worksheet available @ www.tulsacc.edu/nursing). Students who are accepted to the Nursing Program must meet the following program and curriculum prerequisites prior to beginning nursing courses:

1. Complete the following prerequisite general education classes with a grade of " C " or higher prior to beginning the Nursing Program.
2. ENGL 1113-Composition I
3. BIOL 2134 - Human Anatomy (L)
4. CHEM 1114 - Principles of Chemistry (L)
5. BIOL 1224 - Introduction to Biology for Majors (L)
6. PSYC 1113 - Introduction to Psychology (S)
7. Provide documentation of current Oklahoma CNA certification or an acceptable substitute. Acceptable substitutes include: current Oklahoma AUA certification; completion of an Oklahoma Patient Care Technician (PCT) course within the last two years; successful completion of a "Foundations" or "Fundamentals" nursing course form an ACEN accredited nursing program; or local hospital based Nurse Tech (training \& employment verification required).
8. Submit ALL previous official transcripts to the Student Completion Services office prior to application deadline. Please remember that it may take several weeks to have your transcripts reviewed.
9. Have an overall GPA of 2.5 or above. NOTE: To stay eligible for selection in the application pool your GPA must be maintained at 2.5. Otherwise, you will become ineligible and your application will be returned.
10. 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.
11. 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.
12. See www.tulsacc.edu/nursing for specific requirements related to criminal background check, health record requirements, and CPR certification. Drug screening will be required upon entry to the program.
13. Applicants who previously attended a nursing program (RN) at TCC or elsewhere, must submit a completed application at least one month prior to the application 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.

## Application to Nursing Career Mobility Track

The Career Mobility Track admits a new class each fall semester and spring semester. Applicants become qualified for admission based on achievement of Nursing Program admission criteria submitted by the application deadline date. The application period for submission of application for the fall semester is January 1st to April 1. The application period for submission of application for the spring semester is May 1 to September 1. 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 ranking worksheet available @ www.tulsacc.edu/nursing). Students who are accepted to the Nursing Program must meet the following program and curriculum prerequisites prior to beginning nursing courses:

1. Complete the following prerequisite general education classes with a grade of " C " or higher prior to beginning the Nursing Program.
2. BIOL 1224 - Introduction to Biology for Majors (L)
3. BIOL 2134 - Human Anatomy (L)
4. BIOL 2154 - Human Physiology (L)
5. CHEM 1114 - Principles of Chemistry (L)
6. ENGL 1113-Composition I
7. ENGL 1213 - Composition II
8. PSYC 1113 - Introduction to Psychology (S)
9. Provide documentation of current unrestricted licensure as an LPN in the State of Oklahoma, or National Paramedic Registration.
10. Submit ALL previous official transcripts to Student Completion Services prior to application deadline. Please remember that it may take several weeks to have your transcripts reviewed.
11. Have an overall GPA of 2.5 or above.
12. 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.
13. 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.
14. See www.tulsacc.edu/nursing for specific requirements related to criminal background check, health record requirements, and CPR certification. Drug screening will be required upon entry to the program.
15. Applicants who previously attended a nursing program (RN) at TCC or elsewhere, must submit a completed application one month prior to the application 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.

## Degree Requirements

## General Education Requirements Credit Hours: 38 English 6 hours

- ENGL 1113 - Composition I
- ENGL 1213 - Composition II

History and Political Science 6 hours

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


## Psychology 6 hours

- PSYC 1113 - Introduction to Psychology (S) +
- PSYC 2023 - Developmental Psychology


## Science 20 hours

Students with a declared major of Nursing Applicant may take BIOL 1224 concurrently with BIOL 2134. See Advisement office for prerequisite waiver.

- BIOL 1224 - Introduction to Biology for Majors (L) +
- BIOL 2134 - Human Anatomy (L) +
- BIOL 2154 - Human Physiology (L)
- BIOL 2164 - Microbiology (L)
- CHEM 1114 - Principles of Chemistry (L) +


## Specialized Course Requirements Credit Hours:

35
Traditional Nursing Track
Nursing 35 hours
(Enrollment requires admission to the Nursing
Program).

- NURS 1113 - Adult Health I ${ }^{\text {B }}$
- NURS 1111 - Adult Health I Clinical ${ }^{\text {C }}$
- NURS 1143 - Overview of Professional Role Development ${ }^{A}$
- NURS 1163 - Principles of Pharmacology \& Medication Safety ${ }^{D}$
- NURS 2213 - Adult Health II E
- NURS 2212 - Adult Health II Clinical ${ }^{\text {F }}$
- 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 ${ }^{\text {G }}$
- NURS 2242 - Adult Health III Clinical ${ }^{\text {H }}$
- 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 B, D
- NURS 1211-Career Mobility I Clinical C
- NURS 1363 - Transition to Career Mobility A
- NURS 2352 - Career Mobility II E, G
- NURS 2351-Career Mobility II Clinical F, H

Total Credit Hours: 73
+Prerequisite course for program
Additional Nursing Courses/Electives (not required for degree)

- NURS 1471 - Activities of Daily Living Skills
- NURS 2303 - Pharmacology
- NURS 2990 - Selected Topics in Nursing


## Nutritional Sciences AS

## Program Description

You'll find your study of nutrition to be a scientific answer to a practical question: You are what you eat, is this really true?

Nutritional sciences live at the intersection of biology and chemistry. As a nutritional science student, you'll learn how the substances we put into our bodies can be both beneficial and/or harmful. The Nutritional Sciences program prepares students to work in a wide range of settings and assume an array of challenging responsibilities in healthcare and wellness.

The Nutritional Sciences program prepares students planning to continue their education in the field of dietetics and obtain their registered dietician credential. Employment in the field of dietetics includes opportunities in medical healthcare, nutrition or food science research, health education, and private or public practice.

## Degree Requirements

The Nutritional Sciences degree is designed to provide the student the opportunity to tailor a degree to the student's area of interest while meeting the degree requirements listed below. A semester-bysemester course plan of study for each transfer institution is available through a degree map. View a semester-by-semester course plan of study and information on how this degree transfers to other colleges and universities on the Degree Map: Nutritional Sciences A.S.,

## General Education Requirements Credit Hours: 24

(The remaining General Education Requirements are met through the Specialized Course Requirements.)

## Communication 6 hours

- ENGL 1113-Composition I
- ENGL 1213-Composition II

History and Political Science 6 hours

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


## Humanities 6 hours

See the General Education Requirements for course list.
Mathematics 3 hours

- MATH 1513 - Precalculus I (A)

Psychology 3 hours

- PSYC 1113 - Introduction to Psychology (S)

Specialized Course Requirements Credit Hours: 36 Work closely with your academic advisor to select courses that will transfer to the university you plan to attend.

## Science 21 hours

- BIOL 1224 - Introduction to Biology for Majors (L)
- BIOL 1383 - Nutrition
- BIOL 2164 - Microbiology (L)
- CHEM 1315 - General Chemistry I (L)
- CHEM 1415-General Chemistry II (L)


## Controlled Electives 4-6 hours

Select at least two courses from the following:

- ACCT 2213 - Financial Accounting
- ALDH 1323 - Medical Terminology
- COMM 1113 - Public Speaking
- HHPE 2111 - Professional Careers in Nutritional Sciences
- MATH 2193 - Elementary Statistics

Recommended Electives 9-11 hours

- BIOL 2154 - Human Physiology (L)
- CHEM 2145 - Organic Chemistry I (L)
- HSVC 2023 - Lifespan Development
- SOCI 1113 - Introduction to Sociology (S)

Total Credit Hours: 60

## Occupational Therapy Assistant AAS

## Program Description

This program is designed to prepare students 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.

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 6116 Executive Blvd, Suite 200 North Bethesda, MD 20852-4929.. AOTAs phone number is (301) 652-2682 (Website: 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 1 of each year.

## Program Application Instructions

1. All prospective Occupational Therapy Assistant students who have not been enrolled at TCC within the past three years must complete an application for admission 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. Admission to Tulsa Community College does not guarantee admission to the Occupational Therapy Assistant program.
2. Applications to the Occupational Therapy Assistant program must be completed online at https://formatta818-
wp.tulsacc.edu/iFiller/iFiller.jsp?fref=9f65f0db554315e2e642a76984409a56 by January 1. For more information, contact the Department of Allied Health office at (918) 595-7002.
3. First-time college students must meet with an academic advisor regarding new student orientation and to determine if course placement testing is required before enrollment.

## Program Admission Requirements

- Minimum GPA of 2.8
- Minimum ACT composite score of 18
- Successful completion of ALDH 1323 Medical Terminology; BIOL 1314 Human Anatomy and Physiology; and OCTA 1203 Introduction to Occupational Therapy I with a grade of " C " or better prior to the application deadline.
- Applicants will be ranked according to the Occupational Therapy Assistant Applicant Ranking Scale. Interviews will be granted to applicants in the top $30 \%$ of the applicant pool. All interviewed applicants will be notified regarding their selection status.
- Must be willing and able to travel to both local and distant clinical sites.
- 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 students participating in clinicals are required to complete these background checks, immunizations and a drug screening test by the Department of Allied Health 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. NOTE: A felony conviction may affect a graduate's ability to take the National Board for Certification in Occupational Therapy (NBCOT) Certification examination or attain state licensure. The NBCOT offers an "early
determination" review to individuals with a felony background who are considering entering an educational program. For further information contact: One Bank Street, Suite 300 Gaithersburg, MD 20878, call (301) 990-7979 or visit their website at www.nbcot.org.


## English Language Proficiency

An official iBT® TOEFL (internet-based Test of English as a Foreign Language) test score or an IELTS (International English Language Testing System) Band score is required as proof of English proficiency for any International student for whom English is a second language who is applying to any Tulsa Community College health sciences program. Students who have graduated from a U.S. high school will not be required to take the iBT Toefl or IELTS tests. Your scores must be current within 2 years of the semester for which you are applying.
For health sciences students, the minimum sub-scores on the internet based TOEFL (iBT®) are 21 for Writing; 24 for Speaking; 20 for Reading; and 20 for Listening, with a total minimum score of 85.
For students choosing the IELTS test, acceptable scores include: 6.5 for Reading; 6.5 for listening; 7.5 for Speaking; and 6 for Writing, for a total IELTS Bans score of 6.5 . These required minimum scores must be met for each of the four sub-tests on a single exam. A total score that does not meet the sub-score minimums does not meet the requirement. Exceptions to this policy may be considered on an individual basis.

Students must go to www.ets.org/toefl to find a TOEFL iBT testing site, register and pay for the test. Students may go to www.ielts.org/us to find an IELTS testing center and register and pay for the test. Both tests cost approximately $\$ 190$. Students are highly encouraged to take practice tests to prepare for these important tests. Your official scores, including ALL Sub-scores, must be sent directly to the TCC Registrar's Office.

Contact Information Occupational Therapist Assistant Program Director Penny Stack, OTD, OTR/L, CLT 918-595-8596 penny.stack@tulsacc.edu TCC Metro Campus 909 S. Boston Ave. Tulsa, OK 74119

## Degree Requirements

## 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


## History and Political Science 6 hours

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


## Psychology 6 hours

- PSYC 1113 - Introduction to Psychology (S) and select one course from the following:
- PSYC 2023 - Developmental Psychology
- PSYC 2193 - Personality Theories 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.


## Specialized Course Requirements Credit Hours:

 41
## Allied Health 3 hours

- ALDH 1323 - Medical Terminology

Occupational Therapy Assistant 42 hours**

- OCTA 1202 - Introduction to Occupational Therapy
- OCTA 1301-Clinical Conditions
- OCTA 1352 - Neuroanatomy 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 IA
- OCTA 1521 - Fieldwork IB
- OCTA 2203 - Therapeutic Adaptions
- OCTA 2233 - Developmental Disabilities Theory and Practice
- OCTA 2263 - Current Trends in Occupational Therapy
- OCTA 2355 - Fieldwork IIA
- OCTA 2375 - Fieldwork IIB

Total Credit Hours: 63
**Courses must be completed with a "C" or better.

## Paralegal Studies AA

## Program Description

This American Bar Association approved Paralegal Studies Program is designed to prepare graduates to work as professional assistants under the supervision of attorneys. All Paralegal Studies students receive training in civil procedure, contracts, real property, legal research and writing, drafting of documents, litigation support, law office systems and management, and use of computers in the legal environment. Students will take at least ten semester credits, or the equivalent, of legal specialty courses through traditional classroom instruction. 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.

UNAUTHORIZED PRACTICE OF LAW: The paralegal may be asked to accomplish a variety of duties as part of his or her job. However, paralegals are prohibited from offering legal advice and arguing cases in court; and Paralegals may not provide legal services directly to the public, except as permitted by law. Paralegals either work with attorneys who assume professional responsibility for the final work product or in areas where 'lay' individuals are explicitly authorized by statute or regulation to assume certain lawrelated responsibilities.

## Admission To The Program:

Admission to the program as an AA degree candidate requires completion of CSCI 1203, ENGL 1113, and ENGL 1213, COMM 1113, POLS 1113, and PLGL 1213 with a " C " or better.

## Degree Requirements

## General Education Requirements Credit Hours: 37 <br> 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


## History and Political Science 6 hours

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


## Humanities 6 hours

- See the General Education Requirements for the course list.
Mathematics 3 hours
- MATH 1473-Quantitative Reasoning (A)


## Science 7 hours

See the General Education Requirements for the course list. One course must be laboratory science.

## General Education Required Elective 3 hours

Select one three (3) credit hour course from Fine Arts (Art, Music, Theatre), Foreign Language, Psychology, or Social Sciences. See the General Education Requirements for the 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 - Contract Law
- PLGL 2363 - Real Property Law
- PLGL 2383 - Paralegal Studies Capstone

Total Credit Hours: 64

## Paralegal Studies CER

## Program Description

This American Bar Association approved Paralegal Studies Program is designed to prepare graduates to work as professional assistants under the supervision of attorneys. All Paralegal Studies students receive training in civil procedure, contracts, real property, legal research and writing, drafting of documents, litigation support, law office systems and management, and use of computers in the legal environment. Students will take at least ten semester credits, or the equivalent, of legal specialty courses through traditional classroom instruction. Upon satisfactory completion of the Program 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.

UNAUTHORIZED PRACTICE OF LAW: The paralegal may be asked to accomplish a variety of duties as part of his or her job. However, paralegals are prohibited from offering legal advice and arguing cases in court; and Paralegals may not provide legal services directly to the public, except as permitted by law. Paralegals either work with attorneys who assume professional responsibility for the final work product or in areas where 'lay' individuals are explicitly authorized by statute or regulation to assume certain lawrelated responsibilities.

## Admission to The Program:

Students must have a Bachelor degree, AA, AS, or AAS degree to be admitted to the program for the proposed option. Admission to the Program as an AAS degree holder seeking the Post-Degree Paralegal
Studies Certificate requires submission of the Application linked below and completion of CSCI 1203, ENGL 1113, and ENGL 1213, COMM 1113, POLS 1113, and PLGL 1213 with a C or better. For any questions about Admission to the Program and/or a copy of the Legal Specialty Course Transfer Policy please contact the Program Coordinator, Michael Speck michael.speck@tulsacc.edu.
Michael Speck, Paralegal Program Coordinator Metro Campus: (918) 595-7317

## Degree Requirements

## Specialized Course Requirements Credit Hours 24

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 - Contract Law
- PLGL 2363 - Real Property Law
- PLGL 2383 - Paralegal Studies Capstone

Total Credit Hours 24

## Pharmacy Technology Certificate

## Program Description

Tulsa Community College's Pharmacy Technology program is an education designed to prepare students for the field of pharmacy technology, which provides a growing number of opportunities in a wide range of medical settings. The program strives to balance technical training and classroom instruction in order to impart the knowledge and skills necessary to meet the needs and goals established by the American Society of Health-System Pharmacists and the pharmacy profession. We provide you with expert classroom instruction and diverse experiential learning with sites in community, institutional, closed-door, and compounding pharmacies. TCC provides a high level of instruction with our state-of-the-art pharmacy lab for simulation in apothecary, sterile compounding, and community/retail practice, allowing students to receive individualized attention. Completion of this program prepares you to take the national Pharmacy Technician Certification exam.

## Admission to the Program

The Pharmacy Technology program admits a new class each semester beginning in August and January. Admission to the class is limited to 24 students. The Pharmacy Technology classes are day courses offered on the Metro Campus and will take 16 weeks to complete.

## Program Application Instructions

1. All prospective Pharmacy Technology students who have not been enrolled at TCC within the past year must complete an application for admission to the College before applying to the Pharmacy Technology program and submit official high school transcripts or GED, ACT scores, and official previous college transcripts to the Metro Campus Student Completion Services office at 909 South Boston, Tulsa, OK 74119. High school seniors need to send a seventh (7th) semester transcript and an official transcript with final grades and graduation date upon completion of high school. Incomplete submissions will not be considered for admission into the Pharmacy Technology program. Admission to Tulsa Community College does not guarantee admission to the Pharmacy Technology program.
2. Applications to the Pharmacy Technology program must be completed online at tulsacc.edu/ApplyAlliedHealth by June 1 for the fall semester and by November 1 for the spring semester; however, with the approval of the Program Director, applications are accepted outside of those dates if a class still has seats available. For more information, contact the Department of Allied Health office at 918-595-7002. Your TCC student ID number will be needed to complete the application.
3. First-time college students must meet with an academic advisor regarding new student orientation, appropriate college placement testing, and possible high school curricular deficiencies. Applicants must demonstrate proficiency in basic math, English, reading, writing and speaking.

## Program Admission Requirements

- Applicants must be a high school graduate or possess a high school equivalency (GED) and have a high school or college cumulative GPA of 2.0 or better.
- Concurrent high school students must be 18 years before their clinical rotations, have only three (3) credit hours of high school coursework remaining, and must meet TCC's concurrent admission policies.
- Applicants must participate in an interview with the program director and/or a program delegate.
- 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 students participating in clinicals are required to complete these background checks, immunizations and a drug screening test by the Department of Allied Health 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.


## English Language Proficiency

An official $\mathrm{iBT®}$ ® TOEFL (internet-based Test of English as a Foreign Language) test score or an IELTS (International English Language Testing System) Band score is required as proof of English proficiency for any International student for whom English is a second language who is applying to any Tulsa Community College health sciences program. Students who have graduated from a U.S. high school will not be required to take the iBT Toefl or IELTS tests. Your scores must be current within 2 years of the semester for which you are applying.

For health sciences students, the minimum sub-scores on the internet based TOEFL (iBT®) are 21 for Writing; 24 for Speaking; 20 for Reading; and 20 for Listening, with a total minimum score of 85. For students choosing the IELTS test, acceptable scores include: 6.5 for Reading; 6.5 for listening; 7.5 for Speaking; and 6 for Writing, for a total IELTS Bans score of 6.5. These required minimum scores must be met for each of the four sub-tests on a single exam. A total score that does not meet the sub-score minimums does not meet the requirement. Exceptions to this policy may be considered on an individual basis.

Students must go to www.ets.org/toefl to find a TOEFL iBT testing site, register and pay for the test. Students may go to www.ielts.org/us to find an IELTS testing center and register and pay for the test. Both tests cost approximately $\$ 190$. Students are highly encouraged to take practice tests to prepare for these important tests. Your official scores, including ALL Sub-scores, must be sent directly to the TCC Registrar's Office.

Contact Information Teresa Foster BS, CPht. Office: MP 446 Phone: 918-595-7005 Pharmacy Lab MP 408 Phone: 918-595-8303 teresa.foster@tulsacc.edu Additional Information Available

## Certificate Requirements

## Pharmacy Technology 16 hours

- PHMT 1324 - Introduction to Profession of Pharmacy
- PHMT 1334 - Introduction to Pharmacology
- PHMT 1414 - Pharmacy Technician Practicum I *
- PHMT 1524 - Preceptorship I * *Course must be completed with a "C" or better.
Total Credit Hours: 16


## Physical Therapist Assistant AAS

## Program Description

Would you enjoy a rewarding career helping persons of all ages recover from injury and illness? Consider the high demand occupation of the physical therapist assistant. 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.
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. 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 Therapist examination. 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.

## Admission to the Program

## Program Application Instructions

1. All prospective Physical Therapist Assistant students who have not been enrolled at TCC within the past year must complete an application for admission 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 Physical Therapist Assistant program. Admission to Tulsa Community College does not guarantee admission to the Physical Therapist Assistant Program.
2. Applications to the PTA program must be completed online at tulsacc.edu/ApplyAlliedHealth by December 1. For more information, contact the Department of Allied Health office at (918) 5957002.

## Program Admission Requirements

- High school diploma or GED
- Minimum GPA of 2.0
- Minimum ACT composite score of 15
- Must be able to drive to local and distant clinical sites.
- Following the review of the applicants' academic history, qualified applicants will be notified via TCC email of their continuance in the selection process. This includes an interview, a writing assignment, and participation in clinical observation experiences to complete the application process. Applicants will be notified via TCC email of their acceptance into the PTA program by April 15.
- 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 students participating in clinicals are required to complete these background checks, immunizations and a drug screening test by the Department of Allied Health 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.


## English Language Proficiency

An official iBT® TOEFL (internet-based Test of English as a Foreign Language) test score or an IELTS (International English Language Testing System) Band score is required as proof of English proficiency for any International student for whom English is a second language who is applying to any Tulsa Community College health sciences program. Students who have graduated from a U.S. high school will
not be required to take the iBT Toefl or IELTS tests. Your scores must be current within 2 years of the semester for which you are applying.
For health sciences students, the minimum sub-scores on the internet based TOEFL (iBT®) are 21 for Writing; 24 for Speaking; 20 for Reading; and 20 for Listening, with a total minimum score of 85. For students choosing the IELTS test, acceptable scores include: 6.5 for Reading; 6.5 for listening; 7.5 for Speaking; and 6 for Writing, for a total IELTS Bans score of 6.5. These required minimum scores must be met for each of the four sub-tests on a single exam. A total score that does not meet the sub-score minimums does not meet the requirement. Exceptions to this policy may be considered on an individual basis.
Students must go to www.ets.org/toefl to find a TOEFL iBT testing site, register and pay for the test. Students may go to www.ielts.org/us to find an IELTS testing center and register and pay for the test. Both tests cost approximately $\$ 190$. Students are highly encouraged to take practice tests to prepare for these important tests. Your official scores, including ALL Sub-scores, must be sent directly to the TCC Registrar's Office.

Contact Information Physical Therapist Assistant Program Director Melanie Heffington, PT, DPT, APTA Education Leadership Institute Fellow 918-595-3423 melanie.heffington@tulsacc.edu TCC Metro Campus 909 S. Boston Ave. Tulsa, OK 74119 Additional Information Available

## Degree Requirements

## General Education Requirements Credit Hours: 19 <br> Biology 4 hours**

- BIOL 1314 - Human Anatomy and Physiology May substitute BIOL 2154 and BIOL 2134 for BIOL 1314


## English 6 hours

- ENGL 1113-Composition I and select one course from the following:
- ENGL 1213 - Composition II
- ENGL 2333 - Technical/Professional Writing

History and Political Science 6 hours

- POLS 1113 - American Federal Government and select one course from the following:
- HIST 1483 - U.S. History 1492 to the Civil War Era
- HIST 1493 - U.S. History - Civil War Era to the Present
Psychology 3 hours
- PSYC 1113 - Introduction to Psychology (S)

Specialized Course Requirements Credit Hours: 48
Allied Health 3 hours**

- ALDH 1323 - Medical Terminology


## Physical Therapist Assistant 45 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 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 2433-Clinical Practice I
- PHTA 2441 - Psychosocial Aspects in Physical Therapy
- PHTA 2486 - Clinical Practice II
- PHTA 2543 - Neuroscience
- PHTA 2522-Special Studies in Clinical Practice
- PHTA 2551 - Pharmacology for PTAs

Total Credit Hours: 67
**Course must be completed with a "C" or better.

## Physics AS

## Program Description

Do you wonder what subatomic particles have in common with the furthest reaches of the observable universe? Do you enjoy problem solving, analysis and logical thinking? If you do then physics is the program for you!

The physics program provides students with a solid foundation in the concepts of physics including the study of classical mechanics, electricity, light, magnetism, thermodynamics and wave motion. Lay the foundation for a professional program in physics or engineering at a four-year institution by graduating with your Associate in Science degree in two years.

## Degree Requirements

## 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


## History and Political Science 6 hours

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


## Humanities 6 Hours

See the General Education Requirements for the course list.

## General Education Recommended Electives 3 hours

Select courses from the Liberal Arts \& Sciences Electives.

## General Education Required Electives 3 hours

- SOCI 2123 - Introduction to Cultural Anthropology (H) (S)
or
- Select three (3) credit hours from courses in Fine Arts (Art, Music, Theatre), Foreign Language, Psychology, or Social Sciences
Specialized Course Requirements Credit Hours: 33


## Chemistry 10 hours

- CHEM 1315 - General Chemistry I (L)
- CHEM 1415-General Chemistry II (L)


## Mathematics 8 hours

- MATH 2114 - Analytic Geometry and Calculus I (A)
- MATH 2124 - Analytic Geometry and Calculus II (A)

Physics 8 hours

- PHYS 2034 - Physics I with Calculus (L)
- PHYS 2124 - Physics II with Calculus (L)

Recommended Electives 7 hours

- ASTR 1104 - General Astronomy
- ENGR 1242 - Introductory Engineering Computer Programming
- MATH 1715 - Precalculus I and II (A)
- MATH 2134 - Analytic Geometry and Calculus III
- MATH 2613 - Elementary Differential Equations

Total Credit Hours: 60

## Political Science AA

## Program Description

Political science, also called government, is a social science which deals with systems of governance, and the analysis of political activities, political thoughts and political behavior. It deals extensively with the theory and practice of politics which is commonly thought of as determining the distribution of power and resources. Political scientists "see themselves engaged in revealing the relationships underlying political events and conditions, and from these revelations they attempt to construct general principles about the way the world of politics works.

## Degree Requirements

## General Education Requirements Credit Hours: 37

## Communication 9 hours

- COMM 1113 - Public Speaking
- ENGL 1113 - Composition I
- ENGL 1213 - Composition II

History and Political Science 6 hours

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


## Humanities 6 hours

See the General Education Requirements for the course list.

## Mathematics 3 hours

See the General Education Requirements for the course list.
Science 7 hours
See the General Education Requirements for the course list. One course must be a laboratory science.
General Education 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
General Education Required Electives 3 hours Select three (3) credit hours from courses in Fine Arts (Art, Music, Theatre), Foreign Language, Psychology, or Social Sciences.
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 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 (S)
- GEOG 1023 - Introduction to Economic Geography (S)
- HIST 1053 - Ancient and Medieval Western Civilization (H)
- HIST 1063 - Modern Western Civilization (H)
- HIST 1483 - U.S. History 1492 to the Civil War Era
- HIST 1493 - U.S. History - Civil War Era to the Present
- HIST 2043 - Contemporary Affairs (D)
- HIST 2523 - History of Oklahoma
- PHIL 1113 - Introduction to Philosophy (H)
- PHIL 2163 - Introduction to the History and Philosophy of Science (H)
- PSYC 1113 - Introduction to Psychology (S)
- SOCI 1113 - Introduction to Sociology (S)
- SOCI 2113 - Social Problems (S)
- SOCI 2223 - Behavioral Statistics (S)

Total Credit Hours: 60
Proficiency in a foreign language is recommended.

## Pre-Education AA, Elementary Education Option

## 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 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 1st - 8th grade with credentialed subject matter required for 7th and 8th grade math, and Secondary encompasses both middle school and high school or grades 5th - 12th only in credentialed subject matter.

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. The Council for the Accreditation of Educator Preparation (CAEP) advances excellent educator preparation through evidence-based accreditation that assures quality and supports continuous improvement to strengthen P-12 student learning. It reviews departments, schools, and colleges which prepare teachers and other educators. Though each four-year university's requirements are similar, it is best to check with your transfer university about their specific requirements. Information about teacher certification will be discussed in CHLD 2042 which is required for all Pre-Education majors.
Before enrolling in CHLD 2042 students must pass a Criminal Background Investigation. Students are responsible for obtaining the Criminal Background Investigation packet from the School of Child Development and Education office at West Campus, following the instructions provided within the packet, and paying the required fee. Once the School of Child Development and Education 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 e-mail that he/she may enroll in CHLD 2042.

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.

## Degree Requirements

## General Education Requirements Credit Hours: 24

(The remaining General Education requirements are satisfied through the Specialized Course Requirements.)
Communication 9 hours

- COMM 1113 - Public Speaking
- ENGL 1113 - Composition I
- ENGL 1213 - Composition II

History and Political Science 6 hours

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


## Humanities 6 hours

- ENGL 2413 - Introduction to Literature (H)
- GEOG 2033 - World Regional Geography (S,I,H)


## Psychology 3 hours

- PSYC 1113 - Introduction to Psychology (S)


## Specialized Course Requirements Credit Hours: $\mathbf{3 6}$

## Child Development 2 hours

- CHLD 2042 - Early Field Experience in Teaching - Elementary


## Mathematics 12 hours

- See the General Education Requirements for the course list. The following courses are recommended:
- MATH 1473-Quantitative Reasoning (A)
- MATH 1483 - Mathematics Functions and Their Uses (A)
- MATH 2423 - Mathematics Concepts for Educators
- MATH 2553 - Geometry and Measurement


## Science 12 hours

- BIOL 1114 - General Biology for Non-Majors (L)
- BIOL 1383 - Nutrition
- PHSC 1114 - General Physical Science (L,N)
- PHSC 2151- The Nature of Science (Courses in Physics, Chemistry, Zoology may be substituted. One of the courses must be a laboratory (L) science.)


## Recommended Electives 10 hours

Students should consult the specific college/university to which they plan to transfer when selecting courses.

- ART 1053 - Art History Survey I (H)
- CHLD 2003 - Child Development in the Lifespan
- HIST 1483 - U.S. History 1492 to the Civil War Era
- HIST 1493 - U.S. History - Civil War Era to the Present
- MUSC 1113 - Music Appreciation (H)
- PSYC 2023 - Developmental Psychology
- 3-6 credit hours from one Foreign Language.
(Foreign Language is necessary and the number of hours will vary depending on the transfer university requirements. Check with an academic advisor for possible advanced standing credit. Language proficiency at the novice high level required.)
Total Credit Hours: 60


## Pre-Nursing AS

## Program Description

Do you enjoy helping others? Are you ready for a rewarding career in healthcare? Nurses work as part of a team along with physicians and other medical professionals to provide and coordinate patient care, educate patients and the public about health conditions, and provide advice and emotional support to patients and their family members.
In this program, you'll receive expert instruction in anatomy, physiology, microbiology, chemistry, nutrition, and psychology as well as other social and behavioral sciences and liberal arts. When you graduate, you'll be well-prepared to transfer to a four-year university and successfully complete your Bachelor of Science in Nursing (BSN).

## Degree Requirements

## General Education Requirements Credit Hours: $\mathbf{3 0}$

(General Education Science Requirements are satisfied through specialized courses.)

## English 6 Hours

- ENGL 1113 - Composition I
- ENGL 1213 - Composition II


## History and Political Science 6 Hours

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


## Humanities 6 hours

See the General Education Requirements for complete list.

## Mathematics 6 hours

- MATH 1513 - Precalculus I (A)
- MATH 2193 - Elementary Statistics


## Psychology 6 hours

- PSYC 1113 - Introduction to Psychology (S)
- PSYC 2023 - Developmental Psychology

Specialized Course Requirements Credit hours: 30
Science 23-24 hours

- BIOL 1224 - Introduction to Biology for Majors (L)
- BIOL 1383 - Nutrition
- BIOL 2134 - Human Anatomy (L)
- BIOL 2154 - Human Physiology (L)
- BIOL 2164 - Microbiology (L) and select one course from the following:
- CHEM 1315-General Chemistry I (L)
- CHEM 1114 - Principles of Chemistry (L)


## Recommended Electives 6 hours

Select courses that will transfer to the university you plan to attend.

- BUSN 1053 - Introduction to Business
- COLL 1003-College Success
- CSCI 1203-Computer Concepts and Applications
- CSCI 2033 - Excel
- ENGL 2383 - Advanced Composition
- MATH 2513 - Finite Mathematics
- SOCI 1113 - Introduction to Sociology (S)

Total Credit Hours: 60
Consult an advisor at the university you plan to attend for prerequisite and application information.

## Pre-Pharmacy AS

## Program Description

The practice of pharmacy requires detailed knowledge of the physical and chemical properties of drugs as well as their particular biologic effects. Pharmacists practice in a variety of settings, including community pharmacies, hospitals, drug industries, and government agencies. Pharmacists may provide patient care, teach at colleges and universities, or may perform pharmaceutical research. The coursework generally requires a minimum of two full-time academic years of study. Most students require at least three years to complete prerequisite course work.

## Degree Requirements

## General Education Requirements Credit Hours: $\mathbf{3 0}$

(General Education Science requirements are satisfied through Specialized Courses.)

## Economics 3 hours

- ECON 2013 - Principles of Macroeconomics (S)


## English 6 hours

- ENGL 1113 - Composition I
- ENGL 1213 - Composition II


## History and Political Science 6 hours

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


## Humanities 6 hours

See General Education Requirements for the complete list.

## Mathematics 6 hours

- MATH 1513 - Precalculus I (A)
- MATH 2523 - Calculus for Business, Life, and Social Sciences (MATH 2114 - Analytic Geometry and Calculus I (A) may be taken in place of MATH 2523. Consult the selected College of Pharmacy for specific prerequisite requirements before selecting MATH 2114.)


## Psychology 3 hours

- PSYC 1113 - Introduction to Psychology (S)

Specialized Course Requirements Credit Hours: 39-43
Science Courses 36 hours

- BIOL 1224 - Introduction to Biology for Majors (L)
- BIOL 2134 - Human Anatomy (L)
- BIOL 2164 - Microbiology (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)
- PHYS 1114 - General Physics I (L)


## Controlled Electives 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 (L)
- COMM 1113 - Public Speaking

Total Credit Hours: 69-73

# Pre-Professional Health Sciences AS, Pre-Dentistry / Pre-Medicine / Pre-Optometry Option 

## Program Description

Are you ready for a competitive, challenging, yet rewarding career helping others as a physician, surgeon, dentist, or optometrist? Is attending medical, dental, or optometry school after earning your Bachelor's degree your goal? If so, TCC is an excellent place to start.
In this program, you'll receive expert instruction in scientific subjects that are emphasized by medical, dental, and optometry schools such as biology, chemistry, physics, and math as well as English, humanities and the social sciences. When you graduate, you'll be well-prepared to transfer to a four-year university and pursue your Bachelor's degree while you finish your prerequisite coursework and begin the process of applying for admission to professional schools.

## Degree Requirements

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


## Humanities 6 Hours

See the General Education Requirements for the course list.

## History and Political Science 6 hours

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


## Mathematics 3 hours

Select one course from the following:

- MATH 1513 - Precalculus I (A)
- MATH 1613 - Precalculus II (A)
- MATH 1715 - Precalculus I and II (A)
- MATH 2114 - Analytic Geometry and Calculus I (A)
- MATH 2124 - Analytic Geometry and Calculus II (A)
- MATH 2134 - Analytic Geometry and Calculus III


## General Education Required Electives 3 hours

Select three (3) credit hours from courses in Fine Arts (Art, Music, Theatre), Foreign Language, Psychology, or Social Sciences.

## Specialized Course Requirements Credit Hours:

## 39

Biology 16 hours

- BIOL 1224 - Introduction to Biology for Majors (L) and select three courses from the following:
- BIOL 1404 - General Botany (L)
- BIOL 1604 - Zoology (L)
- BIOL 2134 - Human Anatomy (L)
- BIOL 2154 - Human Physiology (L)
- BIOL 2164 - Microbiology (L)

Chemistry 15 hours

- CHEM 1315-General Chemistry I (L) and select two courses from the following:
- CHEM 1415-General Chemistry II (L)
- CHEM 2145 - Organic Chemistry I (L)
- CHEM 2245-Organic Chemistry II (L)

Physics 8 hours

- PHYS 1114 - General Physics I (L)
- PHYS 1214 - General Physics II (L)

Total Credit Hours: 63

## Pre-Professional Health Sciences AS, Pre-Medical Imaging Option

## Program Description

Do you like to help others? Are you interested in being an integral part of a healthcare team? Would you like to work with sophisticated medical equipment to help diagnose and treat illnesses? If so, then a career in nuclear medicine, radiography, radiation therapy, or sonography could be a great choice for you. At TCC, you'll receive expert instruction in the mathematical, physical, social and biological sciences as well as the liberal arts. When you graduate, you'll be well-prepared to transfer to a four-year university and pursue your Bachelor's degree in the medical-imaging program of your choice.

## Degree Requirements

## General Education Requirements Credit Hours: 36

(Science General Education Requirements are satisfied through Specialized Course Requirements.)

## English 9 hours

- ENGL 1113 - Composition I
- ENGL 1213 - Composition II
- ENGL 2333 - Technical/Professional Writing

History and Political Science 6 hours

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

Humanities 6 hours
Select courses designated Humanities from the General Education Requirements.

## Mathematics 3 hours

- MATH 1513 - Precalculus I (A)

Behavioral Science 3 hours

- PSYC 1113 - Introduction to Psychology (S)

General Education Recommended Electives 9 hours
BIOL 1604 - Zoology (L) is recommended. Select courses from the list of Liberal Arts \& Sciences Electives.

## Specialized Course Requirements Credit Hours: 24

Allied Health 3 hours

- ALDH 1323 - Medical Terminology

Science 21 hours

- BIOL 1224 - Introduction to Biology for Majors (L)
- BIOL 2134 - Human Anatomy (L)
- BIOL 2154 - Human Physiology (L)
- CHEM 1315 - General Chemistry I (L)
- PHYS 1114 - General Physics I (L)

Total Credit Hours: 60

## Pre-Professional Health Sciences AS, Pre-Occupational Therapy Option

## Program Description

Do you enjoy helping others? Are you interested in a rewarding career as part of a healthcare team? Occupational therapists treat injured, ill, and/or disabled patients through the therapeutic use of everyday activities. They help patients develop, recover, improve, and maintain vital skills that are required for daily living and working.

At TCC, you'll receive expert instruction in biology, physics, mathematics, psychology and the liberal arts. liberal arts. When you graduate, you'll be well-prepared to transfer to a four-year university and complete your Bachelor's degree before entering graduate school and earning a Master of Science in Occupational Therapy.

## Degree Requirements

## General Education Requirements Credit Hours: 36

(General Education Science requirements are satisfied through the Specialized Course Requirements.)

## English 6 hours

- ENGL 1113 - Composition I
- ENGL 1213 - Composition II

History and Political Science 6 hours

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


## Humanities 6 hours

Select courses designated Humanities $(\mathrm{H})$ from the General Education Requirements.

## Mathematics 6 hours

- MATH 1513 - Precalculus I (A)
- MATH 2193 - Elementary Statistics


## Behavioral Science 12 hours

- SOCI 1113 - Introduction to Sociology (S)
- PSYC 1113 - Introduction to Psychology (S)
- PSYC 2023 - Developmental Psychology and select one course from the following:
- PSYC 2193 - Personality Theories
- PSYC 2423 - Introduction to Abnormal Psychology

Specialized Course Requirements Credit Hours: 24
Allied Health 3 hours

- ALDH 1323 - Medical Terminology

Science 21 hours

- BIOL 1224 - Introduction to Biology for Majors (L)
- BIOL 2134 - Human Anatomy (L)
- BIOL 2154 - Human Physiology (L)
- CHEM 1315-General Chemistry I (L)
- PHYS 1114 - General Physics I (L)

Total Credit Hours: 60

## Pre-Professional Health Sciences AS, Pre-Physical Therapy Option

## Program Description

Would you like to help others by serving as an integral part of a healthcare team? Are you ready for a competitive, challenging, yet rewarding career? Is attending a professional school one of your educational goals? If so, then physical therapy may be right for you. Physical therapists play a vital role in the prevention, treatment, and rehabilitation of injuries and work to help people suffering from illnesses or chronic conditions improve their movement and manage their pain.

At TCC, you'll receive expert instruction in biology, physics, mathematics, psychology and the liberal arts. When you graduate, you'll be well-prepared to transfer to a four-year university and complete your Bachelor's degree while you finish your prerequisite coursework and begin the process of applying for admission to physical therapy programs at professional schools.

## Degree Requirements

## General Education Requirements Credit Hours: $\mathbf{3 0}$

(General Education Science requirements are satisfied through the Specialized Course Requirements.)

## English 6 hours

- ENGL 1113 -Composition I
- ENGL 1213 - Composition II


## History and Political Science 6 hours

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


## Humanities 6 hours

Select courses designated Humanities $(\mathrm{H})$ from the list of General Education Requirements.

## Mathematics 6 hours

- MATH 1513 - Precalculus I (A)
- MATH 2193 - Elementary Statistics


## Psychology 6 hours

- PSYC 1113 - Introduction to Psychology (S)
- PSYC 2023 - Developmental Psychology

Specialized Course Requirements Credit Hours: 30
Science 25 hours

- BIOL 1224 - Introduction to Biology for Majors (L)
- BIOL 2134 - Human Anatomy (L)
- BIOL 2154 - Human Physiology (L)
- CHEM 1315-General Chemistry I (L)
- PHYS 1114 - General Physics I (L)
- PHYS 1214-General Physics II (L)

Recommended Electives 5 hours
Select courses that will transfer to the university that you plan to attend.
Suggested Courses:

- ALDH 1323 - Medical Terminology
- BIOL 1604 - Zoology (L)
- CHEM 1415-General Chemistry II (L)

Total Credit Hours: 60

## Pre-Professional Health Sciences AS, Pre-Veterinary Medicine Option

## Program Description

Do you love working with animals? Are you ready for a competitive, challenging, yet rewarding career in medicine? Is attending a professional school one of your educational goals? If so, then a career as a veterinarian might be right for you. Veterinarians care for the health of animals both large and small. They diagnose, treat, and research medical conditions and diseases of pets, livestock, and other animals.

At TCC, you'll receive expert instruction in biology, physics, mathematics, and the liberal arts. When you graduate, you'll be well-prepared to transfer to a four-year university and complete your Bachelor's degree while you finish your prerequisite coursework and begin the process of applying for admission to a school of veterinary medicine.

## Degree Requirements

## General Education Requirements Credit Hours: 30

(General Education Science requirements are satisfied through Specialized Courses.)

## Communication 9 hours

- COMM 1113 - Public Speaking
- ENGL 1113 - Composition I
- ENGL 1213 - Composition II


## History and Political Science 6 hours

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


## Humanities 6 Hours

- See the General Education Requirements page for the course list.

Mathematics 6 hours

- MATH 1513 - Precalculus I (A)
- MATH 2193 - Elementary Statistics


## General Education Required Electives 3 hours

Select three (3) credit hours from courses in Fine Arts (Art, Music, Theatre), Foreign Language, Psychology, or Social Sciences.

## Specialized Course Requirements Credit Hours: 30

## Biology 12 hours

- BIOL 1224 - Introduction to Biology for Majors (L)
- BIOL 1604 - Zoology (L)
- BIOL 2164 - Microbiology (L)


## Chemistry 10 hours

- CHEM 1315 - General Chemistry I (L)
- CHEM 1415-General Chemistry II (L)

Physics 8 hours

- PHYS 1114 - General Physics I (L)
- PHYS 1214 - General Physics II (L)

Total Credit Hours: 60

## Project Management 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 are taught using a hands-on, real-world, team-based approach employing essential project management software and mobile technologies. $\mathrm{PMI®}$ is a registered trademark of the Project Management Institute, Inc.

## Certificate Requirements

## Business 9 hours

- BUSN 2503 - Principles of Project Management
- BUSN 2513 - Project Management Applications
- BUSN 2523 - Project Management Certification Preparation

Total Credit Hours: 9

## Psychology AA

## Program Description

Do you want to understand why people act the way they do? Are you curious about the science behind the human mind and behavior? If you answered yes, then an Associate degree in Psychology might be right for you.

Through your pursuit of an Associate in Arts in Psychology, you will explore topics such as personality theories, social psychology, psychological disorders, motivation, learning, research, and more. Many students who receive an AA in psychology from Tulsa Community College transfer to a four-year college or university to complete their education. TCC works closely with several area colleges and universities to provide a seamless transition.

## Degree Requirements

## General Education Requirements Credit Hours: 37 Communication 9 hours

- COMM 1113 - Public Speaking
- ENGL 1113 - Composition I
- ENGL 1213 - Composition II


## History and Political Science 6 hours

- POLS 1113 - American Federal Government and select one course from the following:
- HIST 1483 - U.S. History 1492 to the Civil War Era
- HIST 1493 - U.S. History - Civil War Era to the Present
Humanities 6 hours
See the General Education Requirements for the course list.


## Mathematics 3 hours

- MATH 1473 - Quantitative Reasoning (A) or higher level math


## Science 7 hours

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

## General Education Recommended Electives 3

 hours- CSCI 1203 - Computer Concepts and Applications
or
- $\quad$ Select three (3) credit hours from the list of Liberal Arts and Science Electives
General Education Required Electives 3 hours Select three (3) credit hours from courses in Fine Arts (Art, Music, Theatre), Foreign Language, Psychology, or Social Sciences.


## Specialized Course Requirements Credit Hours:

 23 Psychology 15 hours- PSYC 1113 - Introduction to Psychology (S)
- PSYC 2023 - Developmental Psychology and select three courses from the following:
- PSYC 1313 - Human Relations (S)
- PSYC 2053 - Social Psychology
- PSYC 2193 - Personality Theories
- PSYC 2213 - Brain and Behavior
- PSYC 2223 - Behavioral Statistics
- PSYC 2323-Conflict Resolution
- PSYC 2423 - Introduction to Abnormal Psychology
- PSYC 2523 - Child Psychology
- PSYC 2533 - Adolescent Psychology
- PSYC 2613 - Psychology of Adulthood and Aging
- PSYC 2633 - Industrial and Organizational Psychology (S)
- PSYC 2713 - Aging, Death and Dying (S)
- PSYC 2813 - Human Sexuality (S)


## Recommended Electives 8 hours

Select courses that will transfer to the college/university you plan to attend. Courses from any of the following disciplines are recommended: Art, Communication, Criminal Justice, Economics, English, Geography, History, Human Services, Humanities, Philosophy, Political Science, Psychology and Sociology.
Total Credit Hours: 60

## Radiography (X-ray) AAS

## Program Description

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. 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 Program is a two-year (six-semester) program consisting of 47 credit hours of Radiography courses (didactic and clinical) and 22 hours of related general education courses. Lecture and clinical courses run concurrently throughout the two years. Upon completion of the program, graduates receive an Associate in Applied Science (AAS) degree, and are eligible to apply for examination by the American Registry of Radiologic Technologists (ARRT) in Radiography (R). Clinical education classes consist of eight-hour shifts for two to three days per week in the assigned clinical education center.

## Admission to the Program

The Radiography 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 49 credit hours of radiography lecture and clinical courses and 22 credit hours of related general education courses.
Program Application Instructions

1. All prospective Radiography students who have not been enrolled at TCC within the past year must complete an application for admission to the College and submit their high school transcripts, ACT scores, and previous college transcripts to the Metro Campus Student Completion Services office at 909 South Boston, Tulsa, OK 74119. Incomplete submissions will not be considered for admission into the Radiography program. Admission to Tulsa Community College does not guarantee admission to the Radiography program.
2. Applications for admission to the Radiography program must be completed online at tulsacc.edu/ApplyAlliedHealth by February 1 to start the program in the summer semester if accepted. For more information, contact the Department of Allied Health office at 918-595-7002.
3. First-time college students must meet with an academic advisor regarding new student orientation and to determine if course placement testing is required before enrollment.

## Program Admission Requirements

- Must be a high school graduate or equivalent (G.E.D).
- Application to the program must be submitted before February 1.
- Must have a minimum cumulative GPA of 2.0 or better. NOTE: If a student has less than 12 college hours, then an average of high school and college GPA will be used.
- Must attend an interview session with the program director.
- Successful completion of RADT 1212 - Introduction to Radiography with a grade of 'C' or better prior to the application deadline.
- Students with the highest ranking will be selected first. Since the Radiography program has a limited enrollment based on the number of clinical spots available per year, only the top ranking applicants will be selected. Students with a grade point average of less than a 2.00 and/or on
academic probation WILL NOT be considered for admission to the program until GPA is raised or academic probation is discontinued.
- 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, immunizations and a drug screening test by the Department of Allied Health 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. Students will also be required to submit current CPR certification for American Heart BLS Healthcare Provider, and immunization records to satisfy clinical contract requirements.
- All applicants will be contacted by the program director by email for an informational visit and will be ranked for acceptance according to their academic background.


## English Language Proficiency

An official $\mathrm{iBT®}$ © TOEFL (internet-based Test of English as a Foreign Language) test score or an IELTS (International English Language Testing System) Band score is required as proof of English proficiency for any International student for whom English is a second language who is applying to any Tulsa Community College health sciences program. Students who have graduated from a U.S. high school will not be required to take the iBT Toefl or IELTS tests. Your scores must be current within 2 years of the semester for which you are applying.

For health sciences students, the minimum sub-scores on the internet based TOEFL (iBT®) are 21 for Writing; 24 for Speaking; 20 for Reading; and 20 for Listening, with a total minimum score of 85. For students choosing the IELTS test, acceptable scores include: 6.5 for Reading; 6.5 for listening; 7.5 for Speaking; and 6 for Writing, for a total IELTS Bans score of 6.5. These required minimum scores must be met for each of the four sub-tests on a single exam. A total score that does not meet the sub-score minimums does not meet the requirement. Exceptions to this policy may be considered on an individual basis.

Students must go to www.ets.org/toefl to find a TOEFL iBT testing site, register and pay for the test. Students may go to www.ielts.org/us to find an IELTS testing center and register and pay for the test. Both tests cost approximately $\$ 190$. Students are highly encouraged to take practice tests to prepare for these important tests. Your official scores, including ALL Sub-scores, must be sent directly to the TCC Registrar's Office.

Contact Information Program Director Crystal Longshore Email: crystal.longhsore@tulsacc.edu Work Phone: 918-595-7004

## Degree Requirements

## General Education Requirements Credit Hours: 19

Biology 4 hours**

- BIOL 1314 - Human Anatomy and Physiology (May substitute BIOL 2134 and BIOL 2154)
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


## History and Political Science 6 hours

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


## Mathematics 3 hours

Select one course from the following:

- MATH 1473-Quantitative Reasoning (A)
- MATH 1513 - Precalculus I (A)

Specialized Course Requirements Credit Hours: 51
Allied Health 3 hours

- ALDH 1323 - Medical Terminology

Radiography 47 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 1382 - 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: 69
**Courses must be completed with a "C" or better.

## Respiratory Care AAS

## Program Description

Respiratory Care is in the center of patient care and especially emergency scenarios. The Respiratory Care program teaches the student to serve the heart of the patient with a heart of compassion. Come join us and make a difference in the lives of others in a health care setting.
The Respiratory Care Program 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 fastpaced 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. 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.

## Essential Functions

Students admitted to the Respiratory Care program must demonstrate sufficient physical and emotional health to participate in academic and laboratory activities and to practice clinically with the public in a safe and effective manner. Students with disabilities are expected to perform all the essential functions of the program with or without reasonable accommodation. The College will work with the student and the EAC to provide, if possible, reasonable accommodations. While the College will make every effort to work with our students with disabilities to accommodate their disability related needs, it is important to note we are not required to provide requested accommodations that would fundamentally alter the essential functions, technical standards, or academic requirements of the Respiratory Care Program, or result in an undue financial or administrative burden.

Students may not come to class or participate in Clinicals/ Fieldwork/Practicums or Program activities impaired by alcohol or drugs, including marijuana.
Your role as a student in one of the TCC School of Allied Health programs is considered a "safetysensitive position." This includes tasks or duties that can affect the safety and health of the student or others. Examples include (but not exclusive to):

- patient care
- ability to escape injury and to prevent injury to others
- handling of controlled substances during laboratories or Practicum
- dispensing pharmaceuticals
- working with hazardous materials, including pharmaceuticals, disinfectants, laboratory chemicals and other substances
- working with volatile materials, including compressed gases and gas anesthetics
- operation of a motor vehicle or other vehicles, equipment, machinery or power tools


## Physical Demands:

Program applicants/current respiratory care students must be able to

1. Lift and carry fifty pounds. Must be able to walk, run, stoop, and crouch for 8-12 hour shifts.
2. Protect a patient when the patient is standing and ambulating on all surfaces with or without the use of assistive devices, including canes, crutches and walkers.
3. To safely move a patient weighing more than 100 pounds from one surface to another using the appropriate level of help.

## Motor Skills:

Program applicants/current respiratory care students must possess sufficient motor function to elicit information from patients by palpation, auscultation, percussion, and other evaluation procedures.
Program applicants/current respiratory care students must:

1. Be able to execute motor movements including the physical/dexterity strength to stand and ambulate and possess the physical/dexterity strength to lift and transfer patients.
2. Have the physical strength to perform cardiopulmonary resuscitation.
3. Possess coordination of both gross and fine muscular movements, equilibrium, and functional use of the senses of touch, hearing and vision.
4. Possess the ability to engage in procedures involving grasping, pushing, pulling, holding, manipulating, extending and rotating.
5. Possess gross and fine motor abilities sufficient to provide safe and effective respiratory therapy treatment.
Example: Use sophisticated equipment and patient manipulation; mechanical ventilators, oximeters, analyzers, metering devices, artificial airways, obtain blood and sputum samples.

## Sensory/Observational Skills:

Program applicants/current respiratory care students must be able to observe patients and be able to obtain an appropriate medical history directly from the patient or guardian. Such observation requires the functional use of vision, hearing, and other sensory modalities. They must have visual perception, which includes depth and acuity.

## Communication Skills:

Program applicants/current respiratory care students must:

1. Be able to communicate in English effectively and sensitively with patients. In addition, they must be able to communicate in English in oral and hand written form with faculty, allied personnel, and peers in the classroom, laboratory, and clinical settings.
2. Be sensitive to multicultural and multilingual needs.
3. Have the ability to complete reading assignments and search and evaluate the literature.
4. Be able to complete written assignments and maintain written records.
5. Have proficient verbal skills to communicate with patients, physicians, \& staff, and patient's family members.

## Intellectual/Conceptual, Integrative, and Qualitative Skills:

Program applicants/current respiratory care students must have the ability to measure, calculate reason, analyze, and synthesize data. Problem solving and diagnosis, including obtaining, interpreting, and documenting data, are critical skills demanded of respiratory therapists which require all of these intellectual abilities.
They must have the ability to learn to use computers for searching, recording, storing, and retrieving information.

## Behavioral/Social Skills and Professionalism:

Program applicants/current respiratory care students must:

1. Demonstrate attributes of empathy, integrity, concern for others, interpersonal skills, interest, and motivation.
2. Possess the emotional well-being required for use of their intellectual abilities, the exercise of sound judgment, the prompt completion of all responsibilities regarding the evaluation and care of patients, and the development of mature, sensitive, and effective relationships with patients.
3. Be able to adapt to ever changing environments, display flexibility, and learn to function in the face of uncertainties and stresses, which are inherent in the educational process, as well as the clinical problems of many patients.
4. Be able to maintain professional conduct and appearance, maintain client confidentiality and operate within the scope of practice.
5. Have the ability to be assertive, delegate responsibilities appropriately, and function as part of a medical team. Such abilities require organizational skills necessary to meet deadlines and manage time.

## Environmental Exposure:

Respiratory care students will face exposure to:

1. Blood and/or body fluid.
2. Infectious media and agents, toxins, and medications.

These essential functions are not to be construed as an exhaustive list, but rather examples of skills or duties that are required.

## 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) 2832835.

## Admission to the Program

The Respiratory Care program generally accepts 30 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.

## Program Application Instructions

1. All prospective Respiratory Care students who have not been enrolled at TCC within the past year must complete an application for admission to the College and submit their high school transcripts, ACT scores, and previous college transcripts to the Metro Campus Student Completion Services office at 909 South Boston, Tulsa, OK 74119. Incomplete submissions will not be considered for admission into the Respiratory Care Program. Admission to Tulsa Community College does not guarantee admission to the Respiratory Care Program.
2. Application period for Fall 2021 will be Sept. 1st, 2020 until April 15th, 2021. For more information, contact the Department of Allied Health office at (918) 595-7002.

## Program Admission Requirements

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 30 applicants are selected for the next fall semester. 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
- Successful completion of BIOL 1314 - Human Anatomy and Physiology with a grade of 'C' or better prior to the application deadline.
- Student must be able to travel to local and distant clinical sites.
- 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 students participating in clinicals are required to complete these background checks, immunizations and a drug screening test by the Department of Allied Health 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.
Contact Information Program Director Beth Tenney, MS, RRT 918-595-7021 beth.tenney@tulsacc.edu Additional Information Available


## Degree Requirements

## General Education Requirements Credit Hours: 19

## Biology 4 hours**

- BIOL 1314 - Human Anatomy and Physiology Prerequisite to admission into the Respiratory Care Program


## English 6 hours

- ENGL 1113 - Composition I and select one course from the following:
- ENGL 1213 - Composition II
- ENGL 2333 - Technical/Professional Writing


## History and Political Science 6 hours

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


## Psychology 3 hours

- PSYC 1113 - Introduction to Psychology (S)

Specialized Course Requirements Credit Hours: 52**

- RESP 1232 - Applied Sciences for Respiratory Care
- RESP 1242 - Respiratory Care Patient Assessment
- RESP 1313 - Respiratory Care Techniques and Theory I
- RESP 1342 - Respiratory Care Pharmacology
- RESP 1354 - Cardiopulmonary Anatomy and Physiology
- RESP 1403 - Respiratory Care Techniques and Theory II
- RESP 1414-Clinical I
- RESP 1443 - Respiratory Care Pathophysiology
- RESP 1511-Clinical Procedures Laboratory
- RESP 1522 - Introduction to Mechanical Ventilation
- RESP 2102 - Clinical II
- RESP 2204 - Clinical III
- RESP 2213 - Neonatal and Pediatric Respiratory Care
- RESP 2311 - Mechanical Ventilator Lab
- RESP 2324 - Advanced Topics in Mechanical Ventilation
- RESP 2414 - Clinical IV
- RESP 2452 - NBRC Review
- RESP 2493 - Respiratory Critical Care
- RESP 2563 - Cardiopulmonary Diagnostics

Total Credit Hours: 71
** Courses must be completed with a "C" or better.

## Sociology AA

## Program Description

The function of Sociology, as with every science, is to reveal that which is hidden." - Pierre Bourdieu As you complete the coursework required toward an Associate of Arts in Sociology, you will investigate the social structures which guide our individual and collective behaviors. Topics include the intimate family, the hostile mob, organized crime, religious cults, the divisions of race, gender and social class, the shared beliefs of a common culture, the sociology of work, and 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 Requirements

## General Education Requirements Credit Hours: 37

## Communication 9 hours

- COMM 1113 - Public Speaking
- ENGL 1113 - Composition I
- ENGL 1213 - Composition II

History and Political Science 6 hours

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


## Humanities 6 hours

See the General Education Requirements for the course list.

## Mathematics 3 hours

- MATH 1473-Quantitative Reasoning (A) or higher level Math


## Science 7 hours

See the General Education Requirements for the course list. One course must be a laboratory (L) science.
General Education Recommended Electives 3 hours
Select three (3) credit hours from the list of Liberal Arts \& Sciences Electives.

## General Education Required Electives 3 hours

Select three (3) credit hours from courses in Fine Arts (Art, Music, Theatre), Foreign Language, Psychology, or Social Sciences.

Specialized Course Requirements Credit Hours: 24

## Sociology 18 hours

- SOCI 1113 - Introduction to Sociology (S)
- SOCI 2113 - Social Problems (S) and select two courses from the following:
- SOCI 2013 - Marriage and Family (S)
- SOCI 2043 - Juvenile Delinquency (S)
- SOCI 2053 - Social Psychology (S) (May be taken as PSYC 2053)
- SOCI 2063 - Corrections: Jails and Prisons (S)
- SOCI 2123 - Introduction to Cultural Anthropology (H) (S)
- SOCI 2990 - Selected Topics in Sociology and select two courses from the following:
- SOCI 2143 - Inter-Cultural Dynamics and Inclusion
- SOCI 2173 - Religion and Society (S) (May be taken as RELG 2173)
- SOCI 2223 - Behavioral Statistics (S) (May be taken as PSYC 2223)
- SOCI 2263 - Medical Ethics (H) (May be taken as PHIL 2263 )
- SOCI 2713 - Aging, Death and Dying (S) (May be taken as PSYC 2713)
- SOCI 2813 - Human Sexuality (S) (May be taken as PSYC 2813)
- SOCI 2990 - Selected Topics in Sociology


## Controlled Electives 6 hours

Select two courses from the following:

- ART 1113 - Art Appreciation (H)
- CRIM 1013 - Introduction to Criminal Justice
- MCOM 1013 - Introduction to Mass Communication
- MUSC 1113 - Music Appreciation (H)
- NAMS 2113 - Native American Cultures (H)
- PHIL 1113 - Introduction to Philosophy (H)
- PSYC 1113 - Introduction to Psychology (S)
- PSYC 2023 - Developmental Psychology
- THEA 1093 - Introduction to Theatre (H)

Total Credit Hours: 61

## Theatre AA

## Program Description

The Tulsa Community College Theatre program strives to set the standard of excellence for two-year training programs. The theatre program prepares students for transfer to four-year institutions as a theatre major or to pursue other fields, such as education, business management, or communications, among others, with the kind of experience only a theatre program can provide.

## Degree Requirements

## General Education Requirements Credit Hours: 35 <br> Communication 9 hours

- COMM 1113 - Public Speaking
- ENGL 1113 - Composition I
- ENGL 1213 - Composition II

History and Political Science 6 hours

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


## Humanities 6 hours

See the General Education Requirements for the course list.

## Mathematics 3 hours

- MATH 1473 - Quantitative Reasoning (A) or higher level General Education Math


## Science 7 hours

See the General Education Requirements for the course list. One course must be a laboratory (L) science.
General Education Recommended Electives 4 hours
Select courses from the list of Liberal Arts \& Sciences Electives.

## Specialized Course Requirements Credit Hours:

25
Theatre 22 hours

- THEA 1033-Stagecraft I
- THEA 1053 - Acting I
- THEA 1081 - Theatre Practice I A Theatre major is required to have two semesters of transcripted Theatre Practice I.
- THEA 1093 - Introduction to Theatre (H)
- 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 transcripted Theatre Practice II.
- THEA 2253 - Stage Management

Controlled Electives 3 hours

- THEA 1043 - Stagecraft II
- THEA 2013 - Make-Up I
- THEA 2053 - Acting II
- THEA 2073 - Introduction to Production Design
- THEA 2313 - Voice and Diction I
- THEA 2453-Scriptwriting I

Total Credit Hours: 60

Additional Recommended Courses
(not required for degree)

- ENGL 2543 - British Literature to 1800 (H)
- ENGL 2653 - British Literature from 1800 (H)
- ENGL 2773 - American Literature to 1865 (H)
- ENGL 2883 - American Literature from 1865 (H)
- HIST 1053 - Ancient and Medieval Western Civilization (H)
- HUMN 2113 - Humanities I: Prehistory through the Middle Ages (H)
- HUMN 2223 - Humanities II: Renaissance to the Early 20th Century (H)
- MUSC 1113 - Music Appreciation (H)
- MUSC 1153 - American Popular Music (H)
- MUSC 1731 - Guitar Ensemble
- MUSC 1791 - Jazz Combo
- THEA 1563 - Musical Theatre
- THEA 2553 - Scriptwriting II


## Veterinary Technology AAS

## 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, education, 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.

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.


## Admission to the Program

## Program Application Instructions

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 is to be completed before application to program or at program director'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 (if exam taken) scores, to: Veterinary Technology Program, TCC West Campus, 7505 West 41st Street, Tulsa, OK 74107-8633, 918-595-8212, by April 30. Incomplete submissions will not be considered for admission to the program. Admission to TCC does not guarantee acceptance into the Veterinary Technology program.
6. If transferring courses from another college/university, consult an academic advisor and submit a current degree audit with the application.
7. Eligible applicants will be notified and an interview will be scheduled.
8. All interviewed applicants will receive notification by email regarding their selection status.

## Program Admission Requirements

In order to enroll in courses that are part of the program degree plan, students must receive 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. Potential students need to be aware that drug testing is a requirement for participation in the Veterinary Technology program.

## English Language Proficiency

An official iBT® TOEFL (internet-based Test of English as a Foreign Language) test score or an IELTS (International English Language Testing System) Band score is required as proof of English proficiency for any International student for whom English is a second language who is applying to any Tulsa Community College health sciences program. Students who have graduated from a U.S. high school will not be required to take the iBT Toefl or IELTS tests. Your scores must be current within 2 years of the semester for which you are applying.

For health sciences students, the minimum sub-scores on the internet based TOEFL (iBT®) are 21 for Writing; 24 for Speaking; 20 for Reading; and 20 for Listening, with a total minimum score of 85.
For students choosing the IELTS test, acceptable scores include: 6.5 for Reading; 6.5 for listening; 7.5 for Speaking; and 6 for Writing, for a total IELTS Bans score of 6.5 . These required minimum scores must be met for each of the four sub-tests on a single exam. A total score that does not meet the sub-score minimums does not meet the requirement. Exceptions to this policy may be considered on an individual basis.

Students must go to www.ets.org/toefl to find a TOEFL iBT testing site, register and pay for the test. Students may go to www.ielts.org/us to find an IELTS testing center and register and pay for the test. Both tests cost approximately $\$ 190$. Students are highly encouraged to take practice tests to prepare for these important tests. Your official scores, including ALL Sub-scores, must be sent directly to the TCC Registrar's Office.

Contact Information Program Director Jan Barnett, DVM 918-595-8212 jan.barnett@tulsacc.edu Additional Information Available

## Degree Requirements

General Education Requirements Credit Hours: 23-24
(General Education courses are prerequisites for admission into the Veterinary Technology program.)

## Biology 4 hours**

Select one course from the following:

- BIOL 1224 - Introduction to Biology for Majors (L)
- BIOL 1604 - Zoology (L)

Biology courses must be taken within 12 years of application date.

## Chemistry 4-5 hours**

Select one course from the following:

- CHEM 1114 - Principles of Chemistry (L)
- CHEM 1315 - General Chemistry I (L)


## English 6 hours

- ENGL 1113 - Composition I and select one course from the following:
- ENGL 1213-Composition II
- ENGL 2333 - Technical/Professional Writing (recommended)


## History and Political Science 6 hours

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


## Mathematics 3 hours**

Select one course from the following:

- MATH 1473 - Quantitative Reasoning (A)
- MATH 1513 - Precalculus I (A)

Specialized Course Requirements Credit Hours: 53
Veterinary Technology 53 hours**

- VETT 1125 - Veterinary Anatomy and Physiology
- VETT 1132 - Introduction to Veterinary Nursing
- VETT 1161 - Clinical Calculations for Veterinary Nurses
- 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 Practice Management
- VETT 2126 - Practicum: Animal Clinics and Nursing
- VETT 2224 - Microbiology and Sanitation
- VETT 2234 - Clinical Pathology III
- VETT 2253 - Laboratory, Wild, and Exotic Animal Nursing
- VETT 2313 - Veterinary Nursing II
- VETT 2332 - Veterinary Pharmacology
- VETT 2353 - Radiology, Ultrasound and Diagnostic Imaging
- VETT 2364 - Large Animal Technology
- VETT 2382 - Board Review for Veterinary Technicians (Optional course)

Total Credit Hours: 76-77
** Courses must be completed with a "C" or better.

## World Languages AA, French Option

## Program Description

The French language is spoken by nearly 300 million people around the world. It is the official language in 29 different countries, including France, Switzerland, Belgium, and Canada. For this reason, learning French can be a valuable skill. French can help you in the field of international business and agencies, in the field of tourism and hospitality industries, the diplomatic service, the French-speaking research institutes, teaching, translating or interpreting. Come along with the French program at TCC and "Parlons français ensemble!"

## Degree Requirements

## General Education Requirements Credit Hours: 37

## Communication 9 hours

- COMM 1113 - Public Speaking
- ENGL 1113 - Composition I
- ENGL 1213 - Composition II

History and Political Science 6 hours

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


## 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).
General Education 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


## General Education Required Electives 3 hours

Select three (3) credit hours from courses in Fine Arts (Art, Music, Theatre), Foreign Language, Psychology, or Social Sciences.
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
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.
- FREN 1001 - French for Communication I
- FREN 1031 - French Pronunciation
- FREN 1201 - French for Communication II
- FREN 2071 - French History and Geography Introduction ^
- FREN 2143 - French Civilization and Culture
- FREN 2421 - French Culture Comparisons ^
- FREN 2433 - French Cinema and Conversation
- FREN 2523 - Intermediate French Grammar and Composition
- FREN 2533 - Advanced French
Conversation
${ }^{\wedge}$ Course conducted in English.
Total Credit Hours: 60


## World Languages AA, Japanese Option

## Program Description

Majoring in foreign language is a likely choice for the students who are curious about learning and understanding a new culture as well as their own, studying and working abroad, increasing native language ability, and sharpening cognitive and life skills. The program will prepare students to develop a solid competence in, and sensitivity to, Japanese language and culture.

## Degree Requirements

## General Education Requirements Credit Hours: 37

Communication 9 hours

- COMM 1113 - Public Speaking
- ENGL 1113 - Composition I
- ENGL 1213 - Composition II


## History and Political Science 6 hours

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


## Humanities 6 hours

See the General Education Requirements for the course list.

## Mathematics 3 hours

See the General Education Requirements for the course list.

## Science 7 hours

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


## General Education Required Electives 3 hours

Select three (3) credit hours from courses in Fine Arts (Art, Music, Theatre), Foreign Language, Psychology, or Social Sciences.

## 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

The majority of the controlled electives must be courses taught in Japanese. English based courses may only count for two hours toward the degree.

- JAPN 1001 - Japanese for Communication I
- JAPN 1111 - Kanji I
- JAPN 1121 - Kanji II
- JAPN 1131 - Kanji III
- JAPN 1141 - Kanji IV
- JAPN 1201 - Japanese for Communication II
- JAPN 1301 - Japanese for Communication III
- JAPN 2320 - International Work and/or Study Seminar
- JAPN 2421 - Japanese Culture Comparisons ^
- JAPN 2523 - Intermediate Japanese Grammar and Composition
${ }^{\wedge}$ Course conducted in English
Total Credit Hours: 60


## World Languages AA, Spanish Option

## 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 Requirements

## General Education Requirements Credit Hours: 37

## Communication 9 hours

- COMM 1113 - Public Speaking
- ENGL 1113 - Composition I
- ENGL 1213 - Composition II


## History and Political Science 6 hours

- POLS 1113 - American Federal Government and select one course from the following:
- HIST 1483 - U.S. History 1492 to the Civil War Era
- HIST 1493-U.S. History - Civil War Era to the Present
Humanities 6 hours
See the General Education Requirements for the course list.


## Mathematics 3 hours

See the General Education Requirements for the course list.

## Science 7 hours

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

General Education 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


## General Education Required Electives 3 hours

Select three (3) credit hours from courses in Fine Arts (Art, Music, Theatre), Foreign Language, Psychology, or Social Sciences.
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 course from the following:
- SPAN 2213 - Intermediate Spanish II
- SPAN 2523 - Intermediate Spanish Grammar and Composition


## Controlled Electives 5 hours

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.

- SPAN 1001-Spanish for Communication
- SPAN 1031 - Spanish Pronunciation
- SPAN 1201-Spanish for Communication II
- SPAN 2041 - Spanish - Introduction to the Arts ${ }^{\wedge}$
- SPAN 2143 - Latin American Civilization and Culture
- SPAN 2213 - Intermediate Spanish II
- SPAN 2413 - Translating Spanish to English
- 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 ${ }^{\wedge}$ Course conducted in English.


## World Languages Certificate, French Option

## Program Description

This program provides an in-depth study of spoken and written French and prepares students to use the French 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 French language on a professional or work-related basis. For those who speak the French language fluently, job openings are available in teaching, traveling, broadcasting, translating, law enforcement, international business, social service and diplomacy. More importantly, studying French provides skills that are marketable in any career: the ability to adapt and function well in unfamiliar situations, to communicate well with individuals from diverse cultural backgrounds, to analyze cultural differences in professional settings, and to think abstractly and critically.

## Certificate Requirements

## 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
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 certificate.

- FREN 1001 - French for Communication I
- FREN 1031 - French Pronunciation
- FREN 1201 - French for Communication II
- FREN 2071 - French History and Geography Introduction ^
- FREN 2143 - French Civilization and Culture
- FREN 2421 - French Culture Comparisons ^
- FREN 2433 - French Cinema and Conversation
- FREN 2523 - Intermediate French Grammar and Composition
- FREN 2533 - Advanced French Conversation
${ }^{\wedge}$ Course conducted in English
Total Credit Hours: 25


## World Languages Certificate, Spanish Interpreting Skills Option

## 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 nonSpanish speaking medical personnel and non-English speaking patients with legal or medical groups.

## Certificate Requirements

## 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 course from the following:
- SPAN 2113 - Intermediate Spanish I
- SPAN 2213 - Intermediate Spanish II
- 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

## World Languages Certificate, Spanish Option

## 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.

## Certificate Requirements

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

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.

- SPAN 1001 - Spanish for Communication
- SPAN 1031 - Spanish Pronunciation
- SPAN 1201-Spanish for Communication II
- SPAN 2041 - Spanish - Introduction to the Arts ${ }^{\wedge}$
- SPAN 2143 - Latin American Civilization and Culture
- SPAN 2413 - Translating Spanish to English
- 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
${ }^{\wedge}$ Course taught in English
Total Credit Hours: 25


## World Languages Certificate, Spanish Translating Skills Option

## 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.

Prerequisite Requirements Students must complete SPAN 1103 - Spanish I and SPAN 1213 - Spanish II or instructor approval before beginning this program.

## Certificate Requirements

## 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 course from the following:
- SPAN 2523 - Intermediate Spanish Grammar and Composition
- SPAN 2213 - Intermediate Spanish II

Controlled Electives 3 hours

- SPAN 2321-3 International Work and/or Study Seminar
- SPAN 2331-3 Spanish International Seminar and/or Field Studies
- SPAN 2663 - Spanish Service Learning

Total Credit Hours: 21

## 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 ENGL 1113, 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.
*Exception: Zero-level (non-credit) courses which may be taken in any term, but usually within the first two semesters.

## Credit Hour:

A credit hour consists of a one-hour class period per week for 16 weeks per semester, with the exception of laboratories, practicums, or physical education activity classes in which generally two one-hour 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. Note: 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
(N) Natural 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 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 - Sage 50
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 midsize 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 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 2523-Accounting Capstone

Accounting cycle review and application of all previously learned concepts in accounting, payroll, taxation, as well as demonstrate use of the computer, technology and software as it relates to accounting. Strategies tor seeking and obtaining employment will be considered including work ethics, client service skills, resumes and job interviewing skills. Prerequisites: ACCT 2213, ACCT 2363 with a grade of "C" or better and CSCI 1203.

## 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 2990 - Selected Topics in Accounting
The study and/or analysis of a selected topic in Accounting. 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.

## American Sign Language Education

## 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 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 lab component. Includes lab component. Prerequisite: ASLE 1373 with a grade of " C " or better or instructor approval.

## 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. Includes lab component. Prerequisite: ASLE 2414 with a grade of " C " or better or instructor approval.

## Arabic

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.

## Art

## ART 1013-Art Foundations: 2-D Design

Art Foundations: 2-D Design is a study of the principle elements of two-dimensional design. These 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. Includes lab component. Beginning course required of all art majors. May be taken concurrently with Art Foundations: 3-D Design. Open to all interested students. Includes lab component

## ART 1023 - Painting I

Introduction of fundamental techniques of oil painting using form, color, and visual expression. Students will study techniques of painting in a historical context and begin to apply these techniques to their pieces. Includes lab component Prerequisite: ART 1013 or instructor approval.

## ART 1033 - Painting II

Painting II is a continuation of Painting I with an emphasis on both technical and conceptual fundamentals of painting. Students will begin to apply techniques and concepts of painting to the development of personal visual ideas. Includes lab component. Prerequisite: ART 1013 and ART 1023 or instructor approval.

## 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 - Art: Foundations: 3-D Design

Art Foundations: 3-D Design is the study of the principle concepts of three-dimensional design. Basic concepts include line, mass, space, texture, and form. By using a variety of materials and processes, students will apply the information to a series of studio assignments. Includes lab component. Beginning course required of all art majors. May be taken concurrently with Art Foundations: 2-D Design. Open to all interested students. 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. Includes lab component. Prerequisite: ART 1013 or instructor approval.

## 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. Includes lab component. Prerequisites: ART 1013 and ART 1123 or instructor approval.

## ART 2063 - Watercolor I

Watercolor I will develop skills in watercolor painting, stressing form and composition, visual perception, and individual expression Includes lab component. Prerequisite: ART 1013 or instructor approval.

## 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. Includes lab component. Prerequisite: ART 1013 and ART 2063 or instructor approval

## ART 2083 - Sculpture I

Students will begin to integrate concept, material, and process with the three-dimensional form. This course will explore a range of fabrication techniques and media including wood, metal, plaster, wax, stone, and non-traditional materials. Emphasis on spatial concerns, vocabulary and technique. Includes lab component. Prerequisite: ART 1013 and ART 1083 or instructor approval.

## ART 2093 - Sculpture II

Students will continue to practice various fabrication techniques and further explore materials discussed in Sculpture I. Emphasis on spatial concerns, vocabulary, technique, creative research, and conceptual development. Includes lab component. Prerequisites: ART 1013, ART 1083, and ART 2083.

## 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. Includes lab component. Prerequisite: ART 1013 or instructor approval.

## 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. Includes lab component. Prerequisite: ART 1013 and ART 2143 or instructor approval.

## ART 2223 - Printmaking I

Printmaking I will cover basic media and processes involved in the relief, intaglio, lithographic and monotype processes. Includes lab component. Prerequisites: ART 1013 or instructor approval.

## 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. Includes lab component. Prerequisites: ART 1013 and ART 2223 or instructor approval.

## 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. Includes lab component. Prerequisite: ART 2263 or instructor approval.

## 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. Includes lab component.
Prerequisites: ART 2263 and ART 2273 or instructor approval.

## ART 2313 - Metal Arts and Jewelry I

Explores metal as both a sculptural medium and one that interacts with the body. Students will develop fabrication skills such as piercing and sawing, riveting, silver-soldering, and forming. Concept, design and craftsmanship will be stressed. Historical and contemporary trends in the field will be discussed. Includes lab component. Prerequisites: ART 1013 and ART 1083 or instructor approval.

## ART 2323 - Metal Arts and Jewelry II

Builds upon concepts and fabrication skills in Metal Arts and Jewelry I. Students will learn advanced methods of fabrication, lost wax casting and vitreous enameling techniques. Concept, design and craftsmanship will be stressed. Historical and contemporary trends in the field will be discussed. Includes lab component. Prerequisites: ART 1013 and ART 1083 and ART 2313 or instructor approval.

## ART 2413-Typography I

A preliminary introduction to typography as a communication medium within the field of Graphic Design. Exploration of letterforms through a study of type selection, spacing, leading, layout alternatives, type specification, copy fitting, and history. Typographic terminology, measuring systems, craftsmanship and digital computer literacy. Includes lab component. Prerequisites: ART 1013 and ART 1123.

## ART 2423-Graphic Design I

The fundamental elements and principles of design within the field of visual communication. Basic design problem-solving through a developed creative process. Creative problem solving involves research gathering, brainstorm and rapid ideation exercises, rough development of multiple concepts, and the production of final outcomes. Visual communication problems explore both word and image. Emphasis on technical presentation skills. Includes lab component. Includes lab component. Prerequisites: ART 1013 and ART 1123 with a "C" or better.

## ART 2503 - Professional Practice

Includes information about artistic materials, how to make them, how to use them, their health risks, and how to mitigate health risks. Students will also explore avenues of making a living as an artist and related skills such as preparation of art for presentation, presentation techniques, and portfolio development. Includes lab component. Prerequisites: Six hours of art classes, including at least one studio class or instructor approval.

## ART 2530 - Field Studies in Art

In this course, students are exposed through travel to art, artists, and inspiring environments. The course includes lectures and readings to prepare for the experience and discussions and writing or artistic creation as a response to or evaluation of the experience. Requires instructor approval.

## ART 2543 - Introduction to Glassblowing

Beginning glassblowing will introduce the basics of traditional glass working techniques with an emphasis on critical thinking in relation to a three-dimensional form. Techniques explored include kiln forming, gathering class, sculpting and simple vessels. Students will apply these techniques to produce a series of student assignments. Includes lab component.

## ART 2553 - Intermediate Glassblowing I

Intermediate glassblowing will build upon the skills and knowledge gained in the Introduction to Glassblowing course. Students will explore more complex forms and color applications and will begin to express their artistic ideas in glass. Includes lab component. Prerequisite: ART 2543.

## ART 2813 - Filmmaking I

Beginning art filmmaking covering basic technical and aesthetic problems of the experimental films.

## 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.

## 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 2990 - Selected Topics in Astronomy

The study and/or analysis of a selected topic in Astronomy. May be repeated with a different topic.

## 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 - Air Traffic Control 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. See the TCC Aviation Academic Counselor at the Riverside Aviation Center for course permission and enrollment requirements. Prerequisites: AVST 1113 and AVST 1343

## AVST 1364-Air Traffic Control 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. See the TCC Aviation Academic Counselor at the Riverside Aviation Center for course permission and enrollment requirements. Prerequisite: AVST 1354 and AVST 2213

## AVST 1403 - Advanced Theory of Flight

This course will provide professional pilot majors with training on advanced aircraft operations. Material addressed includes high altitude operations, flight management systems, and advanced aircraft systems. See the TCC Aviation Academic Counselor at the Riverside Aviation Center for course permission and enrollment requirements.

## AVST 2113 - History of Aviation

Covers events from the early developments of flight to the present day and how they have affected our world. Topics will include 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 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. See the TCC Aviation Academic Counselor at the Riverside Aviation Center for course permission and enrollment requirements. Prerequisite: AVST 2132 (FAA Part 141) or AVST 1222 (FAA Part 61).

## 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. See the TCC Aviation Academic Counselor at the Riverside Aviation Center for course permission and enrollment requirements. Prerequisite: AVST 1222 for students seeking FAA FAR Part 61 training. Prerequisite: AVST 2132 for students seeking FAA FAR Part 141 training.

## 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. See the TCC Aviation Academic Counselor at the Riverside Aviation Center for course permission and enrollment requirements. Prerequisite: AVST 2162 (FAA Part 141 students) or AVST 2132 (FAA Part 61 students)

## 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. See the TCC Aviation Academic Counselor at the Riverside Aviation Center for course permission and enrollment requirements.
Prerequisites: AVST 1113 and AVST 1222.

## AVST 2226 - Air Traffic Control Tower Operations II

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. See the TCC Aviation Academic Counselor at the Riverside Aviation Center for course permission and enrollment requirements. Prerequisite: AVST 1354.

## AVST 2246 - Air Traffic Control Tower Operations III

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. See the TCC Aviation Academic Counselor at the Riverside Aviation Center for course permission and enrollment requirements. Prerequisite: AVST 2226.

## 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 Nonradar

Introduces the ATC student to the application of the rules of nonradar separation primarily in the enroute environment of the air traffic control system. 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. Prerequisites: AVST 1364.

## AVST 2273 - Air Traffic Control 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 2283 - Aviation Human Factors

Explores the science behind the human element of safety in aviation. Detailed studies of aviation incidents and accidents will be explored in order to assess causal factors attributing to human error. Determinations will be made to implement best practice procedures relating to risk management and aeronautical decision making skills. Topics covered will include professional behavior, health, fatigue, communication, leadership, situational awareness, threat and error mitigation, and safety practices.

## 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. See the TCC Aviation Academic Counselor at the Riverside Aviation Center for course permission and enrollment requirements. Prerequisite: AVST 2213 and AVST 2132

## AVST 2343 - Flight Instructor Pilot Ground School

Provides the required Federal Aviation Administration aeronautical knowledge, skill, and ground instructional knowledge necessary to complete the Fundamentals of Instruction and Flight Instructor Knowledge Tests. Includes the required 40 hours of FAA aeronautical knowledge training leading to the issuance of a Flight Instructor Certificate. Prerequisites: AVST 2132 and AVST 2182.

## AVST 2413 - Aircraft Dispatch I

An introduction to practical aircraft dispatch theory, procedures, and applications. Will provide the student with the required knowledge and training for the FAA Knowledge Test for the Aircraft Dispatch Certificate. Prerequisites: AVST 1113 and AVST 2253.

## AVST 2442 - Flight Instructor Pilot Flight Lab

Provides the required Federal Aviation Administration aeronautical flight training experience, skill, and flight instructional knowledge necessary to complete certification training leading to the issuance of a Flight Instructor Certificate. Lab consists of 25 hours of flight training.

## AVST 2454 - Aircraft Dispatch II

Advanced training in FAA Aircraft Dispatch application and procedures, including regulations, practical dispatch applications, air traffic control, meteorology, emergency and abnormal procedures, navigation, aircraft, and communications. Will provide the student with the required knowledge and training for the FAA Practical Test for the Aircraft Dispatch Certificate. Prerequisites: AVST 1113 and AVST 2253.
Biology

## BIOL 1113 - Introduction to Environmental Science

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 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 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 subcellular, cellular and organismal levels. It provides the foundation for other advanced courses in the biological sciences. Includes lab component. Prerequisite: MATH 0013 or equivalent.

## 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 (L) 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. Includes lab component. Prerequisite: Completion of BIOL 1224 with a grade of "C" or better or instructor approval.

## 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. Includes lab component.

## 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. Includes lab component. Prerequisite: Completion of BIOL 1224 with a grade of "C" or better
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. Includes lab component. Prerequisites: Completion of BIOL 1224 and CHEM 1114 or CHEM 1315 with a grade of " C " or better.
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. Includes lab component. Prerequisite: CHEM 1114 or CHEM 1315 and completion of BIOL 1224 with a grade of "C" or better.

## 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. Crosslisted with PSYC 2213.

## BIOL 2313 - Principles of Ecology

A study of key ecological concepts introducing the student to the foundations of the various subdisciplines 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. Includes lab component. Prerequisite: Concurrent enrollment in ELET 1303.

## 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 Includes lab component. Prerequisite: BMET 1304, concurrent enrollment, or approval of the associate dean.

## 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. Includes lab component. Prerequisites: BMET 2343 and ELET 2244.

## 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

Career exploration, history, and applications of DNA/RNA technology, safe laboratory practices, bioinformatics tools, calculations for solution preparation, and current lab techniques will be investigated. Includes lab component.

## BIOT 1314 - Biotechnology Laboratory Methods and Techniques

Laboratory operations, management, equipment, instrumentation, quality control techniques, and safety procedures. Lectures on biochemistry, bioorganic topics and the scientific method, including design of assays for RNA, DNA, enzymes and protein. Includes lab component. Prerequisites: BIOT 1113, BIOL 1224 and CHEM 1315 with a grade of " C " or better. Courses may be taken concurrently. Semester Offered Spring

## BIOT 1533 - Cell Culture Techniques

Introduces students to lab techniques used to culture mammalian cells. Topics include aseptic technique, subculture, quantitation, cryopreservation, transfection, and cytotoxicity. Course includes an embedded research project. Includes lab component. Prerequisites: BIOT 1113 and BIOL 1224 . Courses may be taken concurrently with this course. Semester Offered Spring

## BIOT 2101 - Biotechnology Quality Assurance

Regulatory issues that govern quality assurance and quality control in a biotechnology setting will be explored. Online course. Prerequisite: BIOT 1113. Semester Offered Spring BIOT 2202 - Applied Bioscience Research
Extraction, amplification, and transformation of a gene with subsequent digital analysis will be investigated. Results will be shared in a scientific forum. Includes lab component. Prerequisites: BIOT 1113 or BIOL 1224 or instructor approval.

## BIOT 2245 - Molecular Biology and Techniques

DNA and RNA manipulations using current molecular tools will be investigated in lecture and lab. Includes lab component. Prerequisites: BIOL 1224 , BIOT 1113 and BIOT 1533 with grades of "C" or better. Also CHEM 1315, but can be taken concurrently with this course. Semester Offered Fall BIOT 2334 - Biotechnology Proteomics and Instrumentation
Theory, applications, and operation of instruments with emphasis on protein purification in both an R\&D laboratory and a biomanufacturing facility. An introduction to protein bioinformatics tools is
included. Calibration of instruments, quantitative and qualitative analysis by chromatography, protein and enzyme assays, spectrophotometry, and SDS-PAGE gel analysis. Includes lab component.
Prerequisites: BIOT 1533 and CHEM 1415 with a grade of " C " or better. Courses may be taken concurrently. Semester Offered Spring
BIOT 2513 - Biotechnology Apprenticeship
An experience for an advanced biotechnolgy student. Students will be mentored/supervised by a designated faculty member to complete a research project. Special permission is required to enroll. Prerequisites: BIOT 1533
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 within business organizations; identifies role of business in modern society.

## BUSN 1353 - Business Mathematics

Utilizes mathematical operations to solve practical business application problems. Includes a review of basic mathematics and percentages, discounts, and 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 ( $\mathrm{H}, \mathrm{I}$ )

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. Crosslisted with COMM 2053.
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 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. Semester Offered Fall 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 Semester Offered Spring

## BUSN 2523 - Project Management Certification Preparation

Preparation for certification exams offered by the Project Management Institute (PMI®). Meets the Project Management Institute's educational requirements for the Certified Associate in Project Management (CAPM®) exam and the Project Management Professional (PMP®) exam. Case studies, scenarios, and real-world examples will be utilized. CAPM®, $\mathrm{PMP®}$ and $\mathrm{PMI®}$ are registered trademarks of the Project Management Institute, Inc. Prerequisite: BUSN 2503 or instructor approval. Semester Offered Spring 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. Crosslisted with PSYC 2633.

## 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: Acceptance to CVT Program

## 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: Acceptance to CVT Program

## 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: CVTC 1003; CVTC 1013 Corequisite: CVTC 1034; CVTC 1044

## CVTC 1034 - Cardiovascular Skills Practicum

A practicum course designed to acquaint 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. Prerequisite: CVTC 1003;CVTC 1013 Corequisite: CVTC 1023; CVTC 1044
CVTC 1044 - 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 1003 ; CVTC 1013 Corequisite: CVTC 1023; CVTC 1034

## 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 1023; CVTC 1034; CVTC 1044
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. Includes lab component. Prerequisite: CVTC 1003; CVTC 1013; CVTC 1023; CVTC 1034; CVTC 1044; CVTC 1063

## 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 1003; CVTC 1013; CVTC 1023; CVTC 1034; CVTC 1044; CVTC 1063

## 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 and internal LV assist devices will be introduced. The basics of intracardiac mapping for electrophysiology studies will be explained. Includes lab component. Prerequisite: CVTC 1003; CVTC 1023; CVTC 1034; CVTC 1044; CVTC 1063; CVTC 2103; CVTC 2125 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 1003; CVTC 1013; CVTC 1023; CVTC 1034; CVTC 1044; CVTC 1063; CVTC 2103; CVTC 2125

## Chemistry

## CHEM 1114 - Principles of Chemistry (L)

A course for science majors. Does not substitute for CHEM 1315. Principles, concepts and theories of chemistry are examined and 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. Includes lab component. Prerequisite: MATH 0013 or appropriate placement test score.

## 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. Prerequisite: MATH 0013 or appropriate placement test score.
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. Includes lab component. Prerequisite: MATH 1513 or MATH 1715 or equivalent with a grade of "C" or better.

## CHEM 1365-General Chemistry for Engineers

Survey course for mechanical engineering students needing only one semester of chemistry. Includes thermodynamics, atomic structure, solid state, materials, equilibria, acids and bases, and electrochemistry. Course may serve as a substitute for CHEM 1315 and/or CHEM 1415 in engineering programs only. Students should seek advisement regarding transferability before enrollment. Includes lab component. Prerequisite: MATH 1513 with a grade of " C " or better or equivalent.
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. Includes lab component. Prerequisite: CHEM 1415.

## 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. Includes lab component. 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

## 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. Prerequisites: Criminal History and Sex Offender Registry background check.

## 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

For students who are considering becoming a teacher in early childhood (Kindergarten - 3rd grade). Involves activities completed outside of the college classroom which correlate to and supplement classroom content. Field experiences include: group tours of public school settings; observations in a classroom setting; tutoring students; reading to students; and interviewing teachers. Introduces the field of early childhood education, including standards, diversity, Developmentally Appropriate Practice, professionalism, and ethics. 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 oncampus 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 2103 - Child Guidance

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. Assigned field experiences facilitate the acquisition of observational skills and provide models for discussion and learning child guidance and classroom management skills.

## CHLD 2113 - Introduction to Child Care Management

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 to use developmental knowledge to create healthy, respectful, supportive and challenging learning environments. A basic introduction to child care budgets and finances is addressed. Highlights the benefits of establishing positive and supportive relationships with children, families and community. Assigned field experiences. Semester Offered Fall
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 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.

## 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. Semester Offered Spring

## 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 cannot be taken concurrently with CHLD 2513. Semester Offered Spring
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. Semester Offered Fall

## 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. Semester Offered Fall

## 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. Course includes a lab component. 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. CHLD 2613 - Health, Safety, and Nutrition: Birth to Eight
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, child obesity, immunizations, emergency response procedures, and children with special medical needs. Emphasizes the importance of respecting and partnering with families to help children establish healthy lifestyles and achieve their learning potential. Assigned field experiences.

## 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 2990 - Selected Topics in Chinese

The study and/or analysis of a selected topic in Chinese. May be repeated with a different topic.

## College Experience

## COLL 1003 - College Success

Students will explore evidence-based strategies that will help them succeed in their individual courses, academic programs, and personal goals. The opportunity to work with a community partner will help students reflect on the needs of our community, the value of volunteer work, and the desire to be a part of it. Students will also explore humanities themes by reading and participating in activities around a common text.
COLL 1101 - Orientation to U.S. Higher Education
Orientates F1-visa international students to the U.S. higher education system. Provides a thorough review of F1-visa regulations, focuses on the unique learning environment common to U.S. higher education, and connects students to the institution's learning support laboratories and student services.

## 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 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. Crosslisted 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 - Leadership 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 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 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-Contemporary Issues in Communication
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 2990 - Selected Topics in Communication

The study and/or analysis of a selected topic in Communication. May be repeated with a different topic. Computer Information Systems

## 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 1203 - Computer Concepts and Applications

A theory/applications course on operating systems, word processing, spreadsheets, databases, and presentation software, cybersecurity and Information Systems. Emphasis is placed upon decision making with spreadsheets and databases. It will serve as the first course to be completed by any computer science major, may satisfy a computer science requirement for another discipline, is a university 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 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 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.

## CSCl 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 advanced coverage of spreadsheets including an introduction to data analysis, dashboards, and data visualization. Emphasis is placed on solving business-related problems and to assist in the preparation for the Microsoft Office Specialist Excel expert exam. Prerequisite: CSCI 1203 or instructor approval.

## CSCl 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 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 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 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: $\operatorname{CSCl} 2473$ or instructor approval.
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 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 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. Prerequisite: CSCI 1203 or concurrent enrollment.

## 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. Semester Offered Fall and Spring

## CSYS 1393 - Web Design and Marketing

Introduction to website creation and marketing related to E-Commerce business. Topics may include market research, usability issues, and design guidelines, including importance of logos, psychology of color, product promotion and cost factors. Develop and test a website using web development software. Crosslisted 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. Crosslisted with MKTG 1443.

## 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 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: CSCI 1203 or instructor approval.

## CSYS 2033 - JavaScript

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 instructor approval.

## 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 2293 - Social Media

Explore the use of Social Media for business and personal use. Develop a Social Media marketing plan for a business. Crosslisted with 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 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 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 1013 or instructor approval.

## 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 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 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 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 2743 - Python Programming

An introduction to Python as both a general programming language and a Web development tool. Topics include procedural and object-oriented coding, implementation of libraries, web frameworks, and database access. Emphasis will be placed on current usage of the language in
industry. Prerequisites: CSYS 1203 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 APls 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 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.

## Dental Hygiene

## DHYG 1013-Oral Anatomy, Embryology and Histology

Anatomy of human body systems with emphasis on oral structures, tooth morphology, dental anomalies, physiology of occlusion, embryonic development, and histology. Includes lab component.
Prerequisite: Acceptance into the Dental Hygiene Program.

## DHYG 1022 - Head and Neck Anatomy

Gross anatomy of the head and neck in relation to clinical practice of dental hygiene: osteology; circulation; innervation; musculature. Prerequisite: Acceptance into the Dental Hygiene Program.

## DHYG 1333 - Pathology, Etiology and Immunology

Principles of general pathology; pathology of organ systems; pathology of the head, neck, and oral structures; etiology of disease; host responses of inflammation; repair and immunology; common clinical features of disease; 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

Role of the dental hygienist in the treatment of periodontal disease; normal periodontium; pathogenesis and etiology of periodontal disease; host response and periodontitis as a manifestation of systemic diseases; evidence-based approach to periodontal care; assessment, planning, implementation and maintenance strategies for the prevention and treatment of periodontal diseases. 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; dental terminology; infection control; oral health services to patients with bloodborne infectious diseases; concepts of oral hygiene; patient management and disease prevention; health education; dental deposits; care plan; care and maintenance of implants; oral inspection procedures; medical/dental histories and vital signs. Prerequisites: Acceptance into the Dental Hygiene Program.

## DHYG 1373 - Dental Hygiene Theory II

Procedures for medical and dental emergencies; oral health care services to patients with bloodborne infectious diseases; planning dental hygiene care for a variety of patients; instrument sharpening; power driven instruments; dental specialties. Prerequisites: Successful completion of all previous Dental Hygiene (DHYG) coursework with a grade of " C " or better.

## DHYG 1384 - Clinical Dental Hygiene I

Preclinical laboratory experience with mannequins and student partner practice; dental instrumentation techniques for comprehensive oral hygiene services; clinical concepts of patient education and treatment; 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; instrumentation skills. Prerequisites: Acceptance into the Dental Hygiene Program and current certification in Basic Life Support for Healthcare Providers.

## DHYG 1394 - Clinical Dental Hygiene II

Development of evidence-based procedural practices; care plans; radiography, non-surgical periodontal therapy and instrumentation techniques and equipment; administration of nitrous oxide sedation and local anesthesia; colloquium of various dental topics. Course includes 180 clinical hours. 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; radiation history; biological effects of Xrays; role of the dental radiographer; diagnostic criteria; radiography armentaria; types of images; exposure techniques and safety; radiographic analysis and interpretation. Prerequisite: Acceptance into the Dental Hygiene Program.

## DHYG 1421 - Dental Radiography Techniques

Practical experience in radiography techniques; evaluation and interpretation; radiation safety; infection control; equipment care. Includes lab component. Prerequisite: Acceptance into the Dental Hygiene Program.

## DHYG 1512 - Dental Pain Management

Dental pain management therapies with emphasis on administration of nitrous oxide sedation and local anesthesia. Includes lab component with student partner practice. 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 1532 - Dental Hygiene Pharmacology

Basic principles of drug actions and interactions; dental-related therapeutics and drugs associated with common system disorders; 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

Management and care plan strategies for patients that require modifications to normal dental routines: patients with medical, physical, psychological, developmental and social situations; older adult/geriatric patients. Prerequisites: Successful completion of all previous Dental Hygiene (DHYG) coursework with a grade of "C" or better.

## DHYG 2312 - Community Dental Health I

Promotion of oral health and disease prevention through organized community-based efforts; 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; program assessment, planning, implementation, and evaluation; cultural competency and social responsibility, service-learning; and ethical and legal principles. Prerequisites: Successful completion of all previous Dental Hygiene (DHYG) coursework with a grade of "C" or better.

## DHYG 2321-Community Dental Health II

Practice experience within the community for developing, implementing and evaluating dental health projects; dental screenings; table clinics; school health oral presentations; other community-based projects. Includes lab component. 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

Procedures, chemical compositions, physical characteristics and manipulation of materials used in dentistry; patient management; impressions; study models; sealants; air polisher. Includes lab component. Prerequisites: Successful completion of all previous Dental Hygiene (DHYG) coursework with a grade of "C" or better.

## DHYG 2362 - Dental Hygiene Theory III

Concepts and application of non-surgical periodontal therapy; advanced instrumentation skills; periodontal care plan; reevaluation and maintenance of periodontal health; application of chemotherapeutic agents; insurance coding for dental procedures; dietary analysis; case studies. 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

Ethical decision making; principles of professionalism; office management with emphasis on productivity, remuneration, risk management and the concept of the dental health team; jurisprudence; current dental hygiene issues; resume 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

Advancement of evidence-based procedural practices; care plans; radiography, non-surgical periodontal therapy and advanced instrumentation techniques and equipment; administration of nitrous oxide sedation and local anesthesia; offsite service learning rotations (up to 16 hours); colloquium of various dental topics. Course includes 240 clinical hours. 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

Further advancement of evidence-based procedural practices; care plans; radiography, non-surgical periodontal therapy and advanced instrumentation techniques and equipment; administration of nitrous oxide sedation and local anesthesia; case presentations; offsite service learning rotations (up to 16 hours); colloquium of various dental topics. Course includes 240 clinical hours. 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

Incorporates patient assessment, medical asepsis, body mechanics, medical emergencies, professional ethics, communication, medico-legal issues, beginning Vascular Technology and other imaging modalities. Emphasizes placed on beginning ultrasound scan skills. Includes lab component. Prerequisite: Acceptance into the Diagnostic Medical Sonography Program. Prerequisites must be passed with "C" or better. Students must maintain a 2.5 overall GPA. Corequisite: DMS 1103

## 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

Incorporates cross sectional and relational anatomy, physiology, normal variants, pathology, laboratory data, and related imaging modalities of the organs, vasculature, muscles, ligaments and other structures in the adult abdomen. Emphasizes ultrasound scan skills. Included lab component. Prerequisite: Acceptance into the Diagnostic Medical Sonography Program, DMS 1002, DMS 1103. Prerequisites must be passed with "C" or better. Students must maintain a 2.5 overall GPA. Co-requisites: DMS 1233, DMS 1213, DMS 1242.

## DMS 1233-OB/GYN Sonography I

Incorporates cross sectional and relational anatomy, physiology, normal variants, pathology, laboratory data, and related imaging modalities pf the organs, vasculature, and other structures of the non-gravid female pelvis and first trimester fetus. Emphasizes ultrasound scan skills. Includes lab component Prerequisite: Acceptance into the Diagnostic Me.dical Sonography Program, DMS 1002, DMS 1103. Prerequisites must be passed with "C" or better. Students must maintain a 2.5 overall GPA. Corequisites: DMS 1223, DMS 1213, DMS 1242.
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

Incorporates sonographic imaging of pediatrics, male pelvis, non-cardiac chest, thyroid, vascular, musculoskeletal, emergency ultrasound, introduction to lower extremity venous and related imaging modalities. Emphasizes ultrasound scan skills. Includes lab component. Prerequisite: Acceptance into the Diagnostic Medical Sonography Program, DMS 1002, DMS 1103, DMS 1223, DMS 1213, DMS 1242. Prerequisites must be passed with "C" or better. Students must maintain a 2.5 overall GPA. Corequisite: DMS 1252

## DMS 2034 - 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

Continuation of Abdominal Ultrasound I. Incorporates cross sectional and relational anatomy, physiology, normal variants, pathology, laboratory data, and related imaging modalities of the organs, vasculature, muscles, ligaments and other structures in the adult abdomen. Emphasizes ultrasound scan skills. Includes lab component. Prerequisite: Acceptance into the Diagnostic Medical Sonography Program, DMS 1002 , DMS 1103 , DMS 1223, DMS 1233 , DMS 1213 , DMS 1242 , DMS 1263 , DMS 1252 . Prerequisites must be passed with "C" or better. Students must maintain a 2.5 overall GPA. Students must sit for ARDMS SPI Exam. Co-requisites: DMS 2133, DMS 2034.

## 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

Continuation of Ob/GYN Ultrasound I. Incorporates normal, pathology, syndromes and ultrasound appearance of tissues, organs and systems, and other imaging modalities for the fetus in the second and third trimesters. Emphasizes ultrasound scan skills. Includes lab component. Prerequisite: Acceptance into the Diagnostic Medical Sonography Program, DMS 1002, DMS 1103, DMS 1223, DMS 1233 , DMS 1213 , DMS 1242 , DMS 1263 , DMS 1252 . Prerequisites must be passed with "C" or better. Students must maintain a 2.5 overall GPA. Students must sit for the ARDMS SPI exam Co-requisites: DMS 2123, DMS 2034.

## DMS 2145 - 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

Incorporates gross anatomy, relational anatomy, physiology, normal variants, pathology, laboratory data, and related imaging modalities of the arterial and venous systems of the upper and lower limbs, extra cranial head and neck ind1.rect testing: systolic pressure measurements, plethysmography, and Doppler waveforms for evaluation of the peripheral vascular system. Prerequisites: Acceptance into Diagnostic Medical Sonography program, DMS 1002, DMS 1103, DMS 1213, DMS 1223, DMS 1233, DMS 1242, DMS 1263, DMS 1252, DMS 2123, DMS 2133, DMS 2034 or proof of prior Sonographic Registry. Prerequisites must be passed with "C" or better. Students must maintain a 2.5 overall GPA. Corequiste: DMS 2131, DMS 2145.

## Digital Media

## DGMD 1013 - Introduction to Graphic Design

Basic history, principles, methodologies, tools, outcomes, and career opportunities within the expanding field of Graphic Design. Preparation for expectations and demands of this competitive industry. Topics involve time-management, professional and ethical design practices, critiques and creative process strategies.

## DGMD 1103 - Adobe Acrobat

A presentation of key concepts, techniques, and tools found within Acrobat Professional. Emphasis on Acrobat basics, keyboard shortcuts, creating PDF documents, combining files into PDF portfolios, creating PDF documents from web pages, editing PDF files, adding signatures and security, creating media-rich presentations, working with forms, using Acrobat in professional publishing, employing commenting tools, and making documents accessible and flexible. Students are encouraged to obtain Adobe Certified Expert (ACE) status. Semester Offered Fall, Spring, Summer

## DGMD 1113 - Digital Foundations 1: Photoshop

Key concepts, vocabulary, tools, principles, and techniques relating to the creation of raster-graphic outcomes. Prepare, edit, manipulate, and create bitmap images through a series of hands-on exercises. Topics involve setting project requirements, identifying and applying design principles, navigating Photoshop's interface, creating bit-map content, working non-destructively, and exporting content for use in print, motion, and interactive mediums. Preparation for Adobe Photoshop Certified Associate (ACA) exam. Cross-listed with INTD 1533. Semester Offered Fall and Spring
DGMD 1203 - Digital Foundations 2: Illustrator
Key concepts, vocabulary, tools, principles, and techniques relating to the creation of scalable-graphic outcomes. Prepare, edit, manipulate, and create vector images through a series of hands-on exercises. Topics involve setting project requirements, identifying and applying design principles, navigating Illustrator's interface, creating vector content, and exporting content for use in print, motion, and interactive mediums. Preparation for Adobe Illustrator Certified Associate (ACA) exam. Semester Offered Fall and Spring

## DGMD 1213 - Advanced Photoshop

Learn professional Photoshop techniques to enhance and alter digital photographs and prepare them for web and print distribution using Macintosh computers. Emphasis on masking, layering techniques, video editing, 3d features, and choosing a non-destructive workflow. Students are encouraged to obtain Adobe Certified Associate (ACA) certification. Prerequisite: DGMD 1113 or instructor approval. Semester Offered Fall, Spring, Summer

## DGMD 1223 - Digital Photography

Introduction of techniques and procedures of digital photography. Working with digital cameras to input images into the digital environment using Adobe software. Enhance, resize, and alter photographs for print and online distribution. Emphasis on the integration of technical skills and aesthetic expression. Projects require exploration and experimentation. Students must provide their own cameras.
Prerequisite: DGMD 1113 with a C or higher. Semester Offered Fall and Spring
DGMD 2263 - Digital Illustration I
The applied study of illustration tools, techniques, processes, and practices for the creation of digital illustration and pictorial narratives. Employ multiple image-making techniques to complete assignments, nurture drawing and painting skills within a digital environment. Conceptually develop illustrative outcomes through an imaginative interpretation of words and written concepts. Appropriate illustration styles through hypothetical brand objectives and content and the creative process are explored. Involves a brief history of traditional illustration mediums and styles. Prerequisites: ART 1013, ART 1123, DGMD 1113, DGMD 1203 with a "C" or higher in each.

## DGMD 2303 - Adobe Audition

Overview of key concepts, techniques, and tools within Adobe Audition. Emphasis on Audition basics, 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 are encouraged to obtain Adobe Certified Expert (ACE) certification. Prerequisites: CSCI 1203 or instructor approval. Semester Offered Fall and Spring

## DGMD 2313 - Digital Foundations 3: InDesign

Key concepts, vocabulary, tools, principles, and techniques relating to the layout of print and screenrelated touch-points. Prepare, edit, and create layouts using Adobe InDesign. Asset creation involves Photoshop, Illustrator, and Acrobat. Topics involve defining project requirements, identifying and applying design principles, working with layouts, grids and typestyles. Navigating InDesign interface, creating documents, pre-flighting, packaging, and exporting content. Preparation for Adobe InDesign Certified Associate (ACA) exam. Prerequistes: DGMD 1113 and DGMD 1203 with a "C" or better. Semester Offered Fall and Spring

## DGMD 2323-2D Animation

The study of animation principles, techniques, processes, tools, vocabulary, and history of animation. Involves script, storyboard, and animatic iteration to develop animated assets and narratives. Stage, pose, and animate characters within a digital environment, on a sequential timeline, using industrystandard software and hardware. Emphasis on creative conceptualization, composition, style, and visual aesthetics. Imaginative storytelling through animation emphasized. Prerequisites: DGMD 1113, DGMD 1203, and ART 1123 with a "C" or better. Semester Offered Fall
DGMD 2333 - Digital Video I/Final Cut Pro
Overview of basic digital video editing techniques and principles. Gain hands on experience in video capture and editing using Final Cut Pro nonlinear video editing software. Prerequisite: MCOM 2573 or
instructor approval. Semester Offered Fall
DGMD 2343-3D Digital Foundations
The study of principles, terminology, processes, and techniques relating to the creation of 3D objects using digital technology. Involves critical thinking and concept development to design, model, surface, and render 3D objects and environments using 3D software. Topics involve an exploration of modeling tools, surface and texture mapping, camera and light rigging, animation, and rendering techniques. Output objects for fabrication. Prerequisites: DGMD 1113 and DGMD 1203 with a " C " or
better. Semester Offered Fall
DGMD 2353 - Adobe Premiere
Overview of key concepts, techniques, and tools. Emphasis on 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 are encouraged to obtain Adobe Certified Expert (ACE) certification. Prerequisites: CSCI 1203 or instructor approval. Semester Offered Fall and Spring

## DGMD 2393 - Graphic Design Capstone

Develop a personal brand identity, identity system, resume, cover letter, portfolio, and strategy for employment. Involves self-discovery surveys, assessments, and creative exercises to visually communicate and showcase talent to future employers. Projects from previous program course work will be revised. All projects evolve through a documented creative process, where the project-brief, audience, and content are carefully considered for the final outcome. Final portfolio presentation and showcase required. Completion of $75 \%$ of their curriculum requirements and obtained instructor permission to enroll.
Semester Offered Fall and Spring
DGMD 2413 - Interaction Design I
Plan, conceive, create layout solutions to interactive design problems using an array of Adobe toolsets and open-source frameworks. Through the vehicle of hands-on exercises and projects, the principles of user experience and interface design will be theoretically explored and applied. Phases of investigation involve an audience and competitor analysis, content strategy, wireframing, prototyping, coding, testing and iteration, development and execution, and analytics. Prerequistes: DGMD 1113 and DGMD 1203 with a "C" or higher.
DGMD 2423 - Motion Graphics
Applied study of principles, techniques, processes, tools, vocabulary, history, and practices relative to the creation of motion graphics within the field of visual communication. Involves hands-on exercises and projects to build technical proficiency (Adobe After Effects), critical thinking and creative problem-solving. Topics involve applying the principles of design and animation, working with typography in a kinetic environment, and composing sequential narratives and motion elements based on a creative-brief. Projects are completed using a script, storyboard, animatic iteration, and asset development. Adobe Photoshop and lllustrator toolsets will be used for the design and illustration of creative assets. Prerequisites: DGMD 1113, DGMD 1203, and DGMD 2343 with a " C " or better.
DGMD 2433 - Digital Video II/Final Cut Pro
Continuation of DGMD 2333. Integrate graphics, audio, animation, and special effects into digital video projects. Use Final Cut Pro video editing software on Macintosh platforms. Prerequisite: DGMD 2333 or instructor approval. Semester Offered Spring

## DGMD 2443-3D Animation

The study of terminology and principles relating to the creation of ray-traced 3D animation outcomes using 3D graphics software. Students will employ a creative process for the conceptual development and design of all 3D animation narratives. Topics involve key frame animation, animation using paths, and procedural animation techniques. Prerequisite: DGMD 2343 with a "C" or better.
DGMD 2453 - Print Design I
The study of techniques, processes, tools, and vocabulary relating to the design and layout of printrelated touch-points. Creatively plan and conceive outcomes for print collateral and packaging, based on a brand-driven project brief. Projects conceptually developed through a documented creative process. Topics involve content creation, paper specification, color usage, folds, bindery formats, and output. Additional exploration on technical setup of special features such as die-lines, special finishes, embossing, and foil stamping. Prerequisites: DGMD 1113, DGMD 1203, DGMD 2313, ART 2413, and DGMD 2423 with a "C" or higher in each course.
DGMD 2493 - Graphic Design Internship
Practical, hands-on learning through professional work experience and supervision. Students will complete an approved 180-hour (60 hours per credit) on-site work experience. Instructor approval required. Prerequisite: DGMD 2393. Semester Offered Fall and Spring

## DGMD 2513 - Interaction Design Studio I

An expansion and continuation of Interaction Design Studio I. Students plan, conceive, create layout solutions lo advanced interactive design problems. Emphasis on elevating conceptual and technical skill concerning interactive touch points and user interface design. Prerequisite: DGMD 2413 with a "C" or higher.

## Drafting and Computer-Aided Design

## 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. Includes lab component. Prerequisites: DRFT 1324 and MATH 1513 or MATH 1454.
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 and DRFT 2204.

## 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. 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. Includes lab component. Prerequisite: DRFT 2043/ENGT 2043 or instructor approval.

## 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. Includes lab component. Prerequisite: DRFT 1324.

## 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. Includes lab component.
Prerequisites: MATH 1513 or MATH 1454 and DRFT 2204.

## 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 2543 - Autodesk REVIT

Introduction to Autodesk REVIT CAD software, including Building Information Modeling, BIM. (Analyzing the 3-D model design for cooling/heating load, square footage, surface area, etc.) Prerequisite: DRFT 2204 or instructor approval.

## 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; national income accounting; business cycles; inflation and unemployment; determinants of the level of output; employment and prices; money and banking; fiscal policy; monetary policy; economic growth; and international trade and finance.
ECON 2023 - Principles of Microeconomics (S)
An introduction to prices and markets. Major topics include supply and demand; elasticity; opportunity cost; utility analysis; business organizations; production and costs; market structures; factor markets; government regulations; and international trade.

## 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.

## 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. Includes lab component. Prerequisite: ELET 1212.

## 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. Includes lab component. Prerequisite: MATH 1454 or MATH 1513 and ELET 1212 or concurrent enrollment.

## 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. Includes lab component. Prerequisites: ELET 1303 and MATH 1454 or MATH 1613 or concurrent enrollment.

## 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. Includes lab component. Prerequisite: ELET 1212.

## 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. Includes lab component. Prerequisite: ELET 1212.

## ELET 1523 - Unmanned Aerial Vehicles and Systems

Learn to read and use UAV manuals and technical data sheets related to FAA regulations. Theory of UAV flight and controls will be covered along with aircraft and electrical safety, UAV/UAS command and control requirements, ground control station set-up, airspace classifications, airspace restrictions, FAA and Government UAS restrictions, and uses. Build or troubleshoot a UAV and learn basic techniques for ground control stations and UAVs. Transmitters, receivers, battery maintenance and control electronics will be covered as they pertain to UAV systems. 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. Includes lab component. Prerequisite: ELET 2132 or concurrent enrollment.

## ELET 2215 - Digital Circuits

Principles and techniques of modern digital systems. Topics include 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 2232 - Industrial Robotics

Examines robotic programming languages, teaching modes, and sensors for use in manufacturing industries. Lessons cover the positioning and motion functions of robotics and test unique robotics designs. This class also discusses robotic classifications, controls, kinematics, motors, and electrical drive circuits. Students will also build their own robotics circuit. Prerequisite: ELET 1223

## ELET 2244 - Amplifiers I

Introduction to solid state electronic devices and basic electronic circuits, including diodes, rectifiers, transistor bias and load lines, common emitter, common collector and common base circuits, and an introduction to field effect transistors and thyristors. Also covered are special amplifiers, power amplifiers, push-pull amplifiers, feedback amplifiers, differential amplifiers, direct coupled and integrated circuit amplifiers, and operational amplifiers. Includes lab component. Prerequisites: ELET 1313.

## 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. Includes lab component. Prerequisite: ELET 2244.

## 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. Includes lab component. Prerequisite: ELET 2215.

## 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. Includes lab component. 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. Includes lab component. Prerequisite: ELET 1313 or ELET 1503.

## 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 II
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 EMSP 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 EMSP 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. Includes lab component. Prerequisite: MATH 1454 or MATH 1613

## 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 or CHEM 1365, MATH 2124, and PHYS 2034.

## 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 1213 - 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 1223 - Industry Print Reading

Focuses on interpreting and visualizing drawings and prints used in industrial settings, including print content, the role of prints in the digital age, and exposure to geometric dimensioning and tolerancing. Also covers several foundational skills needed for print reading success, including basic mathematics, geometry principles, measurement tools, and the design process.

## ENGT 1313 - Manufacturing Processes and Procedures

Industrial processes and procedures, their development and impact, and the sources and classifications of engineering materials used in manufacturing. Visits to local industrial plants are included. Includes lab component.

## 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: ENGT 1223 or any DRFT class. Crosslisted with 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 1543 - Manufacturing Maintenance

Provides the skills necessary to enter the manufacturing workforce and prepare for the examination to become a Certified Production Technicians administered through the Manufacturing Skills Standards Council. Includes a technical overview of safely maintaining production equipment and best practices of isolating stored energy. Predictive and preventive maintenance explored from a Total Productive Maintenance system perspective. Safety systems, sensors, machine maintenance, and proper housekeeping procedures in the manufacturing industry are covered. 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, Kiazen, 5-S, Kanban, Toyota Production System and Six Sigma. Exploration into the theory and tools behind today's most advanced business philosophies.

## ENGT 2463 - Project Engineering and Management

Preparation for industrial project management, including project scheduling, cost management, resource allocation, team building, project scope, and risk management. Includes lab component.

## 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 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 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 0923 - Writing Foundations 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 Foundations II

A continuation of Writing Foundations 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 0943 - Writing Foundations Workshop

Designed to help students successfully complete ENGL 1113 Composition I during the same semester they meet their developmental writing proficiency requirements. Students must enroll in this course and the linked ENGL 1113 course in the same semester for a total of six (6) credit hours. Prerequisites: READ 0123 and ENGL 0923 with a grade of " C " or better, or appropriate placement scores.

## ENGL 1071 - College Vocabulary Enrichment

A self-paced course 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 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 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 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 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 2383 - Advanced Composition

Allows students who have successfully completed ENGL 1113 and ENGL 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 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. Serves as a 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 - Scriptwriting I

Teaches screenplay writing techniques. Attention is given to subject and character development, plot development, scene building, and screenplay formats. May be taken concurrently with ENGL 2553 or THEA 2553 Scriptwriting II. Crosslisted with THEA 2453. Semester Offered Fall

## ENGL 2463 - Creative 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 2493-Introduction to Creative Writing
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 2543 - British Literature to 1800 (H)

Surveys early English literature and literary movements, including representative authors from the AngloSaxon to the Romantic periods. This class may not be offered every semester. Prerequisite: ENGL 1113 and ENGL 1213 with a grade of "C" or better. ENGL 1213 may be taken concurrently with this class. ENGL 2553-Scriptwriting II
Advanced studies in concepts and techniques of scriptwriting. Students receive individual attention as they conceive and develop their work, with an emphasis on character, plot, theme, and language. May be taken concurrently with ENGL 2453 or THEA 2453. Cross-listed with THEA 2553. Semester Offered Fall
ENGL 2653 - British Literature from 1800 (H)
Surveys English literature and literary movements, including representative authors from the Romantic period to the present. This class may not be offered every semester. Prerequisite: ENGL 1113 and ENGL 1213 with a grade of "C" or better. ENGL 1213 may be taken concurrently with this class. ENGL 2773 - American Literature to 1865 (H)
Surveys representative American literature and literary movements from the pre-colonial through the Civil War eras. This class may not be offered every semester. Prerequisite: ENGL 1113 and ENGL 1213 with a grade of "C" or better. ENGL 1213 may be taken concurrently with this class.

## ENGL 2883 - American Literature from 1865 (H)

Surveys representative American literature and literary movements from the Civil War era to the present.
This class may not be offered every semester. Prerequisite: ENGL 1113 and ENGL 1213 with a grade of "C" or better. ENGL 1213 may be taken concurrently with this class.

## ENGL 2893 - African American Literature

Reading, study, and discussion of prominent African American writers with attention tto themes and philosophies dealing with the African experience. Prerequisites: ENGL 1113 or approval of instructor.

## READ 0113 - Introduction to Academic Reading

Teaches students basic reading skills necessary to improve comprehension, build vocabulary, and develop interest in reading.

## READ 0123-Critical Academic Reading

Provides students an opportunity to enhance skills and techniques taught in Introdcution to Academic Reading. Emphasizes locating central themes and/ or main ideas, distinguishing between major and minor details, drawing logical conclusions, and recognizing purpose and tone. Prerequisite: READ 0113 with a grade of "C" or better, or appropriate placement score.

## English as a Second Language

ESLA 0063 - ESL Institute Beginning 1
This novice-low level course introduces students to beginning English language skills. Placement determined by the ESL department.

## ESLA 0213 - ESL Listening Basics 1

This novice-mid level course develops everyday listening skills in English. Placement determined by the ESL department.

## ESLA 0223 - ESL Reading Basics 1

This novice-mid level course develops everyday reading skills in English. Placement determined by the ESL department.

## ESLA 0233 - ESL Grammar Basics 1

This novice-mid level course develops everyday grammar usage in English. Placement determined by the ESL department.

## ESLA 0243 - ESL Writing Basics 1

This novice-mid level course develops everyday writing skills in English. Placement determined by the ESL department.

## ESLA 0253 - ESL Speaking Basics 1

This novice-mid level course develops everyday speaking skills in English. Placement determined by the ESL department.

## ESLA 0263 - ESL Institute Basics 1

This novice-mid level course maintains and enhances everyday English language usage. Placement determined by the ESL department.

## ESLA 0313 - ESL Listening Basics 2

This novice-high level course continues the development of everyday listening skills in English.
Placement determined by the ESL department.
ESLA 0323 - ESL Reading Basics 2
This novice-high level course continues the development of everyday reading skills in English. Placement determined by the ESL department.

## ESLA 0333 - ESL Grammar Basics 2

This novice-high level course continues the development of everyday grammar usage in English. Placement determined by the ESL department.

## ESLA 0343 - ESL Writing Basics 2

This novice-high level course continues the development of everyday writing skills in English. Placement determined by the ESL department.

## ESLA 0353 - ESL Speaking Basics 2

This novice-high level course continues the development of everyday speaking skills in English. Placement determined by the ESL department.
ESLA 0373 - ESL Pronunciation and Spelling 1
This course develops pronunciation and spelling in English focusing on American English sounds and their spelling patterns. Placement determined by the ESL department.
ESLA 0413 - ESL Listening Intermediate 1
This intermediate-low level course continues the development of everyday listening skills in English. Placement determined by the ESL department.

## ESLA 0423 - ESL Reading Intermediate 1

This intermediate-low level course continues the development of everyday reading skills in English. Placement determined by the ESL department.

## ESLA 0433 - ESL Grammar Intermediate 1

This intermediate-low level course continues the development of everyday grammar usage in English. Placement determined by the ESL department.

## ESLA 0443 - ESL Writing Intermediate 1

This intermediate-low level course continues the development of everyday writing skills in English. Placement determined by the ESL department.
ESLA 0453 - ESL Speaking Intermediate 1
This intermediate-low level course continues the development of everyday speaking skills in English. Placement determined by the ESL department.
ESLA 0463 - ESL Institute Intermediate 1
This intermediate-low level course continues the maintenance and enhancement of everyday English language usage. Placement determined by the ESL department.

## ESLA 0473 - ESL Pronunciation and Spelling 2

This course develops pronunciation and spelling in English focusing on American English rhythm, intonation, and spelling patterns. Placement determined by the ESL department.

## ESLA 0513 - ESL Listening Intermediate 2

This intermediate-mid level course continues the development of everyday listening skills in English. Placement determined by the ESL department.

## ESLA 0523 - ESL Reading Intermediate 2

This intermediate-mid level course continues the development of everyday reading skills in English. Placement determined by the ESL department.
ESLA 0533 - ESL Grammar Intermediate 2
This intermediate-mid level course continues the development of everyday grammar usage in English. Placement determined by the ESL department.
ESLA 0543 - ESL Writing Intermediate 2

This intermediate-mid level course continues the development of everyday writing skills in English.
Placement determined by the ESL department.
ESLA 0553 - ESL Speaking Intermediate 2
This intermediate-mid level course continues the development of everyday speaking skills in English.
Placement determined by the ESL department.

## ESLA 0613 - ESL Listening Intermediate 3

This intermediate-high level course continues the development of everyday listening skills in English. Placement determined by the ESL department.

## ESLA 0623 - ESL Reading Intermediate 3

This intermediate-high level course continues the development of everyday reading skills in English. Placement determined by the ESL department.

## ESLA 0633 - ESL Grammar Intermediate 3

This intermediate-high level course continues the development of everyday grammar usage in English. Placement determined by the ESL department.

## ESLA 0643 - ESL Writing Intermediate 3

This intermediate-high level course continues the development of everyday writing skills in English. Placement determined by the ESL department.
ESLA 0653 - ESL Speaking Intermediate 3
This intermediate-high level course continues the development of everyday speaking skills in English.
Placement determined by the ESL department.

## ESLA 0713 - ESL Listening Advanced 1

This advanced-low level course develops academic and professional listening skills in English. Placement determined by the ESL department.

## ESLA 0723 - ESL Reading Advanced 1

This advanced-low level course develops academic and professional reading skills in English. Placement determined by the ESL department.

## ESLA 0733 - ESL Grammar Advanced 1

This advanced-low level course develops academic and professional grammar usage in English.
Placement determined by the ESL department.

## ESLA 0743-ESL Writing Advanced 1

This advanced-low level course develops academic and professional writing skills in English. Placement determined by the ESL department.

## ESLA 0753 - ESL Speaking Advanced 1

This advanced-low level course develops academic and professional speaking skills in English.
Placement determined by the ESL department.
ESLA 0763 - ESL Institute Advanced 1
This advanced-low level course continues the maintenance and enhancement of academic and professional English language usage. Placement determined by the ESL department.

## ESLA 0813 - ESL Listening Advanced 2

This advanced-mid level course develops academic and professional listening skills in English. Placement determined by the ESL department.

## ESLA 0823-ESL Reading Advanced 2

This advanced-mid level course develops academic and professional reading skills in English. Placement determined by the ESL department.

## ESLA 0833 - ESL Grammar Advanced 2

This advanced-mid level course develops academic and professional grammar usage in English.
Placement determined by the ESL department.

## ESLA 0843 - ESL Writing Advanced 2

This advanced-mid level course develops academic and professional writing skills in English. Placement determined by the ESL department.

## ESLA 0853 - ESL Speaking Advanced 2

This advanced-mid level course develops academic and professional speaking skills in English. Placement determined by the ESL department.

## ESLA 0913 - ESL Listening Advanced 3

This advanced-high level course develops academic and professional listening skills in English.
Placement determined by the ESL department.
ESLA 0923 - ESL Reading Advanced 3
This advanced-high level course develops academic and professional reading skills in English. Placement determined by the ESL department.

## ESLA 0933 - ESL Grammar Advanced 3

This advanced-high level course develops academic and professional grammar usage in English.
Placement determined by the ESL department.

## ESLA 0943 - ESL Writing Advanced 3

This advanced-high level course develops academic and professional writing skills in English. Placement determined by the ESL department.

## ESLA 0953 - ESL Speaking Advanced 3

This advanced-high level course develops academic and professional speaking skills in English. Placement determined by the ESL department.

## ESLA 0990 - Selected Topics in ESL

This is a study of selected topics in ESL. It may be repeated with a different topic. Placement determined by the ESL department.

## ESLN 0013 - ESL Beginning 1

This novice level course introduces the students to the English language including the fundamentals of reading, writing, speaking and listening. Placement determined by the ESL department.

## ESLN 0023 - ESL Beginning 2

This novice level course continues the introduction to the English language building on the previous course in this series. Skills include the fundamentals of reading, writing, speaking and listening.
Placement determined by the ESL department.

## ESLN 0033 - ESL Beginning 3

This novice level course continues the introduction to the English language building on the previous courses in this series. Skills include the fundamentals of reading, writing, speaking and listening.
Placement determined by the ESL department.

## ESLN 0043 - ESL Beginning 4

This novice level course continues the introduction to the English language building on the previous courses in this series. Skills include the fundamentals of reading, writing, speaking and listening. Placement determined by the ESL department.

## ESLN 0053 - ESL Beginning 5

This novice level course continues the introduction to the English language building on the previous courses in this series. Skills include the fundamentals of reading, writing, speaking and listening. Placement determined by the ESL department.

## ESLN 0063 - ESL Beginning 6

This novice level course continues the introduction to the English language building on the previous courses in this series. Skills include the fundamentals of reading, writing, speaking and listening.
Placement determined by the ESL department.

## ESLN 0073 - ESL Topics Beginning 1

This novice level course continues the introduction to the English language building on the previous courses in this series. Skills include the fundamentals of reading, writing, speaking and listening. Placement determined by the ESL department.

## ESLN 0113 - ESL Basics 1

This novice level course further develops English language skills in reading, writing, speaking, and listening with a focus on everyday language use. Placement determined by the ESL department.

## ESLN 0123 - ESL Basics 2

This novice level course further develops English language skills building on the previous course in this series. Skills include reading, writing, speaking, and listening with a focus on everyday language use. Placement determined by the ESL department.

## ESLN 0133 - ESL Basics 3

This novice level course further develops English language skills building on the previous courses in this series. Skills include reading, writing, speaking, and listening with a focus on everyday language use.
Placement determined by the ESL department.
ESLN 0143-ESL Basics 4
This novice level course further develops English language skills building on the previous courses in this series. Skills include reading, writing, speaking, and listening with a focus on everyday language use.
Placement determined by the ESL department.

## ESLN 0153 - ESL Basics 5

This novice level course further develops English language skills building on the previous courses in this series. Skills include reading, writing, speaking, and listening with a focus on everyday language use.
Placement determined by the ESL department.

## ESLN 0163 - ESL Basics 6

This novice level course further develops English language skills building on the previous courses in this series. Skills include reading, writing, speaking, and listening with a focus on everyday language use. Placement determined by the ESL department.
ESLN 0173 - ESL Topics Basics 1
This novice level course maintains and enhances skills for beginning English language learners. Placement determined by the ESL department.

## ESLN 0213 - ESL Comprehension 1

This intermediate level course expands English language skills in reading, writing, speaking, and listening. The course features expanded grammar, vocabulary and longer discourse. Placement determined by the ESL department.

## ESLN 0223 - ESL Comprehension 2

This intermediate level course expands English language skills building on the previous course in this series. Skills include reading, writing, speaking, and listening introducing expanded grammar, vocabulary and longer discourse. Placement determined by the ESL department.

## ESLN 0233-ESL Comprehension 3

This intermediate level course expands English language skills building on the previous courses in this series. Skills include reading, writing, speaking, and listening introducing expanded grammar, vocabulary and longer discourse. Placement determined by the ESL department.

## ESLN 0243 - ESL Comprehension 4

This intermediate level course expands English language skills building on the previous courses in this series. Skills include reading, writing, speaking, and listening introducing expanded grammar, vocabulary and longer discourse. Placement determined by the ESL department.

## ESLN 0253 - ESL Comprehension 5

This intermediate level course expands English language skills building on the previous courses in this series. Skills include reading, writing, speaking, and listening introducing expanded grammar, vocabulary and longer discourse. Placement determined by the ESL department.
ESLN 0263 - ESL Comprehension 6
This intermediate level course expands English language skills building on the previous courses in this series. Skills include reading, writing, speaking, and listening introducing expanded grammar, vocabulary and longer discourse. Placement determined by the ESL department.

## ESLN 0273 - ESL Comprehension Topics 1

This intermediate level course maintains and enhances skills for beginning English language learners through a variety of subject matter. Placement determined by the ESL department.

## ESLN 0313 - ESL Proficiency 1

This intermediate level course continues the development of English language skills in reading, writing, speaking, and listening. The course features a variety of daily, academic, and professional topics.
Placement determined by the ESL department.

## ESLN 0323 - ESL Proficiency 2

This intermediate level course continues the development of English language skills in reading, writing, speaking, and listening from the previous course in this series. The course features a variety of daily, academic, and professional topics. Placement determined by the ESL department.

## ESLN 0333 - ESL Proficiency 3

This intermediate level course continues the development of English language skills in reading, writing, speaking, and listening from the previous courses in this series. The course features a variety of daily, academic, and professional topics. Placement determined by the ESL department.
ESLN 0343 - ESL Proficiency 4
This intermediate level course continues the development of English language skills in reading, writing, speaking, and listening from the previous courses in this series. The course features a variety of daily, academic, and professional topics. Placement determined by the ESL department.

## ESLN 0373 - ESL Topics Proficiency 1

This intermediate level course maintains and enhances skills for beginning English language learners through a variety of subject matter. Placement determined by the ESL department.

## ESLN 0383 - ESL Topics Proficiency 2

This intermediate level course maintains and enhances skills for beginning English language learners through a variety of subject matter. Placement determined by the ESL department.

## ESLN 0393 - ESL Topics Proficiency 3

This intermediate level course maintains and enhances skills for beginning English language learners through a variety of subject matter. Placement determined by the ESL department.

## ESLN 0413 - ESL Mastery 1

This advanced level course develops English proficiency with an emphasis for use in academic and professional situations. Placement determined by the ESL department.

## ESLN 0423 - ESL Mastery 2

This advanced level course continues to develop English proficiency with an emphasis for use in academic and professional situations and building on the previous course in this series. Placement determined by the ESL department.

## ESLN 0433 - ESL Mastery 3

This advanced level course continues to develop English proficiency with an emphasis for use in academic and professional situations and building on the previous course in this series. Placement determined by the ESL department.

## ESLN 0443 - ESL Mastery 4

This advanced level course continues to develop English proficiency with an emphasis for use in academic and professional situations and building on the previous course in this series. Placement determined by the ESL department.

## ESLN 0473 - ESL Topics Mastery 1

This advanced level course maintains and enhances skills for beginning English language learners through a variety of subject matter. Placement determined by the ESL department.

## ESLN 0483 - ESL Topics Mastery 2

This advanced level course maintains and enhances skills for beginning English language learners through a variety of subject matter. Placement determined by the ESL department.

## ESLN 0493 - ESL Topics Mastery 3

This advanced level course maintains and enhances skills for beginning English language learners through a variety of subject matter. Placement determined by the ESL department.

## ESLN 0613 - ESL Culture Basics 1

This novice-high level course develops language proficiency along with awareness of the basic American customs, symbols and ideas. Placement determined by the ESL department.

## ESLN 0713 - ESL Culture Intermediate 1

This intermediate level course develops language proficiency along with awareness of the American customs, symbols and ideas. Placement determined by the ESL department.

## ESLN 0741 - TOEFL® Prep Reading Intermediate

This intermediate level course reviews language and strategies tested in the Reading section of the TOEFL®. Placement determined by the ESL department.

## ESLN 0751 - TOEFL® Prep Grammar Intermediate

This intermediate level course reviews language and strategies tested in the Structure and Written expression section of the TOEFL®. Placement determined by the ESL department.

## ESLN 0763 - TOEFL® Prep Intermediate

This intermediate level course reviews language and strategies tested in the TOEFL®. Placement determined by the ESL department.
ESLN 0813 - ESL Culture Advanced 1
This advanced level develops language proficiency along with understanding of American customs, symbols, history, and ideals. Placement determined by the ESL department.
ESLN 0841 - TOEFL® Prep Reading Advanced
This advanced level course reviews language and strategies tested in the Reading section of the TOEFL®. Placement determined by the ESL department.

## ESLN 0851/0852 - TOEFL® Prep Grammar Advanced

This advanced level course reviews language and strategies tested in the Structure and Written expression section of the TOEFL. Placement determined by the ESL department. May be taken as a one or two-hour course.

## ESLN 0863 - TOEFL® Prep Advanced

This advanced level course reviews language and strategies tested in common standardized tests. Placement determined by the ESL department.

## ESLN 0990 - Selected Topics in ESL

This is a study of selected topics in ESL. It may be repeated with a different topic. Placement determined by the ESL department.

## Fire and of Emergency Medical Services

## EMSP 1119 - 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.

## FEMS 1214 - Principles of Fire and 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.

## 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.

## 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.

## 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. 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.

## 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.

## FEMS 1314 - Fundamentals of Firefighting

Provides the knowledge for safe, efficient, and effective firefighting.

## FEMS 1324 - Fundamentals of Firefighting Applications

Provides the knowledge for safe, efficient, and effective firefighting applications. Twenty (20) clinical hours per week.

## 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.

## 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.
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.

## 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.

## 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.

## 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.

## 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.

## 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 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 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 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 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 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 2343 - 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.
Student will gain experience with GIS software. Course should be taken concurrently with GIS
2354. Course must be completed with a grade of $C$ or better to progress in the GIS program. Includes lab component. Crosslisted with GEOG 2343 Semester Offered Fall only
GIS 2354 - Computer Cartography
A brief history and an introduction of cartography, including the basics of map creation, interpretation, and design. Student will gain experience with GIS software. Includes Lab Component Course should be taken concurrently with GIS 2343 or GEOG 2343. Semester Offered Fall

## GIS 2373-GIS Data Acquisition and Management

An introduction to various methods of data capture, conversion and use for Geographic Information Systems. Course must be completed with a "C" or better to advance in the GIS program. Includes lab component. Prerequisites: GIS 2343 /GEOG 2343 with a grade of " C " or better or instructor approval.
Semester Offered Fall

## GIS 2383 - Advanced Geographic Information Systems

A continuation of Introduction to GIS (GEOG 2343 or GIS 2343 ). Exploration of various spatial analysis techniques for use in problem solving and decision making. Course must be completed with a " C " or better to advance in the GIS program. Includes lab component Prerequisite: GEOG 2343 /GIS 2343 with a grade of " C " or better or instructor approval. Semester Offered Spring only
GIS 2393 - Geographic Information Systems Practicum
Experience in designing, implementing, and completing a GIS project. Emphasis on project planning, data acquisition, management, analysis, and presentation. Course must be completed with a "C" or better to graduate in the GIS program. Includes lab component. Prerequisites: GIS 2343 or GEOG 2343, GIS 2354, GIS 2373, and GIS 2383, all with a grade of "C" or better or instructor approval. Semester Offered Spring only
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 - Introduction to Economic Geography (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 2343 - 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. Student will gain experience with GIS software. Course should be taken concurrently with GIS 2354. Course must be completed with a grade of $C$ or better to progress in the GIS program. Includes lab component. Crosslisted with GIS 2343 Semester Offered Fall only 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. Prerequisite: GEOL 1014 or instructor approval.
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 1103-German I

A beginning course in understanding, speaking, reading, and writing German. The first in a sequence of related courses.

## 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.

## Health, Human Performance \& Physical Education

HHPE 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.

## HHPE 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.

## HHPE 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.

## HHPE 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.
HHPE 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.

## HHPE 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.

## HHPE 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.

## HHPE 2990 - Selected Topics in Health, Human Performance, and Physical Education

The study and/or analysis of a selected topic in Health, Human Performance, and Physical Education. May be repeated with a different topic.

## Health Information Technology

## 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: All previous HITC courseworkwith a grade of " C " or better or instructor approval. 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: Admission into the Health Information Technology Program.

## 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. Includes lab component. Prerequisites: BIOL 1314 and ALDH 1323, with a grade of "C" or better.

## HITC 1353 - Legal Aspects of Health Information Managment

The focus of this course is on legal issues affecting the management. It provides exposure to the American legal system, legal terminology, case studies, and statutes with practical application of these principles and concepts to health information. Confidentiality and security of health 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: All previous HITC coursework with a grade of " C " or better or instructor approval.

## 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. Includes lab component. Prerequisites: BIOL 1314 and ALDH 1323 with a grade of " C " or better.

## 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. or permisson of instructor.

## 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: All previous HITC coursework with a grade of " C " or better or instructor approval.

## 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 Scale (RBRVS) and major third-party payers (private and government sponsored). Includes lab component. Prerequisites: HITC 1333 and HITC 1363 with a grade of " C " or better and HITC 2403 or concurrent enrollment or instrutor approval.

## 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, or permission of the instructor.

## 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: All previous HITC coursework with a grade of "C" or better or instructor approval.

## 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 2411 - 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 1412 and HITC 1353 with a grade of " C " or better
HITC 2512 - HIT Professional Review
Capstone course builds on the concepts of all courses within the HIT program. Students will evaluate and integrate the knowledge and skills learned and assess their level of mastery with entry level competencies. Prerequisites: All previous HITC courses with a grade of "C" or better or instructor approval.

## 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.

## History

## 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 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 2043 - Contemporary Affairs (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 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, AfricanAmericans 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 (H)

An introduction to the cultures, experiences, and conflicts of Native Americans from pre-history to the present. Crosslisted with NAMS 2343.

## HIST 2523 - History of Oklahoma

Intercultural contributions from prehistoric to present, including explorations, Indian cultures, homesteading, and statehood.
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 2113 - 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 2123 - Employee Law

An in-depth study of employee laws and workplace issues. Title VII, ADA, EEO, affirmative action programs, discrimination, employment contracts and labor law will be covered. Contemporary workplace issues including employee benefits, discipline, and termination will also be addressed within a legal context. Semester Offered Fall

## HRES 2233-Talent Management

A comprehensive study of HR's role in identifying, staffing, and motivating talent. An emphasis is placed on workforce planning, recruiting and staffing, relationship building, managing organizational change, and measuring employee attitudes and performance.

## HRES 2243-Training and Development

A study of training and development, including strategic training planning, needs assessment, learning theories, and the design, development, and implementation of training and development interventions. An emphasis is placed on evaluating the cost-benefit relationship of training and development with employee productivity and organizational strategy. Semester Offered Spring

## HRES 2373 - Compensation and Benefits Management

A study of compensation and benefits management systems, approaches, and practices with a focus aligning compensation and benefits strategy to organizational strategy. Compensation topics will include organizational policies, job analysis, job evaluation, salary surveys, compensation structuring, and employee performance appraisals. Benefits topics will include addition, selection and administration of benefit plans including health delivery systems, retirement plans, savings and investment plans, and worker's compensation. Semester Offered Summer

## HRES 2413-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. Semester Offered Fall

## HRES 2493 - SHRM Certification Preparation

An intensive exam preparation for SHRM $®$ certification*. Topics covered will include the eight behavioral competencies: Leadership and Navigation; Ethical Practice; Business Acumen; Relationship Management Consultation; Critical Evaluation; Global and Cultural Effectiveness; and Communications. In addition, a comprehensive review of the HR technical competencies of People, Organization, and Workplace will be included. Students will engage in in-depth case studies and integrate previous HR learning, simulating real-world HR challenges and opportunities. SHRM® course materials required at an additional cost. *Course completion does not substitute for or waive exam eligibility requirements as required by $\mathrm{SHRM} ®$. Prerequisite: 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

## 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. Includes lab component. Prerequisite: DDSD Certificate of Training and instructor approval.

## 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 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 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 2153 or PSYC 2153 with a "C" or better and Instructor approval.

## HSVC 2113 - Human Services 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 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. Includes lab component. Prerequisite: Instructor approval.

## 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 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 2713 - Crisis Intervention Strategies and Practice

Human services workers and helping professionals engage with individuals at varying levels of crisis. This study of crisis intervention will include culturally effective models of responding, counseling techniques, assessment and intervention strategies, and community resources. Crisis intervention specialization areas include mental illness, substance abuse, suicide, grief, sexual assault, and violence. Course includes lecture plus a supervised practicum in an approved social services agency. Prerequisite: HSVC 1113 and HSVC 1213

## 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: Prehistory through the Middle Ages (H)
The humanities creatively and critically engage with the fundamental questions and challenges of the human condition through the study of the arts, philosophy, religion, history, etc. This course is an interdisciplinary survey of the humanities from prehistory through the middle ages.

## HUMN 2223 - Humanities II: Renaissance to the Early 20th Century (H)

The humanities creatively and critically engage with the fundamental questions and challenges of the human condition through the study of the arts, philosophy, religion, history, etc. This course is an interdisciplinary survey of the humanities from the Renaissance to the early twentieth century.
HUMN 2323 - Humanities III: Early 20th Century to the Present (H)
The humanities creatively and critically engage with the fundamental questions and challenges of the human condition through the study of the arts, philosophy, religion, history, etc. This course is an interdisciplinary survey of the humanities from the early twentieth century to the present.

## 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 - Introduction to 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 - Cultural Identities and the Arts in America (H)

A dual approach to the relationship between art and identity; seeks to investigate an inclusive range of identity-forming narratives, poetry, images, lyrics, essays, and films and to explore the creative process itself.
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

## 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. MATH 1473 is highly recommended as a prerequisite for this course.

## 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. Completion of the Math requirement for the student's desired degree or certificate is recommended.

## 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. Completion of the Math requirement for the student's desired degree or certificate plan is recommended.

## 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 (laaS), 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. Crosslisted with 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

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. Course counts as a Humanities course for the Interior Design Associate in Applied Science degree only.

## INTD 1443 - History of Interiors II

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. Online only. Course counts as a Humanities course for the Interior Design Associate in Applied Science degree only. Prerequisites: INTD 1433 with a grade of "C" or better.

## 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 1433 is suggested. Concurrent enrollment in INTD 1313 is required Semester Offered 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. Concurrent enrollment in INTD 1443 is suggested. Prerequisites: INTD 1313 and INTD 1473, both with a grade of "C" or better. Concurrent enrollment in INTD 1493 is required. Semester Offered 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. Concurrent enrollment in INTD 1443 is suggested.
Prerequisites: INTD 1313 and INTD 1473, both with a grade of " C " or better. Concurrent enrollment in INTD 1483 is required Semester Offered 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. Concurrent enrollment in INTD 1543 is suggested. Prerequisites: INTD 1443, INTD 1483, and INTD 1493, all with a grade of "C" or better. Concurrent enrollment in INTD 1523 is required. Semester Offered 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. Concurrent enrollment in INTD 1543 is suggested. Prerequisites: INTD 1443, INTD 1483, and INTD 1493, all with a grade of "C" or better. Concurrent enrollment in INTD 1513 is required. Semester Offered 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. Semester Offered 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. Concurrent enrollment in INTD 1513 and INTD 1523 is suggested. Online only. Prerequisites: INTD 1483 and INTD 1493, both with a grade of " C " or better. INTD 2343 - Interior Design 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 - Interior Design 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. Course may be taken twice. 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. Semester Offered 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. Semester Offered 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. Semester Offered 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. Semester Offered 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. Semester Offered 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. Semester Offered 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 Semester Offered 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.

## Interpreter Education

## INED 1423 - Introduction to Interpreting

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. Concurrent enrollment with ASLE 2414 and INED 2393 is recommended. Prerequisites: ASLE 1373 and INED 1423 with a "C" or better or instructor approval. Semester Offered offered during the day in spring semester. Only offered at night in the fall semester.

## 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. Concurrent enrollment with INED 2403 and ASLE 2524 is recommended. Prerequisite: INED 2213 with a "C" or better or instructor approval. Semester Offered Only offered at night in the spring semester. Only offered during the day in the fall semester.

## 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 instructorapproved situations beyond the classroom. Concurrent enrollment in INED 2213 and ASLE 2414 is recommended. Prerequisites: ASLE 1373 and INED 1423 with a grade of " C " or better and an placement score or a grade of "C" or better in ENGL 1113 or instructor approval. Semester Offered Only offered during the day in spring semester. Only offered at night in the fall semester.

## 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. Concurrent enrollment with INED 2233 and ASLE 2524 is recommended. Includes lab component. Prerequisite: INED 2393 with a grade of " C " or better or instructor approval. Semester Offered (Only offered at night in the spring semester. Only offered during the day in the fall semester).

## 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 interpreting settings including, but not limited to, non serious health care, employment, K-12 educational, post-secondary educational, religious and performing arts. Concurrent enrollment in INED 2233 and INED 2403 is recommended. Includes lab component. Prerequisites: INED 2393, INED 2213, and ASLE 2414 with "C' or better or instructor approval. Semester Offered Fall

## 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. Concurrent enrollment with INED 2643 is recommended. Includes lab component. Prerequisites: INED 2403 with a grade of " C " or better or instructor approval. Semester Offered Only offered at night in the fall semester. Only offered during the day in the spring semester.

## 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. Concurrent enrollment with INED 2613 is recommended. Includes lab component.
Prerequisites: ASLE1413, INED 2233, INED 2403, INED 2443, and ASLE 2524 with a grade of "C" or better or instructor approval.

## INED 2990 - Selected Topics in Interpreter Education

The study and/or analysis of a selected topic in Interpreter Education. 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 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 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 I
A beginning course in understanding, speaking, reading, and writing Japanese. The first in a sequence of related courses.

## JAPN 1111 - Kanji I

A review of JLPT N5 kanji and their usage. Conducted in Japanese and English. Prerequisite: JAPN
1103 with grade of " C " or better.
JAPN 1121 - Kanji II
A review of JLPT N4 kanji and their usage. Conducted in Japanese and English. Prerequisite: JAPN 1103 with grade of "C" or better.
JAPN 1131 - Kanji III
A review of JLPT N3/N4 kanji and their usage. Conducted in Japanese and English. Prerequisite: JAPN 1103 with grade of "C" or better.
JAPN 1141-Kanji IV
A review of JLPT N3 kanji, Joyo kanji and their usage. Conducted in Japanese and English. Prerequisite: JAPN 1103 with grade of "C" or better.
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 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 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.

## Mass Communication

## MCOM 1013 - Introduction to Mass Communication

A survey course designed to provide students with a panoramic view of mass communication in the digital global age with emphasis on the role of mass media in a diverse society. Open to all majors. Semester Offered Fall, Spring, and Summer

## MCOM 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. Semester Offered Fall and Spring MCOM 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. Prerequisites: ENGL 1113 Semester Offered Fall, Spring, and Summer MCOM 2013 - Principles of Advertising
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. Prerequisite: MCOM 1113 and/or concurrent enrollment. Semester Offered Fall

## MCOM 2023 - Electronic Communication

Introduces students to electronic communication with a series of hands-on projects that incorporate multimedia tools. Students will develop skills in basic logging, 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. Includes lab component. Prerequisite: MCOM 1113. Semester Offered Spring
MCOM 2123 - 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. News Writing and Reporting Prerequsites: Typing/Word processing ability, successful completion of MCOM 1113 and MCOM 2023 or instructor approval. Semester Offered Fall and Spring

## MCOM 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. Includes lab component. Prerequisite: MCOM 1103. Semester Offered Spring

## MCOM 2183 - Principles of Public Relations

Fundamental principles of public relations processes, including research, planning and communication. Includes an examination of selected case study methodologies, including writing news releases and planning, detailing and producing a comprehensive public relations campaign. Prerequisite: MCOM 1113 or concurrent enrollment. Semester Offered Spring

## MCOM 2513-TCC Connection I

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. Semester Offered Fall

## MCOM 2523-TCC Connection II

Further development in the production of a bi-weekly news product. 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. Semester Offered Spring and Summer

## MCOM 2573 - Videography

A study in video technologies basic equipment, including digital video camera operation, video composition, basic lighting, audio, production planning, and visual story telling. Prerequisite: MCOM 1103 and/or concurrent enrollment or instructor approval. Semester Offered Fall and Spring MCOM 2973 - Mass Communication Internship I
Expands the Mass Communication and Digital Media Programs, offering internship as a means to provide students with hands-on learning and working experience in their chosen degree options of Strategic Communication or Electronic and Broadcast Communication; or their chosen Digital Media specialty of Broadcast Production Specialist or Graphic Design Specialist. Students must apply through internship faculty advisor. Semester Offered Fall, Spring, and Summer

## MCOM 2983 - Mass Communication Internship II

Expands the Mass Communication program, offering internship as a means to provide students with hands-on learning and working experience. Prerequisites: Successful completion of MCOM 2973; initiation of the application process with the Program Coordinator or Dean. Semester Offered Fall, Spring, and Summer
MCOM 2990 - Selected Topics in Mass Communication
The study and/or analysis of a selected topic in Mass Communication. 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 2990 - Selected Topics in Latin
The study and/or analysis of a selected topic in Latin. May be repeated with a different topic.

## Management

## MGMT 1353 - Interpersonal Skills for Managers

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 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 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 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 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. Crosslisted with INTD 1303.

## MKTG 1393 - Web Design and Marketing

An introduction to website creation and marketing related 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 website using popular web development software. Crosslisted with CSYS 1393.

## 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. Crosslisted with CSYS 1443.

## MKTG 2293 - Social Media

Explore the use of social media for business and personal use. Develop a social media marketing plan for a business. 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.

## 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 Innovation and Creativity

Introduction to theoretical concepts related to human creative process, developing creative ideas, and converting ideas into innovative products or solutions.

## MKTG 2453 - Retail Management

A study of the retailing mix strategy including consumer purchase behavior, retailing trends, promotions and pricing strategies, store and personnel management, store site location, store layout \& design, visual merchandising and customer service techniques.
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 - Math Foundations I
A study of the fundamental operations of whole numbers, integers, fractions, and decimals, including an introduction to percents.
MATH 0013 - Math Foundations II
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 MATH 0003 with a grade of " C " or better.

## MATH 0055 - Math Foundations I \& II

A combination of MATH 0003 and MATH 0013. For students who need to review their basic mathematics and algebra skills. Included 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 0123 - Essentials for Precalculus I

A continuation of MATH 0013, including radical expressions and equations; solving systems of equations; evaluating functions, rational expressions and equations; complex numbers; graphing linear, quadratic, and absolute value functions; quadratic equations; and applications. A corequisite to MATH 1513. Prerequisite: MATH 0013 or MATH 0055 with a grade of " C " or better, or appropriate placement.

## MATH 0403 - Essentials for Quantitative Reasoning

Exploration of various topics designed to give the student an appreciation of mathematics and to expose the student to mathematical problems within numerous disciplines. Prerequisites: MATH 0013 or MATH 0055 with a grade of "C" or better or appropriate placement.

## 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: MATH 0013 or MATH 0055 with a grade of "C" or better, or appropriate placement.

## MATH 1473 - Quantitative Reasoning (A)

Covers the skills and tools (including technology) needed to think critically about quantitative information encountered in daily life. Emphasis on solving real-world problems utilizing open-ended exercises that involve reading, analyzing, calculating, and clearly reporting results. Topics include: using numbers in the real world; financial literacy; statistics; probability; linear and exponential modeling. Prerequisites: MATH 0123 with a grade of " C " or better, appropriate placement, or co-requisite enrollment in MATH 0403.
MATH 1483 - Mathematics Functions and Their Uses (A)
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: MATH 0013 with a grade of "C" or better, or appropriate placement.

## MATH 1513-Precalculus I (A)

A continuation of MATH 0123, including relations and functions; graphing using transformations; algebra of functions, circles and parabolas; polynomial and rational functions; Study of equations and functions (polynomial, rational, radical, exponential, logarithmic), systems of equations. Suitable for students planning to take calculus. Prerequisites: MATH 0123 or MATH 1473 with a grade of " C " or better, appropriate placement,or co-requisite enrollment in MATH 0123.

## MATH 1613 - Precalculus II (A)

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 appropriate placement.

## MATH 1715 - Precalculus I and II (A)

Topics from college algebra and trigonometry with emphasis on graphing and functions. 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. Prerequisite: MATH 0123 or MATH 1473 with a grade of " C " or better or appropriate placement.

## 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: MATH 1613 or MATH 1715 with a grade of " C " or better, or appropriate placement.
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 Mclaurin 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:MATH 0013 or MATH 0055 with a grade of "C" or better, or appropriate placement.

## MATH 2423 - Mathematics Concepts for Educators

Foundations for teaching arithmetic and geometry on the elementary level. Includes origins of numerals; number bases; systems of whole numbers; integers; rational numbers; real numbers; and intuitive geometry. Focus on current issues in mathematics education and research and the use of computers in mathematics education. Prerequisite: MATH 1473 or MATH 1513 or MATH 1715 with a grade of "C" or better. Semester Offered Fall and summer

## MATH 2513 - Finite 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: MATH 1483 or MATH 1513 or MATH 1715 with a grade of "C" or better.

## 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: MATH 1473 or MATH 1513 or MATH 1715 with a grade of "C" or better. Semester Offered Spring and summer

## 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 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

The basic concepts and skills needed to prepare to become a phlebotomist. Requires Program Director approval. Includes lab component.

## MDLT 1222 - Phlebotomy Clinical

Students will be assigned to clinical laboratories for practical phlebotomy experiences. Clinical schedule is flexible but equates to 100 clinical lab hours. Includes observation and laboratory procedures. Prerequisites: Concurrent enrollment in MDLT 1203 and MLT Program Director approval.

## MDLT 2002 - Clinical Laboratory Operations and Professionalism

An overview of clinical laboratory operations and each area of the clinical laboratory. Also includes: professional ethics and conduct; medical legal aspects; laboratory safety; microscopy; basic instrumentation; laboratory mathematics; and quality assessment. Course must be completed with a "C" or better. Prerequisite: Admission into the MLT Program or Program Director approval.

## MDLT 2212 - Urinalysis and Body Fluids

The study of urine and body fluids analysis. Includes the anatomy and physiology of the kidneys; physical, chemical and microscopic examination of urine; cerebrospinal fluid; and other body fluids, as well as applicable parasitology. Course must be completed with a "C" or better. Prerequisite: Admission into the MLT Program or Program Director approval.

## MDLT 2222 - Clinical Immunology and Serology

The theory and application of basic immunology, including the immune response; principles of antigen antibody reactions; and the principles of serological procedures as they relate to disease. The immunology lab will utilize a variety of testing methods to demonstrate the serological response to infectious disease. Course must be completed with a " C " or better. Prerequisite: Admission into the MLT Program or Program Director approval.

## 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 Program Director 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 Program Director approval.

## MDLT 2323 - Clinical Chemistry

Principles and procedures of various test performed in clinical chemistry. Presents the physiological basis for the test, the principle and procedure for the test, and the clinical significance of the test results, including quality control and normal values. Course must be completed with a " C " or better. Prerequisite: Admission into the MLT program or Program Director approval.

## MDLT 2331 - Clinical Chemistry Lab

Emphasis is placed on reagent preparations, analytical methodologies and correlating laboratory results with clinical significance. Chemical tests of blood urine and other body fluids are performed. Must be taken concurrently with MDLT 2323. Course must be completed with a " C " or
better. Prerequisite: Admission into the MLT program or Program Director approval.
MDLT 2392 - Clinical Microbiology Lab
Practice of microbiology procedure including: quality control, safety, specimen collection, setup, identification, susceptibility testing and reporting procedures. Must be taken concurrently with MDLT 2393. Prerequisite: Admission to the MLT program or Program Director approval.

## MDLT 2393 - Clinical Microbiology

Emphasis on pathogenic microorganisms, their identification, and related disease processes. Includes instruction in theory and pathogenesis of clinical microbiology. Prerequisite: Admission to the MLT program or Program Director approval.

## MDLT 2422-Clinical Immunohematology/Blood Bank Lab

Includes ABO and D typing, Type and Screen, RBC Phenotyping, Cross Matching, Antibody Identification, DAT and Elution. Must be taken concurrently with MDLT 2423. Course must be completed with a "C" or better. Prerequisite: Admission into the MLT program or Program Director approval. MDLT 2423-Clinical Immunohematology/Blood Bank
Study of blood group antigens and antibodies in relation to their clinical significance. Includes a wide variety of procedures including donor selection, component preparation and use, adverse effects of transfusion and hemolytic disease of the newborn. Course must be completed with a "C" or better. Prerequisite: Admission into the MLT program or Program Director approval.

## MDLT 2433-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 designated weeks. This clinical includes observation and laboratory procedures. Course must be completed with a " C " or better. Prerequisite: Completion of all MDLT courses with a grade of "C" or above.

## MDLT 2462 - Clinical Practicum II

A continuation of Clinical Practicum I. Emphasis on observation, clinical application and laboratory procedures. Clinical lab hours are 40 hours per week for designated weeks. Course must be completed with a "C" or better. Prerequisite: Completion of MDLT 2433 with a grade of " C " or above.

## MDLT 2516 - Clinical Practicum III

A continuation of Clinical Practicum I and II. Emphasis will be placed on observation, clinical application and laboratory procedures. Clinical lab hours are 40 hours per week for designated weeks. Course must be completed with a "C" or better. Prerequisites: MDLT 2433 and MDLT 2462 with a grade of "C" or better.

## 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.

## 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. Graded as 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 nonmusic majors with approval of instructor. Taken concurrently with MUSC 1013 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 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 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. 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 Prerequisite: Requires instructor approval. 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 30minute 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. MUSC 1201 - Private Piano
Private piano 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. Designed for the music major on a secondary instrument. 1 credit hour private music instruction requires a weekly 30 -minute lesson; 3 hours minimum weekly practice recommended. Instructor approval required.

## MUSC 1202 - Private Piano

Private piano 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. Designed for the music major on their primary instrument. 2 credit hour private music instruction requires a weekly 1-hour lesson; 6 hours minimum weekly practice recommended. Recital and performance examination (jury) will be required. Instructor approval required.

## MUSC 1211 - Private Organ

Private organ 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. Designed for the music major on a secondary instrument. 1 credit hour private music instruction requires a weekly 30-minute lesson; 3 hours minimum weekly practice recommended. Instructor approval required.

## MUSC 1212 - Private Organ

Private organ 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. Designed for the music major on their primary instrument. 2 credit hour private music instruction requires a weekly 1 -hour lesson; 6 hours minimum weekly practice recommended. Recital and performance examination (jury) will be required. Instructor approval required. MUSC 1241 - Private Voice
Private voice 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. Designed for the music major on a secondary instrument. 1 credit hour private music instruction requires a weekly 30 -minute lesson; 3 hours minimum weekly practice recommended. Instructor approval required.

## MUSC 1242 - Private Voice

Private voice 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. Designed for the music major on their primary instrument. 2 credit hour private music instruction requires a weekly 1 -hour lesson; 6 hours minimum weekly practice recommended. Recital and performance examination (jury) will be required. Instructor approval required.

## MUSC 1251 - Private Guitar

Private guitar 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. Designed for the music major on a secondary instrument. 1 credit hour private music instruction requires a weekly 30 -minute lesson; 3 hours minimum weekly practice recommended. Instructor approval required.

## MUSC 1252 - Private Guitar

Private guitar 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. Designed for the music major on their primary instrument. 2 credit hour private music instruction requires a weekly 1 -hour lesson; 6 hours minimum weekly practice recommended. Recital and performance examination (jury) will be required. Instructor approval required.

## MUSC 1311 - Private Violin

Private violin 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. Designed for the music major on a secondary instrument. 1 credit hour private music instruction requires a weekly 30 -minute lesson; 3 hours minimum weekly practice recommended. Instructor approval required.

## MUSC 1312 - Private Violin

Private violin 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. Designed for the music major on their primary instrument. 2 credit hour private music instruction requires a weekly 1 -hour lesson; 6 hours minimum weekly practice recommended. Recital and performance examination (jury) will be required. Instructor approval required.

## MUSC 1321 - Private Viola

Private viola 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. Designed for the music major on a secondary instrument. 1 credit hour private music instruction requires a weekly 30 -minute lesson; 3 hours minimum weekly practice recommended. Instructor approval required.

## MUSC 1322 - Private Viola

Private viola 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. Designed for the music major on their primary instrument. 2 credit hour private music instruction requires a weekly 1 -hour lesson; 6 hours minimum weekly practice recommended. Recital and performance examination (jury) will be required. Instructor approval required.

## MUSC 1331 - Private Cello

Private cello 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. Designed for the music major on a secondary instrument. 1 credit hour private music instruction requires a weekly 30 -minute lesson; 3 hours minimum weekly practice recommended. Instructor approval required.

## MUSC 1332 - Private Cello

Private cello 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. Designed for the music major on their primary instrument. 2 credit hour private music instruction requires a weekly 1 -hour lesson; 6 hours minimum weekly practice recommended. Recital and performance examination (jury) will be required. Instructor approval required. MUSC 1341 - Private Bass
Private bass 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. Designed for the music major on a secondary instrument. 1 credit hour private music instruction requires a weekly 30 -minute lesson; 3 hours minimum weekly practice recommended. Instructor approval required.

## MUSC 1342 - Private Bass

Private bass 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. Designed for the music major on their primary instrument. 2 credit hour private music instruction requires a weekly 1 -hour lesson; 6 hours minimum weekly practice recommended. Recital and performance examination (jury) will be required. Instructor approval required.

## MUSC 1351 - Private Flute

Private flute 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. Designed for the music major on a secondary instrument. 1 credit hour private music instruction requires a weekly 30 -minute lesson; 3 hours minimum weekly practice recommended. Instructor approval required.

## MUSC 1352 - Private Flute

Private flute 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. Designed for the music major on their primary instrument. 2 credit hour private music instruction requires a weekly 1 -hour lesson; 6 hours minimum weekly practice recommended. Recital and performance examination (jury) will be required. Instructor approval required.

## MUSC 1361 - Private Oboe

Private oboe 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. Designed for the music major on a secondary instrument. 1 credit hour private music instruction requires a weekly 30 -minute lesson; 3 hours minimum weekly practice recommended. Instructor approval required.

## MUSC 1362 - Private Oboe

Private oboe 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. Designed for the music major on their primary instrument. 2 credit hour private music instruction requires a weekly 1 -hour lesson; 6 hours minimum weekly practice recommended. Recital and performance examination (jury) will be required. Instructor approval required. MUSC 1371 - Private Clarinet
Private clarinet 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. Designed for the music major on a secondary instrument. 1 credit hour private music instruction requires a weekly 30 -minute lesson; 3 hours minimum weekly practice recommended. Instructor approval required.

## MUSC 1372 - Private Clarinet

Private clarinet 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. Designed for the music major on their primary instrument. 2 credit hour private music instruction requires a weekly 1 -hour lesson; 6 hours minimum weekly practice recommended. Recital and performance examination (jury) will be required. Instructor approval required.

## MUSC 1381 - Private Saxophone

Private saxophone 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. Designed for the music major on a secondary instrument. 1 credit hour private music instruction requires a weekly 30 -minute lesson; 3 hours minimum weekly practice recommended. Instructor approval required.

## MUSC 1382 - Private Saxophone

Private saxophone 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. Designed for the music major on their primary instrument. 2 credit hour private music instruction requires a weekly 1 -hour lesson; 6 hours minimum weekly practice recommended. Recital and performance examination (jury) will be required. Instructor approval required.

## MUSC 1391 - Private Electric Bass Guitar

Private electric bass guitar 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. Designed for the music major on a secondary instrument. 1 credit hour private music instruction requires a weekly 30 -minute lesson; 3 hours minimum weekly practice recommended. Instructor approval required.

## MUSC 1392 - Private Electric Bass Guitar

Private electric bass guitar 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. Designed for the music major on their primary instrument. 2 credit hour private music instruction requires a weekly 1 -hour lesson; 6 hours minimum weekly practice recommended. Recital and performance examination (jury) will be required. Instructor approval required.

## MUSC 1411 - Private Trumpet

Private trumpet 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. Designed for the music major on a secondary instrument. 1 credit hour private music instruction requires a weekly 30 -minute lesson; 3 hours minimum weekly practice recommended. Instructor approval required.

## MUSC 1412 - Private Trumpet

Private trumpet 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. Designed for the music major on their primary instrument. 2 credit hour private music instruction requires a weekly 1 -hour lesson; 6 hours minimum weekly practice recommended. Recital and performance examination (jury) will be required. Instructor approval required.

## MUSC 1421 - Private Horn

Private horn 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. Designed for the music major on a secondary instrument. 1 credit hour private music instruction requires a weekly 30 -minute lesson; 3 hours minimum weekly practice recommended. Instructor approval required.

## MUSC 1422 - Private Horn

Private horn 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. Designed for the music major on their primary instrument. 2 credit hour private music instruction requires a weekly 1 -hour lesson; 6 hours minimum weekly practice recommended. Recital and performance examination (jury) will be required. Instructor approval required. MUSC 1431 - Private Trombone
Private trombone 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. Designed for the music major on a secondary instrument. 1 credit hour private music instruction requires a weekly 30 -minute lesson; 3 hours minimum weekly practice recommended. Instructor approval required.

## MUSC 1432 - Private Trombone

Private trombone 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. Designed for the music major on their primary instrument. 2 credit hour private music instruction requires a weekly 1-hour lesson; 6 hours minimum weekly practice recommended. Recital and performance examination (jury) will be required. Instructor approval required.

## MUSC 1441 - Private Tuba

Private tuba 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. Designed for the music major on a secondary instrument. 1 credit hour private music instruction requires a weekly 30-minute lesson; 3 hours minimum weekly practice recommended. Instructor approval required.

## MUSC 1442 - Private Tuba

Private tuba 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. Designed for the music major on their primary instrument. 2 credit hour private music instruction requires a weekly 1 -hour lesson; 6 hours minimum weekly practice recommended. Recital and performance examination (jury) will be required. Instructor approval required.

## MUSC 1451-Private Bassoon

Private bassoon 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. Designed for the music major on a secondary instrument. 1 credit hour private music instruction requires a weekly 30-minute lesson; 3 hours minimum weekly practice recommended. Instructor approval required.

## MUSC 1452 - Private Bassoon

Private bassoon 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. Designed for the music major on their primary instrument. 2 credit hour private music instruction requires a weekly 1-hour lesson; 6 hours minimum weekly practice recommended. Recital and performance examination (jury) will be required. Instructor approval required.

## MUSC 1461 - Private Harp

Private harp 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. Designed for the music major on a secondary instrument. 1 credit hour private music instruction requires a weekly 30-minute lesson; 3 hours minimum weekly practice recommended. Instructor approval required.

## MUSC 1462 - Private Harp

Private harp 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. Designed for the music major on their primary instrument. 2 credit hour private music instruction requires a weekly 1 -hour lesson; 6 hours minimum weekly practice recommended. Recital and performance examination (jury) will be required. Instructor approval required.

## MUSC 1471 - Private Euphonium

Private euphonium 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. Designed for the music major on a secondary instrument. 1 credit hour private music instruction requires a weekly 30-minute lesson; 3 hours minimum weekly practice recommended. Instructor approval required.

## MUSC 1472 - Private Euphonium

Private euphonium 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. Designed for the music major on their primary instrument. 2 credit hour private music instruction requires a weekly 1-hour lesson; 6 hours minimum weekly practice recommended. Recital and performance examination (jury) will be required. Instructor approval required.

## MUSC 1491 - Private Percussion

Private 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. Designed for the music major on a secondary instrument. 1 credit hour private music instruction requires a weekly 30-minute lesson; 3 hours minimum weekly practice recommended. Instructor approval required.

## MUSC 1492 - Private Percussion

Private 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. Designed for the music major on their primary instrument. 2 credit hour private music instruction requires a weekly 1-hour lesson; 6 hours minimum weekly practice recommended. Recital and performance examination (jury) will be required. Instructor approval required.

## 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. Prerequisite: MUSC 1612 with a grade of " C " or better or instructor approval. *Required for music majors

## MUSC 1632 - Class Piano III

Continuation of Class Piano II. Prerequisite: MUSC 1622 with a grade of " C " or better or instructor approval. *Required for music majors.
MUSC 1642 - Class Piano IV
Continuation of Class Piano III. May be waived by piano faculty by demonstration of piano proficiency. Prerequisite: MUSC 1632 with a grade of " C " or better or instructor approval. *Required for music majors. 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 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 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 will develop students' composition skills. Students with songwriting and/or popular music backgrounds can focus on songwriting with emphasis on notation and written presentation, and students with a background and/or interest in concert music will develop their knowledge of writing for combinations of orchestral and related instruments. Crossover techniques, styles and ensembles are welcome. Students will write songs and pieces as desired with the aim of creating a portfolio of scores and recording useful for applying to schools, competitions and seminars aiming for a professional standard of presentation and mature development of musical ideas. Practical skills include proper presentation of jazz and lead sheet notation/concert music engraving, development of musical ideas and presenting ideas in written popular/jazz and concert formats.

## 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. Concurrent enrollment in Class Piano or Private Piano is required unless waived by demonstration of piano proficiency. Prerequisite: MUSC 1023 and MUSC 1072 with a grade of "C" or better or instructor approval. Corequisite: MUSC 2062 for music majors.

## MUSC 2023 - Music Theory IV

A continuation of MUSC 2013. Introduction to extended harmonies and 20th century techniques. Concurrent enrollment in Class Piano or Private Piano is required unless waived by demonstration of piano proficiency. Prerequisite: MUSC 2013 and MUSC 2062 with a grade of "C" or better or instructor approval. Corequisite: MUSC 2072 for music majors.

## 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. Prerequisite: MUSC 1013 or instructor approval. Required of all music majors; non-music majors admitted with instructor approval.

## MUSC 2181-Jazz Choir

Jazz Choir is a mixed choral ensemble that studies and performs a wide variety of choral literature suitable for an advanced choir. Repertoire style will include accompanied and unaccompanied singing.
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. 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 1hour 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. Prerequisite: Requires instructor approval.

## 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. Crosslisted with 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 2413 - Opera Workshop

This course is designed to develop the musical and theatrical talents of students who are interested in a degree in music performance or simply want to broaden their individual experiences on the stage. Course work will focus on the art of performing opera literature and will include learning, blocking, and presenting scenes from standard and contemporary opera literature, music comedy, and operetta. Historical and cultural perspective of individual works will be included in abbreviated lecture form. This is a performance/lab class which will require both individual and partner-based work. A public performance of the literature studied will be presented at the conclusion of the course.

## MUSC 2452 - Composition for Songwriters II

A continuation of MUSC 1852, this course will continue developing students' composition skills with increased focus on larger forms and instrumentation. Projects are tailored to a student's individual needs, with the expectations of pushing their boundaries. Practical skills continue to include proper presentation of jazz and lead sheet notation/concert music engraving, development of musical ideas and presenting their ideas in written popular/jazz and concert formats. Prerequisite: MUSC 1852 with a grade of "C" or better.

## MUSC 2990 - Selected Topics in Music

The study and/or analysis of a selected topic in Music. May be repeated with a different topic.

## Native American Studies

## NAMS 2013 - Images of Indians in American Culture (H)

An examination of the images of "Indians" found in American culture, specifically art and literature, oldtime 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, storytelling, music, dance, painting, sculpture, crafts, and architecture, among others.

## NAMS 2213 - Native American Spiritualities (H)

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 2313 - Native American Literature, Drama, and Film (H)
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 (H)

An introduction to the cultures, experiences, and conflicts of Native Americans from pre-history to the present. Crosslisted 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. Crosslisted 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.

## Nursing

## 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. Includes lab component. Prerequisite: Admission to Program. Corequisites: NURS 1111, NURS 1143, NURS 1163. 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 1111, NURS 1113, 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. Includes lab component. Prerequisite: Admission to Program.
Corequisites: NURS 1111, NURS 1113, NURS 1143.

## 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). Includes lab component. Prerequisite: Admission to the Program. Corequisite: NURS 1211.

## NURS 1363 - Transition to 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 2002 - Nursing in Nicaragua-A Service-Learning Adventure

Provides the nursing student with an opportunity to experience a direct relationship with health care providers and recipients from various cultural backgrounds in an international setting. Students will travel to a supervised site for exposure to theoretical concepts as well as clinical experiences. Students will gain valuable components of a significant learning process by relating to culturally diverse communities with emphasis on holistic care.

## 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 2221, and NURS 2222.

## 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). Includes lab component. Prerequisites: Completion of all previous Nursing courses with a grade of "C" or better. Corequisites: NURS 2212, NURS 2221, NURS 2222.

## 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: PSYC 2023 and completion of all previous Nursing courses with a grade of " C " or better. Corequisites: NURS 2212, NURS 2213 and 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). Includes lab component. Prerequisites: PSYC 2023 and completion of all previous Nursing courses with a grade of "C" or better. Corequisites: NURS 2212, NURS 2213, and NURS 2221.

## 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). Includes lab component. Prerequisites: Completion of all previous Nursing courses with a grade of "C" or better. Corequisites: NURS 2231, NURS 2242, NURS 2243.

## 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). Includes lab component. Prerequisites: Completion of all previous Nursing courses with a grade of "C" or better. Corequisites: NURS 2231, NURS 2232, NURS 2242.

## 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). Includes lab component. Prerequisites: Completion of all previous Nursing courses with a grade of " C " or better. Corequisite: NURS 2351.

## 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). Includes lab component. Prerequisites:
Admission to the Program (Traditional and Career Mobility). Corequisite: NURS 1363 (Career Mobility track only); NURS 2431 (Traditional and Career Mobility). Enrollment by permission only.

## 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). Includes lab component. Prerequisites: Completion of all previous Nursing courses with a grade of "C" or better. Corequisite: NURS 2442.

## 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 1202 - Introduction to Occupational Therapy

A broad overview of the profession with emphasis on its history, philosophy, and organization. Explores the role of occupational therapy personnel in various disability areas. Open to non-majors. Offered in online format only. Technology requirements are covered in the Online Learning Orientation which students should complete before beginning the course.

## OCTA 1301-Clinical Conditions

This course serves as an introduction to conditions commonly referred to and treated by occupational therapy practitioners. Prerequisite: Admission to the OTA Program.

## 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 innervations 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. Includes lab component. All previous OCTA coursework with a grade of " C " or better or instructor approval.
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. Includes lab component. All previous OCTA coursework with a grade of " C " or better or instructor approval.

## OCTA 1483 - Physical Disabilities

Introduction to 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 the young adult to the late, late, late adult lifespan. Students will learn to administer and score standardized assessment, become familiar with the assessment process, develop and implement treatment plans. All previous OCTA coursework with a grade of "C" or better or instructor approval.

## OCTA 1511 - Fieldwork IA

Supervised work experience including observation and application of occupational therapy services with emphasis in physical disability. No Lecture. Fieldwork approximately 40 hours per
week. 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 with a psychological/social emphasis. No Lecture. Laboratory: 40 hours per week. Prerequisites: All previous OCTA coursework with grade of " C " or better and instructor permission.
OCTA 2203 - Therapeutic Adaptions
Builds on the theory and practice of therapeutic adaptions and includes ergonomics, basic environmental modification, community mobility and practical alterations to equipment, including adapted mobility, orthotics, and very basic electronics. The OT Practice Framework is implemented throughout the course as it is applied throughout the lifespan. Includes lab component. Prerequisites: All previous OCTA coursework with a grade of " C " or better or instructor approval.

## OCTA 2233 - Developmental Disabilities Theory 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. Includes lab component. All previous OCTA coursework with a grade of " C " or better or instructor approval. OCTA 2263-Current Trends in Occupational Therapy
Provides a broad overview of the profession with emphasis on healthcare trends, leadership, advocacy, credentialing, reimbursement, marketing, documentation, quality improvement, supervision, roles, communication skills, ethics, legislation, professional organizations and scholarship. Includes lab component. Prerequisites: All previous OCTA coursework with a grade of C " or better or instructor approval.

## OCTA 2355-Fieldwork IIA

Provides clinical experience under the direct supervision of experienced occupational therapists or occupational therapy assistant practitioners working in various practice settings. Emphasis is placed on the transition from student to clinician with experiential clinical preparation for entry-level practice in the profession as established by AOTA guidelines. Grade awarded: Satisfactory/Unsatisfactory.

## OCTA 2375-Fieldwork IIB

A culmination of all didactic coursework and prior clinical fieldwork experience. Provides the final clinical experience under the direct supervision of experienced occupational therapists or occupational therapy assistant practitioners working in various practice settings. Emphasis is placed on full integration of knowledge and skills. Students will have experiential clinical preparation to meet entry-level practice in the profession as established by AOTA guidelines. Grade awarded: Satisfactory/Unsatisfactory.

## Paralegal

## 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, judgment 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. Semester Offered Fall

## 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.
Semester Offered Spring

## 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. Semester Offered Fall

## 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 and MATH 1473. Semester Offered Spring 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. Semester Offered Fall

## 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. Semester Offered Spring
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. Semester Offered Summer

## 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. Crosslisted with NAMS 2513.
PLGL 2802 - Paralegal 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 2803 - Paralegal 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.

## Pharmacology 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 pharmaceutics. 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. Includes lab component.
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-pharmaceutics, 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.

## 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. Crosslisted 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. Crosslisted 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 2163 - Introduction to the History and Philosophy of Science (H)

An introductory survey of the history and philosophy of science. This class examines the origins and development of scientific modes of thought as well as their relationship to ideas about human beings, society, and the natural world.

## 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 2263 - 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. Crosslisted with SOCI 2263.
PHIL 2990 - Selected Topics in Philosophy
The study and/or analysis of a selected topic in Philosophy. May be repeated with a different topic.

## Physical Education

## PHED 1251 - 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 1411 - Yoga

Physical exercise with techniques that integrate the mind, body and spiritual awareness. Includes lab component.

## PHED 2321 - 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 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 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 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 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 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. Includes lab component. Requires admission to the PTA Program.

## 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. Includes lab component. Prerequisites: All previous PTA coursework with a grade of " C " or better or instructor approval.

## 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. Includes lab component. Prerequisites: All previous PTA coursework with a grade of "C" or instructor approval.
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. Includes lab component. 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. Includes lab component. Prerequisites: All previous PTA coursework with a grade of "C" or better or instructor approval

## 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 Includes lab component. Prerequisites: All previous PTA course work with a grade of "C" or better or instructor approval.

## PHTA 2433 - Clinical Practice I

A supervised clinical experience; three 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 2441 - 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 explore community service used to promote awareness of social responsibility, citizenship, and advocacy. Prerequistes: All previous PHTA coursework with a grade of "C" or better or instructor approval.

## PHTA 2486 - Clinical Practice II

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. Course includes 400 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. Includes lab component. 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 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. Includes lab component. Prerequisite: PHYS 1114.
PHYS 2034 - Physics I with Calculus (L)
Physics for engineering and science students. Calculus-based course covering Newtonian mechanics.
Includes lab component. Prerequisite: MATH 2114

## PHYS 2124 - Physics II with Calculus (L)

Physics for engineering and science students. A continuation of PHYS 2034 dealing with magnetism, electricity, and light. Includes lab component. Prerequisites: PHYS 2034 and MATH 2124.

## 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 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 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 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.

## Psychology

## PSYC 1113 - Introduction to Psychology (S)

Scientific study of behavior and mental processes including, scientific method, biopsychology, learning, lifespan development, personality theories, and psychological disorders. Other possible topics include states of consciousness, sensation and perception, memory, motivation, emotion, stress, social psychology, and therapies.

## PSYC 1313 - Human Relations (S)

Application of psychological principles to human relations problems. Emphasizes group dynamics, personal adjustment factors, 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 social interaction and change. Topics include: conformity, social influence, social cognition, prosocial behavior, prejudice, group processes, interpersonal attraction, and aggression. Prerequisite: PSYC 1113 or SOCI 1113 or instructor approval. Crosslisted with SOCI 2053.

## PSYC 2193 - Personality Theories

Examines personality processes and theoretical approaches including psychodynamic, behavioral, trait, social learning, phenomenological, and humanistic. 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. Crosslisted with BIOL 2213.

## PSYC 2223 - Behavioral Statistics

Application of descriptive and inferential analyses to the behavioral sciences. Topics include central tendency, standard distribution, t-tests, ANOVA, correlation, regression, SPSS and more. Prerequisites: MATH 1473 or MATH 1513 or instructor approval, and PSYC 1113 or SOCI 1113. Crosslisted with SOCI 2223.

## PSYC 2323 - Conflict Resolution

Application of psychological principles to interpersonal conflicts commonly found in work and social situations. Emphasizes stress, sexism, racism, ageism.

## PSYC 2423 - Introduction to Abnormal Psychology

Explores mental disorders, their causes, and treatments. Prerequisite: PSYC 1113 or instructor approval.
PSYC 2523 - Child Psychology
Investigates psychological processes of childhood including cognitive, social, emotional and physical changes. Prerequisite: PSYC 1113 or instructor approval.

## PSYC 2533 - Adolescent Psychology

Theoretical and empirical exploration of cognitive, social, emotional, and physical changes occurring between late childhood and emerging adulthood. Prerequisite: PSYC 1113 or instructor approval

## PSYC 2613 - Psychology of Adulthood and Aging

Systematic investigation of the psychological processes of the adult years. Emphasis on the social, emotional and cognitive changes occurring after adolescence. Prerequisites: PSYC 1113 or instructor approval.

## PSYC 2633 - Industrial and Organizational Psychology (S)

Principles of psychology applied to workplace issues. Emphasizes communication, motivation, job satisfaction, personnel selection, placement, and training. Prerequisite: PSYC 1113 or instructor approval. Crosslisted with BUSN 2633.

## PSYC 2713 - Aging, Death and Dying (S)

Socio-cultural, psychological forces, and physiological changes that influence our understanding of aging and the dying process, as well as issues surrounding unexpected acts of homicide, suicide, euthanasia, war, and genocide will be discussed. Focus on occupations and professions that deal with care-giving, terminal patients, and funerals. Prerequisite: SOCI 1113/PSYC 1113 or instructor approval. Crosslisted with SOCI 2713.
PSYC 2813 - Human Sexuality (S)
Analysis of sexuality across the entire life span including issues of disability, aging, health, and mental health. Discussion of how biology, socialization, culture, and mental health influence perspectives on sex, gender, gender identity, sexual identity, and sexual behavior. Discussion of the intersection between identities relating to sex, gender, and sexuality. Prerequisite: PSYC 1113 or SOCI 1113 or instructor approval. Crosslisted 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 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: ENGT 1223 or any DRFT class. Crosslisted with ENGT 1443.

## 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, nonconformance, 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 indepth 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 2433 - Non-Destructive Testing
An exploration of methods, procedures, and equipment associated with non-destructive physical testing. Topics include gauging, hardness testing, impact testing, tensile and compression testing, dye penetrant testing, ultrasonic testing, and magnuflux testing. 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 1211 - Introduction to Radiography Laboratory

Practice positioning and patient care in the radiography laboratory. Prerequisite: Admission to the program. Semester Offered Summer

## RADT 1212 - Introduction to Radiography

Explore the field of medical radiography; patient care; ethics; radiation protection; positioning; chest and abdominal radiography; and image critique. Required to apply for Radiography Program. Semester Offered Fall and Spring

## RADT 1222-Radiographic Clinical Education I

Clinical experience in the radiology department; office procedures; patient care; image processing; image critique; chest and abdominal radiography; includes 128 clinical hours. May require travel outside the Tulsa area. Prerequisite: Admission to the program. Semester Offered Summer

## RADT 1313 - Radiographic Anatomy and Positioning I

Positioning upper and lower extremities, complete spine, bony thorax, mammography; terminology; and image critique.. Includes lab component. Prerequisites: All previous RADT coursework with a grade of "C" or better or instructor approval. Semester Offered Fall

## RADT 1324 - Radiographic Clinical Education II

Continuation of clinical experience in the radiology department; patient care; positioning; image critique; technique skills; fluoroscopic exams; includes 256 clinical hours. May require travel outside the Tulsa area. May require travel outside the Tulsa area. Prerequisites: All previous RADT coursework with a grade of "C" or better or instructor approval. Semester Offered Fall

## RADT 1333 - Radiographic Anatomy and Positioning II

Imaging positioning of the digestive, urinary, biliary, and reproductive systems; skulls; and pediatrics. Includes lab component. Prerequisites: All previous RADT coursework with a grade of "C" or better or instructor approval. Semester Offered Spring

## RADT 1344 - Radiographic Clinical Education III

Continuation of clinical experience in the radiology department; patient care; positioning; image critique; technique skills; fluoroscopic exams; pediatric care; includes 256 clinical hours. May require travel outside the Tulsa area. Prerequisites: All previous RADT coursework with a grade of "C" or better or instructor approval. Semester Offered Spring
RADT 1372 - Radiographic Technique
Practical experience in radiographic exposure factors; radiation protection; image receptors; radiographic equipment. Includes lab component. Prerequisites: All previous RADT coursework with a grade of "C" or better or instructor approval Semester Offered Fall
RADT 1382 - Advanced Radiographic Technique
Continuation of radiographic exposure factors; image receptors; fluoroscopic equipment; radiographic quality assurance. Includes lab component. Prerequisites: All previous RADT coursework with a grade of "C" or better or instructor approval. Semester Offered Spring
RADT 2301-Radiographic Seminar
Basic principles of trauma radiography; portable radiography; surgical procedures; infection control.
Prerequisites: All previous RADT coursework with a grade of " C " or better or instructor approval.
Semester Offered Summer

## RADT 2312 - Radiographic Clinical Education IV

Continuation of clinical experience in radiology department patient care; positioning; image critique; technique skills; surgery; includes 120 clinical hours. May require travel outside the Tulsa area.
Prerequisites: All previous RADT coursework with a grade of " C " or better or instructor approval.
Semester Offered Summer

## RADT 2323 - Radiographic Special Procedures

Basic principles of special procedures; digital imaging; cross sectional anatomy; other imaging modalities; associated equipment; registry review. Includes a lab component. Prerequisites: RADT 2301, RADT 2314, or equivalent, and concurrent enrollment in RADT 2343. Semester Offered Summer

## RADT 2336 - Radiographic Clinical Education V

Continuation of clinical experience in all areas of the radiology department; including special procedures, CT, and MRI; includes 384 clinical hours. May require travel outside the Tulsa area. Prerequisites: All previous RADT coursework with a grade of "C" or better or instructor approval. Semester Offered Fall RADT 2343-Radiographic Biology and Pathology
A study of radiation biology, radiographic pathology, and departmental administration. Includes lab component. Prerequisites: All previous RADT coursework with a grade of " C " or better or instructor approval. Semester Offered Fall

## RADT 2356 - Radiographic Clinical Education VI

Continuation of clinical experience in all areas of the radiology department; clinical need based rotations; includes 384 clinical hours. May require travel outside the Tulsa area. Prerequisites: All previous RADT coursework with a grade of "C" or better or instructor approval. Semester Offered Spring
RADT 2383-Radiographic Physics
A study of x-ray related units of measurement; mechanics; matter structure; electrostatics; magnetism; electrodynamics; electromagnetism; rectification; and equipment. Prerequisites: MATH 1473 or MATH 1513 and all previous RADT coursework with a grade of " C " or better or instructor approval. Semester Offered Fall

## RADT 2990 - Selected Topics In Radiologic Technology

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. Crosslisted 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. Crosslisted with PHIL 1223.
RELG 2113-Christian Old Testament (H)
A survey of the Jewish Scriptures in English translation, with an emphasis upon historical context, critical analysis, and theological interpretations.

## RELG 2123 - Christian New Testament (H)

A survey of the Christian Scriptures in English translation, with an emphasis upon historical context, critical analysis, and theological interpretations.

## 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. Crosslisted with SOCI 2173.
RELG 2233 - Religion in America (H)
A survey of the variety of religion in the United States with an emphasis upon historical context and the interaction between religion and culture through the examination of a wide variety of religious traditions.

## 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

## 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 1342 - 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 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 1342.
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 2213 - 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 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 2563 - Cardiopulmonary Diagnostics

This course will explore the tools used to diagnose and interpret a patient's cardiorespiratory status. Topics covered include: analysis of blood gas exchange, pulmonary function testing, radiography and imaging, bronchoscopy, sleep studies, indirect calorimetry and hemodynamic monitoring. Prerequisites: RESP 1232, RESP 1354, and RESP 1443. 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.

## 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.

## Russian

RUSS 1103-Russian I
A beginning course in understanding, speaking, reading, and writing Russian. The first in a sequence of related courses.

## 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.

## Sociology

## SOCI 1113 - Introduction to Sociology (S)

Examine the origin and development of social institutions and social processes. Sociological concepts and theories are used to explore the social influences in everyday life. Prerequisite: Reading proficiency or concurrent enrollment in a reading course.

## SOCI 2013 - Marriage and Family (S)

An exploration of the patterns and purposes of courtship and insight into marriage, relationships, and the development of family life. Special emphasis on family as a contemporary American social institution. Prerequisite: SOCI 1113 or instructor approval.

## SOCI 2043 - Juvenile Delinquency (S)

The nature, extent, and causes of justice processing. Emphasis on the social and environmental factors in the origin of these activities. An examination of the nature of law as it pertains to delinquent behavior and the role of police, courts, and juvenile institutions. Prerequisite: SOCI 1113 or instructor approval.
SOCI 2053 - Social Psychology (S)
A study of social interaction and change. Topics include: conformity, social influence, social cognition, prosocial behavior, prejudice, group processes, interpersonal attraction, and aggression. Prerequisite: SOCI 1113 or PSYC 1113 or instructor approval. Crosslisted with PSYC 2053.
SOCI 2063 - Corrections: Jails and Prisons (S)
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 prison life.

## SOCI 2113 - Social Problems (S)

A systematic analysis of major social problems in contemporary American society and throughout the world. Solutions to social problems and social justice actions explored. Service-learning hours are required during semester.
SOCI 2123 - Introduction to Cultural Anthropology (H) (S)
Peoples of the world, cultural variations, and the knowledge people use to live their lives and the way in which they do so, especially with respect to social structure, language, law, politics, religion, magic, art, and technology.

## SOCI 2143 - Inter-Cultural Dynamics and Inclusion

An investigation of the sociological processes of a racially and culturally heterogeneous (diverse) society and world. How to successfully approach, understand, and dialogue complex social issues accross diverse perspectives will be focus, as well as how belonging (inclusion) can be achieved. Prerequisite: SOCI 1113 or instructor approval.

## SOCI 2173-Religion and Society (S)

Psychological, sociological, and anthropological perspectives of religion. Patterns in religious group organization, as well as religious identity across denominations, sects, and cults. Crosslisted with RELG 2173.

## SOCI 2223 - Behavioral Statistics (S)

Application of descriptive and inferential analyses to the behavioral sciences. Topics include central tendency, standard distribution, t-tests, ANOVA, correlation, regression, SPSS and more. Prerequisite: MATH 1473 or MATH 1513 and SOCI 1113 or PSYC 1113 or instructor approval. Crosslisted with PSYC 2223.

## SOCI 2263 - Medical Ethics (H)

Special emphasis on issues that arise in the allied medical profession. Prominent ethical perspectives and theories of justice are discussed to analyze and evaluate topics that arise in beginning of life care, end of life care, birth defects and genetics, medical experimentation, and the relationship between provider and client. Crosslisted with PHIL 2263.

## SOCI 2713 - Aging, Death and Dying (S)

Socio-cultural, psychological forces, and physiological changes that influence our understanding of aging and the dying process, as well as issues surrounding unexpected acts of homicide, suicide, euthanasia, war, and genocide will be discussed. Focus on occupations and professions that deal with care-giving, terminal patients, and funerals. Prerequisite: SOCI 1113/PSYC 1113 or instructor approval. Crosslisted with PSYC 2713.

## SOCI 2813 - Human Sexuality (S)

Analysis of sexuality across the entire life span including issues of disability, aging, health, and mental health. Discussion of how biology, socialization, culture, and mental health influence perspectives on sex, gender, gender identity, sexual identity, and sexual behavior. Discussion of the intersection between identities relating to sex, gender, and sexuality. Prerequisite: PSYC 1113 or SOCI 1113. Crosslisted with PSYC 2813.
SOCI 2990 - Selected Topics in Sociology
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 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 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 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 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 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 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 2143 - Latin American Civilization and Culture

Conversations and readings concerning Hispanic culture and civilization. Conducted in Spanish. 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 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 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. 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. On-site lab required.

## 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. 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. On-site lab required.
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 2663 - 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 2990 - Selected Topics in Spanish

The study and/or analysis of a selected topic in Spanish. May be repeated with a different topic.

## Theatre

## 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. Includes lab component. Prerequisite: THEA 1033 and THEA 1093 or instructor approval.

## 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 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 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 $50+\mathrm{lbs}$. 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 1242 - 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. 2 credit hour private acting instruction requires a weekly one hour lesson on average; 3 hours minimum weekly work with material in preparation for lessons recommended. An additional laboratory fee is required. Requires instructor approval.

## 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. Crosslisted with MUSC 1563. Requires voice, dance and/or theatre experience.
THEA 2013 - Make-Up I
Study of principles and techniques of make-up, and practice application.
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 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. Includes lab component. Prerequisite: THEA 1093 and THEA 2063 or instructor approval.

## 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. Includes lab component. Prerequisite:
THEA 1133 or pass a sewing skills proficiency test.

## 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. Crosslisted with MUSC 2231.
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 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 2351 - Die Laughing Improv Troupe

A mixed ensemble that studies and performs a variety of improvisational skills suitable for an advanced troupe. Students will improve their skills at ad-libbing, 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 - Scriptwriting I

Screenplay writing techniques with attention to subject and character development. Covers the basic components of plot development, scene building, and screenplay formats. May be taken concurrently with ENGL 2553 or THEA 2553 Scriptwriting II. Crosslisted with ENGL 2453. Semester Offered Fall THEA 2553 - Scriptwriting II
Advanced studies in concepts and techniques of scriptwriting. Students receive individual attention as they conceive and develop their work, with an emphasis on character, plot, theme, and language. May be taken concurrently with THEA 2453 or ENGL 2453. Cross-listed with ENGL 2553. Semester Offered Fall
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 mammalian life processes and body structures, emphasizing the use of applied anatomy and physiology. Includes the cat. dog, horse, farm animals and birds. Examination of normal and abnormal structures of selected organs systems histologically and pathologically. Fixed and fresh specimen dissection is performed. Includes veterinary medical terminology. Includes lab component. Prerequisite: Admission to VT program or coordinator approval.

## VETT 1132 - Introduction to Veterinary Nursing

Introduction to the profession and practice of veterinary technology and nursing. The role of the veterinary nurse within the veterinary health care team and professional organizations. Includes economics, ethics, regulatory organizations and laws governing veterinary nurses/technicians; humane care practices, sanitation, prevention of zoonosis, animal behavior, pet loss-grief issues and client relations. Career exploration and continuing education for the graduate veterinary nurse/technician. Prerequisite:
Admission to the VT Program or Program Director approval.

## VETT 1161 - Clinical Calculations for Veterinary Nurses

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. Prerequisite: Admission to the VT Program or Program Director approval.

## VETT 1183 - Principles of Small Animal Care

Introduction to the management, husbandry, and basic veterinary care for small animals, emphasizing the dog and cat. A survey of signs and treatments of common infectious diseases. Principles of nutrition, sanitation, handling and housing procedures. Techniques in restraint, taking of vital signs, administering medications, grooming and sample collection for basic laboratory tests. Each student will rotate sanitation and nursing care for resident Program animals. Includes lab component. Prerequisite: Admission to the VT Program or Program Director approval.

## VETT 1193 - Principles of Large Animal Care

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. Each student will rotate sanitation and nursing care for resident program animals. Includes lab component. Prerequisites: Admission to the VT Program or coordinator approval.

## VETT 1223 - Veterinary Hospital Technology I

Emphasis on small animal anesthesiology, with intensive study and application of a wide range of anesthetics. Includes commonly used injectable, inhalant and analgesic protocols, surgical preparation and assistance, patient monitoring, postoperative procedures, parenteral fluid administration, blood transfusion, and many other nursing techniques. Each student will rotate sanitation and nursing care for resident Program animals Includes lab component. Prerequisite: Admission to the VT Program or Program Director approval.

## VETT 1232 - Clinical Pathology I

Introduction to laboratory procedures emphasizing urinalysis and normal hematology of a variety of animal species; including blood cell counts and blood cell identification. 8-week course. Includes lab component. Prerequisite: Admission to the VT Program or Program Director approval.

## VETT 1242 - Clinical Pathology II

Continuation on VETT 1232 - Clinical Pathology I.Introduction to laboratory procedures emphasizing parasitology. Includes ectoparasites, endoparasites and hemoparasites of a variety of animal species; including fecal analysis techniques. 8-week course. Includes lab component Prerequisite: Admission to the VT Program or Program Director approval.

## VETT 1263 - Veterinary Office and Practice Management

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. Includes lab component. Prerequisite: Admission to the VT Program or Program Director approval.

## VETT 2126 - Practicum: Animal Clinics and Nursing

Development of practical veterinary nursing skills development in an approved work site, for a minimum of 316 hours. Active participation through independent in-clinic work, online assignments, and in-class presentations. Students will work directly under the supervision of a licensed veterinarian while applying skills acquired from previous academic preparation. The student, sponsor and program director will develop a written competency-based learning plan with specific learning objectives. Prerequisite: Admission to the VT Program or Program Director approval.

## VETT 2224 - Microbiology and Sanitation

Introduction to microorganisms. Consideration given primarily to pathogenic microorganisms related to veterinary medicine; including bacteria, viruses, fungi, and protozoa. Emphasis will be placed on sanitation, disinfectants, aseptic techniques, sterilization techniques, zoonosis, and related public health concerns. Includes lab component. Prerequisite: Admission to the VT Program or Program Director approval.

## VETT 2234 - Clinical Pathology III

Continuation of VETT 1232 - Clinical Pathology I and VETT 1242 - Clinical Pathology II. Laboratory procedures including abnormal hematology, blood chemistry analysis, cytology, specialized blood testing techniques, coagulation, and immunology. Includes lab component. Prerequisite: Admission to the VT Program or Program Director approval.

## VETT 2253 - Laboratory, Wild, and Exotic Animal Nursing

Nursing techniques required 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. Each student will rotate sanitation and nursing care for resident program animals. Includes lab component. Prerequisite:
Admission to the VT Program or Program Director approval.
VETT 2313 - Veterinary Nursing II
Continuation of VETT 1223 - Veterinary Hospital Technology I:anesthesia, surgical assisting and other nursing skills. Study of non-infectious disease and conditions of major organ systems including renal, cardiac, respiratory, urogenital, endocrine, GI, dermal and emergency medicine. Application of many common nursing techniques (basic and advanced) including radiology, bandaging, casting, and postoperative procedures. Each student will rotate sanitation and nursing care for resident Includes lab component. Prerequisite: Admission to the VT Program or Program Director approval.

## VETT 2332 - Veterinary Pharmacology

Basic principles of veterinary drug therapy for a variety of animal species are studied. Coverage of regulations, major drug classes, drug interactions, delivery routes, dosage calculations, dispensary protocols, inventory control and toxicology. Prerequisites: Admission to VT Program or Program Director approval.

## VETT 2353 - Radiology, Ultrasound and Diagnostic Imaging

Intensive study and practice in medical diagnostic imaging techniques. Includes radiographic exposure techniques, image processing, contrast radiography, ultrasonography and other techniques. Includes lab component. Prerequisites: Admission to VT Program or Program Director approval.
VETT 2364 - Large Animal Technology
Nursing techniques required to assist the large animal or mixed practice veterinarian. Includes the study of large animals: horse, cow, pig, sheep, and goat and other species. Application of restraint, sampling techniques, medication administration, patient care, radiology, anesthesiology, surgical preparation and assisting, and other nursing techniques. Each student will rotate sanitation and nursing care for resident Program animals. Includes lab component. Prerequisite: Admission to the VT Program or Program Director approval.
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.

