

# 2018-2019 CATALOG

Official Bulletin Volume 82



NORTH CENTRAL  
TEXAS COLLEGE



# North Central Texas College

North Central Texas College is accredited by **The Southern Association of Colleges and Schools Commission on Colleges** to award Associate Degrees and Certificates of Completion.

Contact the **Commission on Colleges** for questions about the accreditation of North Central Texas College.

1866 Southern Lane  
Decatur, GA 30033-4097  
(404) 679-4500

## Our Core Values

North Central Texas College is accountable to its students, colleagues, and the community and holds the following values to be fundamental.

### **Affordable, Quality Education**

NCTC is passionate about providing access to higher education. Its highly qualified faculty and staff and student-centered programs and services reflect NCTC's commitment to excellence.

### **Stimulating Learning Environments**

NCTC fosters diverse, challenging, and engaging learning environments to empower its students to impact a global society as creative problem solvers, critical thinkers, and dynamic leaders.

### **Integrity**

NCTC faculty, staff, and students act in an ethical, honest and responsible manner.

### **Innovation**

NCTC embraces creative ideas and challenging initiatives.

### **Cohesive Relationships**

NCTC cultivates productive partnerships through teamwork, personalized attention, and open communication.

### **Encouragement**

NCTC supports students, faculty and staff by welcoming diversity and promoting mutual respect.

### **BULLETIN • Volume 79**

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*NOTICE: All information printed in this edition of the Bulletin of North Central Texas College is subject to change by the Board of Regents and Administration. Every effort is made to make the information contained herein as complete and accurate as possible; however, changes may occur at any time in requirements, deadlines, fees, curricula, courses listed/offered and times offered. Course numbers and descriptions may change from previous Bulletins/Schedules/Catalogs, and such changes will be on record in the offices of the Vice President of Instruction, the Instructional Deans, Vice President of Student Services and Vice President of Financial Services.*

# Graduate Guarantee Program

## Guarantee for Job Competency

If a recipient of an Associate of Applied Science degree or Certificate of Completion is judged by his/her employer to be lacking in technical job skills identified as exit competencies for his/her specific degree program, the graduate will be provided up to 12 tuition-free credit hours or additional skill training by North Central Texas College under the conditions of the guarantee policy. Special conditions which apply to the guarantee include the following:

- The graduate must have earned the Associate of Applied Science degree or Certificate of Completion beginning May, 1992 or thereafter in a technical, vocational or occupational program identified in the college's General Catalog.
- The graduate must have completed requirements for the Associate of Applied Science degree or Certificate of Completion with the North Central Texas College system, with a minimum 75 percent of credits earned at North Central Texas College, and must have completed the degree or certificate within a five-year span.
- Graduates must be employed full-time in an area directly related to the area of program concentration as certified by the appropriate Division Chair.
- Employment must commence within 12 months of graduation.
- The employer must certify in writing that the employee is lacking entry-level skills identified by North Central Texas College as program exit competencies and must specify the areas of deficiency within 90 days of the graduate's initial employment.
- The employer, graduate, Division Chair, and appropriate faculty member will develop a written educational plan for retraining.
- Retraining will be limited to 12 credit hours or additional skill training related to the identified skill deficiency and to those classes regularly scheduled during the period covered by the retraining plan.
- All retraining must be completed within a calendar year from the time the educational plan is agreed upon.
- The graduate and/or employer is responsible for the cost of books, insurance, uniforms, fees and other course-related expenses.
- The guarantee does not imply that the graduate will pass any licensing or qualifying examination for a particular career.

A student's sole remedy against North Central Texas College and its employees for skill deficiencies shall be limited to 12 credit hours of tuition-free education under the conditions described above. Activation of the "Graduate Guarantee Program" may be initiated by the graduate by contacting the appropriate Division Chair within 90 days of the graduate's initial employment.

## Transfer Credit

NCTC guarantees to its Associate of Arts and Associate of Science students who have met the requirements for the degree that course credits will transfer to other public-supported Texas colleges or universities provided the following conditions are met.

Transferability means acceptance of credit toward a specific major and degree at a specific institution. These three components must be identified by the student during the application for admission process prior to the first semester of enrollment at North Central Texas College.

- Limitations on total number of credits accepted in transfer, grades required, relevant grade point average, and duration of transferability apply as stated in the general undergraduate catalog of the receiving institution.
- Transferability refers to courses in a written transfer/degree plan filed in a student's file at North Central Texas College.
- Only college-level courses with Community College Academic Course Guide Manual approved numbers are included in this guarantee.

If all the above conditions are met and a course or courses are not accepted by a receiving institution in transfer, the student must notify the Provost at North Central Texas College within 10 days of notice of transfer credit denial so the "Transfer Dispute Resolution" process can be initiated.

If course denial is not resolved, North Central Texas College will allow the student to take, within a one-year period from granting of a degree at North Central Texas College, tuition-free alternate courses, semester hour for semester hour, which are acceptable to the receiving institution. The graduate is responsible for payment of any fees, books or other course-related expenses associated with the alternate course or courses.

# Important Notice to All Students

**CIVIL RIGHTS:** In compliance with Title VI of the Civil Rights Act of 1964 (P.L.88-352), Title IX of the Education Amendments of 1972 (P.L. 92-318). and the Age Discrimination Act of 1978 (P.L. 92-256), North Central Texas College does not discriminate against or exclude from participation in any of its programs or activities, either in the student body or the staff, any person on the grounds of sex, race, color, religion, age, handicap, national origin, or veteran status.

**RIGHTS OF INDIVIDUALS WITH DISABILITIES:** North Central Texas College complies with Section 504 of the Rehabilitation Act of 1973 (P.L. 93-112), the Americans With Disabilities Act of 1990, and with the ADA Amendments Act (ADAAA) of 2009 and does not discriminate on the basis of a disability in the operation of its educational programs or in its admission and employment practices. Special emphasis will continue to be placed on correcting conditions which may inadvertently discriminate against any individual with a disability. For further information and assistance, contact the Office for Students with Disabilities (OSD) at (940) 668-4209.

**ACCESS TO:** North Central Texas College offers educational and occupational/ technical programs, as described in the College catalog, to all persons without regard to sex, race, color, religion, age, handicap, or national origin. Admission to these programs is based on college admission requirements and individual program policies as outlined in the catalog.

**FAMILY EDUCATIONAL RIGHTS AND RECORDS ACCESS ANNUAL NOTICE:** In compliance with the Family Educational Rights and Privacy Act of 1974, the College may release information classified as “directory information” to the general public without the written consent of the student. Directory information includes: student’s name, address, telephone number and student email; dates of attendance; educational institution most recently attended; and other information including major field of study and degrees and awards received. A student may request that directory information be withheld from the public by giving written notice in person to the Records Office during the first 12 class days of a fall or spring semester or the first 4 class days of a summer session. If no request to withhold directory information is filed, information is released upon inquiry. No transcript or academic record is released without written consent from the student except as specified by law.

**RELIGIOUS HOLY DAYS:** In compliance with Texas Education Code, Section 51.911, North Central Texas College allows a student who is absent from class for the observance of a religious holy day to make up the class work for that day within a reasonable time after the absence. Students who intend to be absent for religious holy days must notify each instructor in writing by the 15<sup>th</sup> calendar day of the semester.

**ILLEGAL DRUGS:** In compliance with HR253/SR645, no illegal drugs shall be allowed on campus, and any student caught with an illegal drug will be suspended from attendance or enrollment for a specified period of time. See the Vice-President of Student Services for a copy of due process procedures.

**STANDARD OF CONDUCT:** The college student is considered a responsible adult. The student's enrollment indicates acceptance of the standards of conduct published in the Student Handbook.

**POLICY ON HIV INFECTION AND AIDS:** The North Central Texas College policy on HIV infection and AIDS is available in the office of the Vice-President of Student Services. An educational pamphlet on AIDS is available in the Counseling Center and the Office of the Vice-President of Student Services.

**BACTERIAL MENINGITIS VACCINATION:** During the 2011 Texas Legislative session, Senate Bill 1107 (SB 1107) was passed and signed into law. Effective with enrollment after January 1, 2012, SB 1107 requires students, with certain exceptions, to provide proof of vaccination or booster no later than the 10<sup>th</sup> day before the first day of the semester. During the 2013 Texas Legislative session, Senate Bill 62 (SB 62) was passed. Please check the NCTC website for updated information.

**INCLEMENT WEATHER AND CLOSING OF THE COLLEGE:** North Central Texas College schedules its instruction to comply with the Common Calendar published by the Texas Higher Education Coordinating Board. College instructors meet all scheduled classes as published in the class schedule. If severe weather or emergency situations make it advisable to discontinue classes, the college makes every effort to notify its students through a variety of means. An official closing of the college delays all work until the next class meeting or until a date determined by the instructor. Make-up days for official college closings will be scheduled as needed.

If a student is in an area experiencing severe weather and the college has not officially closed, it is that student's responsibility to exercise caution and decide whether to risk coming to class. Should the student decide not to attend class, the student must contact the instructor about the instructor's rules for make-up work.

*For information about your rights or about grievance procedures, contact the Vice-Chancellor of Student Affairs, North Central Texas College, 1525 W. California Street, Gainesville, TX, 76240, (940) 668-4240.*

# Academic Calendar 2018-2019

Event	Fall 2018	Fall 2018 1 <sup>st</sup> 8-Week	Fall 2018 2 <sup>nd</sup> 8-Week	Winter Mini-Mester
Registration Begins	April 16	April 16	April 16	April 16
4 <sup>th</sup> of July Holiday Observed College Closed	July 4	July 4		
Saturday Campus Hours 9:00 am – 1:00 pm (Gainesville and Corinth Campuses Only)	August 18 & 25	August 18 & 25		
Last Day of 100% Refund for Courses Dropped	August 26	August 26	October 21	December 16
Classes Begin	August 27	August 27	October 22	December 17
Labor Day Holiday College Closed	September 3	September 3		
Official Date of Record	September 10	September 4	October 29	December 20
Last day to withdraw from a class with 'W'	November 8	September 27	November 21	December 27
Thanksgiving Holiday College Closed	November 21-24		November 21-24	
Classes Resume after Thanksgiving Holiday	November 26		November 26	
Final Exams (see final exam schedule)	December 8-13	October 18	December 13	January 10
Commencement Ceremonies	December 14			
Term Ends	December 14	October 19	December 14	January 10
Final Grades, Attendance Rosters & Grade Rolls due at Noon	December 15	October 20	December 15	January 12
Christmas & New Year's Holiday	December 19-Jan 2			

Event	Spring 2019	Spring 2019 1 <sup>st</sup> 8-Week	Spring 2019 2 <sup>nd</sup> 8-Week	May Mini- Mester
Registration Begins	November 12	November 12	November 12	November 12
Saturday Campus Hours 9:00 am – 1:00 pm (Gainesville and Corinth Campuses Only)	January 19	January 19		
Last Day of 100% Refund for Courses Dropped	January 21	January 21	March 24	May 19
Martin Luther King Holiday Observed College Closed	January 21	January 21		
Classes Begin	January 22	January 22	March 25	May 20
Official Date of Record	February 4	January 28	April 1	May 22
Spring Break College Closed	March 11-16			
Memorial Day Observed College Closed				May 27
Last day to withdraw from a class with 'W'	April 4	February 21	April 25	May 29
Final Exams (see final exam schedule)	May 11-16	March 21	May 16	June 6
Commencement Ceremonies	May 17			
Term Ends	May 17	March 22	May 17	June 6
Final Grades, Attendance Rosters & Grade Rolls due at Noon	May 18	March 23	May 18	June 8

<b>Event</b>	<b>Summer I 2019 5-Week Session</b>	<b>Summer II 2019 5-Week Session</b>	<b>Summer III 2019 10-Week Session</b>
<b>Registration Begins</b>	April 15	April 15	April 15
<b>Last Day of 100% Refund for Courses Dropped</b>	June 9	July 14	June 9
<b>Classes Begin</b>	June 10	July 15	June 10
<b>Official Date of Record</b>	June 13	July 18	June 27
<b>Last day to withdraw from a class with 'W'</b>	June 26	July 31	July 17
<b>4<sup>th</sup> of July Holiday Observed-College Closed</b>	July 4		July 4
<b>Final Exams (see final exam schedule)</b>	July 11	August 15	August 15
<b>Term Ends</b>	July 11	August 15	August 15
<b>Final Grades, Attendance Rosters &amp; Grade Rolls due at Noon</b>	July 13	August 17	August 17



# College Personnel

Board of Regents	Board Position	Term Expires
Karla Metzler, Gainesville	Chair	2021
Richard Haayen, Gainesville	Vice-Chair	2023
Christy Morris, Gainesville	Secretary	2019
Patsy Wilson, Gainesville	Member	2021
Jerry Don Henderson, Gainesville	Member	2023
Jon Grime, Muenster	Member	2021
Matt Chalmers, Gainesville	Member	2019

## Presidents Leadership Team

### **Dr. Brent Wallace, Chancellor - Chief Executive Officer**

B.B.A., Hardin-Simmons U.; M.A., Abilene Christian U.; Ph.D., Texas Tech U.

### **Dr. Andrew Fisher, Provost-Chief Academic Officer**

B.A., U. of North Texas; M.S., Texas A&M U. Commerce; Ed.D., Texas A&M U. Commerce

### **Dr. Janie Neighbors, Vice Chancellor of Fiscal Affairs**

A.S., North Central Texas College; B.S., M.B.E., U. of North Texas; Ed.D., Texas A&M U. Commerce

### **Debbie Sharp, Vice Chancellor of External Affairs**

B.S., M.S., U. of North Texas

### **Dr. O. John Maduko, Vice Chancellor of Student Services**

M.D., St. Matthew's University School of Medicine

### **Robbie Baugh, Vice Chancellor of Administrative Affairs**

B.B.A., U. of North Texas; M.B.A., U. of Mary Hardin-Baylor

### **Dr. Emily Klement, Associate Vice Chancellor of External Affairs**

B.S., M.Ed., Ed.D., U. of North Texas

### **David Brown, Associate Vice Chancellor - Institutional Research and Strategic Planning**

B.S., M.B.A., U. of North Texas

### **Roy Culberson, Associate Vice Chancellor Campus Operations**

B.A., M.Ed., U. of Texas at El Paso

### **Denise Cason, Associate Vice Chancellor of Information Technology**

A.S., North Central Texas College; B.S., Bellevue Univ.

## Deans & Directors

**Kim Birdwell, Director of Graham Campus**

B.S., Texas Tech U.

**Jessica Carlile, Dean of Adult and Continuing Education**

B.S., M.Ed. Texas Woman's U.

**Melinda Carroll, Senior Director of Institutional Research and Reporting**

B.S., U. of Texas Arlington

**Dr. Roxanne Del Rio, Dean of Student Affairs**

A.A., Del Mar College; B.A., Corpus Christi State Univ.; M.P.A., U. of North Texas;  
Ph.D., U. of North Texas

**Jessica DeRoche, Director of Flower Mound Campus**

B.A., M.Ed., U. of North Texas

**Tracey Fleniken, Senior Director of Advising & Counseling**

B.A., McNeese State Univ.; M.A., Texas Woman's Univ.

**Sara Flusche, Dean of Math, Science & Teacher Education**

A.A., A.S., North Central Texas College; B.S., Texas Women's U.; M.A. U. of Texas-  
Dallas

**Daisy Garcia, Director of Student Life**

A.A.S.; B.B.A, U. of North Texas

**Dr. Larry Gilbert, Dean of Dual Credit**

B.S., Texas Tech U.; M.Ed., Tarleton State U.; Ed.D., Texas Tech U.

**Dr. Rochelle Gregory, Division Chair, English, Speech & Foreign Language**

B.A., M.A., Tarleton State U.; Ph.D., Texas Woman's U.

**Van Hedrick, Athletic Director, Head Softball Coach, Dept Chair Physical Education**

A.S., Vernon Regional Jr. College; B.A., M.A., Tarleton State Univ.

**Debbie Huffman, Dean of Career and Technical Education**

A.A.S., North Central Texas College; B.A.A.S., M.S., U. of North Texas

**Ernie Kemp, Director of Inventory Control**

B.S., U. of San Carlos

**Dr. Bruce King, Dean of Arts, Humanities & eLearning**

M.Ed., East Central Univ.; E.d.D., Texas A&M U. Commerce

**Mary Martinson, Dean of Student Success**

B.A., Texas Tech U.; M.A., U. of North Texas

**Lynn Peters, Senior Director of Payroll/Benefits**

A.S., North Central Texas College; B.S., Bellevue Univ.

**Diane Roether, Dean of Libraries**

B.A., New Mexico State U.; M.A, U. of Oklahoma; M.L.S., U. of North Texas

**Kay Schroeder, Director of Human Resources**

B.A., U. of North Texas

**Susan Svane, NTPP Grant Manager-U.S. Department of Labor**

B.S., Texas Woman's U.; M.Ed., U. of North Texas

**Ashley Tatum, Director of Financial Aid**

A.A., A.A.S., North Central Texas College; B.S., M.Ed., U. of North Texas

**Donna Uptergrove, Senior Director of Grants**

B.B.A., M.M.A., Texas Tech Univ.

**Dianne Walterscheid, Director of Marketing & Public Relations**

B.F.A., U. of North Texas

## **Faculty**

**Don Abernathy, Physics**

B.S., U. Texas at Arlington; M.S., Texas A&M U.

**Charles Adams, History**

M.A., American Military U. : B.S., Colorado Technical U.; P.h.D., Univ. of North Texas

**Mario Aguirre, Industrial Technology**

Certificate of Completion, Texas State Technical College

**Doug Akins, Business Management**

B.S., Univ. of South Mississippi; M.S. American Sentinel

**Dee Amaradasa, Accounting**

M.S., Univ. of North Texas

**Belinda Anderson, Biology**

B.S., Texas A&M U.; M.S., Virginia Tech

**Dr. Jahue Anderson, History**

Univ. of Texas, B.A., Texas State Univ., M.A., PhD., Texas Christian Univ.

**Dr. Diana Avila, Science**

St. Mary's University, B.S.; PhD.; University of Texas Health Science Center at San Antonio

**Jacob Arnold, English**

B.A., Univ. of North Texas; M.F.A., Queens Univ. of Charlotte, N.C.

**Keith Bailey, Mathematics**

B.A., U. of Texas Austin; M.S., U. of North Texas

**Ron Bautch, Mathematics**

B.S., U. of Wisconsin-Platteville; M.S., Texas Woman's U.

**Dennis Beane, Industrial Technology**

Certificate, North Central Texas College

**Holly Bell, Government**

B.S., U. of Nebraska at Kearney; M.A. U. of Texas-Arlington

**Dr. Lisa Bellows, Division Chair Biology, Chemistry & Physics**

A.S., A.A., North Central Texas College; B.S., M.S., Texas Woman's U.; Ph.D., Texas Christian U.

**Melanie Billmeier, Program Coordinator, Radiological Technology**

A.A.S., B.S., M.S., Midwestern State U.

**Chris Bishop, English**

B.A., M.A., Midwestern State U.

**Nick Bixby, Vocational Nursing**

Cert., NCTC

**Lori Blagg, College Prep Math**

B.A., Texas A&M Univ.; M.Ed. Univ. of Texas at Arlington

**Melissa Blankenship, Economics**

M.S., Texas A&M Univ.

**Jennifer Boling, English**

B.A., Oklahoma Baptist U.; M.A., Oklahoma State U.

**Theressa J. Borden, Lead Vocational Nursing Faculty**

B.S.N., Medical U. of South Carolina

**Ashley Brown, Associate Degree Nursing**

B.S.N., Midwestern State U.; M.S.N., D.N.P., Texas Tech U.

**John Bryant, Emergency Medical Services**

A.A.S., Cisco Junior College; A.A.S. North Central Texas College

**Angie Bullard, Head Volleyball Coach, Physical Education**

B.S., M.Ed., Tarleton State U.

**Robert Burton, English**

B.A., U. of North Texas; M.A., Texas Woman's U.

**Cathy Carney, Vocational Nursing**

Certificate, North Central Texas College, A.A.S., Grayson County College; B.S.N, UT-Arlington

**Jack Carter, Industrial Technology**

Certificate, Tarrant County College

**Taylor Christian, Assistant Softball Coach, Physical Education**

A.A., North Central Texas College; B.S., Northwestern Oklahoma State

**Malea Clarke, Engineering Technology**

B.S., Texas A&M Univ.

**Linda Coolen, English, Speech, Foreign Language**

B.A., M.A.; U. of North Texas

**Sara Cooper, Mathematics**

A.S., Angelina College, B.S., Stephen F. Austin U., M.S., Texas A&M U-Commerce

**Kathy Corley, Social Science**

A.A.S., Vernon Regional Junior College; B.B.A., M.A., Texas Woman's U.; M.A. Midwestern State U.

**James Crump, Biology**

B.S., M.S., Texas A&M U.-Commerce

**Miranda David, Vocational Nursing**

B.S.N., Oklahoma Baptist U.

**Kevin T. Davis, Government**

B.S., Oregon State U.; M.A., Texas Tech U.; M.A., UT-Permian Basin

**Dr. Rhett Davy, Sociology**

B.S., M.A., Ph.D., U. of North Texas

**Susan Decker., Biology**

B.F.A., U. of North Texas; M.A., U. of Texas Southwestern Medical Center

**Dawn Dias, Office Systems Technology**

A.A., A.A.S., North Central Texas College; B.S., Tarleton State U.; M.Ed. Tarleton State U.

**Alisha Dietz, English**

A.A., North Central Texas College; B.S., Univ. of North Texas; M.A, Texas Woman's U.

**Cliff Downey, Criminal Justice**

B.S., Mississippi College; M.A., U. of Houston-Clear Lake

**Dr. Sam Dunlap, Biology**

B.S., Hendrix College; M.S., Louisiana State U.; Ph.D., U. of Georgia

**Dr. Doug Elrod, Biology**

B.S., U. of Arkansas-Little Rock; M.S., Memphis State U.; Ph.D., U. of North Texas

**Jane England, History**

B.A., M.A., U. of North Texas

**Rondie Escamilla, Associate Degree Nursing**

A.A.S, Grayson College; B.S.N., Midwestern State U.; M.S.N., U. of Texas-Tyler

**Dr. Kevin Eubanks, English**

B.A., M.A., Baylor U.; Ph.D., U. of Tennessee

**Gabrielle M. Fletcher, English**

A.A. City Colleges of Chicago; B.A., U. of New Mexico; M.A., Old Dominion U.

**Strider Floyd, Program Coordinator, Emergency Medical Services**

A.A.S., Excelsior; A.A.S., North Central Texas College; B.S., Univ. of North Texas

**Michele Forbis, English**

B.S., M.Ed., U. of Missouri-Columbia

**Madison Fortenberry, Assistant Volleyball Coach, Physical Education**

B.A., Univ. of North Texas; M.S., Texas Woman's Univ.

**Dr. William Franklin, English**

B.A., U. of Texas-Austin; M.A., Ph.D., U. of North Texas

**Kathryn Fritz, Mathematics**

A.S., North Central Texas College; B.S., M.S., Texas Woman's U.

**Linda Fuqua, Mathematics**

A.A., North Central Texas College; B.S., M.B.A., Texas Woman's U.

**Dr. Cherly Furdge, Division Chair, Public Administration & Management**

B.S., M.S., Mississippi Valley State U.; Ph.D., Texas Woman's Univ.

**Jeremy Godwin, History**

B.A., M.A., Dallas Baptist Univ.

**Marsha Gossett, Mathematics**

B.S., U. of Kansas; M.S., Texas Woman's Univ.

**Dr. Sara Gottardi, Spanish**

M.A., Baylor Univ.; Ph.D., U of Tennessee, Knoxville

**Dianne Gravley, Speech**

M.S., Univ. of North Texas

**Misty Hamner, Mathematics**

B.S., Southwestern Oklahoma State U.; M.S., Baylor U.

**Dr. Brittany Hancock, History**

B.A., Univ. of California; M.A., California State U.; Ph.D. Univ. of Houston

**Ashley Hartman, Horticulture**

B.A., M.S., Texas A&M U.

**Justin Hawkins, Speech**

B.A., Texas A&M; M.A., Univ. of North Texas

**Nicole Hawkins, Associate Degree Nursing**

B.S.N., Univ. of Texas at Arlington; M.S.N., Western Governors Univ.

**Van Hedrick, Athletic Director, Head Softball Coach, Physical Education**

A.S., Vernon Regional Jr. College; B.A., M.A., Tarleton State U.

**Kevin Henson, CyberSecurity**

B.S., Univ. of Texas at Dallas

**William Hill, Computer Information Technology**

B.B.A., Oklahoma Baptist U.

**Dr. Elizabeth Howell, Division Chair Mathematics**

B.A., U. of Texas-Austin; M.A., U. of Texas-Arlington; Ph.D., Southern Methodist Univ.

**Richard Huckaby, Government**

B.S., U. of Houston M.P.A., Texas Tech U.

**Ashley Hunsucker, Vocational Nursing**

A.A.S., North Central Texas College

**Alice Hupp, Vocational Nursing**

Certificate, Grayson County College; A.A.S., North Central Texas College; B.S., Texas Woman's U.

**Dr. Ann Jagoe, English**

B.A., M.A., Ph.D., Texas Woman's U.

**Linda Janoe, BCIS**

B.A.A.S., M.S., Univ. of North Texas

**Robin Cole-Jett, History**

M.Ed., Univ. of North Texas

**Kimberly Johnson, Associate Degree Nursing**

B.S.N., East Central U.

**James Jones, History**

B.A., M.A. Univ. of Texas-Dallas

**Dr. Judith Keller, Mathematics**

B.S., Kennesaw State Univ.; M.S., Ed.D., Univ. of North Texas; P.h.D., Univ. of North Texas

**Dr. Leslie Kelley, Psychology**

B.A., M.A., Franciscan Univ.; M.A., Ph.D. Texas Woman's Univ.

**Steve Keith, Division Chair, Agriculture, Farm & Ranch**

B.S., Univ of Tennessee, M.S., Tarleton State U.

**Yvonne Kirshey, Economics**

B.A., M.B.A., Fairleigh Dickinson U.

**Dr. Franz Klutschkowski, Psychology**

B.A., M.A., Wichita State U.; Ed.D. Texas A&M U.-Commerce

**Ravi Kumar, Mathematics**

M.A., Texas Christian Univ.

**Dr. Jane Leach, Division Chair Associate Degree Nursing**

M.S.N., Midwestern State U.; Ph.D. Capella U.

**Dr. Pat Ledbetter, History**

B.A., U. of Houston; M.A., Ph.D., U. of North Texas; M.Ed., J.D., Texas Tech U. School of Law

**Emily Lewis, Associate Degree Nursing**

A.A.S., North Central Texas College; M.S., Texas Woman's Univ.

**Stephanie Lindsey, Division Chair Cosmetology**

Cert., North Central Texas College

**Marcia Little, English**

B.A., M.A., Missouri State Univ

**Jane Lopes, Vocational Nursing**

B.S.N., Seton Hall U.

**Nelson Lozano, Mathematics**

B.S., M.S., The University of Texas at Dallas

**Cathy Luse, Equine**

A.A., Midway College

**Cindy Lutkenhaus, Associate Degree Nursing**

A.D.N., North Central Texas College; B.S., M.S., Texas Woman's Univ.

**Dee Ann McFarlin, Speech**

B.A., Central Bible College; M.S.; U. of North Texas

**Christopher McGinty, Music**

M.Ed., Univ. of North Texas

**Tiffany McQuien, Vocational Nursing**

Cert., Boston Reed College

**Richard Merrill, Accounting**

M.B.A., M.S., Accounting, U. of North Texas

**Diane Neu, Associate Degree Nursing**

A.D.N., North Central Texas College; B.S.N., M.S.N., Univ. of Texas-Arlington

**Ann Norcross, Psychology**

B.A., Angelo State U.; M.A., U. of North Texas

**Dr. John (Jack) O'Connor, Philosophy**

B.A., U. of Waterloo; M.A., U. of Dallas; Ph.D., Univ. of Texas-Dallas

**Moses Omane-Boateng, Economics, Sociology, Government**

M.P.A., U. of North Texas

**Brandon Ostler, Emergency Medical Services**

A.A.S., North Central Texas College; A.S., Excelsior College

**James Ouchley, Engineering Technology**

B.S., Louisiana Tech U.

**Benjamin Owens, Mathematics**

B.S., M.S., Univ. of North of North Texas

**Marla Owens, Mathematics**

B.S., Langston U.

**James Page, History, Government**

B.A., M.A., U. of North Texas

**Serapio Pena, Industrial Technology**

B.S.O.E., Wayland Baptist Univ.

**Toni Perkins, Vocational Nursing**

Certificate, Amedd Center & School; A.A.S., North Central Texas College; B.S., F.N.P., M.S.N., Texas Woman's U.

**Gloria Prince, Cosmetology**

Certificate, Amarillo College of Hairdressing

**Dr. Terry Province, Computer Science**

B.S., DeVry; M.B.A., Regis U., Ed.D., U. of North Texas

**Adam Ramsey, Government**

M.A., Univ. of North Texas

**Donald Randell, Asst. Baseball Coach, Teacher Education**

B.S., Univ. of Houston; M.Ed., Sul Ross State Univ.

**Judith Rodgers, Division Chair, Surgical Technology**

Diploma Mary Meek School of Nursing; Certificate Surgical Technology New England Institute of Technology B.S., Texas Woman's U.

**Paula Rutherford, Vocational Nursing**

A.D.N., North Central Texas College; B.S., Texas Woman's Univ.

**Jason Rutledge, Mathematics**

M.S., Univ. of North Texas

**Donna Smith, Government**

A.A.S., North Central Texas College; B.S., M.A., Texas Woman's U.

**Kenneth Smith, Division Chair, Industrial Technology**

A.A.S., North Central Texas College; Certificate, Grayson College

**Janis Smith, Surgical Technology**

LVN, Denton School of Vocational Nursing, Certificate, Surgical Technologist, National Liaison Council on Certification



**Darrell Smith, Accounting**

B.S., Univ. of Phoenix; M.S., Liberty Univ.

**Sherry Smith, Biology**

A.S., Tarrant County Community College; B.S., M.S., Biology, Midwestern State U.

**Diane Stewart, Associate Degree Nursing**

B.S.N., Midwestern State U.; M.S.N., Univ. of Texas at Arlington

**Karen Stewart, Cosmetology**

Cert., North Central Texas College

**Stacie Stoutmeyer, Sociology**

B.A., M.S., U. of North Texas

**Shane Studdard, Music & Choral Studies**

A.A., Kilgore College; B.M.E., Baylor U.; M.C.M., Southwestern Baptist Theological Seminary

**Jill Swarner, Speech, Honors Program Coordinator**

B.S., U. of Texas-Arlington; B.A., M.S., Mississippi College

**Dial Swofford, Vocational Nursing**

A.D.N. Grayson College; B.S., M.Ed., Univ. of Texas-Arlington

**Thom Talbott, Division Chair, Performing Arts**

B.A., Baker University; M.A., Texas Woman's U.

**Sherri Taylor, Vocational Nursing**

A.A.S., Trinity Valley Community College

**Becky Terrell, Equine Science**

B.S., Texas Tech U.; M.S., Colorado State U.

**Erica Thompson, English**

B.A., U. of North Texas, M.A., Midwestern State Univ.

**Manuel Trevino, Jr. Database Management**

B.S., M.S., Univ. of Phoenix

**Brian Waddell, Tennis Coach, Physical Education**

B.S., Cumberland College

**Danielle Wagner, English**

B.A., M.A., Midwestern State U.

**Tiffani Walker, Radiological Technology, Clinical Coordinator**

A.A.S., B.S., M.S. Midwestern State U.

**Dawn Watts, Teacher Education**

B.S., M.Ed., Univ. of North Texas

**Kristen Weinzapfel, English**

B.S., Texas Tech University; M.A., Midwestern U.

**Amy Whiting, Chemistry**

B.S., U. of Mary Hardin Baylor; M.S., U. of Notre Dame

**Jill Willi, Chemistry**

A.S., North Central Texas College; B.S., Texas Woman's Univ.; M.S., Univ. of North Texas

**Donnie Willis, Networking**

B.S., Prairie View A&M; M.S., Colorado Technical Univ.

**Aziel Wilson, Mathematics**

B.S., M.S., Texas Woman's U.

**Amy Wise, Vocational Nursing**

Certificate, A.A.S., North Central Texas College

**Kevin Wood, Chemistry**

A.A., Weatherford College; B.S., Tarleton State U.; M.S., Texas Woman's U.

**Crystal R.M. Wright, Division Chair, History, Humanities, Philosophy**

B.S., M.A., U. of North Texas

**Eric Wright, Head Baseball Coach, Physical Education**

A.S., Panola Junior College; B.S., Sul Ross State U.; M.Ed., U. of Texas Pan-American

**Caroline Wunder, Economics**

B.S., M.S., Univ. of North Texas

**Jill Yoder, Mathematics**

B.S., Goshen College; M.S., Wichita State U.; M.S., Iowa State U.

# General Information

The legal authority of North Central Texas College is established by state statute (Texas Education Code, Section 130.003) which governs public community colleges. In accordance, North Central Texas College is a two-year institution primarily serving residents of Cooke, Denton, and Montague counties and the residents of Graham ISD by offering technical and academic courses for certification or associate degrees, continuing education, remedial education consistent with open-admissions policies, and programs of counseling and guidance. The College insists on excellence in all academic areas, instruction, research, and public service. Faculty research, using the facilities provided for and consistent with the College's primary functions, is encouraged.

## Mission

The North Central Texas College is dedicated to student success and institutional excellence. NCTC encourages student achievement by providing affordable, quality learning environments, comprehensive student support, and public services.

The College District fulfills its mission by offering programs leading to associate degrees and certificates and by providing:

- University Transfer Education
- General Education
- Workforce & Technical Education
- Developmental Education
- Student Development
- Continuing Education
- Community Education

NCTC strives to meet nine Institutional Learning Goals, which support the college's mission:

1. A quality general education curriculum in all associate degree programs.
2. Quality freshman and sophomore level courses in arts and sciences which parallel the lower division offerings of four-year colleges and universities.
3. Quality technical programs leading directly to careers in semi-skilled and skilled occupations, and quality technical education program up to two years in length leading to certificates and associate degrees.
4. Quality, flexible, and responsive continuing education programs including workforce training, customized business and industry training, community education programs, and community service programs for occupational and entrepreneurial skills enhancement and/or cultural enrichment.

5. Assistance to students in achieving their educational goals by making available quality student and educational support services.
6. Quality programs and services in support of adult literacy and basic skills development as a means of workforce enhancement and expanding access to higher education.
7. A systematic, broad-based planning, research, and evaluation process, the ongoing pursuit of institutional effectiveness and continuous improvement among programs, services, and personnel.
8. A qualified, competent faculty, staff, and administration who are dedicated to carrying out the role, scope, and mission of the institution as adopted by the Board.
9. Adequate physical and financial resources to accomplish the role, scope, and mission of the institution are dedicated to the completion of Institutional Learning Goals.

## Vision

North Central Texas College will be a recognized leader in higher education and a catalyst for economic, cultural, and community development.

## Values

North Central Texas College is accountable to its students, colleagues, and the community and holds the following values to be fundamental:

### **Affordable, Quality Education**

NCTC is passionate about providing access to higher education. Its highly qualified faculty and staff and student-centered programs and services reflect NCTC's commitment to excellence.

### **Stimulating Learning Environments**

NCTC fosters diverse, challenging, and engaging learning environments to empower its students to impact a global society as creative problem solvers, critical thinkers, and dynamic leaders.

### **Integrity**

NCTC faculty, staff, and students act in an ethical, honest and responsible manner.

### **Innovation**

NCTC embraces creative ideas and challenging initiatives.

## **Cohesive Relationships**

NCTC cultivates productive partnerships through teamwork, personalized attention, and open communication.

## **Encouragement**

NCTC supports students, faculty and staff by welcoming diversity and promoting mutual respect.

# **Statement of Ethics and Philosophy**

The College is dedicated to providing quality educational opportunities to all students and to all other persons and businesses wishing to avail themselves of its services. The College is aware of the complexity of challenges facing both individual and corporate members of a technologically demanding society. Therefore, it pledges the commitment of its Trustees, administration, faculty, and staff to an educational program of excellence and flexibility for a constituency of diverse needs and backgrounds. In order to provide its students with the opportunity to improve their quality of life, the College is dedicated to providing dynamic, responsive and quality services.

The College District seeks to treat each person of the College community as a unique individual and to provide a positive, encouraging, and success-oriented environment. College District policies and practices which protect the rights and development of each individual in the College community shall be enforced. Protection from unlawful discrimination, including conduct that constitutes sexual harassment, and freedom to develop as a student and/or College employee shall be promoted.

The College District accepts its responsibilities to its students, to its employees, and to the members of the community. Further, the College District is committed to meet these responsibilities with balance, fairness, accountability, and ethical integrity. It is the policy of the College District to apply the highest ethical standards to all members of the College community including the Board of Regents, administration, staff, and faculty in achieving its mission and in managing its resources efficiently and effectively to reach its goals and objectives. The College District shall include a code of ethics for Board members, administration, staff, and faculty in its Policy Manual.

## **Public Service**

North Central Texas College responds to the special needs and interests of the public, but it realizes that all these needs and interests cannot be served solely in a formal classroom setting through the traditional academic curricula. Members of the community at large are welcome on campus at any time and are given access to many college facilities and services, such as the Library, free of charge. Other facilities and services,

including space for meetings, workshops, and similar activities are made available at minimal charges.

For more information contact the office of the Vice Chancellor of Administrative Affairs at (940) 668-4201.

Specialized facilities allied with the college's instructional programs also are made available to the community as a public service. In cooperation with the Division of Continuing Education, departments regularly sponsor workshops, seminars, and short courses aimed at disseminating information to individuals as well as to business, industry, and private organizations within the community.

All members of the college faculty, administration, and staff welcome inquiries related to their particular areas of specialization from community organizations and individuals.

A widely varied program of artistic, social, and cultural events — recitals, concerts, stage productions, lectures, exhibits and others — are sponsored by the college.

## Strategic Plan

In order to fulfill its mission, North Central Texas College has identified three priority goals and the "will" statements that describe the College's commitment in each area:

### 1. **Foster Student Success**

NCTC will:

- Improve student retention at the course and program level, term to term
- Improve student completion rates from Fall to Spring
- Provide learning and career pathways to foster continuous learning
- Align courses and programs with external standards and professional requirement

### 2. **Meet Community Needs**

NCTC will:

- Identify and respond quickly to the existing and changing needs of our regional economy
- Partner with businesses, ISDs, municipalities and higher education institutions
- Offer events that improve community life and foster institutional support

### 3. **Ensure Institutional Excellence**

NCTC will:

- Strive for further efficiencies in the corporate function of the institution
- Maintain our physical, equipment and technology infrastructure to meet the needs of students, employees, and community
- Provide professional development to improve performance of employees and work groups.

# History

North Central Texas College, formerly Cooke County College, was established in 1924 with Randolph Lee Clark as its first president. A pioneer in Texas education, Clark is honored with an official Texas Historical Commission Marker on campus.

The college was operated as an extension of the Gainesville Independent School District until May 7, 1960, at which time the voters of Cooke County approved the expansion of the district to include all of Cooke County. As the college grew, its name was changed from Gainesville Junior College to Gainesville College and then to Cooke County Junior College (in 1960). The “junior” was dropped soon thereafter and, reflecting its expanded role as a true comprehensive community college, Cooke County College officially became North Central Texas College in June 1994.

## Gainesville Campus

Donation of five acres of land by William T. Bonner made the move of the main college campus from Gainesville High School to its present site possible in 1959. Subsequent acquisitions of land have increased the size of the campus to more than 132 acres. It is situated in the southwest section of Gainesville on U.S. Highway 51, about one mile from downtown.

Since 1959, NCTC's Gainesville Campus has maintained a steady program of physical growth to meet the needs of its expanding program offerings. Its physical plant is currently valued at \$36.1 million. Modern facilities now in operation include a total of 21 separate buildings. In addition to classrooms, campus buildings host learning laboratories, shop facilities for technical programs, Field House, Student Activities Center, Bookstore, cafeteria, and even a Planetarium. Athletic outdoor facilities include tennis courts, intramural playing fields, and a baseball/softball field complex.

We are especially proud of our facilities for both the visual and performing arts. Our state-of-the-art First State Bank Center for the Performing Arts is one of the region's finest performance venues for drama, dance, and music. The facility also contains excellent instructional and rehearsal spaces for its programs.

The newest buildings on campus is our modern and well-equipped Industrial Technology Center where programs ranging from welding and HVAC to machining and industrial mechanics are offered and the Leo and Mabel Scott Health Science Center which offers the most authentic training possible in fields such as nursing and radiological technology.

### **NCTC Gainesville Campus**

1525 West California Street  
Gainesville, Texas 76240-4699  
(940) 668-7731  
Fax (940) 668-6049  
[www.nctc.edu](http://www.nctc.edu)

## **Corinth Campus**

The Corinth Campus, which officially opened in January 2000, is situated just off Interstate 35 in Corinth, Texas, and is centrally located in Denton County. With an enrollment of approximately 3,800 students taking a wide range of credit courses, this campus has the college's largest student base. The 75,000 square foot building located on the Corinth Campus provides students with modern, fully equipped classrooms, science and computer labs and other amenities. Students also have access to a wide range of services, including admissions, financial aid, tutoring and counseling. In addition, there is a full-service bookstore and a modern library.

## **Pinnell Square**

While the Corinth Campus is centrally located in Denton County, NCTC also has satellite locations throughout the area to better serve students. NCTC has expanded to Pinnell Square, directly across from the Corinth Campus. Located in Pinnell Square are NCTC's Surgical Technology Program Vocational Nursing, EMS Career Connection Center, Lifelong Learning, RITA Grant and the Business Development Center.

### **NCTC Corinth Campus**

1500 North Corinth Street  
Corinth, Texas 76208-5408  
(940) 498-NCTC  
Fax (940) 498-6200

## **Flower Mound Campus**

The Parker Square location serves as a centralized higher education center in the southern portion of Denton County. It complements the NCTC Corinth Campus located in central Denton County.

The Flower Mound campus is a 32,000 square foot building located in the beautiful Parker Square destination. This modern and sophisticated campus provides students



with a technologically advanced learning environment. In addition to the library and general access computer lab, bookstore, testing center and student study areas, the campus also includes 10 classrooms, a lecture hall, two computer labs, and a universal science lab. Students attending this campus can receive a full-range of support services including academic advising, counseling, financial aid, and tutoring.

**NCTC Flower Mound Campus**

1200 Parker Square  
Flower Mound, Texas 75028  
(972) 899-8400

## **Bowie Campus**

The Bowie Campus provides students with modern classrooms, computer and science labs, library, and student services. Through the support of local employers, donors, the City of Bowie and other key partners, the campus was recently expanded to house a larger library and workforce training programs, such as Petroleum Technology.

**NCTC Bowie Campus**

810 S. Mill Street  
Bowie, Texas 76230-1247  
(940) 872-4002  
Fax (940) 872-3065

## **Graham Campus**

In November 2009, the citizens of Graham voted to join the NCTC service area and approve a branch campus maintenance tax to support the maintenance and operations of the campus.

The Graham Knowledge Base Foundation funded the renovation of the former Shawnee Elementary Campus and created the facilities, technology, and distance education capabilities for instruction and workforce training. The facility has over 49,800 square feet of instructional and administrative space, including a large lecture hall, performance stage, distance education classrooms, and a computer lab.

**NCTC Graham Campus**

928 Cherry Street  
Graham, Texas 76450  
(940) 521-0720

## Small Business Development Center

The Small Business Development Center (SBDC) is a non-profit business consulting service that provides guidance free of charge to present and prospective business owners. The goal of the SBDC is to provide practical assistance to clients that will help their business survive, grow and prosper. SBDC staff members assist clients in such areas as writing a business plan, identifying funding sources, managing the business, marketing and meeting federal and state regulations. The SBDC offers training seminars on business related issues, such as marketing, accounting, financial management and operating a home based business.

Call for an appointment, (940) 498-6470

### **Small Business Development Center**

North Central Texas College  
1404 N Corinth St, Suite 308  
Corinth, Texas 76208

## Tobacco-Free Campus

North Central Texas College is committed to providing a safe and healthy environment for its employees, students and visitors. NCTC recognizes the health hazards of tobacco use and of exposure to secondhand smoke. NCTC restricts the use of any and all tobacco products and is aware that tobacco use influences underage students, accumulates unsightly tobacco litter and interferes with assuring clean air for all who come to the college. Information regarding the Tobacco Free policy is available on the NCTC website, [www.nctc.edu/tobacco-free.html](http://www.nctc.edu/tobacco-free.html)

# Admissions Information

## General Admission Policy

North Central Texas College is committed to providing quality education to the community and the students who wish to attend to pursue higher education. Students may begin their studies in the Fall (August or October), Spring (January or March), Summer I (June), Summer II (July), or Summer III (June/July) semesters. NCTC has an open admission policy that allows all students to be admitted regardless of previous academic history. We encourage students from wide range of diverse backgrounds to attend North Central Texas College to meet their educational goals.

Non-citizen students seeking admission at NCTC who do not hold a temporary visa of any category, but who hold an undocumented immigrant status and/or have graduated from a Texas public high school or received a GED in Texas is eligible for admission. Please contact the Office of Admission for additional information.

NCTC follows official state-mandated policy regarding the Texas Success Initiative for all entering students.

## Admission Requirements

In its admission policies and practices, North Central Texas College does not discriminate on the basis of sex, race, age, creed, handicap, or national origin. The following steps must be taken for general admission to NCTC:

1. **Application For Admissions:** Forms may be submitted by using the ApplyTexas Application at: [www.applytexas.org](http://www.applytexas.org). Paper applications may be downloaded from the admissions page of the NCTC website or obtained from the NCTC Admissions Office.
2. **Official Transcripts:** As applicable, an official high school transcript or home school academic record with date of graduation, documentary proof of GED certification or, in the case of a transfer student, official transcript(s) reflecting all work taken from all regionally accredited institutions of higher education must be on file in the Office of Admissions by the official date of record at North Central Texas College. All transcripts submitted become the property of NCTC and cannot be returned. Only copies of the documents will be supplied upon request.
3. **Residency:** For tuition purposes, students who enroll in North Central Texas College will be classified in one of three categories: in-district resident, in-state resident, or out-of-state (non-resident of Texas). The residency status of each

student applying at NCTC is determined during the admissions process, based upon documentary evidence available to make that decision. The following definitions briefly describe the residency requirements specified in Texas statutes and in rules and regulations of the Texas Higher Education Coordinating Board.

- a. **In-district residents** reside in Cooke County or Graham ISD and who has been a resident of Texas (as defined by the State of Texas) for the 12 months preceding the official date of record. In-district residents must be able to provide documentation of residency.
- b. **In-state residents** reside in a Texas county other than Cooke County or Graham ISD and who has been a resident of Texas (as defined by the State of Texas) for the twelve months preceding the official date of record.
- c. **Out-of-state residents** pertains to a student under eighteen years of age who lives away from his/her family and whose family resides in another state or whose family has not resided in Texas for the twelve months preceding the official date of record, or a student eighteen years of age or over who resides out of Texas or who has not been a resident of the state for the twelve months preceding the official date of record.
- d. **Residency reclassification** should be completed by the official date of record of the current semester. Students are responsible for providing any necessary documentation to be eligible for residency reclassification. Students needing additional information about residency determination should contact the campus Office of Admissions.

4. **Texas Success Initiative (TSI) Assessment:** Students may be granted a partial exemption for TSI placement testing based on scores from ACT, SAT, Exit-Level TAKS, or STAAR exams for either Reading/Writing or Math. Partial exemptions are only granted on tests taken on or after April 2004. Composite or combined scores (ACT or SAT) must be met first on the same test date, then scores in subject areas are reviewed to determine a partial exemption. Students must complete a Pre-Assessment Activity (PAA) prior to scheduling TSI testing at NCTC.

5. **Health Records:** North Central Texas College acknowledges the Texas Department of Health's request that all students have proper health inoculations and records. The College stresses the importance for all students to update their personal inoculations, especially those for mumps, measles, and rubella. The College reserves the right to request from each student such inoculation records to be placed in their personal student file should the Texas Department of Health mandate such a requirement. Students in Health Occupations programs are required to be immunized against Hepatitis B. Students enrolled in a specific course may be required to show proof of major medical health insurance. Important Note on Bacterial Meningitis Vaccination: During the 2011 Texas Legislative session, Senate Bill 1107 (SB 1107) was passed and signed into law. Effective with enrollment after January 1, 2012, SB 1107 requires students, with certain exceptions, to provide proof of meningitis vaccination. During the 2013 Texas Legislative session, Senate Bill 62 (SB 62) was passed. Please check the NCTC website for additional information.

**6. Admission to Health Science Programs:** Admission to a Health Science program is contingent upon admission to NCTC; however, granting of admission to the college does not guarantee admission to the specific Health Science program. Refer to specific programs for any additional admission requirements.

**7. First Year Experience (NCTC 1001) or Transfer Orientation:** All first-time college students, including previous Dual Credit students, are required to enroll and complete the First Year Experience course (NCTC 1001) during their first year of enrollment. This course replaces what was previously referred to as College 101/New Student Orientation. Transfer students will complete a Transfer Orientation through the MyNCTC student portal prior to the official date of record of their first semester of enrollment at NCTC.

## Methods of Admission

### Freshman or GED

Students enrolling in college for the first time may apply for admission based on one of the following categories:

- Students who graduate from an accredited public or private high school must submit an official high school transcript showing the date of graduation.
- Students who have completed a non-traditional secondary education course of study in a non-accredited private school setting, including home school, must submit an academic record indicating the curriculum completed and graduation date.
- Students who have satisfactorily completed the Test of General Education Development (GED) must submit official GED test scores or an official GED certificate. Copies will not be accepted.
- North Central Texas College will not recognize a student as a high school graduate who has obtained a diploma through a school or online program that requires only payment with little or no coursework requirements. Determination of the legitimacy of these diplomas will be at the discretion of the Office of Admission. Graduates of such programs will be considered for admission on an individual approval basis (see Individual Approval section below).

### Dual Credit

Dual credit refers to courses taught by NCTC in which students are eligible to receive college and high school credit simultaneously. Courses are limited to NCTC Core Curriculum, Foreign Language, or if the course offering is part of a Early College Educational Program. Eligibility requirements are as follows:

- Only high school students who have met all the eligibility requirements (academic and behavioral) and who are recommended by the high school principal/counselor are eligible to enroll in dual credit courses. Students must be college ready as evidenced by TSI (Texas Success Initiative) Assessment scores and have a high school GPA of "C" or higher. To remain eligible, students must maintain a "C" or higher in each dual credit course.
- Home or private schooled students may enroll in dual credit courses. All dual credit requirements apply.

## Admission Requirements

Students must submit the following to NCTC for admission:

- Application for Admission through Apply Texas
- Current high school/college transcripts
- Official test scores
- Dual Credit Registration Form - this form must be completed accurately with required signatures and NCTC course information.
- Students registering for dual credit must submit proof of the Bacterial Meningitis immunization. The vaccination is required for all dual credit students attending classes on the NCTC campus. Students registering for courses offered on the high school campus are not required to submit proof of the immunization.

## Student Eligibility

High School students should meet and maintain all academic and behavioral requirements and who are recommended by the high school principal/counselor are eligible to enroll in dual credit courses.

Appropriate scores on any of the following approved tests may be used: SAT, ACT, PSAT/NMSQT, TSI Assessment, and STAAR EOC. *All scores are subject to change based on the Texas Higher Education Coordinating Board.*

The testing standards include:

- ACT: Composite score of 23 with 19 on English and/or Math.
- SAT - New SAT: 530 on Math and 480 on EBRW (Evidenced Based Reading and Writing), no composite score.
- STAAR End of Course (EOC): Score of 2000 on English II reading test, score of 4000 cumulative on Reading/Writing on English II (used Junior year only).
- TSI Assessment standards: Reading 351, Writing Multiple Choice score of 340 with an essay of 4 or Multiple Choice of 339 or lower with an Essay of 5; Math 350 or higher.
- PLAN Aspire: THECB approved scores.
- PSAT: THECB approved scores.

Dual Credit students must show college readiness in at least one testing area to be eligible to enroll in dual credit courses, and they are highly encouraged to exhibit eligibility in at least the Reading section of any approved assessment.

## Dual Credit Load

High School students may enroll in the number of courses appropriate to their needs with an institutional upper limit of 18 hours per fall or spring semester without the appropriate approval from. A load of 12 hours per fall or spring semester should be considered advanced by most metrics for dual credit students.

## Early Admissions

Early Admissions refers to students who have successfully completed their junior year of high school. Students must submit an official high school transcript or home or private school academic record to date, along with written approval from their high school principal or counselor. Students must also meet requirements for College Readiness through approved TSI (Texas Success Initiative) test scores previously mentioned.

Students can choose Early Admissions or Dual credit, but cannot be in both programs at the same time.

## Individual Approval

This method of admission may be selected by non-high school graduates or GED completers. Students admitted through individual approval must sign a waiver stating that they understand they will be ineligible for financial aid without a GED or high school diploma. Continued enrollment at NCTC will require completion of a GED or high school diploma within a year of signing this waiver. In addition to this, there are certain special admission programs that require a GED or high school diploma. It is the student's responsibility to check the requirements for the program to which he/she is applying.

## College Transfer

Students previously enrolled at another accredited institution of higher education are eligible for admission. Credit will be awarded for prior course work according to the following conditions:

- Transfer applicants are considered for admission to North Central Texas College first on the basis of having received sufficient credit to demonstrate ability to make satisfactory progress.
- **Transfer Credit Evaluation:** Transfer of credit from another institution involves consideration of accreditation, comparability of course work, and applicability of that course work to a degree program.
- Course work from regionally accredited institutions can be evaluated without a written request. However, students are encouraged to submit a completed

- a written request. However, students are encouraged to submit a completed Transcript Evaluation Form to the Registrar's Office to expedite evaluation.
- Official transcript(s) reflecting all work taken from all regionally accredited institutions of higher education, as well as placement scores or TSI status, must be on file in the NCTC Office of Admissions by the official date of record of the student's first semester. If transcripts are not received by this time, then there will be an academic hold placed on the student's account.
  - Credit for courses equivalent to those listed in the NCTC catalog will be given for credit earned at a regionally accredited institution of higher education. Courses noted as meeting core requirements at a Texas public institution will be evaluated and transferred in as satisfying the specific core component.
  - Credit for equivalent courses will be awarded, according to the previously mentioned procedure, for courses that are specific to the student's degree program. A minimum of 15 semester hours must be taken in residence before a degree can be awarded by North Central Texas College.
  - Official course descriptions from out-of-state colleges previously attended may be needed to determine transfer credit toward equivalent course work. If a determination is unable to be determined, further recommendation will be required from the appropriate instructional area.
  - Credit for all non-equivalent courses, which includes course work not listed in the core curriculum or general education requirements, will be awarded up to 15 hours of general elective credits to apply toward degree completion.
  - All courses attempted on an official transcript will be considered as part of the academic history subject to evaluation. Grades of "D" may not meet degree requirements based on departmental requirements.
  - The Registrar's Office determines the total number of semester hours as well as grade points to be transferred. Students who complete the "Transcript Evaluation" form will be informed of their transfer credit four to six weeks after submitting the request. Student's transcripts may be evaluated administratively for financial aid purposes.
  - Course work completed from non-regionally accredited institutions will be evaluated after a written request has been submitted by the student along with required documentation.
  - Students with credit from non-regionally accredited institutions of higher education should submit an official transcript with course descriptions, learning outcomes and faculty credentials to the Office of Admissions for instructional review.
  - The official transcript from institutions not regionally accredited only need to be submitted if a transcript evaluation for equivalent courses is needed.
  - Foreign transcripts or credentials will not be evaluated or accepted for transfer coursework.
  - PE courses may be waived for military service or for medical reasons. Required documentation include the student's DD214 indicating six months of active duty or a written statement from a physician.
  - Credit will be evaluated for military courses and/or experiences based upon the



evaluation recommendations as outlined in the American Council on Education Guide to the Evaluation of Educational Experiences in the Armed Services manual.

## Readmission

Students wishing to return after a break of enrollment for two long semesters must reapply through the Office of Admissions. Applicants who have attended institutions of higher education since last enrolled at NCTC must submit official transcripts from those institutions along with scores from a state-approved assessment by the official date of record. If transcripts are not received by this time, then there will be an academic hold placed on the student's account.

## Application for Admission

New students and former students who did not attend the previous two long semesters (Fall and Spring) must complete the admissions application.

Forms may be submitted by using the ApplyTexas Application at, [www.applytexas.org](http://www.applytexas.org). Paper applications may be downloaded from the admissions page of the NCTC website or obtained from the NCTC Admissions Office.

Students should be aware that future enrollment will be restricted if all admission records and documents are not on file by the official date of record of the first semester enrolling or returning to North Central Texas College. In addition, no transcripts will be issued until the student's file is complete.

## Admission to Health Science Programs

All students must be granted admission to North Central Texas College prior to admission to special programs:

1. Students seeking admission to Health Sciences' programs (Emergency Medical Services, Fire Science, Radiological Technology, Surgical Technology, or Cosmetology, Associate Degree Nursing or Vocational Nursing) must apply for admission to the college and also to the individual program.
2. The Health Sciences' program faculty will advise students of special pre-admission requirements for each program. The requirements vary, but may include a mandatory advisement session, a pre-admission test, supply of recommendation letters, and/or immunization and physical examination records. Refer to specific programs for additional requirements.
3. Applicants will be notified concerning their status with the individual program by the Health Science or Nursing program coordinator prior to the registration period in which the program starts.

## Other Regulations Affecting Admissions

A student on suspension from another college or university (as noted on the student's official transcript), will be required to submit an Appeal to the Admissions Office of NCTC in order to be eligible for enrollment. If approved for enrollment, the student will automatically be placed on Academic Probation status at NCTC, and therefore must earn a GPA of at least 2.0 in the first semester at NCTC in order to avoid moving to Academic Suspension status.

Any student falsifying registration information is subject to disciplinary action and dismissal.

All tuition and fees must be paid before registration is considered to be complete.

## International Students

International students are highly valued by North Central Texas College, and the multicultural influence they bring to the student body promotes a holistic educational experience for all members of the college community. Information provided below is current as of the publication of this catalog. The United States Citizenship and Immigration Service and the Department of Education have developed policies and procedures for student and institutional compliance with national security measures originating in the Patriot Act of 2001.

### **North Central Texas College**

Attn: International Admissions

1500 N. Corinth Street

Corinth, TX 76208

940-498-6429

[international@nctc.edu](mailto:international@nctc.edu)

## Practical Training

NCTC does not recommend international students for Curricular Practical Training or Optional Practical Training.

## Students Applying from Outside the United States

**Application for Admission** - Submit application online at [applytexas.org](http://applytexas.org)

**Passport** - Copy of photo ID page of valid passport.

**Proof of Language Proficiency** - Evidence of proficiency in the English language is required and can be satisfied by submitting a minimum TOEFL score of 71 (IBT) or 525 (PBT). NCTC code for score reporting is 6245.

**Official Transcripts** - Students are required to submit official transcripts from all schools attended. Credentials should be submitted in English and verify high school completion. Foreign transcripts must be accompanied by a general evaluation completed by a current member of NACES. A current membership roster may be found at [www.naces.org](http://www.naces.org).

**Financial Support Documentation** - Submit an original, notarized affidavit with supporting evidence dated within six months of the beginning of the semester for which the student is applying. Financial statements must indicate the sponsor has adequate funds readily available to cover all educational and personal expenses the student will incur throughout the duration of their studies at North Central Texas College. Contact NCTC International Admissions for current financial support requirements.

**Health Records** - Students under 22 years of age must provide evidence they have received the bacterial meningitis vaccination within the past five years.

**Guidelines Agreement** - Contact International Admissions at [international@nctc.edu](mailto:international@nctc.edu).

**Dependents** - Valid passport photo ID page required for any dependent who will accompany the student.

**Proof of Housing** - Information regarding on-campus student housing can be found at [housing.nctc.edu](http://housing.nctc.edu). If the student plans to reside off campus, they must submit documentation of living arrangements such as a signed lease agreement in their name. If the student plans to reside with a U.S. sponsor, confirmation that room, board, and transportation to and from campus must be included on the affidavit of financial support.

**TSI Assessment Exam** - Must complete all three components of the TSI (Texas Success Initiative) exam or prove exemption to be eligible for enrollment in any core classes or degree program. A Pre-Assessment Activity (PAA) is required before scheduling the TSI exam at NCTC.

## Students Transferring from a U.S. Institution

**Application for Admission** - Submit online application from <https://www.applytexas.org>

**Language Proficiency** - If currently enrolled in an ESL program, student must submit TOEFL score of 71 (IBT) or higher.

**Official Transcripts** - Students must submit official transcripts from all institutions attended. A minimum cumulative GPA 2.0 is required for admission. Foreign credentials must be accompanied by a general evaluation completed by current member of NACES - [www.naces.org](http://www.naces.org).

**Travel Documents** - Copy of photo page of valid passport, student visa, and all I-20s issued to student.

**Transfer Clearance Form** - Must be completed by international advisor at current institution and indicate student is in status, has met all financial obligations, and is eligible for transfer. Contact NCTC International Advisor regarding this form at [international@nctc.edu](mailto:international@nctc.edu).

**Financial Support Documentation** - Submit an original, notarized affidavit with supporting evidence dated within six months of the beginning of the semester for which the student is applying. Financial statements must indicate the sponsor has adequate funds readily available to cover all educational and personal expenses the student will incur throughout the duration of their studies at North Central Texas College. Contact NCTC International Advisor for most accurate financial information requirements.

**Health Records** - Students under 22 years of age must provide evidence they have received the bacterial meningitis vaccination within the past five years.

**Guidelines Agreement** - Contact International Admissions at [international@nctc.edu](mailto:international@nctc.edu)

**Proof of Housing** - Information regarding on-campus housing can be found at [housing.nctc.edu](http://housing.nctc.edu) If the student plans to reside off campus, they must submit documentation of living arrangements; i.e., a signed lease agreement. If the student will reside with a U.S. sponsor, confirmation that room, board, and transportation to and from campus must be included on the affidavit of financial support.

**TSI Assessment Exam** - Must complete all three components of the TSI (Texas Success Initiative) exam or prove exemption to be eligible for enrollment in any core classes or degree program. Completion of a Pre-Assessment Activity (PAA) is required prior to scheduling the TSI exam at NCTC.

**Dependents** - Copy of photo ID page of passport, visa, and I-20 for any F-2 dependent.

## Students Applying for Concurrent Enrollment

**Application for Admission** - Submit online application from <https://www.applytexas.org>

**Official Transcripts** - Students must submit official transcripts from all previous colleges or universities attended.

**Concurrent Enrollment Approval** - Must submit written approval from International Advisor at current institution.

**Travel Documents** - Copy of photo page of valid passport, student visa, and current I-20.

**Health Records** - Students under 22 years of age must provide evidence they have received the bacterial meningitis vaccination within the past five years.

**TSI Assessment Exam** - Must complete all three components of the TSI (Texas Success Initiative) exam or prove exemption to be eligible for enrollment in any core classes or degree program. Completion of a Pre-Assessment Activity (PAA) is required prior to scheduling the TSI exam at NCTC.

Students applying to transfer from an ESL program or who hold a non-immigrant status other than F-1 are encouraged to contact International Admissions at [international@nctc.edu](mailto:international@nctc.edu) for information pertaining to our admission policies and any additional requirements.

## **Specific Requirements**

### **For Temporary and Permanent Resident Aliens**

Temporary and Permanent Resident Aliens seeking admission to North Central Texas College must present their resident alien card (green card) at the time of admission. Some visa holders may be eligible to pay resident tuition. Please contact the International Admissions Office at [admissions@nctc.edu](mailto:admissions@nctc.edu) for further information.

## **Student Correspondence Policy**

### **Student Email**

Email will be the preferred method for official correspondence with accepted and currently enrolled students, and the College will maintain a reasonable expectation that electronic correspondence will be received and read in a timely manner.

North Central Texas College will use various and appropriate media and delivery methods for communication and corresponding with prospective, accepted and currently enrolled students. These may include, but are not limited to, electronic mail (email), web site and portal announcements, conventional mail delivery, paper documents and publications, and campus postings.

All accepted and currently enrolled students will be assigned an official NCTC email address by the Information Technology Services Department. This address will be communicated to the student along with their acceptance letter from NCTC. This is the official student email address to which NCTC will send all official email communications.

## **Social Networking Policy**

If you maintain social networking sites such as Facebook, Twitter, etc. you are responsible for keeping personal sites appropriate.

Students are encouraged to refrain from posting physical threats or derogatory comments about students, coaches, faculty, staff or the NCTC administration. Threats of physical violence are a violation of NCTC board policy [FLB-Student Conduct](#). Violators may be reported to the police. Students found to be in violation of the policy may face disciplinary action.

## **Technical Support**

The research, development and maintaining for technical support will reside with the NCTC Information Technology Services Department. Technical support will be delivered through appropriate and various means as determined by the ITS department.

# Online Registration

Eligible students may register for many NCTC courses via the online registration system available through MyNCTC. Students will receive their MyNCTC network username and password upon initial processing of their application. This is the system all students use to access online registration, as well as:

- View/print unofficial transcripts
- View/print class schedule
- Review admissions file and/or account holds
- Print Advising Worksheets/degree shop
- Check final grades at the end of each semester
- Verify and accept Financial Aid awards
- View/pay on student account

## Seeing an Advisor Before Registering Online

NCTC feels that all students benefit from academic advising, however, they have the opportunity to self-enroll if they meet the eligibility criteria under "Who is eligible to register online through MyNCTC?" listed below.

Otherwise, students must see an advisor before they are allowed to register online if they are:

- First-time college students (including students who were previously Dual Credit students but are now at NCTC as full or part-time student), or continuing college students who have earned 30 credit hours
- Students who are not TSI (Texas Success Initiative) complete in one or more areas (see next section for description of TSI requirements)
- Students who are enrolled in a certificate program
- Students who need to have transfer credits applied from another institution
- Students on Academic or Financial Aid Suspension (if appeal has been submitted and approved)

## Eligibility for Registering Online

- Students who have met admissions requirements, are in good academic standing, and have no holds on their accounts
- Students who are enrolled in an Associates Degree program
- Students who are College Ready in all three TSI areas (Reading, Writing, and Math)

# Academic Advising

Academic advising is an essential element of NCTC's commitment to ensuring that students take the proper courses in the proper sequence to meet their educational objectives. NCTC counselors and advisors provide academic advising services for new, current, and potential students.

All students should regularly review their Advising Worksheet saved in MyNCTC. Advising Worksheets are extremely important because they show both students and advisors exactly what courses need to be taken for students to achieve their educational goals.

**Note:** Transcripts from all previously attended colleges or universities must be submitted to the Admissions Office along with a Transcript Evaluation Form in order for transfer work to be applied and an accurate Degree Audit saved.

Transcript Evaluation Forms should be submitted well in advance of an appointment with an advisor to allow time for processing. Students who qualify for online registration and who have completed college-level coursework already are not required to see an advisor, however, it is recommended for students who have questions or need information about important issues regarding transfer, college majors, graduation requirements, etc.

Students who wish to get a better idea of what major to choose and/or what courses to take should go to the Counseling and Advising office to speak with an advisor or counselor or call one of the campus office locations.

## **Corinth**

(940) 498-6499

## **Gainesville**

(940) 668-4216

## **Flower Mound**

(972) 899-8412

## **Bowie**

(940) 872-4002, ext. 5212

## **Graham**

(940) 521-7120

# Academic Fresh Start

Academic Fresh Start permits course work taken at NCTC that is at least 10 years old to be ignored for application purposes and determination of grade point average (GPA). Students applying to the institution or to a specific program (e.g. LVN, ADN, Paramedicine, etc.) may choose to invoke an Academic Fresh Start. Students must complete the Request for Academic Fresh Start form available in the Registrar's Office at the time of admission. Although grades on students' NCTC transcripts are not altered,

the cumulative hours earned and cumulative GPA are set to 0 and an explanatory note is added to the transcript. Academic Fresh Start applies to all course work in a given semester regardless of the grades earned. Semesters chosen for consideration must be consecutive.

## **Auditing a Course**

When space is available in a specific course and registration for credit students prior to a given semester has ended, those who are 55 years or older wishing to audit a course may do so by contacting the instructor of the course within the course specific department. When auditing, students take a course without receiving official credit for the course from North Central Texas College. After the course begins, a student's audit status may not change. All documentation/requirements are arranged between the audit student and the instructor of the course.

## **College 101/New Student Orientation Policy**

First Year Experience (NCTC 1001), previously known as College 101/New Student Orientation, is required of all first-time NCTC students, including former Dual Credit and Early Admission students. The goal of the First Year Experience course is to equip new students with information about college-level expectations, and knowledge of the NCTC resources which can help them have a more successful college experience. First-time college students are required to enroll in and complete NCTC 1001 during their first year of enrollment prior to completing 15 credit hours.

Transfer students are required to complete an online Transfer Orientation through the MyNCTC student portal prior to the official date of record of their first semester of enrollment at NCTC.

## **Advanced Placement Examination**

NCTC awards credit on the basis of local and national examinations, prior military experience, and professional certifications, subject to general limitations. A maximum of 18 semester hours of credit earned by examination-College Board Advanced Placement Program (AP), College Level Examination Program (CLEP) Subject Examinations, USAFI, and professional certifications-may be applied toward the award of a degree or certificate at NCTC.

Courses completed in the Armed Forces and will be evaluated and credit will be awarded based on the recommendation in ACE (American Council on Education) Guide to Evaluation of Educational experiences in the Armed Services. Such credit is not included in determining grade point averages and has the following restrictions:



- May not be used to reduce the 15 semester hours required in residence for any degree or certificate.
- May not be earned in any course in which the student has earned a grade of "F". Credit by exam cannot be used to replace a grade.
- Credit is awarded only in areas offered within the current curriculum of NCTC, and is appropriately related to the student's educational program.
- Once enrolled, students wishing to utilize AP or CLEP credit are required to do so by submitting official AP or CLEP test score reports to the NCTC Admissions Office. If minimum AP or CLEP test scores are met, the applicable course credit will be applied to an NCTC transcript.

## CLEP

### College Level Examination Program

All student requests for CLEP examinations should be made prior to registration into the class for which credit is being requested. Once a course is attempted and a grade earned, no credit by CLEP examinations will be allowed-CLEP scores cannot be used to replace a grade. If you are taking a CLEP exam with NCTC and having scores sent to another college or institution, you will need to verify their CLEP score requirements and course equivalencies as not all schools are the same.

For new/first-time NCTC students, credit will be recorded at the end of their first semester of enrollment in which they earn credits through regular scheduled classes. Continuing or currently enrolled NCTC students will have their credit recorded as soon as official score reports are available. Students wishing to use test results for courses that are prerequisite to courses they wish to take are responsible for having official examination scores sent to the college in time to be processed by the Admissions office.

NCTC sets the scores required for credit and the particular courses that may be challenged to receive credit. Testing and posting fees may be charged.

North Central Texas College administers the College Level Placement Exam (CLEP) through the Testing Center, so please consult the NCTC Testing Center web page for the most current fees associated with CLEP testing. You must pre-register through the Official CLEP website at [clep.collegeboard.org](http://clep.collegeboard.org) and also contact the Testing Center at your preferred NCTC campus to reserve your seat for CLEP testing.

For a list of CLEP tests and the course credit you can receive at NCTC, please consult the chart, as NCTC does not grant credit for every CLEP exam offered. You are required to know the exact name of the CLEP exam you wish to take when you pre-register through their website. If you have ever attempted a course as evidenced by a grade on your transcript, then you are ineligible for that CLEP exam For example, if you failed [ENGL 1301](#), you are **not** eligible to take the CLEP College Composition Modular exam.

# Awarding Experiential Credit

North Central Texas College offers credit for experiential learning towards Level I and Level II Certificates and Associate of Applied Science career and technical degrees. Experiential learning is a process through which students develop knowledge, skills, and values from direct experiences outside a traditional academic setting and have those skills applied to course requirements. Military personnel, veterans, and adult learners may also be eligible to receive experiential credit based upon appropriate documentation and institutional guidelines. All credit granted for experience must be supported by official and verifiable documentation.

## Guidelines for Receiving Credit

- Have met NCTC admissions requirements.
- Have transferred all previous credit(s) to NCTC.
- Must declare a major. Students seeking credit in Career & Technical programs must declare a Career & Technical Major. Career & Technical program degree plans are listed in the NCTC catalog under *Career & Technical Education* and *Health Science and Human Services*.
- Students seeking credit in Career & Technical programs must submit documentation to Department Chair(s).
- Military personnel and veterans must submit transcripts and course description(s) to the Office of Admissions.

Determination of competence standards and the decision to award credit will be made by appropriate academic and subject experts (Program Coordinators, Department Chairs, Deans).

Students can receive credit for up to 18 semester hours towards an Associates of Applied Science degree. This includes experiential credit and credit by examination. This credit may not be used to reduce the 15 semester hours required in residence for any degree or certificate. A maximum of 30% of experiential credit can be applied for students seeking to complete a Level I or Level II certificate. Experiential credit may not be earned in any course the student is enrolled in after the official date of record or has previously attempted ("W" or "F" grades) or completed.

Students will be awarded experiential credit upon applying for graduation at North Central Texas College. It is recommended that the application for credit be completed within the first semester of enrollment.

Students can submit documentation for evaluation to receive experiential credit within the first semester of being enrolled, however, credit will not be applied until the application for graduation is complete. Once the evaluation process is complete, students will receive a letter from the Department Chair or Program Coordinator listing the awarded credits.

Division Chairs will provide the student with a letter that will exhibit a list of courses the student will receive credit. The letter will be good for five years. If the student does not

graduate within the five years, they would have to reapply for the credit or obtain written approval from the Division Chair stating the credit is still good.

A \$75 fee must be paid for the evaluation process. If supplies are needed to complete the evaluation process, the student is responsible for the cost of supplies. Once fees are paid and all documentation is submitted, the grade of "S" (Satisfactory) will be posted to the NCTC transcript. The fee is waived for veterans and military students.

A copy of the credit approval letter and proof of payment must be submitted to the Registrar's Office before credit is applied.

**Note:** Policies and procedures may differ at other colleges and universities. Students transferring to another college or university should become familiar with the policies and procedures at that college or university in regards to awarded credit and transfer of nontraditional course credits.

## Armed Forces Credit

Student who has served in active duty capacity in the military service of the United States for a period of at least six (6) months and who has been honorably discharged or released, as verified by a DD214, will receive four (4) semester hours of credit for physical activity courses. Personnel on active duty with at least six (6) months in the military service may also receive this credit by presenting a certified letter from their commanding officer attesting to their period of active service.

Students may submit a Joint Services Transcript to the Office of Admissions for evaluation and determination of applicable credit. Courses completed in the Armed Forces will be evaluated and credit will be awarded based on the recommendation provided in the American Council on Education (ACE) Guide to Evaluation of Educational experiences in the Armed Forces.

## Industry Credit

Partial degree requirements may be waived for industry certifications, such as A+, Linux +, Network+, Security+, CCNA, or similar certifications issued by a qualified authority (COMPTIA, Microsoft, CISCO, etc.). The appropriate Program Coordinator will maintain a list of the appropriate equivalent NCTC courses.

Professional certifications must meet currently industry standards, be equivalent to the current college course that is requested, and have the appropriate number of classroom training hours required of the college course. Documentation must include a syllabus or other documents that specify topics taught, learning outcomes, and the number of clock hours required for the certification. Credit will be granted only for documented learning

that demonstrates achievement of all outcomes for specific courses in an approved degree program. Program faculty will conduct evaluations of all requests and make recommendations for the amount of credit to be awarded. Recommendations will be forwarded to the Vice President of Instruction for final approval.

# Credit by Exam Chart

AP, CLEP &amp; IBD

AP Exam	Score	NCTC Credit for AP Examination		Credit Hours
		NCTC Course Name	Course Number	
History of Art	3, 4, or 5	Art History I & II	<a href="#">ARTS 1303</a> , <a href="#">1304</a>	6
Biology	3, 4, or 5	General Biology	<a href="#">BIOL 1408</a>	4
Chemistry	3, 4, or 5	General Chemistry I & II	<a href="#">CHEM 1411</a> , <a href="#">1412</a>	8
Computer Science	3, 4, or 5	Business Computer Applications	<a href="#">BCIS 1305</a>	3
Macro Economics	3, 4, or 5	Principles of Macroeconomics	<a href="#">ECON 2301</a>	3
Micro Economics	3, 4, or 5	Principles of Microeconomics	<a href="#">ECON 2302</a>	3
Engl-Lang & Comp	3 or 4	Composition I	<a href="#">ENGL 1301</a>	3
Engl-Lang & Comp	5	Composition I & Composition II	<a href="#">ENGL 1301</a> & <a href="#">ENGL 1302</a>	6
French Language	3, 4, or 5	Elementary French	<a href="#">FREN 1411</a> , <a href="#">1412</a>	8
German Language	3, 4, or 5	Elementary German	GERM 1411,1412	8
Government & US Politics	3, 4, or 5	Federal Government	<a href="#">GOVT 2305</a>	3
History - US	3, 4, or 5	US History to 1865	<a href="#">HIST 1301</a>	3
History - US	3, 4, or 5	US History from 1865	<a href="#">HIST 1302</a>	3
Statistics	3,4, or 5	Elementary Statistics	<a href="#">MATH 1342</a>	3
Calculus AB*	3, 4, or 5	Calculus I	<a href="#">MATH 2413</a>	4
Calculus BC	3, 4, or 5	Calculus I & II	<a href="#">MATH 2413</a> & <a href="#">MATH 2414</a>	8
Music Theory	3, 4, or 5	Music Theory I & II	<a href="#">MUSI 1311</a> , <a href="#">1312</a>	6
Psychology	3, 4, or 5	General Psychology	<a href="#">PSYC 2301</a>	3

**NCTC Credit for AP Examination**

<b>AP Exam</b>	<b>Score</b>	<b>NCTC Course Name</b>	<b>Course Number</b>	<b>Credit Hours</b>
Spanish Lang	3, 4, or 5	Elementary Spanish I & II	<a href="#">SPAN 1411,1412</a>	8
Physics 1	4 or 5	College Physics I	<a href="#">PHYS 1401</a>	4
Physics 2	4 or 5	College Physics II	<a href="#">PHYS 1402</a>	4
Physics C: Mechanics	4 or 5	University Physics I	<a href="#">PHYS 2425</a>	4
Physics C: Electricity & Magnetism	4 or 5	University Physics II	<a href="#">PHYS 2426</a>	4

*\*or Calculus AB subscore of 3, 4, or 5 from the Calculus BC exam*

**NCTC Credit CLEP Examination**

<b>CLEP Exam</b>	<b>NCTC Required Score</b>	<b>Credit Granted</b>	<b>Equivalent Score</b>
American Literature	50	6	<a href="#">ENGL 2327,2328</a>
College Composition Modular	50	3	<a href="#">ENGL 1301</a>
English Literature	50	6	<a href="#">ENGL 2322,2323</a>
College Algebra	50	3	<a href="#">MATH 1314</a>
Biology	50	4	<a href="#">BIOL 1408</a>
Chemistry	50	4	<a href="#">CHEM 1411</a>
Calculus	50	4	<a href="#">MATH 2413</a>
College Mathematics	50	3	<a href="#">MATH 1332</a>
Precalculus	50	4	<a href="#">MATH 2412</a>
<b>Foreign Languages</b>			
French, Level I	50	8	<a href="#">FREN 1411,1412</a>
French, Level II	59	14	<a href="#">FREN 1411,1412,2311,2312</a>
German, Level I	50	8	GERM 1411,1412
German, Level II	60	14	GERM 1411,1412,2311,2312
Spanish, Level I	50	8	<a href="#">SPAN 1411,1412</a>
Spanish, Level II	63	14	<a href="#">SPAN 1411,1412,2311,2312</a>
<b>History &amp; Social Sciences</b>			
History of US to 1877	50	3	<a href="#">HIST 1301</a>

<b>NCTC Credit CLEP Examination</b>			
<b>CLEP Exam</b>	<b>NCTC Required Score</b>	<b>Credit Granted</b>	<b>Equivalent Score</b>
History of US from 1877	50	3	<a href="#">HIST 1302</a>
Lifespan Growth & Development	50	3	<a href="#">PSYC 2314</a>
Macroeconomics, Principles of	50	3	<a href="#">ECON 2301</a>
Microeconomics, Principles of	50	3	<a href="#">ECON 2302</a>
Psychology, General	50	3	<a href="#">PSYC 2301</a>
Sociology, Introduction	50	3	<a href="#">SOCL 1301</a>
Western Civilization I	50	3	<a href="#">HIST 2321</a>
Western Civilization II	50	3	<a href="#">HIST 2322</a>

**Business**

Info Systems & Comp Applications	50	3	<a href="#">BCIS 1305</a>
Management, Principles of	50	3	<a href="#">BMGT 1327</a>
Marketing, Principles of	50	3	<a href="#">MRKG 1311</a>

**NCTC Credit for IBD Examination**

<b>IB Examination</b>	<b>Score</b>	<b>NCTC Course</b>	<b>Credit Hours</b>
BIOLOGY (SL)	4, 5, 6 or 7	No credit given at this time, pending further consideration	0
BIOLOGY (HL)	4, 5, 6 or 7	No credit given at this time, pending further consideration	0
BUSINESS & MANAGEMENT	4, 5, 6 or 7	<a href="#">BMGT 1327</a>	3
CHEMISTRY (SL)	4, 5, 6 or 7	<a href="#">CHEM 1411</a>	4
CHEMISTRY (HL)	4, 5, 6 or 7	<a href="#">CHEM 1411</a> & <a href="#">1412</a>	8
COMPUTER SCIENCE	4, 5, 6 or 7	<a href="#">BCIS 1305</a>	3

**NCTC Credit for IBD Examination**

<b>IB Examination</b>	<b>Score</b>	<b>NCTC Course</b>	<b>Credit Hours</b>
ECONOMICS (SL)	4, 5, 6 or 7	<a href="#">ECON 2301</a> & <a href="#">2302</a>	6
ECONOMICS (HL)	4, 5, 6 or 7	<a href="#">ECON 2301</a> & <a href="#">2302</a>	6
ENGLISH (SL)			
Language A1 or A2	4, 5, 6 or 7	<a href="#">ENGL 1301</a> & <a href="#">1302</a>	6
ENGLISH (HL)			
Language A1 or A2	4, 5, 6 or 7	<a href="#">ENGL 1301</a> & <a href="#">1302</a>	6
HISTORY OF THE AMERICAS (HL)	4, 5, 6 or 7	<a href="#">HIST 1301</a> & <a href="#">1302</a>	6
MATHEMATICS (HL)			
Mathematics (HL)	4, 5, 6 or 7	<a href="#">MATH 1314</a> & <a href="#">1316</a>	6
Mathematics with Further Mathematics	4, 5, 6 or 7	<a href="#">MATH 1314</a> , <a href="#">1316</a> & <a href="#">1342</a>	9
Mathematical Methods	4, 5, 6 or 7	<a href="#">MATH 2413</a>	4
Mathematical Studies	4, 5, 6 or 7	<a href="#">MATH 1324</a>	3
MODERN LANGUAGES			
Language A1 or A2 (SL)			
French	4, 5, 6 or 7	<a href="#">FREN 1411</a> & <a href="#">1412</a>	8
German	4, 5, 6 or 7	No credit given at this time.	0
Portuguese	4, 5, 6 or 7	No credit given at this time.	0
Russian	4, 5, 6 or 7	No credit given at this time.	0
Spanish	4, 5, 6 or 7	<a href="#">SPAN 1411</a> & <a href="#">1412</a>	8
Language A1 or A2 (HL)			
French	4, 5, 6 or 7	<a href="#">FREN 1411</a> , <a href="#">1412</a> , <a href="#">2311</a> & <a href="#">2312</a>	14
German	4, 5, 6 or 7	No credit given at this time.	0
Portuguese	4, 5, 6 or 7	No credit given at this time.	0
Russian	4, 5, 6 or 7	No credit given at this time.	0
Spanish	4, 5, 6 or 7	<a href="#">SPAN 1411</a> , <a href="#">1412</a> , <a href="#">2311</a> & <a href="#">2312</a>	14
Language B (SL)			



**NCTC Credit for IBD Examination**

<b>IB Examination</b>	<b>Score</b>	<b>NCTC Course</b>	<b>Credit Hours</b>
French	4, 5, 6 or 7	<a href="#">FREN 1411</a> & <a href="#">1412</a>	8
German	5, 6 or 7	No credit given at this time.	0
Portuguese	4, 5, 6 or 7	No credit given at this time.	0
Russian	4, 5, 6 or 7	No credit given at this time.	0
Spanish Language B (HL)	4, 5, 6 or 7	<a href="#">SPAN 1411</a> & <a href="#">1412</a>	8
French	4, 5, 6 or 7	<a href="#">FREN 1411,1412, 2311</a> & <a href="#">2312</a>	14
German	4, 5, 6 or 7	No credit given at this time.	0
Portuguese	4, 5, 6 or 7	No credit given at this time.	0
Spanish	4, 5, 6 or 7	No credit given at this time.	0
Language AB Initio			
French	4, 5, 6 or 7	<a href="#">FREN 1411</a>	4
German	4, 5, 6 or 7	No credit given at this time.	0
Portuguese	4, 5, 6 or 7	No credit given at this time.	0
Russian	4, 5, 6 or 7	No credit given at this time.	0
Spanish	4, 5, 6 or 7	<a href="#">SPAN 1411</a>	4
MUSIC	4, 5, 6 or 7	<a href="#">MUSI 1306</a> & 1311	6
PHILOSOPHY	4, 5, 6 or 7	<a href="#">PHIL 1301</a>	3
PHYSICS (SL)	4, 5, 6 or 7	<a href="#">PHYS 1401</a>	4
PHYSICS (HL)	4, 5, 6 or 7	<a href="#">PHYS 1401</a> & <a href="#">1402</a>	8
PSYCHOLOGY	4, 5, 6 or 7	<a href="#">PSYC 2301</a>	3
SOCIAL & CULTURAL ANTHROPOLOGY	4, 5, 6 or 7	<a href="#">ANTH 2351</a>	3
THEATRE ARTS	4, 5, 6 or 7	<a href="#">DRAM 1310</a>	3
VISUAL ARTS	4, 5, 6 or 7	<a href="#">ARTS 1301</a>	3

## **International Baccalaureate Diploma**

The International Baccalaureate Diploma is an international program of courses and exams offered at the high school level. In keeping with Senate Bill 111 passed in 2005, NCTC will grant (CR) credit for IB exams with certain required scores beginning Fall of 2006.

Texas institutions of higher education must award 24 hours of course specific college credit in subject appropriate areas on all IB exams scores of 4 or above as long as the incoming freshmen have earned an IB diploma. However, course credit does not have to be awarded on any IB exams where the score received is a 3 or less. This may mean that such students will not receive 24 hours of college credit, even if they have an IB diploma.

Students must submit an official transcript of IBD test results to the Office of the Registrar at least two weeks prior to the first day of classes for transcript evaluation and advising. The student will be notified by the designated admissions officer of specific course credit for which the student is eligible upon completion of the IBD transcript evaluation. All IB students must show proof of meeting the Texas Success Initiative (TSI) requirements prior to their initial enrollment at North Central Texas College.

NCTC will not award a diploma based solely upon the number of IBD credits transferred in toward a degree requirement. NCTC and SACS (Southern Association of Colleges and Schools/Commission on Colleges) policies require students to take 25% of credit hours through NCTC instruction for graduation purposes.

Students bringing in an IB transcript for credit evaluation should consider the total number of qualifying credits to be awarded. Additional hours above the required amount to graduate may have an adverse impact on students' financial aid or other grant programs. In addition, no Texas public university or college shall be required to accept in transfer or toward a degree program more than sixty-six (66) semester credit hours of lower division academic credit.

## **Texas Success Initiative (TSI)**

The Texas Education Code, Section 51.403(e), authorizes the Texas Higher Education Coordinating Board to establish guidelines and reporting requirements. The purpose of Chapter 4, Subchapter C, is to implement the Texas Success Initiative for Texas public institutions of higher education. This includes assessing the academic skills of each entering undergraduate student prior to enrollment.

It is the intent of the Texas Higher Education Coordinating Board that Texas public institutions of higher education use the flexibility and responsibility granted under these rules to improve individualized programs to ensure the success of students in higher education.

The following students are exempt from TSI:

- Students who have graduated with an Associate's degree or higher from an accredited institution within the U.S.
- Students who earned a degree outside the U.S. must submit transcripts accompanied by a general evaluation completed by an accredited service. The evaluation must verify their degree to be the equivalent of an associate degree or higher earned at an accredited institution within the U.S. A list of accredited evaluation services may be found at [www.naces.org/members.htm](http://www.naces.org/members.htm)
- Any student wishing to enroll in a certificate program. Level I certificates are programs of one year or less that require at least 15 but no more than 42 semester credit hours.
- Students who are serving on active duty as a member of the U.S. armed forces, or serve as a member of a reserve component of the U.S. armed forces, or National Guard for at least three years preceding enrollment. All TSI rules apply when the student is discharged from the military.
- Students who were honorably discharged, released or retired from active duty as a member of the U.S. armed forces, the Texas National Guard, on or after August 1, 1990.
- Students who transfer from private or out-of-state institutions may use transferred courses for which college credit is earned in the areas of Reading, Mathematics, and Writing. List of equivalent NCTC courses are listed in the Transfer section.
- Students with the following scores: (Partial Exemptions available on tests taken on or after April 2004)

**ACT** - Composite score of 23; at least 19 on both English and/or Math portions. Note that scores must have been earned in one sitting within the past five years.

**SAT** - New SAT: 530 on Math and 480 on EBRW (Evidenced Based Reading and Writing), no composite score. Old SAT: composite score of 1070 and at least 500 on Critical Reading and/or 500 on Math for tests taken after April 1995. Note that scores must have been earned in one sitting. Other scores apply to SAT tests taken before April 1995.

**TAKS** - For a period of five (5) years from the date of testing, a student who is tested and performs at or above the following standards of the Eleventh grade Texas Assessment of Knowledge and Skills (TAKS) may be exempted for the corresponding section: minimum scale score of 2200 on the mathematics section, minimum scale score of 2200 on the English Language Arts section with a writing subsection score of 3.

**STAAR** End-Of-Course (EOC): (End of Course Exam) English III - taken during

11<sup>th</sup> grade year, score of 2000 on Reading and 2000 on Writing, or 4000 if score is combined; EOC Algebra II - taken during 11<sup>th</sup> grade year, scores of 4000.

*\* These rules are subject to change by the Texas Legislature.*

An accepted TSI placement test is also required of all dual credit/early admission students from area high schools unless they are exempt.

## Minimum Passing Standards

The following minimum passing standards shall be used by NCTC to determine a student's readiness to enroll in freshman-level academic coursework. The following assessments may be used for TSI purposes when on an official college transcript from a Texas public institution with coursework prior to Fall 2013:

### ASSET

- Reading Skills - 41
- College Algebra - 46
- Writing Skills (objective) - 40
- Written Essay - 6.

### COMPASS

- Reading Skills - 81
- Algebra - 60
- Writing Skills (objective) - 59 if Essay score 5 or higher
- Written Essay - 6.

### ACCUPLACER

- Reading Comprehension - 78
- Elementary Algebra - 64
- Sentence Skills- 80
- Written Essay - 6.

### THEA

- Reading - 230
- Mathematics - 270
- Writing - 220.

The minimum passing standard for the written essay portion of ASSET, COMPASS, ACCUPLACER, or THEA is a score of 6. However, an essay with a score of 5 will meet this standard if the student meets the objective writing test standard.

### **TSI Assessment\***

- Mathematics - 350
- Reading - 351
- Multiple Choice score of 340 with an essay of 4 or Multiple Choice of 339 or lower with an Essay of 5

*\* Statewide placement test-scores subject to change per the Texas Higher Education Coordinating Board.*

It is important to note that alternative test scores (ASSET, COMPASS, THEA and ACCUPLACER) will not be used by NCTC unless the scores are submitted on an official in-state transcript. The TSI Assessment must be submitted on an official transcript or in a sealed envelope from the institution's testing facility. Students who do not meet minimum passing standards for any section of the TSI Assessment or other alternative test will be required to enroll in remediation for that area.

Students are required to enroll in at least one area of remediation each semester until all remediation has been completed. Regular and punctual attendance is expected of all students in all developmental classes for which they have registered. There are no excused absences. After one week of absenteeism, a student may be warned by the College Prep instructor. After two weeks of absenteeism, a student will receive a final warning regarding attendance from the College Prep instructor. After missing a third week of class, a student may be dropped from his/her College Preparatory class. If a student is dropped from a required College Preparatory class twice for non-attendance, a hold will be placed on the student's record so that the student cannot enroll in any other courses except the required remediation.

Students must complete all required courses in a College Preparatory area with a "C or better" before proceeding to college-level course work in that area. For example, if a student's scores place them in Beginning Algebra, that student must be continuously enrolled in a College Preparatory math course each semester until the College Preparatory sequence in math is completed. However, students may choose to enroll in more than one College Preparatory area each semester.

**NOTE:** It is strongly encouraged that students who fail the Reading section of any test begin by enrolling in College Preparatory Reading courses.

If students so choose, they may retest at any point during the semester for which they are enrolled, in order to place out of their current level of remediation. They will then be eligible to proceed to the next level of course work the following semester in the areas for which they receive a higher score. Students interested in retesting either before or during the semester should contact the Counseling and Testing Office at their campus to schedule a retest.

# Transfer Students

Students who have completed coursework with a "C" or better in the following subject areas from an accredited institution, meeting NCTC's transfer work requirements, will be partially or completely exempt from placement/TSI Assessment testing.

## Writing

[ENGL 1301](#) Composition I

[ENGL 1302](#) Composition II

Any sophomore-level [Literature](#)

## Reading

[ENGL 1301](#) Composition I

[ENGL 1302](#) Composition II

[HIST 1301](#) US History to 1865

[HIST 1302](#) US History from 1865

[HIST 12301](#) Texas History

Any sophomore-level [Literature](#)

[PSYC 2301](#) General Psychology

[PSYC 2314](#) Lifespan Growth & Development

[GOVT 2306](#) Texas Government

[GOVT 2305](#) Federal Government

[PHIL 1301](#) Introduction to Philosophy

[PHIL 2303](#) Introduction to Logic

[PHIL 2306](#) Introduction to Ethics

[SOC 1301](#) Introduction to Sociology

[SOC 1306](#) Contemporary Social Problems

## Math

[MATH 1314](#) College Algebra

[MATH 1316](#) Plane Trigonometry

[MATH 1324](#) Mathematics for Business & Social Sciences

[MATH 1325](#) Calculus for Business & Social Sciences

[MATH 1332](#) Contemporary Mathematics I

[MATH 1342](#) Elementary Statistics

[MATH 2412](#) Pre-Calculus (or any sophomore-level [Calculus](#) course)

# Placement Testing

The NCTC Office of Testing Services offers the statewide TSI Assessment test for those students who are not TSI exempt and are required to have placement testing. An appointment to take the TSI Assessment must be made by contacting the Office of Testing Services at your preferred campus. An application to NCTC must be on file as well as completion of the required Pre-Assessment Activity (PAA) prior to scheduling the TSI Assessment at NCTC. Current TSI Assessment testing fees are \$25 for all sections, or \$10 per section. The statewide TSI Assessment is computer based, not timed, and results will be available immediately upon completion of all required sections.

Students who do not pass/meet minimum standards/passing scores in one or more sections of the TSI Assessment test will be prohibited from enrolling in the following courses:

**READING**, passing score required to enroll in [ENGL 1301](#), [ENGL 1302](#), [HIST 1301](#), [HIST 1302](#), [HIST 2301](#), [GOVT 2305](#), [GOVT 2306](#), [PHIL 1301](#), [PHIL 2303](#), [PHIL 2306](#), [PSYC 2301](#), [PSYC 2314](#), [SOC 1301](#), [SOC 1306](#), and any sophomore level Literature course.

**WRITING**, passing score required to enroll in [ENGL 1301](#), [ENGL 1302](#), or any sophomore level Literature course.

**MATH**, NCTC minimum passing score required to enroll in ANY eligible college-level Math.

Additionally, any student who is already TSI Complete/College Ready in Math based on exemptions, completion of coursework, or placement test scores is eligible to take the Accuplacer College Math Test (CMT) at any of our NCTC Testing Centers on an appointment basis (testing fees may apply). Students who are TSI Complete/College Ready in Math may take the Accuplacer College Math Test to determine if they can proceed directly into one or more of the courses listed below, and therefore be exempted from a pre-requisite. The ACT and SAT Math scores outlined below may also exempt students from pre-requisite coursework for the specified courses.

With an ACT Math score of 28 or higher, an SAT Math score of 640 or higher, or an Accuplacer College Math Test score of 80 or higher, Math TSI Complete/College Ready students can enroll directly into:

- [CHEM 1411](#) General Chemistry I
- [MATH 1316](#) Trigonometry
- [MATH 1325](#) Business Calculus
- [MATH 2412](#) Pre-Calculus

With an Accuplacer College Math Test score of 96 or higher, Math TSI Complete/College Ready students can enroll directly into:

- [MATH 2413](#) Calculus I
- [PHYS 1401](#) General Physics I

- [PHYS 2425](#) University/Engineering Physics I *with concurrent enrollment in* [MATH 2413](#)

Students meeting one or more of the above listed exemptions must meet with an advisor in order to enroll in any of these courses; ACT, SAT, or Accuplacer College Math Test scores must be on file with the NCTC Admissions Office for advisors to verify eligibility and assist with enrollment. Students who have taken the Accuplacer College Math Test at another institution must submit their scores either on an official transcript or in a sealed envelope.



# Tuition & Fees

Just as providing easy access to quality education for all who desire it is a primary commitment of North Central Texas College, so is providing quality education at a reasonable cost. The following information will help students calculate their expenses at NCTC on a per-semester basis.

Students should read this information carefully and thoroughly to assure that they will be able to come up with a fairly accurate estimate of expenses. Students also should keep in mind that this amount will be an estimate, since there is no way to accurately forecast for each individual student such personal expenditures as those for entertainment, transportation, clothing, etc. Also, as will be explained below, some other expenses such as those for books and supplies, board, etc., will vary from student to student.

**Note:** It is the responsibility of the student to complete the steps necessary to drop classes. Any financial obligation that results is also the responsibility of the student.

# Books & Supplies

These costs of books and supplies depend entirely upon the specific courses a student takes. Book and material costs vary widely from course to course; some are relatively inexpensive and some are not. Nursing students, for example, will pay higher prices for their highly technical books and related supplies, such as clinical uniforms, than a student taking mostly academic transfer courses such as English and History.

Students needing an accurate estimate of book costs, based on the specific courses they will take, should contact the Bookstore on their campus. For some courses, an additional fee for specialized books and/or course materials may be automatically charged to a student's account.

**NOTE:** NCTC bookstores are operated by Follett Higher Education Group. All campuses (Gainesville, Corinth, Flower Mound, Bowie and Graham) are serviced online by the eFollett.com virtual store site. On-site bookstores are located on the Gainesville, Corinth and Flower Mound campuses. Please check the NCTC website at [www.nctc.edu](http://www.nctc.edu) and [www.efollett.com](http://www.efollett.com) for hours of operation and other pertinent information.

"A student of this institution is not under any obligation to purchase a textbook from a university-affiliated bookstore. The same textbook may also be available from an independent retailer, including an online retailer." —Texas Education Code Sec.51.9705

# Expense Categories

Basically, the cost of attending North Central Texas College for a regular long semester (Fall or Spring) is the sum of expenses in four categories:

1. Tuition
2. Fees
3. Books and supplies
4. Room and board.

## Credit Hour Tuition

The tuition charged for a course is based on two things:

1. The total number of credit hours for which you're enrolled
2. Your permanent, legal place of residence.

When a student registers for a course, that course will be worth a certain number of hours of college credit for a semester. Most courses at NCTC are worth three (3) hours of credit, however, there are courses that are worth one (1) credit hour all the way up to six (6) or more hours of credit for any given semester. A student can tell how many hours of credit a particular course is worth by looking at the course identification number.

The second digit in this four-digit number gives the semester-credit-hour value of the course. For example, the English course [ENGL 1301](#) is worth three (3) hours of credit, and the French course [FREN 1411](#) is worth four (4) hours of credit. So, if a student registers for four three-hour courses and one four-hour course, he or she will be enrolled for a total of sixteen (16) semester credit hours.

Tuition, then, would be figured by multiplying the number of credit hours for which a student is enrolled times a tuition rate which is determined according to the student's place of residence.

## Place of Residence

NCTC is a public institution that draws a portion of its funding from the State of Texas. Therefore, tuition rates will be higher if a student's permanent legal residence is not in Texas.

This means a student's tuition rate will depend upon one of the following three categories:

- **In-District** : Residents of Cooke County and Graham ISD.
- **In-State**: Residents of all Texas counties except Cooke, and residents of Oklahoma counties contiguous with Cooke who, due to a reciprocal agreement, pay the same tuition rate as Texas residents.

- **Out-of-State** : In addition to residents of states other than Texas, this also includes "international students"- citizens of any country other than the United States.

## Notice

Students will not be considered officially registered until all tuition and fees required by the College have been paid in full or students have entered into an official payment plan with NCTC. These are payable in advance (at registration) at the beginning of each semester.

Students who are participating in one of the various financial aid programs should take special note of deadlines for application and submission of required materials. Lateness in making application and/or submitting all required information may require such students to pay tuition and fees personally at the time of registration, and they should be prepared to bear these expenses until their awards can be processed. Refer to the separate section in this catalog on [Student Financial Aid](#).

## Refund Schedule

For students who drop or withdraw from courses, NCTC will refund tuition and mandatory fees collected according to the following schedule. For faster access to funds, students are encouraged to use our Direct Deposit to MyNCTC debit cards. Note that for courses which meet on a regular schedule (i.e., specified days and times throughout a fall/spring semester or summer session), the term *class days* refers to the number of calendar days NCTC normally meets for classes, **not** the days a particular course meets. For *flexible entry* courses and others which meet on an unusual or irregular schedule, NCTC will exercise professional judgement in defining the term *class days* for refund purposes.

Please note also that percentages given in the schedule are to be applied to the tuition and mandatory fees collected for each course from which the student is withdrawing. Also, note that some fees are non-refundable and will not be calculated in these percentage refunds.

## Regular Fall & Spring Credit Classes

A 100% refund will be made for courses dropped prior to the first class day of a semester.

Otherwise:

- During the first 15 class days — 70% Refund
- During 16th-20th class days — 25% Refund
- After 20th class day — No Refund

## Regular Summer Sessions

A 100% refund will be made for courses dropped prior to the first class day.

Otherwise:

- During the first 5 class days — 70% Refund
- During 6th class day — 25% Refund
- After 6th class day — No Refund

**Note:** It is the responsibility of the student to complete the steps necessary to drop classes. Any financial obligation that results is also the responsibility of the student.

## CEU Option Courses

A 100% refund will be given for courses if request to drop is in writing seven business days prior to first day of class.

**NOTE:** North Central Texas College reserves the right to establish separate withdrawal refund schedules for any fees classified as *optional*. NCTC will refund tuition and fees paid by a sponsor, donor or scholarship to the source rather than directly to the student who has withdrawn if the funds were made available through the College.

Any student who withdraws from the College after registration must notify the office of Adult & Continuing Education. No transcript for work done will be given a student whose library, financial or other obligations to the College have not been cleared. Students dropped from classes for excessive absences by an official of the College are not entitled to a refund after the refund dates.

## Flexible Entry & Non-Semester Length Courses

A 100 percent refund will be made for courses dropped prior to the first class day. Otherwise, refunds will be made as follows (It is the responsibility of the student to complete the steps necessary to drop classes. Any financial obligation that results is also the responsibility of the student.):

<b>Length of Class Term in Weeks</b>	<b>Last Day for 70% Refund</b>	<b>Last Day for 25% Refund</b>
2 or less	2	-
3	3	4
4	4	5
5	5	6
6	5	7
7	7	9
8	8	10
9	9	11
10	9	12
11	10	14
12	12	15
13	13	16
14	13	17
15	14	19
16 or longer	15	20

## Military Withdrawal

If a student withdraws from NCTC because he/she is called into active military service, the College will-at the student's option:

1. Refund the tuition and fees paid by the student for the semester in which the student withdraws;
2. Grant a student (who is eligible under applicable college guidelines) an incomplete grade in all courses by designating "withdrawn-military" on the student's transcript; or
3. As determined by the instructor, assign an appropriate final grade or credit to a student who has satisfactorily completed a substantial amount of course work and who has demonstrated sufficient mastery of the course material.

## Return of Title IV Aid

Federal Title IV financial aid recipients who completely withdraw from classes during any semester of attendance at NCTC will be subject to a return of Title IV aid if the withdrawal occurs before 60% of the semester has been completed. All students who owe Federal and/or NCTC funds will not be allowed to re-enroll at NCTC until the funds have been repaid. Please contact the Office of Financial Aid for more information regarding this federal requirement.

## Pay Tuition & Fees

### Pay in Full or Make Payment Arrangement Online

Students can select from the following payment options:

- Flexible Payment Plan with down payment and 1, 2, or 3 monthly payments.
- Pay in full

More information can be found by contacting the NCTC Business Office at any campus.

**Gainesville:** (940) 668-4200

**Corinth:** (940) 498-6255

**Flower Mound:** (972) 899-8403

**Bowie:** (940) 872-4002

**Graham:** (940) 521-0720

Students can also get all the details of their student account by accessing their MyNCTC account online. Just log into MyNCTC and then select the *Student Services* tab, and finally select the *Financial* option on the left.

**The student is responsible for any financial obligation that results from adding or dropping classes at NCTC.**

**NOTE:** You may incur a nominal, non-refundable enrollment fee of \$30.00 (per semester) if you choose to pay your tuition and fees in installments. There is no additional charge to pay in full.

# Tuition & Fee Costs

Generally, the cost of enrolling at North Central Texas College for a regular long semester (Fall or Spring) will be the sum of four expense categories.

1. Tuition
2. Fees
3. Books & Supplies
4. Personal Living Expenses, including Transportation and Room/Board. No attempt is made to estimate this category of expense because it varies so widely among individual students.

*\* Determination of a student's legal residence for purposes of establishing the appropriate tuition rates is made at the North Central Texas College Admission/Registrar Office. Questions or disputes regarding interpretation of these guidelines should be directed to this office. For additional information on rules and regulations determining residence status, visit [www.collegefortexans.com](http://www.collegefortexans.com) or the Texas Higher Education Coordinating Board Web site [www.theccb.state.tx.us](http://www.theccb.state.tx.us).*

**Important:** NCTC is a state-supported institution subject to state laws. Credit is extended for expenses owed to the college only under limited circumstances. All tuition, fees, dorm rent, and other elements of expense for attending NCTC are subject to change by the NCTC Board of Trustees.

## Correction of Errors

Students are responsible for any additional amount due NCTC resulting from auditing and correction of records after registration fees have been paid - including all registration assessment errors, invalid third-party agreements, and failure to prove residence status.

## Payment Requirement

All tuition and fees are due the day you register and must be paid in full to complete the registration process. Any accounts unpaid may result in the cancellation of a student's registration and a requirement that the student re-register for classes. A Reinstatement Fee may be charged when a student re-enrolls. Payment for any additional tuition and fees resulting from schedule revisions or class adds/drops is due at the time a change is made. Students will NOT be allowed to register after the last day of the add/drop period. It is the responsibility of the student to complete the steps necessary to drop classes. Any financial obligation that results is also the responsibility of the student.

No matter how students sign up for their classes, most NCTC students can pay their tuition/fees online. This means students can:

- Avoid the possibility of long lines and delays,
- Pay at their convenience on weekends and after regular hours,
- Pay in installments, and
- Pay with credit card or bank draft.

In order to access student accounts, go to [www.nctc.edu](http://www.nctc.edu), click on MyNCTC. Login using a valid Student ID and pin number. Select the *Student Services* tab at the top and then click on the *Financial* option on the left.

## Installment Plan Payments

To be eligible for installment plan payments a student cannot have a financial aid hold nor may a student be on probation or suspension by the college.

## Tuition Fees

Tuition at North Central Texas College is based on a student's permanent legal place of residence (Texas Education Code 54.008). The three residency classifications are:

1. In-District Resident (Cooke County or Graham ISD).
2. In-State\*
3. Out-of-State Resident (including foreign countries).

Students must complete a Residency Questionnaire Form and may also be required to furnish documentary proof, such as a valid Texas Driver's License, to prove resident status.

*\* In-State rate applies to residents of all Texas counties (except Cooke) and residents of Oklahoma counties contiguous with Cooke who, due to a reciprocal agreement, pay the same tuition rate as Texas residents.*

Fees charged at registration, in addition to tuition (Education Code 54.051), consist of a General Use Fee of \$30.00 per semester hour (Education Code 130.084), an Out of District Service Fee\* (Education Code 130.084) and Laboratory Fees (Education Code 54.501) when applicable.

*\* An Out of District Service Fee is assessed of all college students who are not residents of Cooke County.*



## Tuition Rates Per Semester Hour

	In-District	In-District Branch Campus (Graham ISD)	In-State	Out-of-State (except some Oklahoma)
Tuition	\$57.00	\$57.00	\$105.00	\$196.00
General Use Fee	\$34.00	\$34.00	\$34.00	\$34.00
Out of District Service Fee	N/A	\$10.00	\$22.00	\$36.00
Total per Semester Hour*	\$91.00	\$101.00	\$161.00	\$266.00

*\*Exclusive of Laboratory Fee and other costs*

The student is responsible for any financial obligation that results from adding or dropping classes at NCTC.

NCTC adheres to the state of Texas policy when refunding tuition and fees.

## Dual Credit

Dual Credit students attending high school in the College's service area of Cooke, Denton, and Montague counties and Graham ISD will be charged at a reduced rate.

## Three Peat

An additional \$60.00 per semester credit hour tuition will be charged to anyone taking a course more than two times at North Central Texas College.

The Texas Higher Education Coordinating Board (THECB) does not permit institutions to submit for formula funding any hours for a course that the student previously attempted for two or more times at the same institution, therefore this loss of revenue will be passed on to the user.

## Tuition for CEU Enrollment Option

Students may opt to enroll in selected semester-credit-hour courses for Continuing Education Unit (CEU) rather than for conventional semester-hour credit. Tuition for these CEU courses is \$81 per credit hour.

1 semester hour class — \$81

2 semester hour class — \$162

3 semester hour class — \$243

4 semester hour class — \$324

**NOTE:** Lab fees are charged in addition to rates above. All other deposits and fees are not applicable.

## Laboratory Fee

Certain types of courses require that you sign up for both a lecture class and a related laboratory class that covers incidental costs for actual hands-on skills training, practice, experiments and practical application of what you learn in lecture. Many of these lab classes involve the use of special facilities, expensive equipment, costly materials, supplies, etc., and so for this reason, you may be charged an extra lab fee (not to exceed \$24 per course) to help cover such costs. Lab fees for each class will be listed in the Schedule of Classes printed each semester.

## Other Fees

### Individualized Instruction Fee

Special fees are charged for certain specific courses as listed below:

Applied Lessons in Music (1 semester hour) — \$75.00

Applied Lessons in Music (2 semester hours) — \$150.00

Health Science and Nursing courses may require additional fees-payable at registration-for malpractice insurance, specialized books, assessment tests and other unusual expenses. Other courses such as bowling, horticulture and artificial insemination will require additional fees to be paid to the facilities in which the instruction is conducted.

### Returned Payment Fee

A \$20.00 charge will be assessed for any returned check/payment.

## **Reinstatement Fee**

A \$50.00 fee may be assessed for students who re-enroll in courses after having their registration canceled for non-activity. This is a non-refundable fee and will be assessed each time the student re-enrolls.

## **Virtual College of Texas**

Virtual College of Texas is a consortium of community colleges that supplies and/or hosts online instruction in which students from participating colleges may enroll by paying tuition to the host college for the course and having credit for that course granted by the host college and applied to the student's transcript. NCTC participates in the Virtual College of Texas as a host college and enrolls students only in courses that are not available through NCTC.

# Student Services

The term *Student Services* at North Central Texas College refers collectively to the various student-related support functions carried out by several offices on campus under the administrative direction of the Vice Chancellor of Student Affairs or the Provost. These include:

- Office of Admissions
- Office of the Registrar
- Office of Recruitment
- Office of Counseling & Advising Services
- Office of Testing Services
- Completion Center
- Office of the Dean of Student Affairs & Outreach
- International Student Services
- Office of Financial Aid
- Office for Students with Disabilities
- TRIO Student Support Services
- Veterans Services
- Career and Transfer Services
- On-Campus Student Housing
- On-Campus Student Dining
- Office of Student Life: Student Activities, Clubs & Organizations

In addition, the Office of the Vice Chancellor of Student Affairs handles matters related to student discipline.

Policies, procedures and regulations governing the conduct of students at North Central Texas College are outlined in the Student Handbook, which also contains general information related to student life at the College.

## TRiO Student Support Services

The TRIO Student Support Services program provides comprehensive, individualized services to students enrolled at all five NCTC campuses each academic year. The mission of the federally funded program is to increase the retention and graduation rates of eligible participants and to foster an institutional climate supportive of first generation, low income college students and students with disabilities. TRIO students receive the following services: one-on-one tutoring, academic advising, career counseling, financial aid information, cultural enrichment, personal counseling, and educational workshops geared to give students tools to succeed in college.

To obtain more information regarding TRIO services or to apply to the program, please contact:

**Nancy Zamora**

*Program Coordinator*

(940) 498-6214

[nzamora@nctc.edu](mailto:nzamora@nctc.edu)

**Camilia Dunn**

*Advisor/Coach - Corinth/Flower Mound Campuses*

(940) 498-6248

[cdunn@nctc.edu](mailto:cdunn@nctc.edu)

**Terrie Moss**

*Advisor/Coach - Bowie/Graham Campuses*

(940) 872-5227

[tmoss@nctc.edu](mailto:tmoss@nctc.edu)

**Scott Pulte**

*Advisor/Coach - Gainesville Campus*

(940)668-7731, ext. 4905

[spulte@nctc.edu](mailto:spulte@nctc.edu)

## Behavioral Intervention Services

The NCTC Behavioral Intervention Team or CARES (Campus Assessment Response Evaluation Services) Team addresses behavior which may be disruptive, harmful or pose a threat to the health and safety of the NCTC community-such as stalking, harassment, physical or emotional abuse, violent or threatening behavior, or self-harm. As a student, you have the ability to report concerning behavior which could impact your own safety or the safety of another NCTC student. Just click the NCTC CARES Team logo posted on MyNCTC, or complete the [CARES Reporting/Referral Form](#). If you feel there is an immediate threat to your own safety or welfare (or to another student), please call 911 immediately.

**CARES Team Corinth** (940) 498-6203 or (940) 498-6207

**CARES Team Flower Mound** (972) 899-8402

**CARES Team Bowie/Graham/Gainesville** (940) 668-4207

## Financial Aid

North Central Texas College administers a variety of programs for students who need assistance in financing their education. There are four basic financial aid programs available to students: grants, loans, work-study employment and scholarships. Each program is funded either through federal, state, institutional or local sources.

## Who Qualifies?

Except for most scholarship programs, eligibility for financial assistance at North Central Texas College is based almost exclusively upon demonstrated need. It is understood, however, that this need varies greatly from one individual to another. It is the student's responsibility to inform the College of the need for financial assistance and to provide the information necessary to establish the individual student's qualifications for such assistance. Financial Aid is not currently available through federal, state or NCTC resources for those students who enroll in non-credit or concurrent courses.

The following table is offered as an aid to students in comparing costs of attending North Central Texas College to personal financial resources. Although the prospective student should keep in mind that some figures are estimates, it is hoped that this information will be of assistance in determining relative financial need as it applies to the prospect of applying for financial aid at NCTC.

The costs outlined are based on enrollment for a regular academic year (Fall and Spring semesters) and a class load of 15 hours each semester.

	<b>In District</b>	<b>Out of District</b>
In-State Tuition & Fees*	\$2,550.00	\$3,960.00
Books & Supplies	\$2,100.00	\$2,100.00
Room & Board*	\$5,816.00	\$5,816.00
Transportation**	\$1,692.00	\$1,692.00
Personal	\$1,846.00	\$1,846.00
<b>TOTAL</b>	<b>\$14,004.00</b>	<b>\$15,414.00</b>

\**Out-of-state tuition & fees - \$7,500.00*

\*\**Room & Board, Transportation based on off-campus figures.*

Financial aid is available for most students who have demonstrated need, it is not awarded until after the student has made application. Again, it is the student's responsibility to inform the College of need and to supply information necessary to establish eligibility.

## Application & Eligibility

The NCTC Financial Aid Office encourages prospective college students to apply early for financial aid. FAFSA applications are available to complete as early as October 1 of each year. FAFSA applications may be completed online at [www.fafsa.gov](http://www.fafsa.gov). The NCTC school code is 003558.

Parents and students should be aware that FAFSA applications are free to all students. Be wary of scams that require payment for the submission of a FAFSA application. FAFSA applications are processed by the U. S. Department of Education. Students are notified by email and/or regular mail as to the status of their financial aid application.

Any additional documentation required to complete the financial aid process will be requested through the NCTC Financial Aid Office, also by email or regular mail. Eligibility for financial assistance is established by the data that students and parents input on their FAFSA application. All students who are eligible to receive Federal Financial Aid must be admitted to the college as regular degree-seeking students and show proof that they have graduated from an accredited high school or received a GED.

## **Application Deadlines**

Students must apply for financial aid each academic year. Federal application deadlines are October 1 of the prior year through June 30 of the following year. Priority deadlines may be set by each state or college. NCTC Financial Aid priority deadlines are as follows:

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

Students who do not meet these deadlines run the risk of paying out of pocket for tuition, fees, and books because of a late or incomplete financial aid application. Please note, to be considered complete, a FAFSA application must include any and all requested supporting documents as well as have been received and been processed no later than the priority deadlines mentioned above. Normal processing time for a FAFSA application is four to six weeks, beginning with the actual online submission to school file completion. Late or incomplete financial aid applications will be accepted and processed past the semester priority deadlines, but students must make arrangements to pay for the semester prior to school starting or at the time of actual registration.

## **Financial Aid Late Awards**

Late awards will be processed and disbursed during the appropriate semester for students whose FAFSA applications are incomplete or late. Students whose applications are completed after semester exams will receive their awards and disbursements during the next semester and after attendance has been verified. Financial Aid disbursements are based on student attendance as of the term census date.

## **Summer Awards**

Financial aid for summer classes is generally limited to students with remaining grant or loan eligibility and available need-based work study employment. NCTC considers the summer semester as part of the preceding award year and all summer sessions are considered as one semester for determining enrollment status, grant and loan eligibility.

## Financial Aid Distribution

Financial aid is distributed to eligible applicants on a first come first serve basis. Awards may include a combination of federal and state aid depending on the financial needs of the student and the availability of funds.

Award amounts must be accepted by the student by going online to the MyNCTC student portal. Financial aid grant and loan awards will be applied toward the amounts owed for tuition, fees, and books. If a balance due remains, students will be responsible for making payment at the NCTC Business Office before classes begin. Credit balance amounts will be disbursed to the student within the first thirty (30) days of class. First time students who are first time loan borrowers must wait thirty (30) days for their first loan disbursement. Refunds are disbursed back to the student based on their "Student Refund Choice" made through the MyNCTC student portal.

## Satisfactory Academic Progress Policy

Financial aid recipients are required by law to maintain satisfactory academic progress as defined by the College. Non-compliance results in disqualification for further financial aid assistance. Copies of the minimum standards of progress necessary to maintain eligibility are available from the NCTC Financial Aid Office or [financialaid.nctc.edu](http://financialaid.nctc.edu)

Financial Aid Students must maintain Satisfactory Academic Progress towards an Associate's Degree or approved Certificate Program in order to receive Federal Title IV and/or State Financial Aid.

After each semester the academic records of all Financial Aid Students will be reviewed to determine if Satisfactory Academic Progress is being maintained. A student's entire academic record is reviewed including all credits earned at prior institutions even if Financial Aid was not used to earn these hours. All students, including transfer students, must submit transcripts from all prior colleges and have them evaluated by the end of the first semester of enrollment. Students without degree evaluations will not be eligible to receive aid for the following term. Title IV funds awarded are affected by this policy. The requirements for these standards are set by Federal regulations (34CFR 668.34).

### Good Standing

A financial aid student is in good standing when they have:

- Maintained at least a 2.0 cumulative grade point average (GPA) AND
- Completed 67% of all courses attempted AND
- Complete degree within the 150% time frame. (i.e. an associate degree of 60 credit hours must be completed within 90 credit hours.



Students entering the Suspension Appeal Process will be evaluated based on their Pace of Academic Progression. Pace of Academic Progression will be measured against the maximum time frame allowable to complete the student's degree or certificate program. If it is determined that a student's rate of academic progression is not attainable, they will be placed on an Academic Plan. Students on an Academic Plan will be required to make sufficient academic progress at the end of each payment period in order to maintain eligibility for Financial Aid.

## **Repeated Coursework**

The regulatory definition for full-time enrollment status for undergraduate students has been revised to allow a student to retake (one time only per previously passed course), any previously passed course. For this purpose, passed means any grade higher than an "F," regardless of any school or program policy requiring a higher qualitative grade or measure to have been considered to have passed the course. This retaken class may be counted towards a student's enrollment status and the student may be awarded Title IV aid for the enrollment status based on inclusion of the class.

## **Student Loan Repayment**

The NCTC Student Loan Default Policy states that students who are in default on a federal or state sponsored student loan will be placed on financial hold. Students on hold will not be allowed to enroll in classes or make requests for grades, transcripts, diplomas, certificates, etc. Persons wishing to override this policy are required to present written documentation from their servicer that they have entered into a satisfactory repayment plan. All transcripts, grades, and diplomas and/or certificates will be held until the default status is resolved.

## **Programs Available**

The chart below outlines the major financial aid programs available at North Central Texas College along with eligibility requirements and application procedures. Not all scholarship programs are listed, check with the Scholarship Office for information about other specialized scholarship programs.

## Summary of Student Financial Assistance Programs Available at North Central Texas College

Program	Description	Eligibility	Value	To Apply
Federal PELL Grant	Available to eligible students with an established need. (Grant program) Reserved for	Undergraduate & U.S. citizen or eligible non-citizen. Established financial need.	Up to \$5,920 per year paid	<ol style="list-style-type: none"> <li>1. Complete the FAFSA (Free Application for Federal Student Aid) online at: <a href="http://www.fafsa.gov">www.fafsa.gov</a></li> <li>2. Check with the NCTC Financial Aid Office upon receipt of your Student Aid Report from the Department of Education.</li> <li>3. Follow up with any other documentation that may be required.</li> </ol>
Federal Supplemental Educational Opportunity Grant (FSEOG)	EXCEPTIONAL financial need. Priority given to Pell recipients	Undergraduate & U.S. citizen enrolled at least half-time, with minimal family contributions.	Approximately \$400	
Federal College Work-Study Program	Part-time employment (up to 19 hours weekly) on campus, need-based.	Enrolled at least half-time, U.S. citizen or eligible non-citizen.	\$8/hr	
Direct Loans: Subsidized, Unsubsidized and PLUS	Federal Loan Program	Must be enrolled at least half-time and amount	\$1750 for Freshman <30hrs	Additional amounts available upon written request

<b>Program</b>	<b>Description</b>	<b>Eligibility</b>	<b>Value</b>	<b>To Apply</b>
		awarded must not be over Cost of Attendance.	\$2250 for Sophomore >30hrs	based on eligibility.
Mary Josephine Cox Scholarship	Scholarship does not require repayment.	Cooke County resident under age 21, enrolled full-time, cumulative 3.0 GPA and special competency in given field.	Tuition/fees only, maximum \$100 per semester (Fall/ Spring)	Students may complete an on-line scholarship application located on the college webpage at <a href="http://scholarships.nctc.edu">scholarships.nctc.edu</a> .
NCTC Foundation Scholarships	Donors have established these scholarships that do not require repayment.	Criteria for these scholarships are varied including academic achievement, certain residency, financial need, specific major, etc.	Average Scholarship \$600.	Scholarship applications are accepted twice a year between March 1 - April 15 and September 1 - October 15. Application deadlines are April 15 for the Summer & Fall semesters and October 15 for the Spring semester.
NCTC Foundation Dual Credit Scholarships	Scholarships do not require repayment.	Must be attending high school or residing in the college's service area. Preference given to underprivileged.	Cost of 1 class	Students who are new to NCTC will need to apply for admission before being able to complete a scholarship application.
"Best Seat in the House" Scholarships	Scholarships do not require repayment	Students majoring in the Performing & Visual Arts	Up to \$500	Contact the Performing & Visual Arts Department

<b>Program</b>	<b>Description</b>	<b>Eligibility</b>	<b>Value</b>	<b>To Apply</b>
Friends of Agriculture Scholarship	Scholarships do not require repayment.	Enrolled full-time, in a minimum of 2 agriculture courses, and maintain a minimum 2.0 cumulative GPA	\$500 per semester (Fall/Spring)	Scholarship applications available at Gainesville Campus with the Agriculture Dept. or by completing the on-line NCTC Foundation scholarship application mentioned above. Contact
NCTC Departmental Scholarships	Scholarships are available from various NCTC depts., including music, drama, dance, art, athletics	Enrolled in the specific dept. at NCTC	Vary depending on program	department chairs for the various departments.

*For more detailed information about these and other financial assistance programs, call or write:*

**Office of Financial Aid**

1525 W. California  
 Gainesville, TX 76240  
 (940) 668-4242  
 (940) 498-6294

**North Central Texas College Foundation**

1525 W. California  
 Gainesville, TX 76240  
 (940) 668-4213

# Completion Center

The Completion Center offers success coaching and career exploration services for all new-to-college students. The Completion Center is here to support and empower students personal success.

## Success Coaching Services

- Improve your time management skills
- Demonstrate your knowledge by improving test-taking strategies
- Study smarter with effective reading techniques
- Avoid procrastination and stress with goal setting
- Find community resources to support your short & long term goals
- Prepare questions before meeting with your professors

For more information viisit The Completion Center online,  
<https://nctc.edu/student-services/completion-center/index.html>

Or contact,

**Amy Klohn**

*Director of Title III Programs*

(940) 498-6416

## Veteran Educational Benefit Service

All Veteran Educational Benefit Services are handled by the Financial Aid Office.

Veterans on the Gainesville, Bowie & Graham Campuses - (940) 668-4242

Veterans on the Corinth & Flower Mound Campuses - (940) 498-6294

## Active Duty, Selected Reserve, Reserve, Survivor & Dependents Benefits

Eligibility to the various GI Bill® educational programs is determined by the veteran's service record. Before applying for an educational benefit veterans should consult the VA Comparison Tool. The VA Comparison Tool is designed to help veterans determine eligibility, compare benefits and review payment rates for each program.

In order to receive educational benefits under the New Post 9/11 or other Montgomery GI Bill® Programs students must complete an application. Once this application is processed the Veterans Administration Office notifies each applicant by mail whether they qualify for benefits or not. A "Certificate of Eligibility" is sent to students who qualify. This certificate tells the veteran and the school how much and how many months of entitlement they will receive. Students must bring a copy of their Certificate of Eligibility to the school in order to begin receiving monthly benefit amounts.

Other documents required by the school in order to set up Veteran benefits:  
Veterans Only: DD214 - MEMBER 4 - Report of Separation, Official Military Transcript.  
Veterans & Dependents of Veterans: Copy of Certificate of Eligibility OR EBenefits  
Screen Shot of remaining eligibility, Official College Transcripts from ALL prior colleges,  
NCTC VA Information Sheet, NCTC Degree Audit Request Form, and NCTC VA  
Enrollment Certification.

## **Benefit Payments for All Chapters**

Monthly benefit payments are made directly to students. The payment is made to the student for the number of days the student is certified for the month. If a student is certified for a whole month, the full monthly benefit is paid. If the student is only certified for part of the month, the benefit is prorated as follows: Using a 30-day month, divide the monthly rate by 30 to get the daily rate. If a student is certified from the 1st through the 15th, the student is certified 15 days and is entitled to 15/30ths of the full monthly benefit.

## **Break or Interval Pay**

Break or interval pay has been eliminated except for periods where a school is closed due to an Executive Order of the President or due to an emergency situation. This applies to all VA education benefit programs.

## **Concurrent Enrollment Guest Student**

A student may take courses at more than one school as long as the courses apply to his or her degree plan. The school that will grant the degree is the student's "primary" school. All other schools are "secondary" schools. The primary school provides a letter ("primary school letter" or PIL) addressed to the VA Certifying Official at the secondary school. If the student is enrolled at the primary school and the secondary school at the same time (concurrent enrollment), VA will pay for the combined credit, taking overlapping enrollment dates into account. If the student is only enrolled at the secondary school (supplemental enrollment), VA will pay for the credits taken at the secondary school.

## **Degree Plan or Degree Audit**

All transcripts from all prior colleges including military transcripts must be submitted to the school for the purpose of credit evaluation before attendance can be certified for VA purposes. Only courses that satisfy requirements outlined by the degree plan or graduation evaluation form can be certified. If a student takes a course that does not fulfill a program requirement, it cannot be certified for VA purposes. Excessive free electives, for example, cannot be certified.

## **Remedial Coursework**

Remedial and deficiency courses are courses designed to correct deficiencies in basic mathematics, English, and reading at the elementary or secondary level. These courses

can be certified as part of an approved program, but only for students for whom a verifiable need has been established. Generally, veteran students are exempt from meeting the Admissions Office Texas Success Initiative (TSI) requirement. To be considered for an exemption the veteran must turn in a copy of their DD Form 214-Member 4 and sign a TSI Waiver at the Admissions Office. Remedial and deficiency courses offered as independent study (online) cannot be approved and cannot be certified to VA.

## **Repeated Courses**

Courses that are successfully completed may not be certified for VA purposes if they are repeated. If a program requires a higher grade than achieved, that course may be repeated. For example, if Nursing requires a "B" or better in Biology, then that course may be repeated if a "B" was not earned.

## **Withdrawing or Non-Punitive Grades**

The law prohibits payment of VA educational benefits for a course from which the student withdraws or completes and receives a grade that is not used in computing the grade point average (a non-punitive grade, i.e. "W"). The School Certifying Official (SCO) is required to notify the Department of Veteran Affairs when changes occur to a student's school schedule. A decrease in training time (i.e. drop classes, stop attending, leave school, etc.) will create an overpayment to the student account. In addition, a decrease in credit hours can also change both prior and future payments to the basic housing allowance, book stipend, and/or the monthly benefits amount. If VA has issued a payment to either the student or the school for the term in which a student drops, students will owe money back to the Department of Veteran Affairs. In some cases the VA is willing to forgive an overpayment due to acceptable mitigating circumstances. Mitigating Circumstance: Mitigating circumstances are issues beyond the student's control that prevent the student from continuing in school or that cause the student to reduce credits. Mitigating circumstances include the following:

- An illness or injury afflicting the student during the enrollment period.
- An illness or death in the student's immediate family.
- An unavoidable change in the student's conditions of employment.
- An unavoidable geographical transfer resulting from the student's employment.
- Immediate family or financial obligations beyond the control of the claimant that require him or her to suspend pursuit of the program of education to obtain employment.
- Discontinuance of the course by the school.
- Unanticipated active military service, including active duty for training.
- Unanticipated difficulties with childcare arrangements the student has made for the period during which he or she is attending classes

## **School Responsibilities**

Keep VA informed of the enrollment status of veterans and other eligible persons.

Report all enrollments and changes within 30 days, report only those classes that apply to the student degree plan, monitor student's grades to ensure he/she is making academic progress, report unsatisfactory progress at the end of each semester, monitor the student's conduct and report when a student is suspended or dismissed for unsatisfactory conduct.

Keep the State Approving Agency (SAA informed of new programs and or changes to current programs, changes to academic policies and/or procedures, changes of addresses, phone numbers, certifying officials, and report any other information required by the SAA.

Keep up to date on current VA rules and benefits, read and maintain VA bulletins, attend VA and SAA training opportunities.

## **Hazlewood Exemption for Texas Veterans**

The Hazlewood Act exempts qualified veterans and dependent children of certain disabled or deceased veterans from specific tuition and fee charges at public institutions of higher education in the state of Texas. The exemption is for a maximum of 150 credit hours and may be awarded regardless of financial need. The benefit is not available to spouses of veterans.

Eligible veterans must have been a resident of Texas at enlistment and must provide official military documentation to prove eligibility for the exemption. Veterans must serve more than 180 days of active duty service, excluding training, and discharge must be characterized as "honorable" or "general, under honorable conditions."

Veterans or dependents must provide proof of eligibility or ineligibility for VA education benefits. Verification may be obtained by calling the VA Education Call Center at 1-888-442-4551.

Contact the Texas Veterans Commission for more information about the Hazlewood Act and other education benefits for Texas veterans. Call 1-800-252-VETS.

## **Satisfactory Academic Progress**

Senate Bill 1210 passed during the Regular Session of the 83rd Texas Legislature now requires students who receive the Hazlewood Exemption to maintain a cumulative 2.0 out of 4-point grade average. It also limits to 30 the number of hours a student can take beyond their degree plan and still receive an exemption. The law does not allow for grandfathering.

Financial Aid began monitoring for Satisfactory Academic Progress at the beginning of the Fall 2014 semester. Students may regain eligibility to the Hazlewood Exemption if/ when they complete a term in compliance with SB1210 requirements or by submitting an Exemption/Waiver Financial Aid Suspension Appeal Form and being approved based on medical reasons, due to the death of direct family member, or other special circumstances. Please contact the Financial Aid Office for more information.



# Return of Title IV Aid Policy

## Student Financial Aid

Students receiving federal financial aid such as Federal Pell Grant, Federal Supplemental Educational Opportunity Grant, Federal Direct Student Loans, or the Federal Work-Study Program understands, agrees, and affirms that award monies will be used solely for expenses directly related to attendance or continued attendance at North Central Texas College. Federal financial aid is considered Federal Title IV Funds and follows the rules and guidelines set forth by the U.S. Department of Education.

Students who receive Federal Title IV funds are required to complete a minimum number of hours for which assistance was received. Students who withdraw or stop attending may no longer be eligible for the full amount of Title IV funds originally awarded. All students receiving Financial Aid who complete a Petition for Course withdrawal, whether online or in person, through the NCTC Registrar's Office, will be subject to a recalculation of their Title IV Aid. If the student completely withdraws from school during the semester, or quits attending but fails to officially withdraw, the student may be required to return the unearned part of the funds received to help pay educational expenses for the term. In addition, students who attend and subsequently withdraw before financial aid is disbursed may be eligible to receive a Post-Withdrawal Disbursement of Title IV Funds for the earned aid that was not received. All students who owe Federal and/or NCTC funds will not be allowed to re-enroll at NCTC or request an official transcript, until the funds have been repaid. Liability for the return of Federal Title IV funds will be determined according to the following guidelines:

- If the student remains enrolled and attends class beyond the 60% mark of the semester in which aid is received, all federal aid is considered earned and not subject to this policy.
- If the student completely withdraws from all classes prior to completing 60% of the semester, a pro-rated portion of the federal aid received must be returned to the federal aid programs based on the amount of time the student attended.
- If the student does not officially withdraw from classes but quits attending all classes, a prorated portion of the federal aid received, based on the documented last date of attendance, must be returned to the federal programs. If the College is unable to document the last date of attendance, the school will assume the student only attended to the 50% mark of the semester and this date will be used to determine how much aid must be returned.
- Return of Federal Title IV funds will be distributed according to statutory regulations. Worksheets provided by the U.S. Department of Education will be used to determine the amounts and order of return. The student will be notified and will be allowed 45 days from the date of determination to return their share to the program accounts. If the student does not return the amount owed within 45 days, the amount of the overpayment will be reported to the U.S. Department of Education (DOE) via the National Student Loan Database (NSLDS) and the student will be referred to the DOE for resolution of the debt. Contact Financial Aid for questions and examples of this policy. North Central Texas College refunds unearned funds received from Federal student assistance programs in accordance

with Federal Title IV student assistance regulations, with rules of the Texas Higher Education Coordinating Board, and the rules of the College's Board of Regents.

## **Return of Title IV, HEA—Content Section**

When a student applies for financial aid, he or she signs a statement that received funds will be used for educational purposes only. Therefore, if a student withdraws before completing their program, a portion of the funds received may have to be returned. NCTC will calculate the amount of tuition to be returned to the Title IV, HEA Federal fund programs according to the policies listed below.

### **Return of Title IV Funds Policy**

This policy applies to students who withdraw officially, unofficially, fail to return from a leave of absence, or are dismissed from enrollment at NCTC. It is separate and distinct from the NCTC refund policy. (Refer to institutional refund policy)

The calculated amount of the Return of Title IV, HEA (R2T4) funds that are required for the students affected by this policy, are determined according to the following definitions and procedures as prescribed by regulations.

The amount of Title IV, HEA aid earned is based on the amount of time a student spent in academic attendance, and the total aid received; it has no relationship to student's incurred institutional charges. Because these requirements deal only with Title IV, HEA funds, the order of return of unearned funds do not include funds from sources other than the Title IV, HEA programs.

Title IV, HEA funds are awarded to the student under the assumption that he/she will attend school for the entire period for which the aid is awarded. When student withdraws, he/she may no longer be eligible for the full amount of Title IV, HEA funds that were originally scheduled to be received. Therefore, the amount of Federal funds earned must be determined. If the amount disbursed is greater than the amount earned, unearned funds must be returned.

The institution has 45 days from the date that the institution determines that the student withdrew to return all unearned funds for which it is responsible. The school is required to notify the student if they owe a repayment via written notice.

The school must advise the student or parent that they have 14 calendar days from the date that the school sent the notification to accept a post withdraw disbursement. If a response is not received from the student or parent within the allowed time frame or the student declines the funds, the school will return any earned funds that the school is holding to the Title IV, HEA programs.

Post-withdraw disbursements will occur within 90 days of the date that the student withdrew.

### **Official Withdrawal from the School**

A student is considered to be "Officially" withdrawn on the date the student notifies the Financial Aid Office or Admissions/Registrar's Office in writing of their intent to withdraw.

The date of the termination for return and refund purposes will be the earliest of the following for official withdrawal:

- Date student provided official notification of intent to withdraw, in writing or orally.
- The date the student began the withdrawal from NCTC records. A student is allowed to rescind his notification in writing and continue the program. If the student subsequently drops, the student's withdrawal date is the original date of notification of intent to withdraw.

## **Unofficial Withdrawal from School**

In the event that the school unofficially withdraws a student from school, a school Administrator, Faculty, and/or Director of Admissions will complete the Withdrawal Form using the last date of attendance as the drop date. Any student that does not provide official notification of his or her intent to withdraw will be considered unofficially withdrawn.

In the event a student decides to rescind his or her official notification to withdraw, the student must provide a signed and dated written statement that he/she is continuing his or her program of study, and intends to complete the payment period. Title IV, HEA assistance will continue as originally planned. If the student subsequently fails to attend or ceases attendance without completing the payment period, the student's withdrawal date is the original date of notification of intent to withdraw.

## **Institution Responsibilities**

North Central Texas College's responsibilities in regards to Title IV, HEA funds follow:

- Providing students with the information in this policy.
- Identifying students who are affected by this policy and completing the return of Title IV funds calculation for those students;
- Returning any Title IV, HEA funds due to the correct Title IV programs.
- The institution is not always required to return all of the excess funds; there are situations once the R2T4 calculations have been completed in which the student must return the unearned aid.

Student Responsibilities in regards to Return of Title IV, HEA funds

- Returning to the Title IV, HEA programs any funds that were dispersed to the student in which the student was determined to be ineligible for via the R2T4 calculation.
- Any notification of withdraw should be in writing and addressed to the appropriate institutional official.
- A student may rescind his or her notification of intent to withdraw. Submissions of intent to rescind a withdraw notice must be filed in writing to the official records/ registration personal at your school.

*\*To request a copy of the North Central Texas College Return of Title IV Policy by contacting the Financial Aid Office. This policy is subject to change at any time, and without prior notice.*

## Scholarships

The North Central Texas College Foundation awards more than 650 scholarships per semester. These scholarships are made possible by generous contributions of individuals, corporations and private foundations to assist students in reaching their educational goals. The Foundation's scholarships are generally awarded on the basis of academic achievement, financial need, community involvement and leadership. Each scholarship has different award criteria based on the terms identified by the donor, thus opening the door for scholarships for a wide variety of students. Additional scholarships are also available through various college departments, student organizations, faculty association, and other sources.

Students may complete an on-line scholarship application located on the college webpage at [scholarships.nctc.edu](http://scholarships.nctc.edu). Scholarship applications are accepted twice a year between March 1 - April 15 and September 1 - October 15. Application deadlines are April 15 for the Summer & Fall semesters and October 15 for the Spring semester. Students who are new to NCTC will need to apply for admission before being able to complete a scholarship application.

Scholarship applications are archived each January so students must reapply each year for the NCTC Foundation Scholarships beginning in March. For more information please call the Foundation Office at (940) 668-4213.

## Athletics

The NCTC athletics program supports the institutional mission through assisting students in meeting their educational goals by making available quality student support services, including intercollegiate athletics. Each athletic program provides an opportunity for student athletes to pursue academic success, physical and emotional well being and social development. Specifically, NCTC athletes pursue academic excellence, participate in well organized sports activities, promote a positive public image for the College and advance their personal and professional objectives.

The college Chancellor has ultimate responsibility for, and the administrative and fiscal control over, the institution's intercollegiate athletic programs as well as supervisory oversight of the athletics program through the Director of Athletics. The Provost coordinates with the NCTC Athletics Committee to regularly evaluate the NCTC athletics program to ensure that it is an integral part of the education of athletes and is in keeping with the educational purpose of the institution.

Students may provide input to the committee by contacting the Provost (940) 668-4120

## **Intercollegiate Sports**

NCTC participates in the following intercollegiate sports: women's tennis, women's volleyball, men's baseball and women's softball. The College is a member of the National Junior College Athletic Association (NJCAA) and competes in the Northern Texas Junior College Athletic Conference.

NCTC adheres to NJCAA requirements in regard to all aspects of athletics including, but not limited to, recruitment, admission, financial aid and the continuing eligibility of athletes. All academic, admission and financial aid policies are the responsibilities of those institutional administrative units regularly charged with oversight of these functions of the College. Students having questions in these areas are encouraged to contact the appropriate office for assistance.

Scholarships are available, and students considering participation in the NCTC intercollegiate athletics program should contact the Director of Athletics, at (940) 668-4286, for additional information.

## **Department of Student Success**

The Department of Student Success provides a Math Lab, a Writing Center, and Study/Tutor Groups accessible for use by all NCTC students. The Math Lab is a drop-in lab. Tutors circulate among students and answer questions as students work through various algebraic or mathematical problems. The Writing Center is an appointment only center. Students make an appointment to meet with a writing tutor who can guide students through all stages of the writing process. Tutors can assist with structure, style, and grammar, and they empower students to become their own editors.

To find out more about the services listed above and to view the Department of Student Success hours of operation, please go to: [www.nctc.edu/student-success/tutoring/index.html](http://www.nctc.edu/student-success/tutoring/index.html)

## **Office for Students with Disabilities OSD**

The Office for Students with Disabilities provides support services for students with disabilities. North Central Texas College is committed to making its degree and certificate programs accessible to all qualified persons in accordance with Section 504 of the Rehabilitation Act of 1973 (P.L. 93-112), the Americans With Disabilities Act (ADA) of 1990, and the ADA Amendments Act (ADAAA) of 2009). To afford each of our students every reasonable opportunity for success, the OSD offers a variety of support services to enable students with disabilities and/or special needs to participate in the full range of college experiences. Services are coordinated to fit the individual needs of the student and may include the following: sign language interpreting, note-taking, tutoring, mobility assistance, audio taping, large print materials, readers, scribes, and other reasonable accommodations.

As a resource for the ADA, as well as other legislation regarding disability-related issues, the OSD staff serves as liaison among students, faculty, and college staff to help determine appropriate accommodations in the College environment. If a student has a learning, physical or mental disability, and would like accommodations, they should contact the OSD Department staff to determine if they qualify for services. A student with a disability is not required to disclose this to college officials if the student is not requesting accommodations.

Disclosure of Disability - In accordance with the ADA, NCTC is committed to making reasonable accommodations for any student who provides appropriate documentation verifying her/his disability. Appropriate documentation is current and includes a diagnosis made by a certified health professional in education, medicine, psychology or other related area. Additionally, documentation should indicate the presence of a learning, physical or mental impairment which substantially limits one or more major life activities. For more information or to disclose a disability, contact information for the OSD Department is listed below.

**Wayne Smith**, M.S., CRC, LPC, CBIST  
OSD Coordinator  
Corinth Campus, Room 170  
(940) 498-6207  
[kwsmith@nctc.edu](mailto:kwsmith@nctc.edu)

**Yvonne Sandmann**, M.S.  
OSD Specialist  
Gainesville Campus, Room 110  
(940) 668-7731, ext. 4321  
[ysandmann@nctc.edu](mailto:ysandmann@nctc.edu)

Please refer to the OSD Website for more information: [osd.nctc.edu](http://osd.nctc.edu)

## TRIO Program

The TRIO program provides comprehensive, individualized services to students enrolled at all three NCTC campuses each academic year. The mission of the federally funded program is to increase the retention and graduation rates of eligible participants and to foster an institutional climate supportive of first generation, low income college students and students with disabilities. TRIO students receive the following services: one-on-one tutoring, academic advising, career counseling, financial aid information, cultural enrichment, personal counseling, and educational workshops geared to give students tools to succeed in college.

To obtain more information regarding TRIO services or to apply to the program, please contact:

**Nancy Zamora**  
Program Coordinator  
Corinth Campus  
(940) 498-6212  
[nzamora@nctc.edu](mailto:nzamora@nctc.edu)

## Networks Program

The Networks Program provides services for students enrolled in one of NCTC's Technical Programs and students who qualify based on one or more of the following categories:

- Nontraditional Learner
- Limited English Proficiency Learner
- Learners who are economically disadvantaged
- Learners who are single parents or displaced homemakers.

Services include:

- Non-traditional Career Awareness
- Career Assessment
- Referrals to Campus and Community Services
- Academic, Career, and Individual Counseling Services
- Tutoring Services
- Child Care Assistance.

For more information, please contact:

**WayneSmith**, M.S., CRC, LPC, CBIST  
OSDCoordinator  
CorinthCampus, Room170  
(940)498-6207  
[kwsmith@nctc.edu](mailto:kwsmith@nctc.edu)

**YvonneSandmann**, M.S.  
OSDSpecialist  
GainesvilleCampus, Room110 (940)  
668-7731, ext.4321  
[ysandmann@nctc.edu](mailto:ysandmann@nctc.edu)

## Transfer Services

The NCTC Office of Counseling and Advising serve as a resource center to students preparing for transfer to other Texas public institutions, and as a focal point for information concerning programs, resources, and services to ensure a smooth transition to four-year colleges and universities. Students can start by visiting the [Counseling & Advising Transfer Guide](#) on the website to access Transfer Guides for major universities, as well as Academic Pathways which outline the suggested courses you need to take for your intended college major.

It is always recommended to visit with an advisor or counselor in person to review these Academic Pathways and transfer degree plans and materials, as well as

receive assistance with choosing a major, academic course selection, and the transfer application process.

Additionally, when representatives from four-year institutions visit our campuses, they too assist in the transfer process by highlighting their institution, the programs they offer, and scholarship opportunities. Please check the NCTC website to access a monthly calendar of transfer events and scheduled university recruiter visits.

## Office for Students with Disabilities

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As a resource for the ADA, as well as other legislation regarding disability-related issues, the OSD staff serves as liaison among students, faculty, and college staff to help determine appropriate accommodations in the College environment. If a student has a learning, physical or mental disability, and would like accommodations, they should contact the OSD Department staff to determine if they qualify for services. A student with a disability is not required to disclose this to college officials if the student is not requesting accommodations.

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**Wayne Smith**, M.S., CRC, LPC, CBIST

OSD Coordinator

Corinth Campus, Room 170

(940) 498-6207

[kwsmith@nctc.edu](mailto:kwsmith@nctc.edu)



**Yvonne Sandmann, M.S.**

OSD Advisor  
Gainesville Campus, Room 110  
(940) 668-7731, ext. 4321  
[ysandmann@nctc.edu](mailto:ysandmann@nctc.edu)

**Robbie Baugh**

ADA Compliance Officer  
1525 W. California Street  
Gainesville, Texas 76240  
(940) 668-7731  
[rbaugh@nctc.edu](mailto:rbaugh@nctc.edu)

Please refer to the OSD Website for more information: [osd.nctc.edu](http://osd.nctc.edu)

## Career Services

North Central Texas College provides career-related services to students at all campuses. These services are delivered through several departments and persons.

### Technical Program Faculty

Students enrolled in technical education programs such as criminal justice, nursing, cosmetology, drafting, surgical technology, office systems technology, equine science, business management, computer information technology, agricultural science, radiology technology, petroleum technology, and emergency medical services may network with department faculty to receive advising related to potential careers. Faculty members are also available to assist students in contacting prospective employers for internship and employment opportunities.

### Job Search Resources

Job postings can be viewed online under the "CareerLion Job Board" link located at Career Services, <https://www.nctc.edu/career-services/index.html>. Resume and cover letter assistance are also available to job-seeking students through online resources such as Career Cruising and Grade Results, and also through NCTC's Writing Center. Contact a counselor or advisor for more information about resources to assist you with your job search.

### Completion Center Program

The NCTC Completion Center is a comprehensive student engagement program, with a variety of services to help with student success, retention, and completion for all first-time-in-college students.

Major services include:

- Centralized Completion Center- Services provided on all campuses to address students' academic and non-academic challenges and issues including- success and academic coaching, goal setting, study skills, time management, test taking, reading strategies, motivation, etc.
- Centralized Career Readiness and Job Placement Program- Services include career readiness and development skills that are related to students' academic experiences. Assist students to create a solid foundation for future professional success, establish academic, personal, and professional goals based on analysis of students personality type, skills, and interests; and demonstrate tools and strategies for personal and professional growth. Other services include assisting students to create ePortfolios, and in-depth job placement services- including resume writing, career/job fair training, application and interview skill training.
- First Year Experience Course for all first-time-in-college students- The primary focus of the course is to develop an academic plan, and assist students with utilizing a range of support services on campus, such as completion center's success coaches, mentors, career services, advising, financial aid, disability services, and tutoring centers.
- Professional development opportunities for full-time and part-time faculty/staff on student success, engagement, and retention efforts.
- Mentoring program- including faculty, staff and students.

## Dean of Student Affairs & Outreach

The Office of the Dean of Student Affairs & Outreach is committed to fostering the holistic development of students at North Central Texas College by providing opportunities for advocacy, leadership, civic learning, career development, moral development, empowerment, accountability, and community engagement. Through a variety of student services, our priority is to support the educational mission of the College while providing a learning environment conducive to student success.

The Office of the Dean of Student Affairs & Outreach includes the following programs and services:

- [Behavioral Intervention Team \(CARES\)](#)
- [Campus Tours](#)
- Multicultural Affairs
- Veterans Affairs
- [College Housing and Residence Life](#)
- Student Conduct and Conflict Resolution
- [Student Life](#)
- [Title IX and Sexual Misconduct](#)

**Dr. Roxanne Del Rio**

Dean of Student Affairs & Outreach

(940) 498-6245

[rdelrio@nctc.edu](mailto:rdelrio@nctc.edu)

**Carol Novak**

Departmental Assistant

(940) 498-6455

[cnovak@nctc.edu](mailto:cnovak@nctc.edu)

## **Student Conduct & Resolution Office**

North Central Texas College is dedicated to providing quality educational opportunities and protecting of the rights and development of each individual of the College community in a positive, encouraging, and success-oriented environment.

In support of the NCTC mission and core values of *Stimulating Learning Environments*, *Integrity* and *Encouragement*, the Office of Student Conduct and Conflict Resolution is responsible for:

- Educating students about their rights and responsibilities as members of the NCTC community
- Facilitating student learning and development regarding community behavioral standards
- Promoting and safe and inclusive environment that fosters student success
- Guiding student conduct for responsible citizenship and positive lifestyle choices
- Implementing the Student Conduct Code and other policies governing student conduct, on and off campus.

Please see the Student Handbook or contact the Dean of Student Affairs & Outreach at (940) 498-6455 for assistance or additional information.

## **Student Life and Residence (Housing) Life**

**Daisy Garcia**

Director of Student Life

(940) 668-3330

[dgarcia@nctc.edu](mailto:dgarcia@nctc.edu)

Student Life Specialist

(940) 498-6246

**Amanda Thompson**

Residence Life Coordinator

(940) 668-4259

[sthompson@nctc.edu](mailto:sthompson@nctc.edu)

# Counseling & Advising Center

The counselors and advisors of this office provide the academic advising students need in order to formalize education and/or vocational objectives, understand the college admissions process, research college majors and transferability of coursework, and assist with resolving personal problems which are impacting a student's academic performance.

Personal counseling is available to students on a limited basis with referral to community and private resources when appropriate.

## Academic Advising

Academic Advising is an essential element of NCTC's commitment to ensuring that students that the proper courses, in the proper sequence, in order to meet their educational and career goals. NCTC advisors and counselors provide academic advising services to all new, returning, and potential students throughout each semester—not just during registration!

The following students are required to meet with an advisor or counselor in order to register for courses:

- First-time college students, including students who were previously Dual Credit students but are now at NCTC full or part-time, and current students who have earned at least 30 credit hours
- Students who are not TSI (Texas Success Initiative) complete in one or more areas (see next section for a description of TSI requirements)
- Students who are enrolled in a Certificate program
- Students who need to have transfer credits applied from another institution
- Students on Academic or Financial Aid Suspension (if an appeal has been submitted and approved)

Students who qualify for online course registration are not required to see an advisor or counselor, however, it is highly recommended for students who have questions or need information about important issues such as course sequencing, pre-requisites, choosing or changing a major, transferability of courses or degrees, etc.

Please contact the Counseling and Advising Office at your preferred campus in order to speak with an advisor or counselor at any time before or during the semester or email [counseling@nctc.edu](mailto:counseling@nctc.edu).

### **Corinth**

(940) 498-6499

### **Gainesville**

(940) 668-4216

### **Flower Mound**

(972) 899-8412

**Bowie**

(940) 872-4002, ext. 5212

**Graham**

(940) 521-0720

## Testing Services

The mission of NCTC Testing Services is to provide high-quality testing services that observe and adhere to the professional standards and guidelines in order to meet the needs of our students, faculty, and community members.

The Testing Center exists to support the integrity of the testing process by creating a quiet, comfortable, and clean environment conducive to productive testing, providing great customer service by being friendly, courteous, and supportive, by collaborating with faculty, administrators, other colleges and universities and working with testing vendors and national organizations to keep abreast of best practices.

The Office of Testing Services serves as the center for administering tests, including the College Level Examination Program (CLEP) tests for course credit, high school equivalency tests of the General Educational Development (GED) program, Ability to Benefit (ATB), the statewide TSI Assessment to determine placement in college courses, technical program assessment exams (e.g. TEAS, HESI), as well as makeup exams or proctored exams required for online courses.

Contact us, [testingcenter@nctc.edu](mailto:testingcenter@nctc.edu)

## Student ID Card

An ID card is issued to all students registered in credit courses, but it remains the property of North Central Texas College. This ID card is the student's official ID and library card. It functions as a debit card with direct deposit for refunds and book buy back and should be carried securely at all times. Access to computer labs and campus check cashing privileges (Bookstore, Cafeteria and Business Office) will not be extended to students who do not present a valid ID.

Lending this card to anyone subjects the holder to disciplinary action and forfeiture of the ID card. The ID card can also be used at local businesses participating in the Lion's Pride Program to receive discounts.

## Photo Policy

All students are advised that the North Central Texas College Marketing & Community Relations Office takes photographs and shoots videos throughout the year of members of the student body and reserves the right to use them for publicity, promotional, and marketing purposes. This may include images and audio and video recordings of voices.

The College reserves the right to take photographs of campus facilities and scenes, events, faculty, staff, and students for promotional purposes in any areas on campus or at any NCTC-sponsored event off campus where subjects do not have a normal and reasonable expectation of privacy. All such photographs are the property of NCTC and may be used for NCTC promotional purposes such as electronic and printed publications, websites, classroom use, and college ads without prior permission of the subjects.

As a general practice, there is no attempt to collect individual photo release forms from students. Instead, we make the assumption that NCTC students are our best resources for marketing the College and that they will welcome involvement in these activities. However, students who do not wish to have their images or voices used for this purpose must stipulate this in writing to the office of the Vice Chancellor of Student Affairs at the beginning of the semester. It is also expected that such students will excuse themselves from photo or video sessions and inform the NCTC photographer that they do not wish to be included.

## **Publications**

Student publications are a valuable aid in establishing and maintaining an atmosphere of free and responsible discussion on the campus. They help bring student concerns to the attention of the College community and provide a forum for student opinion on various campus issues.

North Central Texas College publishes *The April Perennial*, an annual literary and visual arts magazine which features the winning entries in both poetry and short story categories from the major divisions of NCTC's highly popular Creative Writing Awards competition. Other publications are issued periodically, including a student newspaper when journalism classes make.

Students and prospective students are encouraged also to log on to the NCTC website for the latest news and features about the College. Go to [www.nctc.edu](http://www.nctc.edu) and click on the "News & Press Releases" button.

## **Student Activities & Organizations**

The existence of student organizations and student activities at North Central Texas College reflects the belief of the administration, faculty and staff that although provision of a quality instructional program is the institution's uppermost aim, the total college learning experience transcends the classroom.

The governing board and administration of North Central Texas College value the opinions and input of students in regard to a wide variety of college-related issues and they believe strongly in empowering students by giving them a meaningful voice in the institutional decision-making process. This is done in a variety of ways which include,

but are not limited to, employee search/selection committees and many standing committees of the College.

In addition, student input is actively encouraged and sought on a district-wide basis from the Student Government Association.

Finally, students may—either individually or collectively—bring issues before the Instructional Council, Chancellor's Leadership Team or other administrative bodies of the College at any time by complying with the appropriate process for requesting that they be placed on the agenda.

## Clubs and Organizations

Student clubs and organizations are sanctioned by the College administration according to the belief that each renders a particular service to the College and to the student body. No effort is made to manipulate decisions regarding activities or projects of the organization, but the College expects all student organizations to conduct their affairs in a manner appropriate to proper codes of conduct and in accordance with institutional policies and regulations.

All student group-sponsored activities on the College campus are to be sponsored by one of the recognized clubs or organizations and its advisors. Club promotional and money-making ventures involving the public must be cleared through the Office of the Dean of Students Affairs.

New clubs and organizations are required to petition the Vice Chancellor of Student Affairs for official recognition. The four requirements to become a registered organization at NCTC are:

- 7 student members
- A full-time or part-time employee must advise the club or organization
- A constitution
- A student organization registration form

The Office of Student Life will also provide assistance in the formation of clubs and organizations to meet student needs and interests. For more information about starting a club at NCTC, visit [studentlife.nctc.edu](http://studentlife.nctc.edu) or contact the Office of Student Life at (940) 668-3330 or [studentlife@nctc.edu](mailto:studentlife@nctc.edu). For a current list of active student organizations visit [studentorg.nctc.edu](http://studentorg.nctc.edu)

### **Campus Activities Board (CAB)**

CAB's primary purpose is to provide district wide student activities as well as off-campus activities for NCTC.

### **Cosmetology Student Association (CSA)**

CSA creates a link between the students of the Cosmetology Department and other student organizations and the rest of the campus community through participation in a wide variety of student activities.

### **Esthetician Student Association (ESA)**

ESA creates a link between the students of the Esthetician program and other student organizations and the campus community. ESA works to better serve the students through education outside the classroom and the financial support of the ESA program.

### **Fellowship**

Membership in this non-denominational Christian student organization is open to persons of all faiths.

### **FOCUS**

Fellowship of Christian University Students creates a place for both Christian and Non-Christian NCTC students to build relationships and to learn about Christ.

### **Gaming Club**

The NCTC Gaming Club is for students who enjoy gaming. Students discuss latest game releases, the development process of favorite games, and work on gaming projects together. This club is for any student no matter what their major.

### **Horticulture Society of North Central Texas College**

This organization focuses on horticulture education while promoting the NCTC Horticulture Program and its students. The society participates in horticulture programs and activities such as the annual plant sale and field trips as well as campus beautification projects. The society also pursues opportunities to partner with Master Gardener and local interest groups within the NCTC service area.

### **Lambda Epsilon Chi**

This club's purpose is to develop a better understanding in the criminal justice field and to improve skills in handling fire arms. Members of this organization seek to enhance the image of law enforcement

### **Latino Leadership Council (LLC)**

LLC is on the Corinth and Gainesville Campuses. Although they are separate student organization they each provide leadership skills, volunteer opportunities and fun activities for its members

### **Phi Theta Kappa Society**

The world's oldest, largest and most prestigious association of community college honor students, recognizes and promotes academic excellence on 1,200 community college campuses around the world. The Psi Iota Chapter was chartered on the North Central Texas College campus in 1972. More than \$36 million in transfer scholarships have been designated by 600 colleges and universities for Phi Theta Kappa members only. Membership requirements include a GPA of 3.5 or higher, a total of at least 12 transferable credit hours from NCTC, and currently enrolled for at least 6 credit hours.

### **Residence Hall Association (RHA)**

RHA is the voice for the residents in the halls. RHA will plan programs and activities for the residents. RHA is the organization that every residence hall student automatically belongs to and the objective of RHA is to be a social and community service organization. RHA has 4 elected officers (President, Vice-President, Secretary, and Treasurer), 1 advisor, and a number of committee chairs (Activity, Advertising, School Spirit, Community Service, etc.). RHA holds monthly general assemblies, weekly officers meetings, and hosts monthly social events for the members.



### **Student Government Association (SGA)**

Members of this officially recognized representative body are elected by fellow students to communicate the interests and concerns of the student body to the Board of Regents, administration and faculty. SGA makes recommendations regarding student interests and policies to the administration. In addition, SGA helps develop campus programming designed to enhance the learning environment through social and cultural activities. By serving as an officer or senator in SGA, students have opportunities to develop and refine leadership and governance skills. Each officially recognized student organization elects a senator to serve and represent the interests of that organization.

### **Students in Action (SIA)**

SIA is an NCTC student based volunteer organization that participates in community service with local organizations and is located on the Corinth campus.

### **Student Nurse Association (SNA)**

The NCTC Student Nurse Association is a constituent of the National and Texas Nursing Student Association. The group acts as a liaison between faculty and students, aids in community health affairs, participates in legislative activities concerning health issues, and appoints delegates to the state convention each year.

## **Acting Performance**

The Drama Department at NCTC has many opportunities to participate in 4-5 performances each year. Every summer, the department even produces a large musical. In the past *Annie*, *Beauty & the Beast*, and *Peter Pan* have been crowd favorites. The Drama Department also produces such interesting works as *Frankenstein*, *Macbeth*, and *Dracula*. With acting and stage craft classes available, students get the chance to experience all aspects of the theater - from on stage to backstage.

## **Musical Organizations**

The performing groups associated with NCTC's Music Department provide exciting learning opportunities for students as well as cultural enrichment for the North Central Texas area. Ensembles include the NCTC Singers, the NCTC Jazz Band, and the NCTC Wind Ensemble. All ensembles are open to both music and non- music majors, and students may receive scholarship assistance.

The NCTC Singers are an auditioned choir that performs both on and off campus. The group has performed in such venues as Carnegie Hall in New York City, Trinity Church in Boston, and the Cathedral in St. Louis. The College Singers are offered both on the Gainesville campus and the Corinth Campus. The Singers keep an active schedule in Cooke and Denton counties, singing for churches, schools and civic organizations. Admission is by audition only.

The NCTC Jazz Band performs a varied repertoire (including big band swing, dixieland and contemporary jazz) during concerts and special appearances throughout the North Texas region.

The NCTC Wind Ensemble focuses on traditional wind band music of the Renaissance through 20th Century, performing works by such composers as Gabrieli, Bach, Bizet and other important composers.

## On-Campus Housing Services

NCTC provides on-campus housing for students in two facilities, Hays Hall and Bonner Hall.

Hays Hall, a suite style facility, accommodates 30 students in a two-story structure. It features six 4-student suites and two 3-student suites. Each suite has two bedrooms accommodating up to two students each and sharing a common area and bathroom. Each suite is restricted to either all male or all female.

Bonner Hall is a traditional residence hall. It features double occupancy rooms for students and community bathrooms. Male and female wings are separated by a common lobby area, access to each wing by the opposite sex is permitted during visitation hours.

All students living in the residence halls have access to Bonner Hall as there are amenities available for use. Bonner Hall has a kitchen, TV lounges, and laundry facilities on both sides of the building. There is also a work out room and a study room available for use.

Dining rooms are not provided in on-campus housing facilities at NCTC, but the college does require that students living in both residence halls purchase a Meal Plan (see details following), with meals served in the Student Center cafeteria just a short walk away.

Students who wish to be considered for housing should submit an Application/Lease Agreement, pay an application fee, and complete a background check. This information is available on the NCTC website under student housing and how to apply. Once these are completed please send all paperwork to:

### **Office of Student Life**

North Central Texas College  
1525 West California Street  
Room 152  
Gainesville, Texas 76240

All housing reservations will be handled on a space-available basis. The college reserves the right to make specific room assignments, although roommate preferences will be honored whenever possible. To ensure a student's roommate and hall preference, application must be made by April 30.

## Charges for Room & Board

Rental charges for on-campus housing during a regular long term (Spring or Fall) at NCTC include a mandatory Meal Plan which provides 14 meals per week for the duration of the semester. Serving of meals included in this plan begins the first day of classes and ends with the Friday noon meal of the last week of each semester. Meals are prepared and served by a privately contracted food service company, and menus are planned to give students good nutritionally balanced meals at the most reasonable price possible.

**NOTE:** As of this catalog's publication date, the NCTC Food Service is open Monday breakfast through Friday lunch only. Students living on campus should be prepared to eat elsewhere on Friday evenings and weekends-either in town or in their rooms. Kitchen facilities are provided for student use on each upstairs wing of Bonner Hall. Students are allowed to have small refrigerators and microwaves in their rooms in both residence halls.

## Total Charges & Payment Terms

Room/board charges for the entire semester are due and payable - either in full or installments. Students making full payment at registration will have their room/board charges discounted to:

Bonner Hall — \$1,985.00

Hays Hall — \$2,085.00

## Installment Schedule

Students wishing to pay room/board charges in installments must make arrangements through the NCTC Business Office. Failure to meet installment obligations will result in severe penalties, including the student's immediate withdrawal from school when accounts become 30 days past due. The installment schedules for 2014-2015 are as follows:

### Fall Semester

<b>Due Date</b>	<b>Bonner Hall</b>	<b>Hays Hall</b>
Due by Move-in	\$662	\$695
Due September 15	\$662	\$695
Due October 15	\$661	\$695
Total	\$1,985	\$2,085

## Spring Semester

Due Date	Bonner Hall	Hays Hall
Due by Move-in Due	\$662	\$695
February 15 Due	\$662	\$695
March 15	\$661	\$695
Total	\$1,985	\$2,085

## Summer Semester

Due prior to move-in \$301 per summer session, \$602 for a private room per summer session.

### Application Fee

A \$150 nonrefundable application fee is required in advance to be considered for a room in either residence hall. *The College Board of Regents reserves the right to adjust college housing rental/meal charges in accordance with operational costs.*

### Background Check

In an effort to ensure the safety and security of the Residence Halls at NCTC, the department of Residence Life institutes a background check. All students wishing to be considered for housing will be required to submit a background check from their home state; international students do not need to submit a background check form. In order to keep costs down for students, the background check must be performed by the student in their home state. Students with any convictions or pending charges for a Felony, Class A Misdemeanor, or Class B Misdemeanor, will not be eligible to live in the residence halls. For information on how to request a background check in Texas visit the Housing and Residence Life website at [www.nctc.edu](http://www.nctc.edu).

### Bacterial Meningitis Vaccination

During the 2009 Texas Legislative session, House Bill 4189 (HB 4189) was passed and signed into law. HB 4189 requires that any incoming new student who lives on campus must either receive a vaccination against bacterial meningitis (10 days prior to move-in) or meet certain criteria for declining such a vaccination before they can live on campus. Students who are living on campus will be required to provide verification of vaccination against bacterial meningitis or provide a signed affidavit declining the vaccination.

### Resident Assistants

Both residence halls at NCTC employ student Resident Assistants (RAs) to help the Coordinator of Residence Life with security, supervising the facilities, providing resident assistance in emergencies, etc. The residence halls are staffed with an appropriate number of RAs in direct relation to the number of residents in the building. Compensation is given in the form of a free private room and meal plan. To apply, contact the Coordinator of Residence Life at (940) 668-4259.

**Security**

The NCTC Police Department provides direct supervision of security personnel, policies and procedures, and, along with other College officials, reserves the right to forcibly remove any student from the campus who poses an immediate threat to the health and safety of the college environment.

**Facilities**

Should a resident have any maintenance requests they need to submit them to the RAs or to the Coordinator of Residence Life, so that they can be addressed by the maintenance department.

# Academic Policies

## Academic Freedom

North Central Texas College ensures adequate procedures for safeguarding and protecting academic freedom. That faculty have freedom in teaching, research and publication is essential to the collegiate culture that rests upon the belief that institutions of higher education serve the common good, and depends upon a free search for truth and its free expression without intent to do personal harm. The college's stance on academic freedom and its protection is clearly stated in [Board Policy EJA \(Local\) - Miscellaneous Instructional Policies: Academic Freedom](#)

Each faculty member is entitled to full freedom in the classroom in discussing the subject which he/she teaches. Limitations to this basic statement exist only within the bounds of common decency and good taste. Each faculty member is also entitled to speak or to write as a citizen of the nation, state, and community without fear of institutional censorship or discipline.

The concept of academic freedom must be accompanied by an equally demanding concept of responsibility shared by the Board, administration, and faculty. The fundamental responsibilities of faculty as teachers and scholars include a maintenance of competence in their field of specialization and the exhibition of such competence in lectures and discussions. Although publishing is not a fundamental responsibility of a faculty member, it is encouraged by the college.

Exercise of professional integrity by a faculty member includes recognition that the public will judge the profession and the institution by his/her statements both in public and in private life. Therefore, he/she should strive to be accurate, to exercise appropriate restraint, to show respect for the opinions of others and to avoid creating the impression that he/she speaks or acts for his/her College when he/she speaks or acts as a private person.

A faculty member should be selective in the use of controversial material in the classroom and should introduce such material only as it has clear relationship to the subject field.

## Academic Honors

At the end of each Fall and Spring semester, certain students are recognized for superior academic achievement by being named to either the Chancellor's Honor List or the Dean's Honor List.

To qualify for the Chancellor's Honor List, students must attain a GPA of 4.0 while enrolled full-time (12 or more college-level semester hours). Students qualifying for the Dean's Honor List must be enrolled full-time (12 or more college-level semester hours) and achieve a GPA of 3.5 or above. Names of students so honored will be posted and released to the news media.

## Academic Load

At North Central Texas College, a full-time student is defined as one who is enrolled for a minimum of 12 semester credit hours per Fall, Spring, or combined Summer semesters. Special permission must be obtained from the Provost or designee in order to enroll for more than 18 semester credit hours during a Fall or Spring semester, more than 7 semester credit hours in an individual Summer session, or more than 14 semester credit hours during the combined Summer semesters.

## Attendance Regulations

The NCTC attendance policy is published in each course syllabi. NCTC faculty are expected to keep up to date attendance records. However, general regulations regarding class attendance are as follows:

- Regular and punctual attendance is expected of all students in all classes for which they have registered.
- All absences are considered to be unauthorized unless the student is absent due to sickness or emergencies which are approved by the instructor, or due to participation in an approved college-sponsored activity (which requires written approval from the appropriate Dean or Director).
- The instructor is responsible for judging the validity of any reasons given for absence. Valid reasons for absence however, do not relieve the student of the responsibility for making up required work.
- Students will not be allowed to make up an examination missed due to absence unless they have reasons acceptable to the instructor. A student who is compelled to be absent when a test is given should petition the instructor, in advance if possible, for permission to postpone the exam.
- Students may be dropped from a class by the Registrar upon recommendation of the instructor who feels the student has been unjustifiably absent or tardy a sufficient number of times to preclude meeting the course's objectives.
- Persistent, unjustified absences from classes or laboratories may be considered sufficient cause for College officials to drop a student from the rolls of the College.
- Students may be dropped from a developmental course required for the Texas Success Initiative (TSI) purposes for non-attendance. Official NCTC TSI rules state that students not passing all sections of the THEA, Compass, or new statewide TSI Assessment test must be enrolled in at least one area of remediation each semester they are enrolled or until all sections are passed or all remedial requirements have been met. Students who are dropped twice for non-attendance in a required developmental course will receive a registration hold limiting enrollment in the subsequent semester.
- Simply logging into an online course does not constitute attendance. The Department of Education calculates last date of attendance by the last time a student participated in an online discussion or made contact (interacted) with a faculty member and this standard is applied to online courses.

# Course Cancellation Policy

The College reserves the right to cancel any scheduled course which does not have sufficient enrollment to justify, economically or educationally, teaching the course. Students will be notified of a cancellation at the first scheduled meeting of a course.

## Dropping Courses

If a student's personal circumstances dictate the need to reduce their academic load, that student should confer with an advisor for assistance in adjusting the number of courses being taken. A grade of "W" will be given to students who officially withdraw from a course by the deadline noted in the academic calendar. Any drops after this will be made with the approval of the instructor and the Division Chair.

It is the student's responsibility to initiate the action necessary to drop courses under the conditions outlined above. This requires the completion of a petition for a course drop form available in the Office of Admissions on any NCTC Campus or by going to the NCTC website at [www.nctc.edu](http://www.nctc.edu) and then [Admissions](#). Choose the forms online option and follow directions for submission of form. This form must be submitted on or before the last day to drop with a "W" (see Academic Calendar in front of catalog for specific date), and it is not available until the official date of record. Prior to the official date of record, a student should go to the Office of Admission to complete the required drop form.

Students who register for courses are required to drop any courses they no longer wish to attend or a final grade will be assigned.

Instructors may drop students from courses for non-attendance by completing a petition for course withdrawal.

## (6) Drop Limit - S.B. 1231 Legislation

Effective 2007, section 51.907 of the Texas Education Code applies to first-time freshman students who enroll in a Texas public institution of higher education in the fall semester of 2007 or thereafter. High school students currently enrolled in the North Central Texas College Dual Credit and Early Admission program are waived from this requirement until high school graduation.

Based on this law, any Texas Public institution of higher education may not permit students to withdraw more than six college level credit courses for unacceptable reasons during their entire undergraduate career without penalty. All college-level courses withdrawn after the official date of record are included in the six-course limit, including courses dropped at another Texas public institution of higher education, unless the student demonstrates to an appropriate college official that one of the following events occurred to the student during the semester or summer session:



- A severe illness or other debilitating condition that affects the student's ability to satisfactorily complete the course.
- The student's responsibility for the care of a sick, injured, or needy person if the provision of that care affects the student's ability to satisfactorily complete the course.
- The death of a person who is considered to be a member of the student's family or who is otherwise considered to have a sufficiently close relationship to the student that the person's death is considered to be a showing of good cause.
- The active duty service as a member of the Texas National Guard or the armed forces of the United State of either the student or a person who is considered to be a member of the student's family or who is otherwise considered to have a sufficiently close relationship to the student that the person's active military service is considered to be a showing of good cause.
- The change of the student's work schedule that is beyond the control of the student, and that affects the student's ability to satisfactorily complete the course.
- Other good cause as determined by the college official.

Contact the Office of Admissions for further details related to exceptions.

## 51.907 b.3 Withdraw from the Institution

**Withdrawn from the Institution** is defined as any student that has dropped all courses for the semester, including any mini-semesters.

The Office of Admission and Registrar is responsible for tracking the number of drops that students have accumulated at North Central Texas College and from any transfer institution of public higher education in Texas. These drops will be indicated on the student's NCTC transcript.

## Course Drop Definition

A course drop, which will be recorded on the transcript, is defined as an affected credit course not completed by an undergraduate student who:

- is enrolled in the course by the official date of record\*
- will receive a non-punitive grade of W.

*\* Official date of record varies according to the length of the course. The most common course lengths are listed below. For the official date of record for all other course lengths, please contact the Registrar's Office.*

<b>COURSE LENGTH</b>	<b>DATE OF RECORD</b>
3 week course	2 <sup>nd</sup> class day
5 or 6 week course	4 <sup>th</sup> class day
8 week course	6 <sup>th</sup> class day
16 week course	12 <sup>th</sup> class day

The following courses will be exempt from being counted as a withdrawal towards the limitation. The courses are as follows:

- College Preparatory course drops (including non-college-prep courses dropped as a result of non-attendance in the College Prep course)
- Co-requisite courses - courses that are linked together such as a lecture/lab class
- Dual credit courses - courses that are taken as dual credit while also enrolled in the high school

Drops that will count towards the 6 drop limit include:

- Students who are withdrawn from the institution for disciplinary reason.
- Students who are dropped for non-attendance by individual faculty members.
- Students who do not meet any of the exemptions listed above.

## Complete Withdrawal

It is the student's responsibility to make payment for all courses in which they register. If a student wishes to withdraw from all courses, they must do so according to the above mentioned procedure. Once a grade has been given for a course, the student must initiate and complete the grade appeal process within one long semester of completion of the course, see section on [Grade Appeal Process](#).

If a student withdraws completely from the College on or prior to the *course drop date deadline*, as defined above, a final grade of "W" will be recorded for each course in which the student is enrolled. Should a student withdraw completely from the College after the *course drop date deadline*, a final grade will be recorded for each course in which the student is enrolled at the discretion of the appropriate Dean with the advice and consultation of the instructor of record.

## Medical Withdrawal

### Policy

The Registrar (or designated representative) may grant medical withdrawals to students who must withdraw for medical reasons from all courses for which they are registered at NCTC. It is expected that the appeal will be filed as soon as possible, no later than a week prior to final exams.

Students who receive medical withdrawals after the last day to withdraw without receiving a grade shall receive either an "I" or a "W" in each course for which they were registered.

## **Procedures**

1. Students (or their appointed representatives if they are unable to act for themselves) who seek to withdraw for medical reasons from all courses for which they are registered at NCTC shall, as soon as possible, request medical withdrawals in writing from the Registrar, submitting all appropriate documentation, including a statement from a physician or psychologist, with their written requests.
2. The documentation will be sent to the appropriate deans of the subject areas involved within the appeal. If the appeal involves multiple disciplines, then the request will be sent to the deans to discuss collaboratively providing a recommendation to the Office of Admissions and Registrar.
3. The Deans will be responsible for the validation of documentation.
4. The Registrar will inform the student and instructor of the decision in writing if the request is approved.

## **Faculty Withdrawals**

If a faculty member withdraws a student who has exceeded the six drop limit and who does not meet any of the areas of exemption, the withdrawal slip will be sent back to the faculty member with an indication that the student can no longer be withdrawn from classes due to exceeding the "six drop limit". The faculty member will be required to give the student a grade.

## **Grades & Reports**

Grades are reported and made a part of the official record, filed in the Registrar's Office, at the end of each semester. Students may view their grades online.

### **Minimum Grades for Good Academic Standing**

All students enrolled in credit courses at North Central Texas College, whether on a full-time or part-time basis, must maintain a minimum cumulative grade point average GPA of at least 2.0 to remain in Good Academic Standing.

### **System of Grading**

The standing of a student in each course is expressed by the following grades which are assigned for class work, examinations, and general classroom performance according to criteria set by the instructor.

Interpretations of these grades are:

- A — Excellent
- B — Good
- C — Average
- D — Poor
- F — Failure
- I — Incomplete
- W — Withdrew
- P — Pass

***Disclaimer:** Some departments and programs do not accept a grade of "D" as a passing grade.*

## Grade Points

Letter grades are assigned numerical values, or **grade points**, as follows per semester hour:

- A = 4 grade points
- B = 3 grade points
- C = 2 grade points
- D = 1 grade point
- F = 0 grade points

Courses with a grade of "P", "W", or "I" are not assigned grade point values and are not considered in computing grade point average (GPA). When a course initially taken at NCTC is repeated at NCTC, the higher grade earned is included in the computation of the cumulative GPA.

A student's cumulative GPA is determined by dividing the total college-level grade points earned by the total number of college-level credit hours attempted. To illustrate, a student who has attempted 30 college-level credit hours, earning 60 college-level grade points, would have a cumulative GPA of 2.0. College Preparatory coursework is not use in the calculation of the cumulative GPA, however, the grades earned and hours attempted are used in the calculation of the current term GPA, for example Spring, Fall, or Summer GPA.

## Pass/Fail Option

North Central Texas College permits enrollment in selected courses on a pass/fail option basis. In courses where this option is available to the student, the instructor can provide the necessary forms for selecting the pass/fail option. The forms must be completed by the student and instructor and returned to the Registrar's Office by the second Tuesday of the second week of the current semester. The pass/fail option will not be extended beyond this date.

Once the pass/fail option is processed, he or she may not return to a standard A, B, C, D, F evaluative system. It is not recommended to select the pass/fail option if the course in which the option is applied should be included as a part of the college major and expected to transfer that course to a senior college or university.

Performance requirements on the part of the student are the same regardless of the pass/fail option or the traditional A, B, C, D, F evaluative system. Courses taken on a pass/fail basis do not earn grade points, however, failing grades will be counted in the student's grade point average.

## Incomplete Grades

A grade of "I" signifies incomplete course work. The intent of an "I" is to allow a student to complete a course when unforeseen circumstances hinder the student from being able to complete the course during the regular semester.

The student must follow these procedures:

- To receive an "I" in any course, a student must be in good standing in the course through the last day to drop.
- The student must petition the instructor in writing, and if the instructor agrees that the incomplete grade is reasonable, he or she will detail in writing the requirements necessary to complete the course and attach the Incomplete Grade form to the final grade roll.
- It is the student's responsibility to comply prior to the end of the next long semester or the grade will be changed to an "F".
- Instructors who wish to issue a grade of "I" must submit the Incomplete Grade form with the appropriate documentation to the Division Chair for approval. Once an incomplete is finished, the instructor must submit a Petition of Change of Grade form for final approval.

## Student Grade Appeal

Any student wishing to appeal the final grade received in any course may do so according to the following procedure:

1. Collect all tests, assignments, class notes and other relevant materials and request a conference in writing with the instructor of the course in question. The same materials collected must be presented at each stage of the appeal process, with no addition or omission of items.
2. Present the case for grade appeal directly to the instructor.
3. If not satisfied with the decision of the instructor, the student has 10 calendar days to appeal in writing to the instructor's Division Chair (see listing in College

Personnel section of the Catalog). All tests, assignments, class notes and other relevant materials must be presented to the Department Chair or Program Coordinator.

4. If not satisfied with the decision of the Division Chair, the student has 10 calendar days to appeal in writing to the Academic Appeals Committee (contact information provided by the Division Chair). All tests, assignments, class notes and other relevant materials must be presented to the Committee.

Grade appeals may only be considered if the procedure has been followed explicitly in the order outlined. The grade appeal process must be initiated by the end of the sixth week of the next long semester. For more information students may consult Board Policy FLD (Local).

## Academic Probation

A student whose cumulative GPA is less than 2.0 at the end of a Fall, Spring, or Summer semester for which the student is enrolled will be placed on Academic Probation. A student on Academic Probation is notified of this status through NCTC email and a notation on his or her transcript.

A student will remain on Academic Probation if their semester GPA exceeds 2.0 but their cumulative GPA is below 2.0. If at any time a student's cumulative GPA is above 2.0 then the student will subsequently be released from Academic Probation.

A student on Suspension from another college or university (as noted on the student's official transcript), will be required to submit an Appeal to the Admissions office of NCTC in order to be eligible for enrollment. If approved for enrollment, this student will automatically be placed on Academic Probation status at NCTC, and therefore **MUST** earn a GPA of at least 2.0 in the first semester at NCTC in order to avoid moving to Suspension status.

## Academic Suspension

A student who is already on Academic Probation status will be placed on Academic Suspension status if his or her cumulative GPA remains below 2.0 at the end of the next Fall, Spring, or Summer semester in which the student is enrolled, and the student's term GPA for that Fall, Spring, or Summer semester is also below 2.0.

A student placed on Academic Suspension is required to sit out the next long semester in which the student intended to enroll at NCTC unless the student completes the Appeal process and is approved for enrollment. Students approved for an Academic Suspension Appeal will be assigned an Academic Advisor, will be limited in the number of hours in which they can enroll, and will also have other obligations to meet during the appeal semester such as attending College Success seminars.

A student on Academic Suspension is notified of this status through a mailed letter, NCTC and Canvas email, and a notation on the transcript.

A student placed on Academic Suspension status whose Appeal has been denied or who does not Appeal but rather sits out the next semester(s) (i.e. sits out Summer and/or Fall if placed on Suspension after Spring, or sits out Spring if placed on Suspension after Fall), will have a Registration Hold placed on the student's account and must meet with an Academic Advisor in order to re-enroll for the next eligible semester. Also, this student will automatically be placed on Academic Probation status when the student does re-enroll at NCTC, and therefore MUST earn a term GPA of at least 2.0 in the first semester back at NCTC in order to avoid returning to Suspension status.

### **Permanent Academic Suspension**

NCTC does not permanently suspend students for poor academic performance.

## **Numbering of Courses**

Courses are designated by four-digit numbers. The first digit indicates the level at which the course is taught. For example, a 1 indicates a freshman level course and a 2 indicates a sophomore level course. The second digit indicates the semester hour value of the course. The third and fourth digits indicate the distinguishing number of the course. For example, Government (GOVT) 2305 is a sophomore (2) level, three-semester-hour (3) course. The distinguishing number of this particular government course is 05.

## **Student Classification**

Freshmen are defined as students who have completed fewer than 30 semester hours of credit at the beginning of a registration period. Sophomores are defined as having completed 30 or more semester hours of credit.

## **Student Responsibilities**

### **Campus Behavior**

North Central Texas College reserves the right to take disciplinary measures appropriate to any violation and in keeping with its own best interests and the interests of other students. Such disciplinary action may result in a student being placed on probation or suspension from the College. In the latter case, a student will be given the opportunity to show his or her innocence or mitigating circumstances in a hearing before a Student Services Committee. This committee may uphold previous decisions or refer the case to the Chancellor of the College for final review.

## Student Records

Each individual student at NCTC is responsible for seeing that his/her records are kept accurate and up to date. If, after registration, students change their name, address, telephone number, social security number, etc., the Admissions/Registrar's Office should be notified as soon as possible.

Students who receive financial aid should also be sure that their mailing address is up to date in the Office of Financial Aid. North Central Texas College is not be responsible for financial aid award checks, grades or other documents/correspondence not received because of their failure to notify the Registrar of address changes.

Privacy of Information - North Central Texas College complies with all requirements of the Family Educational Rights & Privacy Act of 1974 (FERPA). As provided under this act, NCTC will-unless expressly requested in writing (to follow) not to do so by the student-release to the public, on request, certain student information. This will be restricted to "directory information," defined under FERPA as "not generally considered harmful or an invasion of privacy if disclosed." Directory information includes but is not limited to:

- Name, address, telephone number
- Student email
- Date and place of birth
- Participation in officially recognized activities and sports
- Major field of study
- Weight and height of athletes
- Enrollment status (full time, part time, etc.)
- Degrees and awards received
- Dates of attendance
- Previous high school and college attended
- Grade level

Directory information cannot include student identification numbers or social security numbers.

## College Debts

Students having overdue books at the Library or owing fines and students indebted to the College or the College Bookstore will not be issued a transcript and will not be permitted to re-register until such debts are paid. Students must clear all debt to the College before withdrawing.

## Check Cashing

A check of \$20 or less may be cashed at the NCTC Business Office. Proper identification is required. A student ID, driver's license or other photo identification and date of birth will be requested for check cashing privileges. A \$20.00 charge will be made for any returned check or payment.



# **Student Rights Concerning Educational Records**

## **Under FERPA**

The Family Educational Rights and Privacy Act (FERPA) affords students certain rights with respect to their education records. They include:

### **Right to Review Records**

NCTC students have the right to inspect and review their education records within 45 days of the day the College receives a request for access. Students should submit to the Registrar a written request that identifies the record(s) they wish to inspect. The Registrar will make arrangements for access and notify the students of the time and place where the records may be inspected.

### **Right to Correct Errors**

NCTC students have the right to request that an amendment be added to their educational records if they believe the records are inaccurate or misleading. They should provide this request to the Registrar, clearly identify the part of the record they want changed, and specify why it is inaccurate or misleading. The Registrar will notify the student of their judgment to amend and advise the student of his or her right to a hearing regarding the request for amendment. Additional information regarding the hearing procedures will be provided to the student when notified of the right to a hearing.

### **Right to Disclose Information**

NCTC 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. One exception which permits disclosure without consent is disclosure to school officials with legitimate educational interests.

### **Right to File Complaint**

Students have the right to file a complaint with the U.S. Department of Education concerning alleged failures by North Central Texas College to comply with the requirements of FERPA.

The name and address of the Office that administers FERPA complaints can be located at:

#### **Family Policy Compliance Office**

*U.S Department of Education*  
400 Maryland Avenue SW  
Washington D.C. 20202-4605

# Transfer of Courses to Senior Colleges

The hours earned at North Central Texas College in academic courses are generally accepted by other accredited colleges and universities to satisfy specific course requirements or to count as electives. Students who have gained proficiency through completion of course work from non-accredited institutions should consult the Provost regarding individual course evaluation.

Students planning to transfer to a four-year school, or other community college, should be aware that each school determines its own list of courses required for a particular kind of degree. Moreover, different colleges do not require all the same courses for the same major. Therefore, knowledge of the degree plan requirements at the institution to which the student plans to transfer is very important. Students can start to research these requirements by visiting the NCTC Transfer web page to access Transfer Guides for major universities, as well as Academic Pathways which outline the suggested courses you need to take for your intended college major.

NCTC counselors and advisors are familiar with course requirements at transfer colleges and will be glad to assist students in determining course equivalency and in choosing those courses which are appropriate to their educational objectives after they transfer.

## Resolution of Transfer Disputes

### For Lower Division Courses

The Texas Higher Education Coordinating Board has established the following policy to resolve disputes over transfer credit involving lower-division courses by public institutions of higher education.

The following procedures shall be followed:

1. If any institution of higher education does not accept course credit earned by a student at another institution of higher education, the receiving institution shall give written notice to the student and to the sending institution that transfer of the course credit is denied.
2. The two institutions and the student shall attempt to resolve the transfer of the course credit in accordance with Board rules and/or guidelines.
3. If the transfer dispute is not resolved to the satisfaction of the student or the sending institution within 45 days after the date the student received written notice of denial, the institution whose credit is denied for transfer shall notify the Commissioner of the denial.

The Commissioner of Higher Education or the Commissioner's designee shall make the final determination about the dispute concerning the transfer of course credit and give written notice of the determination to the involved student and institutions.

# Degree Requirements

As a two-year comprehensive community college, NCTC has the authority by the state of Texas to offer the following degrees:

- Associate of Arts (AA)
- Associate of Science (AS)
- Associate of Arts in Teaching (AAT)
- Associate of Applied Science (AAS)
- Level I Workforce Certificate
- Level II Workforce Certificate
- Occupational Skills Achievement Award

## Overview of Degree Requirements

AA, AS and AAT degrees are an embodiment of NCTC's goal to provide quality freshman and sophomore level courses in arts and sciences that parallel the lower division offerings of four-year colleges and universities by offering a coherent sequence of courses with appropriate breadth and depth to prepare students for transfer to a university.

The AAS and certificates represent NCTC's goal to provide quality technical programs leading directly to careers in semi-skilled and skilled occupations by offering a coherent sequence of courses with appropriate breadth and depth to prepare students for success in the workforce.

To graduate, students must complete the degree requirements with a cumulative grade point average of 2.0.

<b>Degree</b>	<b>Requirements</b>	<b>Semester Credit Hours</b>
<b>Associate of Arts (AA)</b>	Core Curriculum Courses	42
	Electives*	18
	Total Minimum Required Hours	60
<b>Associate of Science (AS)</b>	Core Curriculum Courses	42
	Electives*	6 or 7
	Additional Advanced Mathematics Course	3 or 4
	Two Additional Science Courses	8
	Total Minimum Required Hours	60 or 61

<b>Degree</b>	<b>Requirements</b>	<b>Semester Credit Hours</b>
<b>Associate of Arts in Teaching (AAT)</b>	Specific degree requirements for grades EC-6, 4-8, and Secondary are listed in current catalog	
<b>Associate of Applied Sciences (AAS)</b>	General Education Courses	15
<b>Technical Courses</b> (per degree plan)	Varies	Varies
<b>Proficiency With Computers</b> (per degree plan)	Varies	Varies

*\*Elective courses should be based on the degree requirements for your chosen Major Field of Study at the university you wish to attend. Transfer electives generally meet basic university degree requirements for a Major Field of Study. Recommended electives generally transfer, but they may not meet university Major Field of Study requirements. Either Transfer or Recommended electives will satisfy NCTC degree requirements.*

## Official Transcripts

Official college transcripts may be requested online through Parchment. NCTC partners with Parchment to manage ordering, processing and secure delivery of official transcripts. All official transcripts to be sent electronically or mailed must be ordered through Parchment. Visit the NCTC website for additional information.

Official college transcripts may be picked up on campus from the Office of Admissions on the Gainesville, Corinth, Flower Mound, Bowie, and Graham campuses. A photo ID is required in order to pick up transcripts.

Current students are able to view and print unofficial transcripts online on [MyNCTC](#). If a current student needs access to view their unofficial transcript online but has a transcript conversion hold, please email [transcripts@nctc.edu](mailto:transcripts@nctc.edu) for assistance with your student ID and full name.

## Graduation Requirements

### Application for Graduation

To ensure consideration as a candidate for a degree or certificate, the student should submit an application for graduation at the beginning of the semester in which a degree or certificate will be completed, or be identified as expected to graduate by the Registrar's Office. Students identified by this process will be notified by mail or email regarding their award. The application may be obtained online through [MyNCTC](#) or from the [Office of Admissions](#).

Deadlines for submitting graduation applications are:

- May graduation - March 15
- December graduation - October 15.

All graduating students are encouraged to submit a graduation application, regardless of intent to participate in the ceremony to ensure the desired name is printed on the diploma as well as the correct address of mailing the diploma. Graduation applications received after the deadline will be processed and students are encouraged to attend, but the student's name may not be published in the graduation program.

An evaluation of course work submitted to fulfill degree requirements must be completed before candidacy for graduation is approved. Any student within 12 hours of finishing may participate in May commencement. Those applying for May graduation must fulfill all requirements by the end of the second summer session following the semester they applied. Diplomas are granted only after all requirements are met.

## Requirements

North Central Texas College certifies graduates three times a year; in the fall, spring and summer semesters. North Central Texas College holds formal commencement ceremonies twice each year-in May and December. Students are encouraged to participate in spring or fall commencement ceremonies after applying to graduate. Diplomas are not awarded at commencement ceremonies and participation in the ceremonies is not a guarantee of degree completion. Degrees are officially conferred when the Registrar's Office certifies that all requirements have been met. Nevertheless, candidates for graduation are highly encouraged to attend and participate in the designated graduation ceremony. NCTC makes a special effort to give graduates (and their families) a beautiful and memorable ceremony to mark this important milestone in their lives. It truly is an event not to be missed.

There is no fee to participate in the commencement exercises; however, the student must purchase the required cap and gown from the NCTC campus bookstore in order to participate in the ceremony.

North Central Texas College reserves the right to post degrees and/or certificates for current or former students who have met completion requirements but have not applied for graduation. Diplomas will be automatically issued and sent to the mailing address on file.

## Graduation Honors

Graduation honors will be awarded for students with the following cumulative grade point averages earned by the end of the Fall semester prior to the May graduation ceremony and by the end of the summer session prior to the December graduation ceremony. A minimum of 29 hours (earned at NCTC by the end of the Fall semester prior to the May graduation ceremony and by the end of the summer session prior to the December graduation ceremony) will be required in order to be considered for graduation honors.

4.0 GPA — Summa cum laude

3.90 — 3.99 GPA Magna cum laude

## **Commencement**

North Central Texas College certifies graduates three times a year; in the Fall, Spring, and Summer semesters. North Central Texas College holds formal commencement ceremonies twice each year-in May and December. Students are encouraged to participate in spring or fall commencement ceremonies after applying to graduate. Diplomas are not awarded at commencement ceremonies and participation in the ceremonies is not a guarantee of degree completion. Degrees are officially conferred when the Registrar's Office certifies that all requirements have been met. Nevertheless, candidates for graduation are highly encouraged to attend and participate in the designated graduation ceremony. NCTC makes a special effort to give graduates (and their families) a beautiful and memorable ceremony to mark this important milestone in their lives. It truly is an event not to be missed.

There is no fee to participate in the commencement exercises; however, the student must purchase the required cap and gown from the NCTC campus bookstore in order to participate in the ceremony.

North Central Texas College reserves the right to post degrees and/or certificates for current or former students who have met completion requirements but have not applied for graduation. Diplomas will be automatically issued and sent to the mailing address on file.

## **Catalog Restrictions**

Students may graduate under any approved degree plan from the catalog in effect at the time of first enrollment at North Central Texas College, provided the catalog is still in effect, the current catalog, or a subsequent catalog in effect during enrollment as long as the program of study is still offered. In addition to this, the catalog may not be more than 5 years old and enrollment must have occurred during that year and earned college credit for work completed. The options above only apply provided the student meets the requirements not later than five years from the date of the catalog selected.

## **Reverse Transfer**

A student can finish an associate's degree at NCTC after transferring to a university. Credits earned at a four-year college or university are evaluated to determine if the credits taken will fulfill requirements for an associate's degree.

If a student is interested in being considered for reverse transfer, then contact should be made with the appropriate office at the university or college. Check the NCTC website for more information.

## **Educational Intent**

At the time of admission, students must identify their educational intent, i.e. to earn a certificate, to complete a degree or to transfer coursework for a bachelor's degree.

Students must also identify a major. This information is kept on file in the Office of Admissions and Registrar. Students may change their educational intent and/or their major during the course of their education. A Records Maintenance Form must be filed in the Office of Admissions and Registrar to make the change official. Changes in educational intent and/or major are effective the following semester.

# Instructional Division

The Instructional Division at NCTC is made up of eight major instructional areas with a Division Chair for each department who report to one of eight Deans, who in turn report to a Provost.

1. Visual and Performing Arts, Social Sciences, and English, Foreign Language and Speech
2. Math and Sciences
3. Career and Technical Education
4. Health Sciences
5. Adult and Continuing Education
6. Library Services
7. Student Success
8. Honors Studies

## Arts and Sciences

Associate of Arts (AA), Associate of Science (AS), and the Associate of Art in Teaching (AAT) degrees are offered through the Arts & Sciences area, under the leadership of the Instructional Deans and Division Chairs. The instructional programs are organized according to major subject areas or disciplines, as follows:

### **Department of English, Speech & Foreign Language**

- English
- Foreign Language
- Speech

### **Department of Visual and Performing Arts**

- Drama
- Music
- Art

### **Department of Mathematics**

### **Department of Science**

- Biology
- Chemistry
- Physics
- Astronomy
- Geology



## **Department of Physical Education & Athletics**

### **Department of (AAT) Education**

- Early Childhood-Grade 6
- Grades 4-8
- Secondary (Grades 9-12)
- Learning Frameworks

### **Department of Social Sciences**

- Government
- Economics
- History
- Humanities
- Philosophy
- Psychology
- Sociology
- Anthropology

# **Career & Technical Education**

Associate of Applied Science (AAS) degrees and certifications are offered through the Career and Technical Education Division, under the leadership of the Instructional Dean and Department Chairs. The instructional programs, as listed, are organized according to major subject areas.

- Accounting
- Agriculture
- Business Management
- Business Office Technology
- Computer Information Systems & Technology
- Computer Network Systems
- Computer Science
- Cosmetology
- Criminal Justice
- CyberSecurity
- Database Administration
- Engineering Technology
- Equine Science
- Electrical Technician
- Farm & Ranch Management
- Gaming/Application Programming
- Horticulture
- Heating, Ventilation, and Air Conditioning
- Industrial Mechanics

- Machining Technology
- Office Systems Technology
- Petroleum Technology
- Web Design
- Welding

## Health Sciences

Associate degrees and certifications are offered through the Health Sciences area, under the leadership of the Dean and Division Chairs. The instructional programs, as listed below, are organized according to major subject areas.

- Associate Degree Nursing
- Fire Sciences
- Emergency Medical Technology
- Licensed Vocational Nursing
- Radiological Technology
- Surgical Technology

## Dual Credit Program

The Dual Credit program at NCTC provides an opportunity for eligible high school students to enroll in college-level courses to earn both college credit and high school credit simultaneously. Students may take NCTC classes at any NCTC campus, at their high schools, online or any combination of the three. Refer to Admissions Information for eligibility requirements.

## eCampus

The mission of the eLearning Department is to facilitate the continued growth and development of distance learning opportunities for a diverse and rapidly changing student population. The department strives to accommodate a wide range of online student needs and learner preferences.

Students can expect the same high-quality courses as those taught in the classroom. The content and transferability is identical to courses offered on campus. eCampus students follow the same admissions and registration procedures as on-campus students. A student may complete the core curriculum through online courses, and many technical program courses are available online.

Online courses require students to have an Internet connection to complete coursework. Students may use a personal computer in a setting that fits their needs. For those with limited connectivity, they may use NCTC General Access Lab computers on-

campus. NCTC uses the Canvas Learning Management System for all online and hybrid courses. Face-to-face courses also use Canvas to log grade and attendance data and may use Canvas to deliver resources, activities, and assessments. Students use their assigned NetID to login to Canvas.

An online course is delivered 80%-100% online. Most online courses are conducted completely online, however, some do require students come to campus for testing, etc.

A hybrid course is delivered 30%-79% online. Hybrid courses blend online and face-to-face delivery. Hybrid courses require some on-campus time yet offer the flexibility of fewer trips to campus. Generally, a hybrid course meets on campus one day a week to attend lab or classroom instruction.

Students should check specific course information by searching [MyNCTC](#) under [Find Courses](#).

## Adult Continuing Education (ACE)

The Division of Adult Continuing Education (ACE) at North Central Texas College provides non-credit learning options in workforce education and personal enrichment. In order to address the needs of an increasingly diverse student population, courses are flexibly scheduled at Cooke, Denton, Montague, and Young Counties.

Occupational training programs are a mainstay in the ACE division. Working hand-in-hand with employers and workforce development boards, NCTC develops curriculum to support ever-changing labor pool needs. With the understanding that many individuals need to prepare for a career change while in the workforce, the number of comprehensive workforce and certification programs offered entirely on-line has increased to 500+ topics.

NCTC is viewed as a customized training provider of choice in the region, working with employers to identify and implement specialized training objectives. Subsequent results prompt increased efficiency and employee retention, groom workers for upward mobility and improve the competitive stance of the organization. Additionally, professionals who require mandatory professional education look to NCTC to polish competencies.

Cultural/personal enrichment courses range from art, fitness, and gardening, to home décor, music, financial management, and language studies. Topics are modified regularly in alignment with popular trends. Students may even opt to pursue their personal interests using the distance education venue.

Computer classes teach basic to advanced technology skills like the Microsoft Suite, specific business applications such as Quickbooks, and trendy subjects such as digital photography.

Informational schedules are available each semester and may be viewed on the college web site, [www.nctc.edu](http://www.nctc.edu), under the Lifelong Learning link. Non-credit course registration is on-going throughout the year and encouraged at least seven business days prior to the class start.

The majority of ACE courses do not mandate prerequisites. However, some courses

may be taken only by those students who meet age restrictions or pre-designated experience or licensure. Any specific eligibility criteria will be reflected on [ace.nctc.edu](http://ace.nctc.edu)

- Enrollment in all course topics is based upon a first-come, first-serve basis.
- All course topics require minimum enrollment for implementation.
- Continuing Education Units (CEUs), the nationally recognized means of recording and accounting for the various continuing education activities a person accumulates, are awarded for completion of courses. One (1) is awarded for every 10 contact hours of organized continuing adult education.

## Conversion of Non-Credit to Credit

A student may enroll in select technical credit courses but choose to earn continuing education units (CEUs) instead of academic credit. This is referred to as concurrent enrollment. Upon course completion, the concurrently enrolled student receives a conventional letter grade, and the CEUs are posted to the student's combined transcript.

Within two years of course completion and enrollment as an undergraduate student, a student who has a passing conventional letter grade for a noncredit course may apply to have the CEUs earned for that course converted to regular semester-hour college credit. At this point, semester-hour credits earned are posted to the student's undergraduate academic transcript. Once converted to college credit, the course can count toward the requirements for a certificate or degree.

## ACE Registration

Enrollment forms may be found in the course schedule or sent to students upon request. Registration can be conducted in person, by phone, fax or mail. Payment is required at the time of registration.

**Note:** ACE offers a payment plan for workforce development courses/groups of courses (\$199 or higher + fee total). Currently, the Division offers limited scholarships for courses pertaining to GED and other workforce certificates.

### **Gainesville Campus**

Adult Continuing Education (ACE) Division  
1525 W. California Street  
Gainesville, TX 76240  
(940) 668-3373  
Fax (940) 668-6049

**Corinth Campus**

1404 N. Corinth Street, Suite 307 Corinth,  
TX, 76208  
(940) 668-3373  
Fax (940) 498-6401

**Bowie Campus**

810 S. Mill Street  
Bowie, Texas 76230-1247  
(940) 872-4002  
Fax (940) 872-3065

**Flower Mound Campus**

1200 Parker Square  
Flower Mound, Texas 75028  
(972) 899-8419  
Fax (972) 899-8401

## Honors Studies at NCTC

The Honors Program at North Central Texas College is an initiative designed to provide deserving area students with advanced learning and community leadership opportunities. Students in the program will be automatically considered for honors scholarships. Participating students will benefit from personalized learning plans, innovative and exemplary teaching, smaller class sizes, and guidance through the transfer process. Other advantages of honors study include service learning experiences and access to cultural and other special events. With completion of the requisite coursework, graduating and transferring students qualify to receive the Honors Program designation on transcripts, diplomas, and honors certificates.

Honors coursework emphasizes academic rigor and the development of both critical thinking and communication skills. Honors faculty develop courses in a variety of ways—course content can be organized topically or thematically, according to instructor expertise, and/or with an interdisciplinary focus. Regardless of approach, the instructional goal is to offer students competing perspectives within a global context, while engaging student intellectual curiosity. Honors subsections of core curriculum courses are offered each semester. Students who need coursework beyond what is offered may develop an even more personalized plan of study. Honors options can be created by contract with faculty and student collaboration. All honors coursework arrangements, whether contracts or subsections, need to be finalized by the second week of the semester. More information and the appropriate forms can be found in the Honors Handbook.

For more information, visit [honors.nctc.edu](http://honors.nctc.edu) or contact the Office of Honors Studies.

**Jill Swarner**

*Honors Coordinator*  
(940) 665-7731, ext. 4301  
[jswarner@nctc.edu](mailto:jswarner@nctc.edu)

# Library Services

In addition to the main library on the Gainesville campus, Mary Josephine Cox Library, NCTC also has additional campus libraries on the Bowie, Corinth, and Flower Mound campuses. Students use the online catalog to identify materials and, if the item needed is on another NCTC campus, students can request the item through the online catalog. Those who are at the Graham campus, which does not have a physical library location but is assisted through the Bowie Public Library, may also request items through the online catalog. A courier service between campuses ensures rapid delivery of materials.

Students can access many of the library resources online. In addition to traditional print resources, NCTC has an eBook collection and thousands of periodical titles (magazines, newspaper, journals, etc.) from databases accessible from any computer on the college's intranet. For information on accessing resources remotely, students should contact their NCTC campus library. Students on the Graham campus should contact the Bowie Campus Library.

If a citation found in an online periodical database does not provide a link to the full text of the article, students should check to see if the NCTC Libraries has a print subscription and if there is none, students may request the article through interlibrary loan.

## Materials & Resources

The NCTC Libraries has over 45,000 materials (both print and media) available across four campus libraries and campus workstation access on the College's Intranet (during campus library operating hours) to over 70 electronic information sources which include periodical databases (index and full-text collections), newspaper archives, and over 25,000 eBooks. There is also 24/7 remote access to the electronic information sources through the MyNCTC portal.

The NCTC Libraries also has:

- Intra-campus loan service, allowing borrowing across campuses via courier
- General Access Computer Labs available through each campus library\*
- Special collections such as Graphic Novels and the Genealogical collection.
- Interlibrary Loan and TexShare Card program
- Ask-a-Librarian service
- Research assistance from professional librarians
- Citation help both online and in-person
- Online subject guides
- Photocopiers and DVD players and monitors are available to students for In-Library Use Only within the campus libraries.

*\*On the Corinth campus, the computer lab is located outside the library in Room 366; the computer lab on the Graham campus is separate from and not maintained by the NCTC Libraries.*

## **Online, Web-Accessible Catalog**

An online public access catalog (OPAC) is accessible from any NCTC workstation as well as via the Internet through the Library link on the NCTC website, MyNCTC portal, and on the NCTC Library website. The OPAC provides indexed access to books and audiovisual materials in the NCTC Libraries collection. Circulating items check out upon presentation of an NCTC photo identification card; students may request that items located at another NCTC campus library be sent to their NCTC home campus through the on-line catalog and students who are unable to locate specific research materials within the NCTC Libraries collection are encouraged to inquire at the Circulation Desk for reference assistance, interlibrary loan services, and TexShare services. Students at the Graham campus may contact the librarian at the Bowie campus for assistance. For county residents, either a county resident card issued by the NCTC Libraries or a TexShare Card issued by a public library that is a member of TexShare will allow checkout of circulating items.

## **General Access Computer Labs**

Computer Labs are located within the library at the Bowie, Flower Mound, and Gainesville campuses and in room 366 at the Corinth campus. Lab hours are posted in the respective buildings and on the NCTC Libraries website. Although NCTC students have priority, there are also two public access computers at the Mary Josephine Cox Library on the Gainesville campus.

## **Courier Learning Resources**

A courier delivers and returns materials between the NCTC campuses. In addition, the TexShare program provides two-day weekly courier services for interlibrary loan items. NCTC students and employees may inquire at the Circulation Desk on their respective campus to learn more about the interlibrary loan service.

## **Important Note**

A student's library record must be clear at the conclusion of each semester before transcripts of grades will be released or before he/she is allowed to re-enroll. At the end of the semester, a hold is placed on records of any student having an unpaid fine and/or a currently overdue book. Library circulation policy is posted on the Library website.

## **Saturday College**

Saturday College at North Central Texas College is designed to fit the busy lifestyle of students who want to complete a college degree. The Saturday College reflects NCTC's commitment to the education of students of diverse ages and backgrounds by allowing students to earn credits toward four degree options by attending classes only one day a week.

Courses that require class attendance will be offered outside traditional teaching hours in blocks of time on Saturday. The courses will be delivered in such a way as to concentrate the learning experience using the facilities and staff of NCTC to offer the opportunity to complete a degree in the traditional classroom setting combined with online courses.

The Saturday College classes fulfill general education requirements for the state of Texas. Many courses will transfer with full credit between and among all public state-supported institutions of higher education within the state. Special articulation agreements between NCTC and the major universities in this region ensure the student that their coursework will provide the step up to a higher degree if they wish. Students are advised to meet with their academic advisor prior to enrolling in the Saturday College so they can be assured that the courses they take meet their educational goals.

Saturday College classes are available at NCTC's Corinth and Flower Mound campuses. The same objectives and requirements that apply to the courses regularly taught on campus during the week also apply to Saturday College. Although the delivery methods vary, the content does not. Full-time faculty members and adjunct faculty who teach during the week also teach Saturday College courses.

## **Virtual College of Texas -VCT- Courses**

Students may enroll in VCT courses within the following guidelines:

1. Students **MUST** register for online courses at NCTC as long as courses are open and meet the student's needs.
2. The fee charged by the provider college may not exceed \$200.00.
3. Students may register only in VCT courses that are not available through NCTC in the online format and that have been approved by the appropriate department. However, students can contact other institutions directly to inquire about enrolling in their course.
4. Students who have enrolled in VCT courses and either dropped or failed for two consecutive semesters must enroll in and pass 12 hours of non-VCT courses before they may enroll in another VCT course.



# NCTC Core Curriculum

To complete the 42 hour Core Curriculum, a student must earn the required number of semester credit hours according to the parameters described below.

## Communication - 2 courses

<a href="#">ENGL 1301</a>	COMPOSITION I	3 credit hours
<a href="#">ENGL 1302</a>	COMPOSITION II	3 credit hours
<a href="#">ENGL 2311</a>	TECHNICAL & BUSINESS WRITING	3 credit hours

*6 credit hours - Select two courses from the list above.*

## Mathematics - 1 course

<a href="#">MATH 1314</a>	COLLEGE ALGEBRA	3 credit hours
<a href="#">MATH 1316</a>	PLANE TRIGONOMETRY	3 credit hours
<a href="#">MATH 1324</a>	MATHEMATICS FOR BUSINESS & SOCIAL SCIENCES	3 credit hours
<a href="#">MATH 1325</a>	CALCULUS FOR BUSINESS & SOCIAL SCIENCES	3 credit hours
<a href="#">MATH 1332</a>	CONTEMPORARY MATHEMATICS I	3 credit hours
<a href="#">MATH 1342</a>	ELEMENTARY STATISTICAL METHODS	3 credit hours
<a href="#">MATH 2412</a>	PRE-CALCULUS MATH	4 credit hours
<a href="#">MATH 2413</a>	CALCULUS I	4 credit hours

*3 - 4 credit hours - Select one course from the list above.*

## Life and Physical Sciences - 2 courses

<a href="#">ASTR 1403</a>	STARS AND GALAXIES	4 credit hours
<a href="#">ASTR 1404</a>	SOLAR SYSTEM	4 credit hours
<a href="#">BIOL 1406</a>	BIOLOGY FOR SCIENCE MAJORS I	4 credit hours
<a href="#">BIOL 1407</a>	BIOLOGY FOR SCIENCE MAJORS II	4 credit hours
<a href="#">BIOL 1408</a>	BIOLOGY FOR NON- SCIENCE MAJORS I	4 credit hours
<a href="#">BIOL 1411</a>	GENERAL BOTANY	4 credit hours
<a href="#">BIOL 1413</a>	GENERAL ZOOLOGY	4 credit hours

**Life and Physical Sciences - 2 courses**

<a href="#">BIOL 2401</a>	HUMAN ANATOMY AND PHYSIOLOGY I	4 credit hours
<a href="#">BIOL 2402</a>	HUMAN ANATOMY AND PHYSIOLOGY II	4 credit hours
<a href="#">BIOL 2406</a>	ENVIRONMENTAL BIOLOGY	4 credit hours
<a href="#">CHEM 1406</a>	INTRODUCTORY CHEMISTRY	4 credit hours
<a href="#">CHEM 1411</a>	GENERAL CHEMISTRY I	4 credit hours
<a href="#">CHEM 1412</a>	GENERAL CHEMISTRY II	4 credit hours
<a href="#">GEOL 1401</a>	EARTH SCIENCE FOR NON-MAJORS I	4 credit hours
<a href="#">GEOL 1402</a>	EARTH SCIENCE FOR NON-MAJORS II	4 credit hours
<a href="#">HORT 1401</a>	HORTICULTURE	4 credit hours
<a href="#">PHYS 1401</a>	COLLEGE PHYSICS I	4 credit hours
<a href="#">PHYS 1402</a>	COLLEGE PHYSICS II	4 credit hours
<a href="#">PHYS 1415</a>	PHYSICAL SCIENCE	4 credit hours
<a href="#">PHYS 2425</a>	UNIVERSITY PHYSICS I	4 credit hours
<a href="#">PHYS 2426</a>	UNIVERSITY PHYSICS II	4 credit hours

*6 credit hours - Select two courses from the list above.*

*Some courses require a prerequisite course.*

**Language, Philosophy, and Culture - 1 course**

<a href="#">ENGL 2322</a>	BRITISH LITERATURE I	3 credit hours
<a href="#">ENGL 2323</a>	BRITISH LITERATURE II	3 credit hours
<a href="#">ENGL 2327</a>	AMERICAN LITERATURE I	3 credit hours
<a href="#">ENGL 2328</a>	AMERICAN LITERATURE II	3 credit hours
<a href="#">ENGL 2332</a>	WORLD LITERATURE I	3 credit hours
<a href="#">ENGL 2333</a>	WORLD LITERATURE II	3 credit hours
<a href="#">ENGL 2351</a>	MEXICAN AMERICAN LITERATURE	3 credit hours
<a href="#">ENGL 2341</a>	FORMS OF LITERATURE	3 credit hours
<a href="#">HIST 2321</a>	WORLD CIVILIZATIONS I	3 credit hours
<a href="#">HIST 2322</a>	WORLD CIVILIZATIONS II	3 credit hours
<a href="#">HUMA 1301</a>	INTRODUCTION TO THE HUMANITIES I	3 credit hours

**Language, Philosophy, and Culture - 1 course**

<a href="#">PHIL 1301</a>	INTRODUCTION TO PHILOSOPHY	3 credit hours
<a href="#">PHIL 2306</a>	INTRODUCTION TO ETHICS	3 credit hours
<a href="#">SPAN 2311</a>	INTERMEDIATE SPANISH I	3 credit hours

*3 credit hours - Select one course from the list above.*

**Creative Arts - 1 course**

<a href="#">ARTS 1301</a>	ART APPRECIATION	3 credit hours
<a href="#">DANC 2303</a>	DANCE APPRECIATION I	3 credit hours
<a href="#">DRAM 1310</a>	INTRODUCTION TO THEATER	3 credit hours
<a href="#">DRAM 1330</a>	STAGECRAFT I	3 credit hours
<a href="#">DRAM 2366</a>	INTRODUCTION TO CINEMA	3 credit hours

<a href="#">MUSI 1306</a>	MUSIC APPRECIATION	3 credit hours
<a href="#">MUSI 1310</a>	AMERICAN MUSIC	3 credit hours

*3 credit hours - Select one course from the list above.*

**History - 2 courses**

<a href="#">HIST 1301</a>	UNITED STATES HISTORY I	3 credit hours
<a href="#">HIST 1302</a>	U.S. HISTORY FROM 1865	3 credit hours
<a href="#">HIST 2301</a>	TEXAS HISTORY	3 credit hours

*6 credit hours - Select two courses from the list above.*

**Government - 2 courses**

<a href="#">GOVT 2305</a>	FEDERAL GOVERNMENT (Federal constitution & topics)	3 credit hours
<a href="#">GOVT 2306</a>	TEXAS GOVERNMENT (Texas constitution & topics)	3 credit hours

**Social and Behavioral Sciences - 1 course**

<a href="#">ANTH 2346</a>	GENERAL ANTHROPOLOGY	3 credit hours
<a href="#">ANTH 2351</a>	CULTURAL ANTHROPOLOGY	3 credit hours
<a href="#">ECON 2301</a>	PRINCIPLES OF MACROECONOMICS	3 credit hours

**Social and Behavioral Sciences - 1 course**

<a href="#">ECON 2302</a>	PRINCIPLES OF MICROECONOMICS GENERAL	3 credit hours
<a href="#">PSYC 2301</a>	PSYCHOLOGY LIFESPAN	3 credit hours
<a href="#">PSYC 2314</a>	GROWTH & DEVELOPMENT	3 credit hours
<a href="#">SOC1 1301</a>	INTRODUCTION TO SOCIOLOGY	3 credit hours
<a href="#">SOC1 1306</a>	SOCIAL PROBLEMS	3 credit hours
<a href="#">SPCH 1318</a>	INTERPERSONAL COMMUNICATION	3 credit hours

*3 credit hours - Select one course from the list above.*

**Component Area Option - 2 courses**

<a href="#">SPCH 1315</a>	PUBLIC SPEAKING	3 credit hours
<a href="#">SPCH 1321</a>	BUSINESS AND PROFESSIONAL COMMUNICATION	3 credit hours
<a href="#">EDUC 1300</a>	LEARNING FRAMEWORK	3 credit hours
<a href="#">PSYC 1300</a>	LEARNING FRAMEWORK	3 credit hours

*SPCH 1315 or SPCH 1321 AND EDUC 1300 or PSYC 1300 for a total of 6 hours*

# Associate of Arts in Teaching

The Associate of Arts in Teaching (AAT) degree offers the first two years of classes towards initial teacher certification. This degree is approved by the Texas Higher Education Coordinating Board approved collegiate degree program consisting of lower division courses intended for transfer to baccalaureate programs that lead to initial Texas teacher certification.

North Central Texas College has particular transfer agreements for this degree program with the University of North Texas, Texas Woman's University, Midwestern State University and Southeastern Oklahoma State University. Early Childhood—Grade 6 degree program is also designed to help teacher aides and paraprofessionals who seek college credit hours to comply with the No Child Left Behind Act. Substitute teachers would also benefit from the education courses offered in the degree program.

The AAT degree includes the complete core degree requirements as well as field of study and additional math and science courses. All courses lead to initial teacher certification programs at the four year university. Students are strongly encouraged to seek advisement for all AAT degree programs.

Most university teacher education programs require a 2.50 overall GPA and a 3.0 or higher in field of study courses. Each university also specifies a required minimum THEA score for entrance to the college of education.

## AAT Early Childhood-Grade 6

The AAT Early Childhood-Grade 6 degree is appropriate for students who seek teacher certification in the following areas:

- EC-6 Generalist
- EC-6 Bilingual Generalist
- EC-6 ESL Generalist
- EC-6 other content area teaching fields/academic disciplines/interdisciplinary majors

## AAT Grades 4-8

AAT Grades 4-8 degree is appropriate for students who seek teacher certification in the following areas:

- 4-8 Generalist
- 4-8 Bilingual Generalist
- 4-8 ESL Generalist
- 4-8 English Language Arts and Reading
- 4-8 English Language Arts and Reading/Social Studies
- 4-8 Mathematics
- 4-8 Mathematics/Science
- 4-8 Science

- 4-8 Social Studies
- 4-8 other content area teaching fields/academic disciplines/interdisciplinary majors

## **AAT Secondary Grades 8-12**

AAT Secondary Grades 8-12 degree is appropriate for students who seek teacher certification in the following areas:

- Mathematics
- Science (Chemistry, Physics, Physical Science, or General Science)
- English Language Arts and Reading
- History
- Foreign Language

In order to successfully complete any of the AAT degree programs, students will be required to pass a criminal background check and complete a field experience lab component in each of their field of study courses.

## **AAT Early Childhood-Grade 6**

### **Associate of Arts in Teaching**

The Associate of Arts in Teaching degree (AAT) is a Texas Higher Education Coordinating Board-approved collegiate degree program consisting of lower-division courses intended for transfer to baccalaureate programs that lead to initial Texas teacher certification. The AAT degree as defined by the Coordinating Board is fully transferable to all Texas public universities. Because the AAT fulfills the requirements of the field of study curriculum statutes and Coordinating Board rules, all Texas public universities must accept the AAT curricula if they offer the applicable baccalaureate degrees leading to initial teacher certification. However, students who complete the AAT will be required to meet any and all entrance requirements of the receiving university and the educator preparation program, including grade point averages and/or testing requirements.

Upon Completion of this degree students will be able to:

- Demonstrate knowledge of the teaching profession's main tenets.
- Demonstrate an understanding of multicultural perspectives in education including special education, English as a Second Language (ESL), cultural differences, socioeconomic differences and issues dealing with urban, rural and suburban schools.
- Identify the major ideas and influences of major educational theorists.
- Categorize methods of teacher/parent communication into two distinct categories, one way communication and two way communications.

Students pursuing this degree typically incur tuition and fee costs of approximately \$4,200 (In-District). Books and supplies constitute approximately an additional \$1,500. Financing for this program may be available through grants, scholarships, loans, and institutional financing plans.

This program is designed to take 4 full-long semesters to complete and is comprised of the following suggested pathway or course of study. This degree can be completed either online or face-to-face contingent on course scheduling and availability.

	<b>First Semester</b>
<a href="#">ENGL 1301</a>	Grammar & Composition I
<a href="#">HIST 1301</a>	US History ( <i>up to 1865</i> )
<a href="#">EDUC 1300</a>	Learning Frameworks
<a href="#">MATH 1314</a>	College Algebra
<a href="#">SOC 1301</a>	Intro to Sociology
	<b>Second Semester</b>
<a href="#">ENGL 1302</a>	Grammar & Composition II
<a href="#">HIST 1302</a>	US History ( <i>from 1865</i> )
Non-Majors <a href="#">Science Core</a>	<a href="#">BIOL 1408</a> , <a href="#">BIOL 2406</a> , <a href="#">PHYS 1415</a> , <a href="#">GEOL 1401</a> , <a href="#">GEOL 1402</a> , <a href="#">ASTR 1403</a> , or <a href="#">ASTR 1404</a>
<a href="#">MATH 1350</a>	Mathematics for Teachers I
<a href="#">EDUC 1301</a> *	Introduction to the Teaching Profession
	<b>Third Semester</b>
Non-Majors <a href="#">Science Core</a>	<a href="#">BIOL 1408</a> , <a href="#">BIOL 2406</a> , <a href="#">PHYS 1415</a> , <a href="#">GEOL 1401</a> , <a href="#">GEOL 1402</a> , <a href="#">ASTR 1403</a> , or <a href="#">ASTR 1404</a>
<a href="#">GOVT 2305</a>	American National Government
<a href="#">MATH 1351</a>	Mathematics for Teachers II
<a href="#">EDUC 1301</a> *	Introduction to the Teaching Profession
<a href="#">ENG 2327</a> , or <a href="#">2332</a>	American Literature I, World Literature I
<a href="#">EDUC 2301</a> *	Introduction Special Populations
	<b>Fourth Semester</b>
<a href="#">GOVT 2306</a>	State & Local Government
Non-Majors <a href="#">Science Core</a>	<a href="#">BIOL 1408</a> , <a href="#">BIOL 2406</a> , <a href="#">PHYS 1415</a> , <a href="#">GEOL 1401</a> , <a href="#">GEOL 1402</a> , <a href="#">ASTR 1403</a> , or <a href="#">ASTR 1404</a>
<a href="#">SPCH 1315</a>	Public Speaking
<a href="#">ARTS 1301</a>	Arts Appreciation

\* *Students may be required to pass a criminal background check to complete 16 observation hours for EDUC 1301 and EDUC 2301*

# AAT in Grades 4-8 EC-12 Special Education

## Associate of Arts in Teaching

The Associate of Arts in Teaching degree (AAT) is a Texas Higher Education Coordinating Board-approved collegiate degree program consisting of lower-division courses intended for transfer to baccalaureate programs that lead to initial Texas teacher certification. The AAT degree as defined by the Coordinating Board is fully transferable to all Texas public universities. Because the AAT fulfills the requirements of the field of study curriculum statutes and Coordinating Board rules, all Texas public universities must accept the AAT curricula if they offer the applicable baccalaureate degrees leading to initial teacher certification. However, students who complete the AAT will be required to meet any and all entrance requirements of the receiving university and the educator preparation program, including grade point averages and/or testing requirements.

Upon Completion of this degree students will be able to:

- Demonstrate knowledge of the teaching profession's main tenets.
- Demonstrate an understanding of multicultural perspectives in education including special education, English as a Second Language (ESL), cultural differences, socioeconomic differences and issues dealing with urban, rural and suburban schools.
- Identify the major ideas and influences of major educational theorists.
- Categorize methods of teacher/parent communication into two distinct categories, one way communication and two way communications.

Students pursuing this degree typically incur tuition and fee costs of approximately \$4,200 (In-District). Books and supplies constitute approximately an additional \$1,500. Financing for this program may be available through grants, scholarships, loans, and institutional financing plans.

This program is designed to take 4 full-long semesters to complete and is comprised of the following suggested pathway or course of study. This degree can be completed either online or face-to-face contingent on course scheduling and availability.

### **First Semester**

[ENGL 1301](#)

Grammar & Composition I

[HIST 1301](#)

US History (*up to 1865*)

[EDUC 1300](#)

Learning Frameworks

[MATH 1314](#)

College Algebra

[SOC 1301](#)

Intro to Sociology

### **Second Semester**

[ENGL 1302](#)

Grammar & Composition II

[HIST 1302](#)

US History (*from 1865*)



	<b>Second Semester</b>
Non-Majors <a href="#">Science Core</a>	<a href="#">BIOL 1408</a> , <a href="#">BIOL 2406</a> , <a href="#">PHYS 1415</a> , <a href="#">GEOL 1401</a> , <a href="#">GEOL 1402</a> , <a href="#">ASTR 1403</a> , or <a href="#">ASTR 1404</a>
<a href="#">MATH 1350</a>	Mathematics for Teachers I
<a href="#">EDUC 1301</a> *	Introduction to the Teaching Profession
	<b>Third Semester</b>
Non-Majors <a href="#">Science Core</a>	<a href="#">BIOL 1408</a> , <a href="#">BIOL 2406</a> , <a href="#">PHYS 1415</a> , <a href="#">GEOL 1401</a> , <a href="#">GEOL 1402</a> , <a href="#">ASTR 1403</a> , or <a href="#">ASTR 1404</a>
<a href="#">GOVT 2305</a>	American National Government
<a href="#">MATH 1351</a>	Mathematics for Teachers II
<a href="#">EDUC 1301</a> *	Introduction to the Teaching Profession
<a href="#">ENG 2327</a> , or <a href="#">2332</a>	American Literature I, World Literature I
<a href="#">EDUC 2301</a> *	Introduction Special Populations
	<b>Fourth Semester</b>
<a href="#">GOVT 2306</a>	State & Local Government
Non-Majors <a href="#">Science Core</a>	<a href="#">BIOL 1408</a> , <a href="#">BIOL 2406</a> , <a href="#">PHYS 1415</a> , <a href="#">GEOL 1401</a> , <a href="#">GEOL 1402</a> , <a href="#">ASTR 1403</a> , or <a href="#">ASTR 1404</a>
<a href="#">SPCH 1315</a>	Public Speaking
<a href="#">ARTS 1301</a>	Arts Appreciation

\* *Students may be required to pass a criminal background check to complete 16 observation hours for EDUC 1301 and EDUC 2301*

## AAT in Grades 7-12 EC-12 Other than Special Education

### Associate of Arts in Teaching

The Associate of Arts in Teaching degree (AAT) is a Texas Higher Education Coordinating Board-approved collegiate degree program consisting of lower-division courses intended for transfer to baccalaureate programs that lead to initial Texas teacher certification. The AAT degree as defined by the Coordinating Board is fully transferable to all Texas public universities. Because the AAT fulfills the requirements of the field of study curriculum statutes and Coordinating Board rules, all Texas public universities must accept the AAT curricula if they offer the applicable baccalaureate degrees leading to initial teacher certification. However, students who complete the AAT will be required to meet any and all entrance requirements of the receiving university and the educator preparation program, including grade point averages and/or testing requirements.

Upon Completion of this degree students will be able to:

- Demonstrate knowledge of the teaching profession's main tenets.
- Demonstrate an understanding of multicultural perspectives in education including special education, English as a Second Language (ESL), cultural differences, socioeconomic differences and issues dealing with urban, rural and suburban schools.
- Identify the major ideas and influences of major educational theorists.
- Categorize methods of teacher/parent communication into two distinct categories, one way communication and two way communications.

This program is designed to take 4 full-long semesters to complete and is comprised of the following suggested pathway or course of study. This degree can be completed either online or face-to-face contingent on course scheduling and availability.

	<b>First Semester</b>
<a href="#">ENGL 1301</a>	Grammar & Composition I
<a href="#">HIST 1301</a>	US History ( <i>up to 1865</i> )
<a href="#">EDUC 1300</a>	Learning Frameworks
<a href="#">MATH 1314</a>	College Algebra
<a href="#">SOC1 1301</a>	Intro to Sociology
	<b>Second Semester</b>
<a href="#">ENGL 1302</a>	Grammar & Composition II
<a href="#">HIST 1302</a>	US History ( <i>from 1865</i> )
Non-Majors <a href="#">Science Core</a>	<a href="#">BIOL 1408</a> , <a href="#">BIOL 2406</a> , <a href="#">PHYS 1415</a> , <a href="#">GEOL 1401</a> , <a href="#">GEOL 1402</a> , <a href="#">ASTR 1403</a> , or <a href="#">ASTR 1404</a>
<a href="#">MATH 1350</a>	Mathematics for Teachers I
<a href="#">EDUC 1301</a> *	Introduction to the Teaching Profession
	<b>Third Semester</b>
Non-Majors <a href="#">Science Core</a>	<a href="#">BIOL 1408</a> , <a href="#">BIOL 2406</a> , <a href="#">PHYS 1415</a> , <a href="#">GEOL 1401</a> , <a href="#">GEOL 1402</a> , <a href="#">ASTR 1403</a> , or <a href="#">ASTR 1404</a>
<a href="#">GOVT 2305</a>	American National Government
<a href="#">MATH 1351</a>	Mathematics for Teachers II
<a href="#">EDUC 1301</a> *	Introduction to the Teaching Profession
<a href="#">ENGL 2322</a>	British Literature
<a href="#">ENGL 2327</a>	American Literature I or
<a href="#">ENGL 2332</a>	World Literature I
<a href="#">EDUC 2301</a> *	Introduction Special Populations
	<b>Fourth Semester</b>
<a href="#">GOVT 2306</a>	State & Local Government
Non-Majors <a href="#">Science Core</a>	<a href="#">BIOL 1408</a> , <a href="#">BIOL 2406</a> , <a href="#">PHYS 1415</a> , <a href="#">GEOL 1401</a> , <a href="#">GEOL 1402</a> , <a href="#">ASTR 1403</a> , or <a href="#">ASTR 1404</a>
<a href="#">SPCH 1315</a>	Public Speaking
<a href="#">ARTS 1301</a>	Arts Appreciation

*\* Students may be required to pass a criminal background check to complete 16 observation hours for EDUC 1301 and EDUC 2301*

## **Degree Plan**

Degree is contingent on the transferring university's recommended or preferred course work for specific content area. The following pathways are provided only as a guide. Students should contact transferring university for approval.

- Biology
- Chemistry
- Visual Arts
- English
- History
- Kinesiology
- Mathematics

# Curricula Career & Technical Education

To earn either an Associate of Applied Science Degree or a Certificate, students must achieve an overall grade point average of at least 2.0 and complete the minimum number of semester hours specified for each program. Fifteen of the semester hours required for completion of the degree or certificate must be completed at NCTC.

A student can refer to each individual program section in the following pages for requirements specific to those programs.

To verify entry-level workplace competencies, the institution must provide at least one of the following for each approved award (certificate or degree):

- A capstone experience
- Eligibility for a credentialing exam
- An external learning experience which should occur during the last semester of the student's educational program.

Specifics are listed within program information.

NCTC's Associate of Applied Science Degrees transfer into Bachelor of Applied Arts and Sciences degrees at several Texas universities. Check <http://ntxccc.org/pathways> to see which degrees transfer and to which universities.

For more information, contact the Division Chair, Program Coordinator, or the Dean of Career & Technical Education.

## Agriculture Management Program

**Steve Keith**

*Chair Agriculture Division*

(940) 668-4217

[skeith@nctc.edu](mailto:skeith@nctc.edu)

At NCTC we strive to continue to provide students with opportunities to obtain the knowledge and skills needed to compete in today's agricultural industry: providing a solid foundation for those who aspire to transfer to a senior university. Innovation, globalization, critical thinking, diversity, leadership, problem-solving, hands-on-experience are key words used in describing what we offer our students at North Central Texas College.

The Agriculture Management Certificate is designed for students who plan to pursue a career in the farming and ranching industry. The program provides practical and educational experiences in animal science, beef cattle production, pasture management, livestock business, animal nutrition, and computer applications specific to agriculture. Agriculture Management students learn skills and practices applicable to the

management of farms, ranches, and other agricultural businesses. Through laboratory experience students will utilize their knowledge base to apply to real-world examples at our Experimental Farm/Beef Research Center. All courses in the certificate apply toward the AAS in Farm and Ranch Management.

### Gainful Employment Disclosure

<a href="#"><u>AGRI 2317</u></a>	<b>First Semester</b> INTRODUCTION TO AGRICULTURAL ECONOMICS	3 credit hour
OR		
<a href="#"><u>AGRI 1325</u></a>	MARKETING OF AGRICULTURE PRODUCTS	3 credit hours
OR		
<a href="#"><u>AGMG 2301</u></a>	LIVESTOCK BUSINESS MANAGEMENT	3 credit hours
<a href="#"><u>AGRI 1309</u></a>	COMPUTERS IN AGRICULTURE	3 credit hours
<a href="#"><u>AGRI 2301</u></a>	AGRICULTURAL POWER UNITS	3 credit hours
OR		
<a href="#"><u>AGRI 2303</u></a>	AGRICULTURAL CONSTRUCTION I	3 credit hours
OR		
<a href="#"><u>AGME 1315</u></a>	FARM & RANCH SHOP SKILLS I	3 credit hours
<a href="#"><u>AGAH 1453</u></a>	BEEF CATTLE PRODUCTION	4 credit hours
TOTAL CREDIT HOURS		13
	<b>Second Semester</b>	
<a href="#"><u>AGCR 2405</u></a>	ENTOMOLOGY	4 credit hours
<a href="#"><u>AGRI 2321</u></a>	LIVESTOCK EVALUATION I FORAGE	3 credit hours
<a href="#"><u>AGCR 1441</u></a>	AND PASTURE MANAGEMENT	4 credit hours
<a href="#"><u>AGAH 1372</u></a>	AGRICULTURAL SPANISH	3 credit hours
<a href="#"><u>AGMG 2280</u></a>	COOPERATIVE EDUCATION- AGRICULTURAL BUSINESS AND MANAGEMENT, GENERAL	2 credit hours
Total Credit Hours:		16
<b>TOTAL CREDIT HOURS: 29</b>		

# Farm & Ranch Management AAS

## Associate of Applied Science Degree

### Steve Keith

*Division Chair, Agriculture*

(940) 668-4217

[skeith@nctc.edu](mailto:skeith@nctc.edu)

The Farm and Ranch Management curriculum provides a combination of agriculture, business, technology, and general education to prepare students for agricultural occupations.

The Farm and Ranch AAS program is designed for students who plan to pursue a career in the farming and ranching industry. The program provides practical and educational experiences in animal science, beef cattle production, pasture management, livestock business, animal nutrition, and computer applications specific to agriculture. Students learn skills and practices applicable to the management of farms, ranches, and other agricultural businesses.

Upon completion of this Associate of Applied Science Degree, graduates will be able to:

- Identify plants and pests which are of economic importance to forage and livestock production.
- Correctly perform applicable animal husbandry practices such as castration, tattooing, and injections.
- Utilize equipment owners' manual to properly set-up and maintain farm equipment.
- Restate the fundamental concepts of planting small grains either through preparing a seed bed or no-till method.
- Recommend modern feeding practices and nutritional principles to livestock feeding programs.

This degree is offered face-to-face; however, some core curriculum requirements may be completed online if the student chooses. The program is designed to take two years to complete and is comprised of the following suggested pathway or course of study.

## Degree Requirements

	<b>First Semester</b>	
<a href="#">AGRI 1131</a>	THE AGRICULTURE INDUSTRY	1 credit hour
<a href="#">ENGL 1301</a>	COMPOSITION I	3 credit hours
<a href="#">AGRI 1309</a>	COMPUTERS IN AGRICULTURE	3 credit hours
<a href="#">AGRI 1407</a>	AGRONOMY	4 credit hours
<a href="#">AGRI 2317</a>	INTRODUCTION TO AGRICULTURAL ECONOMICS	3 credit hours

	<b>First Semester</b>	
OR		
<a href="#">AGRI 1325</a>	MARKETING OF AGRICULTURE PRODUCTS	3 credit hours
Total Credit Hours:		14
	<b>Second Semester</b>	
<a href="#">MATH 1314</a>	COLLEGE ALGEBRA	3 credit hours
OR		
<a href="#">MATH 1342</a>	ELEMENTARY STATISTICAL METHODS	3 credit hours
OR		
<a href="#">MATH 1332</a>	CONTEMPORARY MATHEMATICS	3 credit hours
<a href="#">CORE</a>	Core Social/Behavioral Science	3 credit hours
<a href="#">SPCH 1315</a>	PUBLIC SPEAKING	3 credit hours
OR		
<a href="#">SPCH 1318</a>	INTERPERSONAL COMMUNICATION	3 credit hours
OR		
<a href="#">SPCH 1312</a>	BUSINESS & PROFESSIONAL COMMUNICATION	3 credit hours
<a href="#">AGRI 1419</a>	INTRODUCTORY ANIMAL SCIENCE	4 credit hours
<a href="#">AGMG 2301</a>	LIVESTOCK BUSINESS MANAGEMENT	3 credit hours
Total Credit Hours:		16
	<b>Third Semester</b>	
<a href="#">CORE</a>	Humanities/Fine Arts	3 credit hours
<a href="#">AGAH 1372</a>	AGRICULTURAL SPANISH	3 credit hours
<a href="#">AGRI 2303</a>	AGRICULTURAL CONSTRUCTION	3 credit hours
OR		
<a href="#">AGRI 2301</a>	AGRICULTURAL POWER UNITS	3 credit hours
OR		
<a href="#">AGME 1315</a>	FARM AND RANCH SHOP SKILLS I	3 credit hours
<a href="#">AGAH 1453</a>	BEEF CATTLE PRODUCTION	4 credit hours

	<b>Third Semester</b>	
<a href="#">AGAH 2270</a>	ARTIFICIAL INSEMINATION	2 credit hours
OR		
<a href="#">AGAH 2271</a>	CATTLE REPRODUCTION	2 credit hours
Total Credit Hours:		15
	<b>Fourth Semester</b>	
<a href="#">AGCR 2405</a>	ENTOMOLOGY FORAGE AND PASTURE	4 credit hours
<a href="#">AGCR 1441</a>	MANAGEMENT	4 credit hours
<a href="#">AGAH 2313</a>	PRINCIPLES OF FEEDS AND FEEDING	3 credit hours
<a href="#">AGMG 2480</a>	COOPERATIVE EDUCATION- AGRICULTURAL BUSINESS AND MANAGEMENT, GENERAL	4 credit hours
Total Credit Hours:		15

**Total Credit Hours: 60**

Capstone Requirement: [AGMG 2480](#) Cooperative Education - Agricultural Business and Management, General is the capstone requirement and may not be substituted. It should be taken the last semester before graduation.

## Business Management Program

**Doug Akins**

*Business Management Faculty*

(940) 498-6261

[dakins@nctc.edu](mailto:dakins@nctc.edu)

The Business Management program at North Central Texas College is designed to equip students with knowledge and skills directly applicable to a career in management, as well as to update and sharpen personal management skills. The program is also designed to provide quality workforce education to men and women seeking to qualify themselves for positions of managerial responsibility in business and industry.

Classes focus on the specific needs of the student, whether that is to work for a large corporation or to manage a business as a sole proprietor. Students may pursue a certificate or an AAS in Business Management. All courses in the certificate apply towards the AAS.



# Business Management AAS

## Associate of Applied Science Degree

The Business Management Associate of Applied Science Degree is designed to equip students with knowledge and skills directly applicable to a career in management or supervision, as well as to update and sharpen personal management skills. It is also aimed at providing quality workforce education for positions of managerial responsibility in business and industry. In addition to providing classroom-based course work, the College works with local and area employers to provide on-the-job training experiences to bridge the gap between theory and practice.

Upon completion of the Associate of Applied Science Degree, students will be able to:

- Demonstrate written and oral communication skills appropriate for business situations.
- Plan the operations of a business across functional areas.
- Demonstrate the ability to perform basic financial analysis.
- Demonstrate an understanding of global dimensions of business including sociocultural, political, legal, financial, technological, and economic environments.

This degree can be completed through a mix of face-to-face classes and online classes. The program is designed to take two years to complete and is comprised of the following suggested pathway or course of study.

## Degree Requirements

<a href="#">ACNT 1303</a>	<b>First Semester</b> INTRODUCTION TO ACCOUNTING I	3 credit hours
OR		
<a href="#">ACCT 2301</a>	PRINCIPLES OF FINANCIAL ACCOUNTING	3 credit hours
<a href="#">BUSG 1304</a>	FINANCIAL LITERACY	3 credit hours
<a href="#">HRPO 2301</a>	HUMAN RESOURCE MANAGEMENT	3 credit hours
<a href="#">BUSG 1301</a>	INTRODUCTION TO BUSINESS	3 credit hours
<a href="#">MRKG 1301</a>	CUSTOMER RELATIONS MANAGEMENT	3 credit hours
Total Credit Hours:		15
	<b>Second Semester</b>	
<a href="#">ACNT 1311</a>	INTRODUCTION TO COMPUTERIZED ACCOUNTING	3 credit hours

OR

<b>Second Semester</b>		
<a href="#">ACCT 2302</a>	PRINCIPLES OF MANAGERIAL ACCOUNTING	3 credit hours
<a href="#">POFT 2312</a>	BUSINESS CORRESPONDENCE AND COMMUNICATION	3 credit hours
<a href="#">MRKG 1311</a>	PRINCIPLES OF MARKETING	3 credit hours
<a href="#">BMGT 1327</a>	PRINCIPLES OF MANAGEMENT	3 credit hours
<a href="#">BMGT 2309</a>	LEADERSHIP	3 credit hours
Total Credit Hours:		15

<b>Third Semester</b>		
<a href="#">BCIS 1305</a>	BUSINESS COMPUTER APPLICATIONS	3 credit hours
<a href="#">IBUS 1305</a>	INTRODUCTION TO INTERNATIONAL BUSINESS AND TRADE	3 credit hours
<a href="#">HRPO 2307</a>	ORGANIZATIONAL BEHAVIOR	3 credit hours
<a href="#">BUSG 2305</a>	BUSINESS LAW/ CONTRACTS	3 credit hours
<a href="#">ARTS 1301</a>	ART APPRECIATION	3 credit hours
Total Credit Hours:		15

<b>Fourth Semester</b>		
<a href="#">ENGL 1301</a>	COMPOSITION I	3 credit hours
<a href="#">SPCH 1321</a>	BUSINESS & PROFESSIONAL COMMUNICATION	3 credit hours
OR		
<a href="#">SPCH 1315</a>	PUBLIC SPEAKING	3 credit hours
OR		
<a href="#">SPCH 1318</a>	INTERPERSONAL COMMUNICATION	3 credit hours
<a href="#">ECON 2301</a>	PRINCIPLES OF MACROECONOMICS	3 credit hours
<a href="#">MATH 1342</a>	ELEMENTARY STATISTICAL METHODS	3 credit hours
OR		
<a href="#">MATH 1314</a>	COLLEGE ALGEBRA	3 credit hours
OR		

<a href="#">MATH 1332</a>	CONTEMPORARY MATHEMATICS I	3 credit hours
<a href="#">BUSG 2380</a>	COOPERATIVE EDUCATION - BUSINESS/ COMMERCE, GENERAL	3 credit hours

Total Credit Hours: 15

**Total Credit Hours: 60**

Capstone Requirement: [BUSG 2380](#) Cooperative Education - Business General is the capstone requirement and may not be substituted. It should be taken the last semester before graduation.

## Business Management Certificate

### Level 1 Workforce Certificate

Upon completion of the Level 1 Workforce Certificate, students will be able to:

- Identify the business functions of accounting, finance, management, and marketing.
- Understand the theories of trade flow.

#### [Gainful Employment Disclosure](#)

This certificate can be completed either completely face-to-face or through a mix of face-to-face classes and online classes. The program is designed to take two semesters, or 32 weeks, to complete and is comprised of the following suggested pathway or course of study.

### Certificate Requirements

	<b>First Semester</b>	
<a href="#">ACNT 1303</a>	INTRODUCTION TO ACCOUNTING I	3 credit hours
<a href="#">BUSG 1304</a>	FINANCIAL LITERACY	3 credit hours
<a href="#">HRPO 2301</a>	HUMAN RESOURCES MANAGEMENT	3 credit hours
<a href="#">BUSG 1301</a>	INTRODUCTION TO BUSINESS	3 credit hours
<a href="#">IBUS 1305</a>	INTRODUCTION TO INTERNATIONAL BUSINESS AND TRADE	3 credit hours
<a href="#">MRKG 1301</a>	CUSTOMER RELATIONSHIP MANAGEMENT	3 credit hours

Total Credit Hours: 18

<a href="#">ACNT 1311</a>	INTRODUCTION TO COMPUTERIZED ACCOUNTING	3 credit hours
OR		
<a href="#">ACCT 2302</a>	PRINCIPLES OF MANAGERIAL ACCOUNTING	3 credit hours
<a href="#">POFT 2312</a>	BUSINESS CORRESPONDENCE AND	3 credit hours
<a href="#">MRKG 1311</a>	COMMUNICATION PRINCIPLES OF	3 credit hours
<a href="#">BMGT 1327</a>	MARKETING PRINCIPLES OF	3 credit hours
<a href="#">BMGT 2309</a>	MANAGEMENT	3 credit hours
<a href="#">POFT 1220</a>	LEADERSHIP	2 credit hours
Total Credit Hours:	JOB SEARCH SKILLS	17

**Total Credit Hours: 35**

Capstone Requirement: [POFT 1220](#) Job Search Skills is the capstone requirement.

## Business Office Technology Program

**Dr. Cherly Furdge**

*Chair, Public Administration and Management Division*

(940) 498-6263

[cfurdge@nctc.edu](mailto:cfurdge@nctc.edu)

The Business Office Technology curriculum is designed to prepare students for a variety of careers related to office technology and to update and sharpen current skills. This program is available 100% online. The program's flexibility allows the student to take classes over the Internet while continuing to work full-time or meeting family needs. It is designed to equip students with the knowledge and skills directly related to their career and specifically targets existing occupational areas that are forecast by regional planning agencies to be growing ones. Upon completion of this program, students may find work as an administrative assistant, secretary, receptionist, accounting assistant, or other business office support positions.

The objectives of the program include preparing students to become employable through training in the occupational area by providing adequate information, learning opportunities, and hands-on practice to become proficient in using computer applications and office technology and providing professional guidance and ethical foundations for the office environment.

**Prerequisite:** Use of the computer is essential for success in this program. Students enrolled in Business Office Technology classes must be able to keyboard at a minimum rate of 30 words per minute, and will be required to take a keyboarding test to verify that they meet this requirement. Those that cannot meet the requirement must take a keyboarding class to improve their skills prior to or concurrent with enrollment.

# Business Office Technology AAS

## Associate of Applied Science Degree

Courses in the certificate program transfer directly into the degree.

Upon completion of the Associate of Applied Science degree, students will be able to:

- Construct and present effective oral and written forms of professional business communication.
- Integrate technology in performing business functions.
- Demonstrate proficiency in selecting and using appropriate business software applications.
- Understand and perform office record-keeping functions.

The Associate of Applied Science degree can be completed 100% online. The program is designed to take two years to complete and is comprised of the following suggested pathway or course of study.

## Degree Requirements

	<b>First Semester</b>	
<a href="#">POFT 1329</a>	BEGINNING KEYBOARDING	3 credit hours
<a href="#">POFT 1309</a>	ADMINISTRATIVE OFFICE PROCEDURES I	3 credit hours
<a href="#">POFI 2301</a>	WORD PROCESSING	3 credit hours
<a href="#">POFT 2331</a>	ADMINISTRATIVE PROJECT SOLUTIONS	3 credit hours
<a href="#">ACNT 1303</a>	INTRODUCTION TO ACCOUNTING I	3 credit hours
Total Credit Hours:		15
	<b>Second Semester</b>	
<a href="#">ACNT 1311</a>	INTRODUCTION TO COMPUTERIZED ACCOUNTING	3 credit hours
<a href="#">POFI 1349</a>	SPREADSHEETS	3 credit hours
<a href="#">POFT 1328</a>	BUSINESS PRESENTATIONS	3 credit hours

[POFT 1319](#) RECORDS AND INFORMATION MANAGEMENT I 3 credit hours

[POFI 2331](#) DESKTOP PUBLISHING 3 credit hours

Total Credit Hours: 15

**Third Semester**

[ITSW 1307](#) INTRODUCTION TO DATABASE 3 credit hours

[ENGL 1301](#) COMPOSITION I 3 credit hours

[BCIS 1305](#) BUSINESS COMPUTER APPLICATIONS 3 credit hours

[POFT 1325](#) BUSINESS MATH USING TECHNOLOGY 3 credit hours

[POFT 2312](#) BUSINESS CORRESPONDENCE & COMMUNICATION 3 credit hours

Total Credit Hours: 15

**Fourth Semester**

[MATH 1332](#) CONTEMPORARY MATHEMATICS 3 credit hours

[POFT 2380](#) COOPERATIVE EDUCATION - ADMINISTRATIVE ASSISTANT & SECRETARIAL SCIENCE, GENERAL 3 credit hours

[SPCH 1321](#) BUSINESS & PROFESSIONAL COMMUNICATION 3 credit hours

[ARTS 1301](#) ART APPRECIATION 3 credit hours

[ECON 2301](#) PRINCIPLES OF MACROECONOMICS 3 credit hours

Total Credit Hours: 15

**Total Credit Hours: 60**

Capstone Requirement: [POFT 2380](#) Cooperative Education - Administrative Assistant and Secretarial Science is the capstone requirement and may not be substituted. It should be taken the last semester before graduation.

## Business Office Technology Certificate

### Level 1 Workforce Certificate

Courses in the certificate program transfer directly into the degree.

Upon completion of the Level 1 Workforce Certificate, students will be able to:

- Perform the basic skills of an office professional.
- Demonstrate the recording of adjusting entries.

[Gainful Employment Information](#)

This certificate can be completed 100% online. The program is designed to take two semesters, or 32 weeks, to complete and is comprised of the following suggested pathway or course of study.

## Certificate Requirements

<b>First Semester</b>		
<a href="#">POFT 1329</a>	BEGINNING KEYBOARDING	3 credit hours
<a href="#">POFT 1309</a>	ADMINISTRATIVE OFFICE PROCEDURES I	3 credit hours
<a href="#">POFI 2301</a>	WORD PROCESSING	3 credit hours
<a href="#">POFT 2331</a>	ADMINISTRATIVE PROJECT SOLUTIONS	3 credit hours
<a href="#">ACNT 1303</a>	INTRODUCTION TO ACCOUNTING I	3 credit hours
Total Credit Hours:		15

<b>Second Semester</b>		
<a href="#">ACNT 1311</a>	INTRODUCTION TO COMPUTERIZED ACCOUNTING	3 credit hours
<a href="#">POFT 1328</a>	BUSINESS PRESENTATIONS	3 credit hours
<a href="#">POFI 1349</a>	SPREADSHEETS	3 credit hours
<a href="#">POFI 2331</a>	DESKTOP PUBLISHING	3 credit hours
<a href="#">POFT 1220</a>	JOB SEARCH SKILLS	2 credit hours
<a href="#">POFT 1319</a>	RECORDS AND INFORMATION MANAGEMENT I	3 credit hours
Total Credit Hours:		17

**Total Credit Hours: 32**

Capstone Requirement: [POFT 1220](#) Job Search Skills is the capstone requirement.

# Business Office Technology OSA

## Occupational Skills Award

This award is designed to provide training for individuals interested in obtaining marketable skills as a Microsoft Office Specialist. Emphasis is placed on preparation for Microsoft Office certification examinations.

## Occupational Skills Award Requirements

	First Semester	
<a href="#">POFI 2301</a>	WORD PROCESSING	3 credit hours
<a href="#">POFI 1349</a>	SPREADSHEETS	3 credit hours
<a href="#">POFT 1328</a>	BUSINESS PRESENTATIONS	3 credit hours
<a href="#">ITSW 1307</a>	INTRODUCTION TO DATABASE	3 credit hours
Total Credit Hours:		12

**Total Credit Hours: 12**

# Computer Information Systems & Technology (CITE) Program

**Susan Svane**

*Chair Information Technology Division*

(940) 498-6292

[ssvane@nctc.edu](mailto:ssvane@nctc.edu)

The Computer Information Systems & Technology (CITE) curriculum is designed to prepare students for careers in the high demand Information Technology segment of the workforce.

Each area of the curriculum provides entry level skills, or prepares the student for industry certification in the chosen field of study. The CITE program curriculum has been developed with the assistance and advice of an advisory council which is composed of service area industry professionals.

Students may pursue an Occupational Skills Award, Level 1 Workforce Certificate, or an Associate of Applied Science degree.

The degree and certificate programs will provide the student with skills in industry standard software and hardware. The program provides skills in computer applications, performing critical thinking, and the application of ethics in their daily operations.

**Prerequisite:** Students in this program must be able to keyboard at a minimum rate of 40 words per minute. Those who cannot meet this requirement must take a keyboarding class to improve their skills prior to enrollment.



# Computer Help Desk OSA

## Occupational Skills Award

This Computer Help Desk Occupational Skill Award can be completed through a mix of face-to-face and online classes. The award is designed to take 16 weeks to complete and is comprised of the following suggested pathway or course of study.

## Occupational Skills Award Requirements

### First Semester

<a href="#">ITNW 1358</a>	NETWORK+	3 credit hours
<a href="#">ITSC 1325</a>	PERSONAL COMPUTER HARDWARE	3 credit hours
<a href="#">EECT 1300</a>	TECHNICAL CUSTOMER SERVICE	3 credit hours

Total Credit Hours: 9

**Total Credit Hours: 9**

# Computer Information Systems & Technology Certificate

## Level 1 Workforce Certificate

Curriculum provides similar classes to the degree programs, however there are no academic classes in the certificate. A student that commences study as a certificate student and later desires to complete the degree program will find that the classes taken for a certificate will readily transfer to the degree program.

Upon completion of the Level 1 Workforce Certificate, students will be able to:

- Communicate technical issues related to computer hardware, software, and networks through presentations and reports.
- Comprehend and resolve common desktop and network issues.

### [Gainful Employment Disclosure](#)

This certificate can be completed through a mix of face-to-face, hybrid, and online classes. Several of the courses are offered in an 8-week term, rather than a 16-week term. The program is designed to take two semesters, or 32 weeks to complete, and is comprised of the following suggested pathway or course of study.

## Certificate Requirements

	<b>First Semester</b>	
<a href="#">ITSC 1316</a>	LINUX INSTALLATION AND CONFIGURATION	3 credit hours
<a href="#">IMED 1316</a>	WEB PAGE DESIGN I	3 credit hours
<a href="#">ITSE 2321</a>	OBJECT-ORIENTED PROGRAMMING	3 credit hours
<a href="#">ITNW 1358</a>	NETWORK+ PERSONAL	3 credit hours
<a href="#">ITSC 1325</a>	COMPUTER HARDWARE	3 credit hours

Total Credit Hours:	<b>Second Semester</b>	15
<a href="#">ARTC 1325</a>	INTRODUCTION TO COMPUTER GRAPHICS TECHNICAL CUSTOMER SERVICE	3 credit hours
<a href="#">EECT 1300</a>	INTERMEDIATE WEB PROGRAMMING	3 credit hours
<a href="#">ITSE 2302</a>	INTRODUCTION TO DATABASE COMPUTER PROGRAMMING	3 credit hours
<a href="#">ITSW 1307</a>		3 credit hours
<a href="#">ITSE 1302</a>		3 credit hours

Total Credit Hours: 15

**Total Credit Hours: 30**

Capstone Requirement: Students completing the certificate must pass a comprehensive program exam with a score of 70% or higher to satisfy the capstone requirement. Exam must be scheduled with the Division Chair.

## Computer Information Systems & Technology AAS

### Associate of Applied Science Degree

Upon completion of the Associate of Applied Science degree, students will be able to:

- Communicate technical issues related to computer hardware, software, and networks through presentations and reports.
- Analyze and troubleshoot common hardware issues.
- Analyze and troubleshoot common software issues.
- Demonstrate the ability to work effectively in teams.

This degree can be completed through a mix of face-to-face, hybrid, and online classes. Several of the courses are offered in an 8-week term, rather than a 16-week term. The program is designed to take two years to complete and is comprised of the following suggested pathway or course of study

## Degree Requirements

### First Semester

<a href="#">ITSC 1316</a>	LINUX INSTALLATION AND CONFIGURATION	3 credit hours
<a href="#">IMED 1316</a>	WEB PAGE DESIGN I	3 credit hours
<a href="#">ITNW 1358</a>	NETWORK+	3 credit hours
<a href="#">ITSE 2321</a>	OBJECT-ORIENTED PROGRAMMING	3 credit hours
<a href="#">ITSC 1325</a>	PERSONAL COMPUTER HARDWARE	3 credit hours
Total Credit Hours:		15

### Second Semester

<a href="#">ARTC 1325</a>	INTRODUCTION TO COMPUTER GRAPHICS	3 credit hours
<a href="#">EECT 1300</a>	TECHNICAL CUSTOMER SERVICE	3 credit hours
<a href="#">ITSE 2302</a>	INTERMEDIATE WEB PROGRAMMING	3 credit hours
<a href="#">ITSW 1307</a>	INTRODUCTION TO DATABASE	3 credit hours
<a href="#">ITSE 1302</a>	COMPUTER PROGRAMMING	3 credit hours
Total Credit Hours:		15

### Third Semester

<a href="#">ENGL 1301</a>	COMPOSITION I	3 credit hours
<a href="#">ARTC 1302</a>	DIGITAL IMAGING I (PHOTOSHOP)	3 credit hours
<a href="#">IMED 1345</a>	INTERACTIVE DIGITAL MEDIA	3 credit hours
OR		
<a href="#">ITNW 1313</a>	COMPUTER VIRTUALIZATION	3 credit hours
<a href="#">INEW 2334</a>	ADVANCED WEB PROGRAMMING	3 credit hours

OR	INFORMATION	3 credit hours
<a href="#">ITNW 1335</a>	STORAGE & MANAGEMENT	
<a href="#">ITSE 2317</a>	JAVA PROGRAMMING	3 credit hours
Total Credit Hours:		15

### Fourth Semester

<a href="#">ENGL 2311</a>	TECHNICAL & BUSINESS WRITING	3 credit hours
<a href="#">MATH 1332</a>	CONTEMPORARY MATHEMATICS	3 credit hours
<a href="#">ARTS 1301</a>	ART APPRECIATION	3 credit hours
<a href="#">GOVT 2305</a>	FEDERAL GOVERNMENT (Federal constitution & topics)	3 credit hours
OR		
<a href="#">CORE</a>	SOCIAL/BEHAVIORAL SCIENCE CORE	3 credit hours
Total Credit Hours:		15

**Total Credit Hours: 60**

Capstone Requirement: [ITSC 2380](#) Cooperative Education - Computer and Information Sciences is a capstone experience and may not be substituted. It should be taken the last semester before graduation. The cooperative education course combines classroom learning with work experience and a lecture component.

## Cosmetology Program

Gainesville Campus Only

**Stephanie Lindsey**

*Chair Human Services & Hospitality Division*

(940) 668-3314

[slindsey@nctc.edu](mailto:slindsey@nctc.edu)

All NCTC Cosmetology program curriculum is governed by the Texas Department of Licensing and Regulations (TDLR) and helps prepare graduates to take the associated state TDLR examination.

Three Cosmetology Level 1 Workforce Certificates are available

- Cosmetology
- Esthetician
- Cosmetology Instructor.

To enroll in any Cosmetology certificate program, student must:

- Be at least 17 years of age by state licensure testing date
- Have obtained a high school diploma or the equivalent of, i.e., GED
- Apply to NCTC and complete the college orientation
- Complete required Cosmetology department paperwork
- Complete financial aid forms if applicable
- Provide applicable transcripts
- Pay \$25 fee to the Texas Department of Licensing and Regulation for a student permit

# Cosmetology Certificate

## Level 1 Workforce Certificate

The 42 semester hour curriculum in cosmetology leads to a Level 1 Workforce Certificate and helps prepare graduates to take the state TDLR Cosmetology Examination. Successful completion of the examination will allow graduates to practice as a licensed cosmetologist in the state of Texas.

Upon completion of the Level 1 Workforce Certificate, students will be able to:

- Demonstrate introductory skills, professional ethics, and safety and sanitation procedures as required by the Texas Department of Licensing and Regulations
- Provide safe and appropriate care to clients receiving hair, skin or nail services
- Use effective communication skills with client
- Demonstrate proficiency in business and ethical practices relating to the field of Cosmetology
- Demonstrate the skills and knowledge required for successful completion of the state licensing examination

### [Gainful Employment Disclosure](#)

Fees associated with the Cosmetology Certificate are as follows:

- Kit costs, which include all supplies needed during course of program, approximately \$1900. This fee includes trolley, set of professional shears, all professional electric tools, and all hair supplies needed (i.e., combs/brushes, coloring bowls/brushes, capes, clips, pins, manicuring set, etc.). Kit fees will be divided between first two semesters and will be included in tuition.
  - First semester kit will be approximately \$1375
  - Second semester kit will be approximately \$527.
- Textbooks, approximately \$328 new
- Uniform will consist of professional solid black clothing. Will be required to purchase a vest or smock. Must monogram NCTC Cosmetology logo and name on top for \$13.
- Fees to take state licensure exams, \$126

This certificate is offered only through face-to-face classes. The program is designed to take three semesters, or 42 weeks, to complete. Students may enter the program at the beginning of each semester (Fall, Spring and Summer)\*.

\* *Student will enroll in four (4) courses in the fall and spring; and three (3) courses in the summer. Student must meet with an advisor in the Cosmetology Department to determine course selection each semester.*

The program is comprised of the following suggested pathway or course of study.

## Certificate Requirements

	<b>First Semester</b>	
<a href="#">CSME 1401</a>	ORIENTATION TO COSMETOLOGY	4 credit hours
<a href="#">CSME 1405</a>	FUNDAMENTALS OF COSMETOLOGY	4 credit hours
<a href="#">CSME 1410</a>	INTRODUCTION TO HAIR-CUTTING AND RELATED THEORY	4 credit hours
<a href="#">CSME 1453</a>	CHEMICAL REFORMATION AND RELATED THEORY	4 credit hours
Total Credit Hours:		16
	<b>Second Semester</b>	
<a href="#">CSME 2501</a>	THE PRINCIPLES OF HAIR COLORING AND RELATED THEORY	5 credit hours
<a href="#">CSME 2410</a>	ADVANCED HAIR-CUTTING AND RELATED THEORY	4 credit hours
<a href="#">CSME 1443</a>	MANICURING AND RELATED THEORY	4 credit hours
<a href="#">CSME 1447</a>	PRINCIPLES OF SKIN CARE/FACIALS & RELATED THEORY	4 credit hours
Total Credit Hours:		17
	<b>Third Semester</b>	
<a href="#">CSME 2237</a>	ADVANCED COSMETOLOGY TECHNIQUES	2 credit hours
<a href="#">CSME 2343</a>	SALON DEVELOPMENT	3 credit hours
<a href="#">CSME 2441</a>	PREPARATION FOR TEXAS DEPARTMENT OF LICENSING AND REGULATIONS	4 credit hours

Total Credit Hours: 9

**Total Credit Hours: 42**

Verification of Workplace Competencies: Eligibility to sit for TDLR Cosmetology Operator's License exam.

## **Cosmetology Instructor Certificate**

### **Level 1 Workforce Certificate**

The NCTC Cosmetology Instructor program curriculum is mandated by the Texas Department of Licensing and Regulations. The 15 semester hour curriculum leads to a Certificate of Completion and helps prepare graduates to take the TDLR Cosmetology Instructor Examination. Successful completion of the examination will allow graduates to practice as a licensed cosmetology instructor in the state of Texas.

In addition to the above requirements, to enroll in the Cosmetology Instructor Certificate Program, student must:

- Be at least 18 years of age by state licensure testing date
- Hold a current Texas Cosmetology Operator, Esthetician or Manicurist license
- Have at least one year of verifiable salon/spa experience prior to enrollment

Upon completion of this program, student will be able to:

- Explain, design and implement teaching methodologies and lesson plans
- Demonstrate effective classroom/clinic management
- Identify the laws and rules of the state licensing agency
- Demonstrate the skills and knowledge required for successful completion of the state licensing examination

#### [Gainful Employment Disclosure](#)

Fees associated with the degree are as follows:

- Textbooks, approximately \$260
- \$17 name badge
- \$120 fee is required for state board licensure exams

This certificate is offered only through face-to-face classes. The program is designed to take 16 weeks to complete (attending four days per week) and is comprised of the following suggested pathway or course of study.

Student may wear professional business attire or scrubs with NCTC logo and name monogrammed on top.

## Certificate Requirements

	<b>First Semester</b>	
<a href="#">CSME 1534</a>	COSMETOLOGY INSTRUCTOR I	5 credit hours
<a href="#">CSME 1535</a>	ORIENTATION TO THE INSTRUCTION OF COSMETOLOGY	5 credit hours
<a href="#">CSME 2514</a>	COSMETOLOGY INSTRUCTOR II	5 credit hours
Total Credit Hours:		15

**Total Credit Hours:** 15

Verification of Workplace Competencies: Eligibility to sit for TDLR  
Cosmetology Instructor License exam.

## Criminal Justice Program

**Dr. Cherly Furdge**

*Chair, Public Administration and Management Division*

(940) 498-6238

[cfurdge@nctc.edu](mailto:cfurdge@nctc.edu)

Criminal Justice is an enjoyable and rewarding career with a variety of job opportunities. Students seeking a degree in this area will receive exceptional preparation for employment in the fields of law enforcement, corrections, probation/parole, forensics and investigation. An Associate of Arts Degree, Associate of Applied Science Degree, a Level 1 Workforce Certificate, and an Occupational Skills Award are available in this program.

## Criminal Justice Management

### Occupational Skills Awards

The Occupational Skills Awards in Criminal Justice Management is designed to equip individuals working in the field of Criminal Justice with knowledge and skills directly applicable to a supervisory role and to qualify those seeking a promotion for managerial responsibility.



	<b>First Semester</b>	
<a href="#">CJSA 2302</a>	POLICE MANAGEMENT, SUPERVISION, AND RELATED TOPICS	3 credit hours
<a href="#">CJSA 2334</a>	CONTEMPORARY ISSUES	3 credit hours
<a href="#">BMGT 1327</a>	PRINCIPLES OF MANAGEMENT	3 credit hours
<a href="#">BMGT 2309</a>	LEADERSHIP	3 credit hours
Total Credit Hours		12 credit hours

## Criminal Justice Certificate

### Level 1 Workforce Certificate

This certificate provides students with the necessary skills and academic requirements to qualify for employment in a criminal justice agency. All the courses completed in the certificate program are part of the AAS degree and may be directly transferred into the degree program. Students seeking a certificate cannot enroll in [CJSA 2388](#).

*Experiential Credit is available for students currently working in the field of Criminal Justice. For more information, see the Division Chair.*

Upon completion of the Level 1 Workforce Certificate, students will be able to:

- Display critical thinking skills related to areas in the criminal justice field.
- Demonstrate professional, ethical, respectful conduct to those of diverse cultures, customs and beliefs in stressful situations.
- Communicate both verbally and in writing in areas related to the criminal justice field.
- Demonstrate the ability to use appropriate employment strategies relevant to positions in criminal justice.

#### [Gainful Employment Disclosure](#)

This certificate can be completed either completely face-to-face or through a mix of face-to-face classes and online classes. The program is designed to take two semesters, or 32 weeks, to complete and is comprised of the following suggested pathway or course of study.

## Certificate Requirements

<b>First Semester</b>		
<a href="#">CRIJ 1301</a>	INTRODUCTION TO CRIMINAL JUSTICE	3 credit hours
<a href="#">CJSA 1348</a>	ETHICS IN CRIMINAL JUSTICE	3 credit hours
<a href="#">CJSA 1317</a>	JUVENILE JUSTICE SYSTEM	3 credit hours
<a href="#">CRIJ 2313</a>	CORRECTIONAL SYSTEMS & PRACTICES	3 credit hours
<a href="#">CRIJ 2328</a>	POLICE SYSTEMS & PRACTICES	3 credit hours
Total Credit Hours:		15

<b>Second Semester</b>		
<a href="#">CJSA 1342</a>	CRIMINAL INVESTIGATION	3 credit hours
<a href="#">CRIJ 1310</a>	FUNDAMENTALS OF CRIMINAL LAW	3 credit hours
<a href="#">CRIJ 1306</a>	COURT SYSTEMS & PRACTICES	3 credit hours
<a href="#">CJCR1304</a>	PROBATION & PAROLE	3 credit hours
<a href="#">CJSA2334</a>	CONTEMPORARY ISSUES IN CRIMINAL JUSTICE	3 credit hours
Total Credit Hours:		15

**Total Credit Hours: 30**

Capstone Requirement: Students completing the certificate must pass a comprehensive program exam with a score of 70% or higher to satisfy the capstone requirement. Exam must be scheduled with the Division Chair.

## Criminal Justice AA

### Associate of Arts Degree

The AA in Criminal Justice is 60 credit hours in length and prepares the student to transfer to a four-year university to pursue a bachelor's degree in Criminal Justice. Students that complete this degree will take five Criminal Justice courses and meet the requirements to be core complete.

Upon completion of this degree, students will be able to:

- Exhibit critical thinking skills related to areas in the Criminal Justice Field.
- Demonstrate professional, ethical, respectful conduct to those of diverse cultures, customs and beliefs in stressful situations.
- Communicate both verbally and in writing on areas related to the criminal justice field.
- Be prepared for transfer to a Criminal Justice Program at a four-year university.

This degree can be completed through a mix of face-to-face classes (day or night) and online classes. The program is designed to be completed in two years if the suggested pathway or course of study is followed.

## Degree Requirements

	<b>First Semester</b>	
<a href="#">CRIJ 1301</a>	INTRODUCTION TO CRIMINAL JUSTICE	3 credit hours
<a href="#">ENGL 1301</a>	COMPOSITION I	3 credit hours
<a href="#">EDUC 1300</a>	LEARNING FRAMEWORK	3 credit hours
OR		
<a href="#">PSYC 1300</a>	LEARNING FRAMEWORK	3 credit hours
<a href="#">MATH 1314</a>	COLLEGE ALGEBRA	3 credit hours
OR		
<a href="#">MATH 1332</a>	CONTEMPORARY MATHEMATICS I	3 credit hours
OR		
<a href="#">MATH 1342</a>	ELEMENTARY STATISTICAL METHODS	3 credit hours
Total Credit Hours:		12
	<b>Second Semester</b>	
<a href="#">CRIJ 1306</a>	COURT SYSTEMS & PRACTICES	3 credit hours
<a href="#">ENGL 1302</a>	COMPOSITION II	3 credit hours
<a href="#">SPCH 1315</a>	PUBLIC SPEAKING	3 credit hours
CREATIVE ARTS ELECTIVE		3 credit hours
<a href="#">SOCJ 1301</a>	INTRODUCTION TO SOCIOLOGY	3 credit hours
<a href="#">PHED</a>	PHYSICAL EDUCATION	1 credit hour
Total Credit Hours:		16

<b>Third Semester</b>		
<a href="#">CRIJ 1310</a>	FUNDAMENTALS OF CRIMINAL LAW	3 credit hours
<a href="#">GOVT 2305</a>	FEDERAL GOVERNMENT (Federal constitution & topics)	3 credit hours
<a href="#">BIOL 1408</a>	BIOLOGY FOR NON- SCIENCE MAJORS I	4 credit hours
<a href="#">LANGU, PHILOSOPHY AND CULTURE HIST 1301</a>	UNITED STATES HISTORY I	3 credit hours 3 credit hours
Total Credit Hours:		16

<b>Fourth Semester</b>		
<a href="#">CRIJ 2313</a>	CORRECTIONAL SYSTEMS & PRACTICES	3 credit hours
<a href="#">CRIJ 2328</a>	POLICE SYSTEMS & PRACTICES	3 credit hours
<a href="#">GOVT 2306</a>	TEXAS GOVERNMENT (Texas constitution & topics)	3 credit hours
<a href="#">HIST 1302</a>	U.S. HISTORY FROM 1865 ENVIRONMENTAL	3 credit hours
<a href="#">BIOL 2406</a>	BIOLOGY	4 credit hours

OR

<a href="#">CHEM 1411</a>	GENERAL CHEMISTRY I	4 credit hours
Total Credit Hours:		16

**Total Credit Hours: 60**

## **Criminal Justice AAS**

### **Associate of Applied Science Degree**

The AAS in Criminal Justice degree is 60 credit hours in length. The AAS degree may be transferred to local universities for those students wishing to obtain a BAAS degree. Transferring students should check with the university he/she plan to transfer to for information about the number of classes that can be transferred. Experiential Credit may be available for students currently working in the field of Criminal Justice. For more information, see the Division Chair. (Dr. Cherly Gary-Furdge)

Upon completion of the Associate of Applied Science Degree, students will be able to:

- Exhibit critical thinking skills related to areas in the Criminal Justice Field.
- Demonstrate professional, ethical, respectful conduct to those of diverse cultures, customs and beliefs in stressful situations.
- Communicate both verbally and in writing on areas related to the criminal justice field.
- Demonstrate the ability to use employment strategies related to the field of criminal justice.

This degree can be completed through a mix of face-to-face, hybrid, and online classes. The program is designed to take two years, or 64 weeks, to complete and is comprised of the following suggested pathway or course of study.

## Degree Requirements

<b>First Year First Semester</b>		
<a href="#">CRIJ 1301</a>	INTRODUCTION TO CRIMINAL JUSTICE	3 credit hours
<a href="#">CJSA 1348</a>	ETHICS IN CRIMINAL JUSTICE	3 credit hours
<a href="#">CJSA 1317</a>	JUVENILE JUSTICE SYSTEM CORRECTIONAL	3 credit hours
<a href="#">CRIJ 2313</a>	SYSTEMS & PRACTICES	3 credit hours
<a href="#">CRIJ 2328</a>	POLICE SYSTEMS & PRACTICES	3 credit hours

Total Credit Hours: 15

<b>First Year Second Semester</b>		
<a href="#">CJSA 1342</a>	CRIMINAL INVESTIGATION	3 credit hours
<a href="#">CRIJ 1310</a>	FUNDAMENTALS OF CRIMINAL LAW	3 credit hours
<a href="#">CRIJ 1306</a>	COURT SYSTEMS & PRACTICES	3 credit hours
<a href="#">CJCR 1304</a>	PROBATION & PAROLE	3 credit hours
<a href="#">CJSA 2334</a>	CONTEMPORARY ISSUES IN CRIMINAL JUSTICE	3 credit hours

Total Credit Hours 15

**Second Year First Semester**

<a href="#">CJSA 1325 ENGL</a>	CRIMINOLOGY	3 credit hours
<a href="#">1301 SPCH 1315</a>	COMPOSITION I PUBLIC	3 credit hours
OR	SPEAKING	3 credit hours
<a href="#">SPCH 1321</a>		
	BUSINESS AND	3 credit hours
	PROFESSIONAL	
	COMMUNICATION	
<a href="#">SOC1 1301</a>	INTRODUCTION TO	3 credit hours
	SOCIOLOGY COLLEGE	
<a href="#">MATH 1314</a>	ALGEBRA	3 credit hours
OR		
<a href="#">MATH 1342</a>	ELEMENTARY	3 credit hours
	STATISTICAL METHODS	
OR		
<a href="#">MATH 1332</a>	CONTEMPORARY	3 credit hours
	MATHEMATICS	
Total Credit Hours:		15

**Second Year Second Semester**

<a href="#">GOVT 2305</a>	FEDERAL GOVERNMENT	3 credit hours
	(Federal constitution &	
	topics) GENERAL	
<a href="#">PSYC 2301</a>	PSYCHOLOGY	3 credit hours
	TECHNICAL& BUSINESS	
<a href="#">ENGL 2311</a>	WRITING	3 credit hours
	LANGUAGE,	
<a href="#">CORE</a>	PHILOSOPHY, AND	3 credit hours
	CULTURE/OR CREATIVE	
	ARTS	
	INTERNSHIP	
<a href="#">CJSA 2388</a>		3 credit hours
Total Credit Hours:		15

**Total Credit Hours: 60**

Capstone Requirement: [CJSA 2388](#) Internship - Criminal Justice/Safety Studies is the capstone requirement and may not be substituted. It should be taken the last semester before graduation.

**Note:** *Most agencies require a criminal background check as part of the internship hiring process. Having a criminal record may prevent you from being accepted in an internship program.*

# Culinary Arts

Stephanie Lindsey  
Division Chair, Human Services and Hospitality  
(940) 668-3314  
[slindsey@nctc.edu](mailto:slindsey@nctc.edu)

The Culinary Arts program prepares students for entry level positions in the food service industry. The objective of the program is to give the student basic culinary skills that are utilized in today's food service industry.

## Culinary Arts OSA

### Occupational Skills Award

This award is designed to provide training for individuals interested in obtaining marketable skills in the Culinary Arts field. It is designed to take 16-weeks to complete and is comprised of the following suggested pathway or course of study.

<a href="#">CHEF 1301</a>	Basic Food Preparation	3 credit hours
<a href="#">CHEF 1305</a>	Safety and Sanitation	3 credit hours
<a href="#">PSTR 1301</a>	Fundamentals of Baking	3 credit hours
<a href="#">FDNS 1301</a>	Introduction to Foods	3 credit hours
Total Credit Hours		12

**Total Credit Hours 12**

# Cyber Security Program

**Susan Svane**  
*Chair Information Technology Department Division*  
(940) 498-6292  
[ssvane@nctc.edu](mailto:ssvane@nctc.edu)

The CyberSecurity program prepares the student for entry into this exciting field by providing introductory training in fundamental security concepts, firewalls and network security, basic scripting, operating systems security, intrusion detection, and incident response.

The CyberSecurity program curriculum has been developed with the assistance and advice of an advisory council which is composed of service area industry professionals.

Prerequisite: Students in this program must be able to keyboard at a minimum rate of 40 words per minute (WPM). Those who cannot meet this requirement must take a keyboarding class to improve their skills prior to enrollment.

*Note: It is highly recommended that students have some knowledge of computer networking before beginning this program.*

# Cyber Security AAS

## Associate of Applied Science Degree

Upon completion of the Associate of Applied Science Degree, students will be able to:

- Describe the cyber threat landscape.
- Identify corrective action against network threats.
- Communicate technical issues related to network systems and network security through presentations and reports.
- Demonstrate the ability to work effectively in teams.

This degree can be completed through a mix of face-to-face, hybrid, and online classes. Several of the courses are offered in an 8-week term, rather than a 16-week term. The program is designed to take two years, or 64 weeks, to complete and is comprised of the following suggested pathway or course of study.

## Degree Requirements

	<b>First Semester</b>	
<a href="#">ITSY 1342</a>	INFORMATION TECHNOLOGY SECURITY	3 credit hours
<a href="#">ITSC 1316</a>	LINUX INSTALLATION AND CONFIGURATION	3 credit hours
<a href="#">ITCC 1414</a>	CCNA 1: INTRODUCTION TO NETWORKS	4 credit hours
<a href="#">ITCC 1440</a>	CCNA 2: ROUTING AND SWITCHING ESSENTIALS	4 credit hours
<a href="#">EECT 1300</a>	TECHNICAL CUSTOMER SERVICE	3 credit hours

Total Credit Hours: 17

	<b>Second Semester</b>	
<a href="#">ITSY 2300</a>	OPERATING SYSTEM SECURITY	3 credit hours
<a href="#">ITSY 2301</a>	FIREWALL AND NETWORK SECURITY	3 credit hours
<a href="#">ITSY 2330</a>	INTRUSION DETECTION	3 credit hours
<a href="#">ITNW 1313</a>	COMPUTER VIRTUALIZATION	3 credit hours
<a href="#">ITSY 2342</a>	INCIDENT RESPONSE & HANDLING	3 credit hours

Total Credit Hours: 15



<b>Third Semester</b>		
<a href="#">ITSY 2343</a>	COMPUTER SYSTEM FORENSICS NETWORK	3 credit hours
<a href="#">ITSY 2445</a>	DEFENSE AND COUNTERMEASURES CONTEMPORARY	4 credit hours
<a href="#">MATH 1332</a>	MATHEMATICS I COMPOSITION I	3 credit hours
<a href="#">ENGL 1301</a>	SECURITY	3 credit hours
<a href="#">ITSY 2359</a>	ASSESSMENT AND AUDITING	3 credit hours
Total Credit Hours:		16

<b>Fourth Semester</b>		
<a href="#">ENGL 2311</a>	TECHNICAL & BUSINESS WRITING	3 credit hours
<a href="#">ARTS 1301</a>	ART APPRECIATION	3 credit hours
<a href="#">GOVT 2305</a>	FEDERAL GOVERNMENT (Federal constitution & topics)	3 credit hours
<a href="#">ITSY 2382</a>	COOPERATIVE EDUCATION COMP & INFO SYS SEC	3 credit hours
Total Credit Hours:		12

**Total Credit Hours: 60**

Capstone Requirement: [ITSY 2382](#) Cooperative Education - Computer and Information Systems Security is a capstone experience and may not be substituted. It should be taken the last semester before graduation. The cooperative education course combines classroom learning with work experience and a lecture component.

# Cyber Security Certificate

## Level 1 Workforce Certificate

The Certificate Program provides similar classes to the degree program, however, there are no academic classes in these individual curricula. A student that commences study as a certificate student and later desires to complete the degree program will find that the classes taken for a certificate will readily transfer to the degree program.

Upon completion of the Level 1 Workforce Certificate, students will be able to:

- Use tools to enhance network security.
- Configure network protocol.
- Identify sources of computer threats and evaluate potential practices, tools, and technologies to protect individual network systems.

- Communicate technical issues related to network systems and security through presentations and reports.

[Gainful Employment Disclosure](#)

This certificate can be completed through a mix of face-to-face, hybrid and online classes. Several of the courses are offered in an 8-week term, rather than a 16-week term. The program is designed to take two semesters, or 32 weeks to complete, and is comprised of the following suggested pathway or course of study.

## Certificate Requirements

	<b>First Semester</b>	
<a href="#">ITSY 1342</a>	INFORMATION TECHNOLOGY SECURITY	3 credit hours
<a href="#">ITSC 1316</a>	LINUX INSTALLATION AND CONFIGURATION	3 credit hours
<a href="#">ITCC 1414</a>	CCNA 1: INTRODUCTION TO NETWORKS	4 credit hours
<a href="#">ITCC 1440</a>	CCNA 2: ROUTING AND SWITCHING ESSENTIALS	4 credit hours
<a href="#">EECT 1300</a>	TECHNICAL CUSTOMER SERVICE	3 credit hours

Total Credit Hours: 17

	<b>Second Semester</b>	
<a href="#">ITSY 2300</a>	OPERATING SYSTEM SECURITY	3 credit hours
<a href="#">ITSY 2301</a>	FIREWALL AND NETWORK SECURITY	3 credit hours
<a href="#">ITSY 2330</a>	INTRUSION DETECTION	3 credit hours
<a href="#">ITNW 1313</a>	COMPUTER VIRTUALIZATION	3 credit hours
<a href="#">ITSY 2342</a>	INCIDENT RESPONSE & HANDLING	3 credit hours

Total Credit Hours: 15

**Total Credit Hours: 32**

Capstone Requirement: Students completing the certificate must pass a comprehensive program exam with a score of 70% or higher to satisfy the capstone requirement. Exam must be scheduled with the Division Chair.

# Database Program

**Susan Svane**

*Chair Information Technology Division*

(940) 498-6292

[ssvane@nctc.edu](mailto:ssvane@nctc.edu)

The Database Management Certificate and Database Administration Associate of Applied Science programs at NCTC are designed to prepare students for a career in the use of specialized software to store and organize data. The curriculum provides learning opportunities and hands-on training in the fundamentals of web programming, Oracle, and the most up-to-date database programs.

Program curriculum has been developed with the assistance and advice of an advisory council which is composed of service area industry professionals.

**Prerequisite:** Students in this program must be able to keyboard at a minimum rate of 40 words per minute (WPM). Those who cannot meet this requirement must take a keyboarding class to improve their skills prior to enrollment.

## Database Management AAS

### Associate of Applied Science Degree

Upon completion of the Associate of Applied Science, students will be able to:

- Demonstrate the ability to work effectively in teams.
- Design, implement, and analyze relational database tables.
- Communicate technical issues related to database administration through presentations and reports.
- Demonstrate database administration concepts, relevant alternatives and decision recommendations.

The Associate of Applied Science can be completed through a mix of face-to-face, hybrid, and online classes. Several of the courses are offered in an 8-week term, rather than a 16-week term. The program is designed to take two years, or 64 weeks, to complete and is comprised of the following suggested pathway or course of study.

### Degree Requirements

	<b>First Semester</b>	
<a href="#">ITSW 1307</a>	INTRODUCTION TO DATABASE	3 credit hours
<a href="#">ITSE 2321</a>	OBJECT-ORIENTED PROGRAMMING	3 credit hours
<a href="#">ITNW 1358</a>	NETWORK+	3 credit hours
<a href="#">EECT 1300</a>	TECHNICAL CUSTOMER SERVICE	3 credit hours

[ITSE 1303](#) INTRODUCTION TO MySQL 3 credit hours

Total Credit Hours: 15

**Second Semester**

[ITSE 1345](#) INTRODUCTION TO ORACLE SQL 3 credit hours

[ITSY 1342](#) INFORMATION TECHNOLOGY SECURITY 3 credit hours

[ITSE 2317](#) JAVA PROGRAMMING 3 credit hours

[ITSE 2302](#) INTERMEDIATE WEB PROGRAMMING 3 credit hours

[ITSW 2337](#) ADVANCED DATABASE 3 credit hours

Total Credit Hours: 15

**Third Semester**

[ENGL 1301](#) COMPOSITION I 3 credit hours

[ARTS 1301](#) ART APPRECIATION 3 credit hours

[ITSE 2354](#) ADVANCED ORACLE PL/SQL 3 credit hours

[ITSE 2356](#) ORACLE DATABASE ADMINISTRATION I 3 credit hours

[MATH 1342](#) ELEMENTARY STATISTICAL METHODS 3 credit hours

Total Credit Hours: 15

**Fourth Semester**

[ENGL 2311](#) TECHNICAL & BUSINESS WRITING IMPLEMENTING 3 credit hours

[ITSE 2333](#) A DATABASE ON MICROSOFT SQL SERVER INFORMATION STORAGE AND

[ITNW 1335](#) MANAGEMENT FEDERAL GOVERNMENT 3 credit hours

[GOVT 2305](#) COOPERATIVE EDUCATION- 3 credit hours

[ITSE 2380](#) COMPUTER PROGRAMMER 3 credit hours

Total Credit Hours: 15

**Total Credit Hours: 60**

Capstone Requirement: [ITSE 2380](#) Cooperative Education - Computer Programming/ Programmer, General is the capstone requirement and may not be substituted. It should be taken the last semester before graduation.

# Database Management Certificate

## Level 1 Workforce Certificate

The Certificate Program provides similar classes to the degree programs, however there are no academic classes in these individual curricula. A student that commences study as a certificate student and later desires to complete the degree program will find that the classes taken for a certificate will readily transfer to the degree program.

Upon completion of the Level 1 Workforce Certificate, students will be able to:

- Design and generate tables, forms and reports.
- Communicate technical issues related to database systems through presentations and reports.

### [Gainful Employment Disclosure](#)

This Level 1 Workforce Certificate can be completed through a mix of face-to-face, hybrid and online classes. Several of the courses are offered in an 8-week term, rather than a 16-week term. The program is designed to take two semesters, or 32 weeks to complete, and is comprised of the following suggested pathway or course of study.

## Certificate Requirements

	<b>First Semester</b>	
<a href="#">ITSW 1307</a>	INTRODUCTION TO DATABASE	3 credit hours
<a href="#">ITSE 2321</a>	OBJECT-ORIENTED PROGRAMMING	3 credit hours
<a href="#">ITNW 1358</a>	NETWORK+ TECHNICAL	3 credit hours
<a href="#">EECT 1300</a>	CUSTOMER SERVICE	3 credit hours
<a href="#">ITSE 1303</a>	INTRODUCTION TO MySQL	3 credit hours
Total Credit Hours:		15
	<b>Second Semester</b>	
<a href="#">ITSE 1345</a>	INTRODUCTION TO ORACLE SQL	3 credit hours
<a href="#">ITSY 1342</a>	INFORMATION TECHNOLOGY SECURITY	3 credit hours
<a href="#">ITSE 2317</a>	JAVA PROGRAMMING	3 credit hours
<a href="#">ITSE 2302</a>	INTERMEDIATE WEB PROGRAMMING	3 credit hours

[ITSW 2337](#)

ADVANCED DATABASE 3 credit hours

Total Credit Hours:

15

**Total Credit Hours: 30**

Capstone Requirement: Students completing the certificate must pass a comprehensive program exam with a score of 70% or higher to satisfy the capstone requirement. Exam must be scheduled with the Division Chair.

## Electrical Technician Program

**Kenny Smith**

*Chair Industrial and Energy Technology Division*

(940) 668-7731, ext. 4426

[ksmith@nctc.edu](mailto:ksmith@nctc.edu)

Electrical Technicians are a targeted occupation by the local workforce boards and demand is high for those seeking a career in the electrical field. Electrical apprentices can earn from \$9.95 per hour up to \$18.83 per hour. The Electrical Technician Program is an Approved Texas Electrician Apprenticeship Program with the Texas Department of License and Regulation.

Since a basic knowledge of electron theory as well as the ability to calculate the electrical values of series, parallel and combination circuits is needed to succeed in the field, the initial training begins with electrical fundamentals, as well as electrical safety, which make up the foundation for a career in the field of electricity. The electrical technician also must understand the operating principles for solid state and conventional controls along with their application, and single and three phase motors, transformers and their principles of operation. In addition, the technician must understand the fundamental concept of programmable logic controllers, principles of operation and numbering systems as applied to electrical controls. To this end, training continues with the focus on motor control, motors, transformers, and programmable logic controllers. This will broaden the job opportunities for a student in the various fields of plant maintenance and industrial applications.

## Electrical Technician OSA

### Occupational Skills Award

The award can be completed face to face and through an online industrial mathematics course. The program is designed to take one semester or 16 weeks to complete and comprised of the following suggested pathway or course of study.

## Occupational Skills Award Requirements

	First Semester	
<a href="#">ELPT 1319</a>	FUNDAMENTALS OF ELECTRICITY I	3 credit hours
<a href="#">ELPT 1341</a>	MOTOR CONTROL	3 credit hours
<a href="#">ELPT 2305</a>	MOTORS AND TRANSFORMERS	3 credit hours
<a href="#">ELPT 2319</a>	PROGRAMMABLE LOGIC CONTROLLERS I	3 credit hours
Total Credit Hours:		12
<b>Total Credit Hours:</b>	<b>12</b>	

## Engineering Technology Program

**Zach Ouchley**

*Engineering Technology Faculty*

(940) 498-6538

[jouchley@nctc.edu](mailto:jouchley@nctc.edu)

The Engineering Technology Program offers training using Autodesk software, an industry standard used around the world. Students can work toward an Engineering Technology Workforce Certificate or an Associate of Applied Science Degree. In addition to CAD, students will study structural drafting, solid modeling and design, electromechanical drafting and geometric dimensioning.

Graduates may be employed in the aircraft industry, architectural firms, engineering firms, electronics firms and other industries in jobs such as civil drafter, architectural drafter, pipeline drafter, automotive design drafter, and technical illustrator.

**Note:** Formerly Drafting Technology Program

## Engineering Technology AAS

### Associate of Applied Science

All of the courses completed in the certificate program transfer directly into the degree.

Upon completion of the Associate of Applied Science degree, students will be able to:

- Apply engineering practices to CAD drawings using multiple industry examples.
- Demonstrate basic drafting proficiency, including the ability to use industry-standard software to generate 2D and 3D drawings.
- Demonstrate oral and written communication skills expected of a future professional in the engineering field.

- Demonstrate computer literacy skills such as opening files, saving files, knowledge of Autodesk software and commands, and the ability to create a computer generated drawing.

The degree can be completed through a mix of face-to-face classes and online classes. The program is designed to take two years to complete and is comprised of the following suggested pathway or course of study.

## Degree Requirements

	<b>First Semester</b>	
<a href="#">DFTG 1305</a>	TECHNICAL DRAFTING	3 credit hours
<a href="#">DFTG 1309</a>	BASIC COMPUTER-AIDED DRAFTING	3 credit hours
<a href="#">DFTG 1317</a>	ARCHITECTURAL DRAFTING/ RESIDENTIAL	3 credit hours
<a href="#">DFTG 1333</a>	MECHANICAL DRAFTING	3 credit hours
<a href="#">DFTG 2317</a>	DESCRIPTIVE GEOMETRY	3 credit hours
Total Credit Hours:		15
	<b>Second Semester</b>	
<a href="#">DFTG 2306</a>	MACHINE DESIGN	3 credit hours
<a href="#">DFTG 2300</a>	INTERMEDIATE ARCHITECTURAL DRAFTING- RESIDENTIAL	3 credit hours
<a href="#">DFTG 2302</a>	MACHINE DRAFTING	3 credit hours
<a href="#">DFTG 2319</a>	INTERMEDIATE COMPUTER-AIDED DRAFTING	3 credit hours
<a href="#">DFTG 2340</a>	SOLID MODELING/ DESIGN	3 credit hours
Total Credit Hours:		15
	<b>Third Semester</b>	
<a href="#">DFTG 1391</a>	SPECIAL TOPICS IN DRAFTING AND DESIGN TECHNOLOGY	3 credit hours
<a href="#">DFTG 2328</a>	ARCHITECTURAL DRAFTING - COMMERCIAL	3 credit hours
<a href="#">DFTG 1358</a>	ELECTRICAL/ ELECTRONIC DRAFTING	3 credit hours



<a href="#">DFTG 2330</a>	CIVIL DRAFTING	3 credit hours
<a href="#">ARTS 1301</a>	ART APPRECIATION	3 credit hours
Total Credit Hours:		15

**Fourth Semester**

<a href="#">DFTG 2338</a>	FINAL PROJECT- ADVANCED DRAFTING	3 credit hours
<a href="#">MATH 1314</a>	COLLEGE ALGEBRA	3 credit hours

OR

<a href="#">MATH 1342</a>	ELEMENTARY STATISTICAL METHODS	3 credit hours
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<a href="#">ECON 2301</a>	PRINCIPLES OF MACROECONOMICS	3 credit hours
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OR

<a href="#">ECON 2302</a>	PRINCIPLES OF MICROECONOMICS	3 credit hours
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<a href="#">SPCH 1315</a>	PUBLIC SPEAKING	3 credit hours
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OR

<a href="#">SPCH 1321</a>	BUSINESS AND PROFESSIONAL COMMUNICATION	3 credit hours
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<a href="#">GOVT 2305</a>	FEDERAL GOVERNMENT (Federal constitution & topics)	3 credit hours
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OR

<a href="#">GOVT 2306</a>	TEXAS GOVERNMENT (Texas constitution & topics)	3 credit hours
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Total Credit Hours: 15

**Total Credit Hours: 60**

Capstone Requirement: [DFTG 2338](#) Final Project is the capstone requirement. It should be taken the last semester before graduation.

## Engineering Technology Certificate

### Level 1 Workforce Certificate

Upon completion of the Level 1 Workforce Certificate, students will be able to:

- Apply engineering practices to CAD drawings using multiple industry examples.
- Demonstrate basic drafting proficiency, including the ability to use industry-standard software to generate 2D and 3D drawings.

- Demonstrate oral and written communication skills expected of a future professional in the engineering field.
- Demonstrate foundational computer literacy skills such as opening files, saving files, knowledge of Autodesk software and commands, and the ability to create a computer generated drawing.

[Gainful Employment Information](#)

This certificate can be completed face-to-face with minimal online classes. The program is designed to take two semesters, or 32 weeks, to complete and is comprised of the following suggested pathway or course of study.

## Certificate Requirements

<b>First Semester</b>		
<a href="#">DFTG 1305</a>	TECHNICAL DRAFTING	3 credit hours
<a href="#">DFTG 1309</a>	BASIC COMPUTER-AIDED DRAFTING	3 credit hours
<a href="#">DFTG 1317</a>	ARCHITECTURAL DRAFTING/ RESIDENTIAL	3 credit hours
<a href="#">DFTG 1333</a>	MECHANICAL DRAFTING	3 credit hours
<a href="#">DFTG 2317</a>	DESCRIPTIVE GEOMETRY	3 credit hours
Total Credit Hours:		15

<b>Second Semester</b>		
<a href="#">DFTG 2306</a>	MACHINE DESIGN	3 credit hours
<a href="#">DFTG 2300</a>	INTERMEDIATE ARCHITECTURAL DRAFTING- RESIDENTIAL	3 credit hours
<a href="#">DFTG 2302</a>	MACHINE DRAFTING	3 credit hours
<a href="#">DFTG 2319</a>	INTERMEDIATE COMPUTER-AIDED DRAFTING	3 credit hours
<a href="#">DFTG 2340</a>	SOLID MODELING/ DESIGN	3 credit hours
Total Credit Hours:		15

**Total Credit Hours: 30**

Capstone Requirement: Students completing the certificate must pass a comprehensive program exam with a score of 70% or higher to satisfy the capstone requirement. Exam must be scheduled with the Division Chair.

# Equine Program

Steve Keith, Chair Agriculture Department

940-668-4217

[skeith@nctc.edu](mailto:skeith@nctc.edu)

Becky Terrell, Equine Faculty

940-668-7731, x4372

[bterrell@nctc.edu](mailto:bterrell@nctc.edu)

Cathy Luse, Equine Faculty

940-668-7731, 4318

[cluse@nctc.edu](mailto:cluse@nctc.edu)

North Central Texas College's Equine Program is located in the heart of the horse industry of North Texas on their Gainesville campus. The horse industry is a highly diverse industry that supports a wide variety of activities in all regions of the country. Of the approximately 9.2 million horses in the US, nearly 1 million of those reside in Texas. The Equine Science program at NCTC offers a great deal of hands-on experience in training, breeding and management, as well as classroom instruction on the science and business aspects of the horse industry.

Students in the Equine Program not only have the opportunity to work and gain practical skills within the program but directly with many of the outstanding professionals and facilities in the area as well, thereby gaining important skills, work experience, and contacts within the industry. The diverse student population encompasses individuals from many levels of experience, disciplines, and background including international students that come to study in the program.

In addition to formal academic instruction, NCTC Equine offers equine related extracurricular activities including Stock Horse, Judging, and IHSA Western Show Teams. These teams give students the chance to compete in an intercollegiate format that will contribute invaluable life lessons as part of their educational experience.

## Equine Business Management AAS

### Applied Associate of Science Degree

Coursework in the Equine Business Management Degree focuses on the specific needs of the student, whether that is to work for a large corporation or to manage a business as a sole proprietor. Students may simultaneously pursue an AAS in Equine Business Management and complete a certificate as most classes are required for both. Some of the careers available to graduates include Extension Horse Specialist, Auctioneer, College Professor/Instructor, Equine Industry Retailer/Salesman, Farm/Ranch Manager, Public Relations & Marketing, Equine Journalist, Pedigree Analyst, Horse Show Manager, and Breed Association Administration.

Upon completion of the Associate of Applied Science Degree, students will be able to:

- Describe the different segments of the equine industry and the role they play economically.
- Apply principles of leadership to organizational group dynamics.
- Propose effective communication and conflict management techniques.
- Record a business transaction in the journals and ledgers of the accounting system.
- Prepare financial statements (income statement, statement of owner's equity, balance sheet) for a business entity.

This degree is completed primarily face-to-face, however some of the core curriculum and business course requirements may be completed online or at other NCTC campuses. The program is designed to take two years to complete and is comprised of the following suggested pathway or course of study.

## Degree Requirements

<b>First Year First Semester</b>		
<a href="#">AGEQ 1319</a>	HORSEMANSHIP I	3 credit hours
OR		
<a href="#">AGEQ 1300</a>	ENGLISH EQUITATION I	3 credit hours
OR		
<a href="#">AGEQ 1370</a>	LOCAL NEEDS - PRINCIPLES OF RANCH HORSE RIDING I	3 credit hours
<a href="#">AGEQ 1411</a>	EQUINE SCIENCE I (HORSE PRODUCTION AND MANAGEMENT)	4 credit hours
<a href="#">AGEQ 1205</a>	EQUINE ENTERPRISE MANAGEMENT	2 credit hours
<a href="#">ENGL 1301</a>	COMPOSITION I	3 credit hours
<a href="#">AGRI 1309</a>	COMPUTERS IN AGRICULTURE	3 credit hours

Total Credit Hours: 15

<b>First Year Second Semester</b>		
<a href="#">AGEQ 1315</a>	HORSE EVALUATION I	3 credit hours
<a href="#">BMGT 1327</a>	PRINCIPLES OF MANAGEMENT	3 credit hours
<a href="#">ACCT 2301</a>	PRINCIPLES OF FINANCIAL ACCOUNTING	3 credit hours
OR		
<a href="#">ACNT 1303</a>	INTRODUCTION TO ACCOUNTING I	3 credit hours
<a href="#">AGEQ 1322</a>	FUNDAMENTALS OF RIDING INSTRUCTION	3 credit hours

OR

[AGEQ 1391](#) SPECIAL TOPICS III 3 credit hours

OR

[AGEQ 1371](#) LOCAL NEEDS - 3 credit hours  
 PRINCIPLES OF RANCH  
 HORSE RIDING II  
 LANGUAGE, PHILOSOPHY AND CULTURE, OR  
 CREATIVE ARTS  
 ELECTIVE

Total Credit Hours: 15

**Second Year First Semester**

[MATHXXX](#) CORE COLLEGE MATH 3 credit hours  
[SPCH XXXX](#) COMMUNICATIONS CORE 3 credit hours

[BUSG 1304](#) INTRODUCTION TO FINANCIAL ADVISING 3 credit hours

[AGRI 2317](#) INTRODUCTION TO AGRICULTURAL ECONOMICS 3 credit hours

OR

[AGRI 2301](#) Livestock Business Management 3 credit hours  
 SOCIAL AND BEHAVIORAL SCIENCES CORE 3 credit hours

Total Credit Hours: 15

**Second Year Second Semester**

[AGEQ 2311](#) EQUINE SCIENCE II (ADVANCED HORSE PRODUCTION AND MANAGEMENT) 3 credit hours

[AGEQ 2310](#) EQUINE BUSINESS MANAGEMENT 3 credit hours

[AGAH 1372](#) AGRICULTURAL SPANISH 3 credit hours

[BMGT 2309](#) LEADERSHIP 3 credit hours

[AGEQ 2386](#) INTERNSHIP - EQUINE SCIENCE 3 credit hours

Total Credit Hours: 15

**Total Credit Hours: 60**

Capstone Requirement: [AGEQ 2386](#) Internship - Equestrian/Equine Studies is the capstone requirement and may not be substituted. It should be taken the last semester before graduation.

# Equine Science AAS

## Associate of Applied Science Degree

Course work in the Equine Science Degree focuses on the physiological and behavioral science aspects of the horse and related industry professions. The curriculum also prepares students for further academic study and transfer of credits toward a bachelor's degree in an equine or Agriculture related degrees. Coursework may also be applied to any of the other certificates offered as well as the Equine Business Mgt. AAS Degree. Some of the careers available to graduates include Vet Technician, Breeding Farm/General Farm Mgt., Training/Riding Instructor, College Professor/Instructor, Extension Horse Specialist, and Ag. Agent, and Equine Pharmaceuticals, Equine Nutritionist and related Industry Retail/Sales.

Upon completion of the Associate of Applied Science Degree, students will be able to:

- Discuss various diseases and ailments in a horse
- Perform basic medical care of horses
- Identify lameness that afflict horses
- Summarize the functional components of a bit and explain the action of different bit types in the horse's mouth
- Explain the anatomy and physiology of the horses' digestive system.
- Recommend nutritional consideration and feeding practices to meet the needs of individual horses.

Students pursuing this degree typically incur tuition and fee costs of \$7,080. Books and supplies constitute approximately an additional \$2,235 across the entire degree. Financing for this program may be available through scholarships, loans, and institutional financing plans.

This degree is completed primarily face-to-face, however some of the core curriculum requirements may be completed online or at other NCTC campuses. The program is designed to take two years to complete and is comprised of the following suggested pathway or course of study.

## Degree Requirements

<a href="#">ENGL XXXX</a>	<b>First Semester</b> COMMUNICATIONS CORE	3 credit hours
OR		
<a href="#">SPCH XXXX</a>	COMMUNICATIONS CORE	3 credit hours
<a href="#">AGEQ 1319</a>	HORSEMANSHIP I	3 credit hours
OR		
<a href="#">AGEQ 1300</a>	ENGLISH EQUITATION I	3 credit hours
OR		

<a href="#">AGEQ 1370</a>	LOCAL NEEDS - PRINCIPLES OF RANCH HORSE RIDING	3 credit hours
<a href="#">AGEQ 1411</a>	I EQUINE SCIENCE I (HORSE PRODUCTION AND MANAGEMENT)	4 credit hours
<a href="#">AGEQ 1205</a>	EQUINE ENTERPRISE MANAGEMENT	2 credit hours
<a href="#">AGRI 1309</a>	COMPUTERS IN AGRICULTURE	3 credit hours

Total Credit Hours: 15

**Second Semester**

<a href="#">AGEQ 1315</a>	HORSE EVALUATION I	3 credit hours
<a href="#">AGAH 1372</a>	AGRICULTURAL SPANISH	3 credit hours

OR

<a href="#">AGRI 2317</a>	INTRODUCTION TO AGRICULTURAL ECONOMICS	3 credit hours
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OR

<a href="#">AGMG 2301</a>	LIVESTOCK BUSINESS MANAGEMENT	3 credit hours
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<a href="#">AGEQ 2339</a>	HORSEMANSHIP II	3 credit hours
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OR

<a href="#">AGEQ 2359</a>	ENGLISH EQUITATION II	3 credit hours
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OR

<a href="#">AGEQ 1371</a>	LOCAL NEEDS - PRINCIPLES OF RANCH HORSE RIDING II	3 credit hours
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<a href="#">CORE</a>	SOCIAL AND BEHAVIORAL SCIENCES	3 credit hours
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<a href="#">CORE</a>	LANGUAGE, PHILOSOPHY AND CULTURE, OR CREATIVE ARTS ELECTIVE	3 credit hours
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<a href="#">AGEQ 2311</a>	EQUINE SCIENCE II (ADVANCED HORSE PRODUCTION AND MANAGEMENT)	3 credit hours
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Total Credit Hours: 18

**Third Semester**

<a href="#">AGRI 2303</a>	AGRICULTURAL CONSTRUCTION I	3 credit hours
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OR

[AGRI 2301](#) AGRICULTURAL POWER UNITS 3 credit hours

[MATHXXXX](#) CORE COLLEGE MATH 3 credit hours

[AGEQ 1401](#) EQUINE BEHAVIOR AND TRAINING I 4 credit hours

[CORE](#) LIFE AND PHYSICAL SCIENCES 4 credit hours

Total Credit Hours: 14

**Fourth Semester**

[AGRI 1419](#) INTRODUCTORY ANIMAL SCIENCE 4 credit hours

[AGEQ 1350](#) EQUINE REPRODUCTION 3 credit hours

[AGEQ 2310](#) EQUINE BUSINESS MANAGEMENT 3 credit hours

[AGEQ 2386](#) INTERNSHIP - EQUINE SCIENCE 3 credit hours

Total Credit Hours: 13

1. Choose one from: ENGL1301 or SPCH1315 or SPCH1321
2. Equestrian I Requirement: AGEQ1319, or AGEQ1300 or AGEQ1370
3. Choose one from AGAH1372 or AGRI2317 or AGMG2301
4. Equestrian II Requirement: AGEQ2339 or AGEQ2359 or AGEQ1371
5. Choose one course from the Core Curriculum Social & Behavioral Sciences
6. Choose one from AGRI2301 or AGRI2303
7. Choose one course from the Core Curriculum in Mathematics
8. Choose one course from the Core Curriculum in Life and Physical Sciences
9. Choose one course from the Core Curriculum for either Language, Philosophy and Culture OR Creative Arts

**Total Credit Hours: 60**

Capstone Requirement: [AGEQ 2386](#) Internship - Equestrian/Equine Studies is the capstone requirement and may not be substituted. It should be taken the last semester before graduation.

# Equine Breeding Farm Management Certificate

## Level 1 Workforce Certificate

Equine Breeding Farm Management Certificate curriculum focuses on physiology of reproduction as well as the business and management aspects of this side of the equine industry. Some of the careers available to graduates include, Breeding



Farm/General Farm Mgt., Vet Technician, Laboratory and Research vocations, Pedigree Analysis, Bloodstock Agent, Sales Prep and Marketing, and related Industry Retail/Sales.

Upon completion of the Level 1 Workforce Certificate , students will be able to:

- Identify the major horse breeds and describe their characteristics.
- Demonstrate correct and safe handling of horses.
- Discuss the management practices used at a breeding farm, and the reasoning behind these practices.
- Perform basic skills necessary for employment at a typical breeding operation.1
- Restate proper management procedures during gestation and foaling, as well as basic semen collection, evaluation, insemination, and semen transportation

### [Gainful Employment Disclosure](#)

This certificate is only offered in face-to-face delivery. The program is designed to take 48 weeks to complete and is comprised of the following suggested pathway or course of study.

## Certificate Requirements

<b>First Semester</b>	
<a href="#">AGEQ 1205</a>	EQUINE ENTERPRISE MANAGEMENT EQUINE 2 credit hours
<a href="#">AGEQ 1411</a>	SCIENCE I (HORSE PRODUCTION AND MANAGEMENT) 4 credit hours
<a href="#">AGEQ 1401</a>	EQUINE BEHAVIOR AND TRAINING I 4 credit hours
<a href="#">AGRI 1309</a>	COMPUTERS IN AGRICULTURE 3 credit hours
Total Credit Hours:	13

<b>Second Semester</b>	
<a href="#">AGEQ 2310</a>	EQUINE BUSINESS MANAGEMENT EQUINE 3 credit hours
<a href="#">AGEQ 2311</a>	SCIENCE II (ADVANCED HORSE PRODUCTION AND MANAGEMENT) 3 credit hours
<a href="#">AGCR 1441</a>	FORAGE AND PASTURE MANAGEMENT 4 credit hours
<a href="#">AGEQ 1350</a>	EQUINE REPRODUCTION 3 credit hours
Total Credit Hours:	13

	<b>Third Semester</b>	
<a href="#">AGRI 2301</a>	AGRICULTURAL POWER UNITS	3 credit hours
OR		
<a href="#">AGRI 2303</a>	AGRICULTURAL CONSTRUCTION I	3 credit hours
<a href="#">AGAH 1372</a>	AGRICULTURAL SPANISH	3 credit hours
<a href="#">AGEQ 2386</a>	INTERNSHIP - EQUINE SCIENCE	3 credit hours
Total Credit Hours:		9

**Total Credit Hours: 35**

Capstone Requirement: [AGEQ 2386](#) Internship - Equestrian/Equine Studies is the capstone requirement and may not be substituted. It should be taken the last semester before graduation.

## Equine Management Certificate

### Level 1 Workforce Certificate

Equine Management Certificate curriculum focuses on the business and managerial aspects of running an equine facility, whether this is as a sole proprietor or for a public, working ranch, or private equine facility. Coursework may also be applied to any of the other certificates offered as well as both AAS Degree programs. Some of the careers available to graduates include, Breeding Farm/General Farm Mgt., Vet Technician, Bloodstock Agent, Horse Show Manager, Sales Prep and Marketing, and a variety of related Industry Retail/Sales.

Upon completion of the Level 1 Workforce Certificate, students will be able to:

- Propose managerial practices relevant to the equine industry
- Evaluate form to function regarding conformation, and performance of horses
- Utilize relevant computer programs commonly used in equine businesses.

#### [Gainful Employment Disclosure](#)

This certificate is only offered in face-to-face delivery. The program is designed to take 32 weeks to complete and is comprised of the following suggested pathway or course of study.

## Certificate Requirements

<b>First Semester</b>		
<a href="#">AGEQ 1411</a>	EQUINE SCIENCE I (HORSE PRODUCTION AND MANAGEMENT)	4 credit hours
<a href="#">AGEQ 1205</a>	EQUINE ENTERPRISE MANAGEMENT	2 credit hours
<a href="#">AGRI 1309</a>	COMPUTERS IN AGRICULTURE	3 credit hours
<a href="#">AGEQ 1319</a>	HORSEMANSHIP I	3 credit hours
OR		
<a href="#">AGEQ 1300</a>	ENGLISH EQUITATION I	3 credit hours
OR		
<a href="#">AGEQ 1370</a>	LOCAL NEEDS - PRINCIPLES OF RANCH HORSE RIDING I	3 credit hours
Total Credit Hours:		12

<b>Second Semester</b>		
<a href="#">AGEQ 1315</a>	HORSE EVALUATION I	3 credit hours
<a href="#">AGEQ 2311</a>	EQUINE SCIENCE II (ADVANCED HORSE PRODUCTION AND MANAGEMENT)	3 credit hours
<a href="#">AGCR 1441</a>	FORAGE AND PASTURE MANAGEMENT EQUINE	4 credit hours
<a href="#">AGEQ 2310</a>	BUSINESS MANAGEMENT	3 credit hours
Total Credit Hours:		13

### **Total Credit Hours: 25**

Capstone Requirement: Students completing the certificate must pass a comprehensive program exam with a score of 70% or higher to satisfy the capstone requirement. Exam must be scheduled with the Division Chair.

# Equine Science - Horse Management and Training

## Level 1 Workforce Certificate

Horse Management and Training curriculum focus on the specific needs of the student, whether that is to work for a top trainer or manage a horse training business as a sole proprietor. Students may pursue a certificate, then if they chose to migrate to an AAS degree all courses in the certificate then apply toward the AAS. Some of the careers available to graduates with this certificate include Horse Trainer/Riding Instructor, Farm/Ranch Manager, Veterinary Technician, Bloodstock Agent, Extension Horse Specialist, and Pedigree Analyst.

Upon completion of the Level 1 Workforce Certificate, students will be able to:

- Identify the major horse breeds and describe their characteristics.
- Describe ideal, correct, and incorrect movement in performance horses.
- Demonstrate correct and safe handling of horses.
- Demonstrate a balanced seat and posture in all gaits
- Recognize behavioral patterns and adapt training methods accordingly to individual horses.

### [Gainful Employment Disclosure](#)

This degree is completed completely face-to-face. The program is designed to take three semesters to complete and is comprised of the following suggested pathway or course of study.

## Certificate Requirements

	<b>First Semester</b>	
<a href="#">AGEQ 1411</a>	EQUINE SCIENCE I (HORSE PRODUCTION AND MANAGEMENT)	4 credit hours
<a href="#">AGEQ 1401</a>	EQUINE BEHAVIOR AND TRAINING I	4 credit hours
<a href="#">AGEQ 1205</a>	EQUINE ENTERPRISE MANAGEMENT	2 credit hours
<a href="#">AGEQ 1319</a>	HORSEMANSHIP I	3 credit hours
OR		
<a href="#">AGEQ 1300</a>	ENGLISH EQUITATION I	3 credit hours
OR		
<a href="#">AGEQ 1370</a>	LOCAL NEEDS - PRINCIPLES OF RANCH HORSE RIDING I	3 credit hours
Total Credit Hours:		13

<b>Second Semester</b>		
<a href="#">AGEQ 2310</a>	EQUINE BUSINESS MANAGEMENT	3 credit hours
<a href="#">AGEQ 2311</a>	EQUINE SCIENCE II (ADVANCED HORSE PRODUCTION AND MANAGEMENT)	3 credit hours
<a href="#">AGEQ 2401</a>	EQUINE BEHAVIOR AND TRAINING II	4 credit hours
<a href="#">AGEQ 1315</a>	HORSE EVALUATION I	3 credit hours
<a href="#">AGRI 2303</a>	AGRICULTURAL CONSTRUCTION I	3 credit hours

OR

<a href="#">AGRI 2301</a>	AGRICULTURAL POWER UNITS	3 credit hours
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Total Credit Hours: 16

<b>Third Semester</b>		
<a href="#">AGAH 1372</a>	AGRICULTURAL SPANISH	3 credit hours
<a href="#">AGEQ 2339</a>	HORSEMANSHIP II	3 credit hours
OR		
<a href="#">AGEQ 2359</a>	ENGLISH EQUITATION II	3 credit hours
OR		
<a href="#">AGEQ 1371</a>	LOCAL NEEDS - PRINCIPLES OF RANCH HORSE RIDING II	3 credit hours

OR

<a href="#">AGEQ 2370</a>	LOCAL NEEDS - REINING	3 credit hours
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OR

<a href="#">AGEQ 2371</a>	LOCAL NEEDS - ADVANCED RANCH HORSE RIDING	3 credit hours
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OR

<a href="#">AGEQ 2372</a>	LOCAL NEEDS-ADVANCED REINING	3 credit hours
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<a href="#">AGEQ 2386</a>	INTERNSHIP - EQUINE SCIENCE	3 credit hours
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Total Credit Hours: 12

**Total Credit Hours: 41**

Capstone Requirement: [AGEQ 2386](#) Internship - Equestrian/Equine Studies is the capstone requirement and may not be substituted. It should be taken the last semester before graduation.

# Equine Husbandry OSA

## Occupational Skills Award

### Occupational Skills Award Requirements

	<b>First Semester</b>	
<a href="#">AGEQ 1411</a>	EQUINE SCIENCE I (HORSE PRODUCTION AND MANAGEMENT)	4 credit hours
<a href="#">AGEQ 1205</a>	EQUINE ENTERPRISE MANAGEMENT	2 credit hours
<a href="#">AGEQ 1315</a>	HORSE EVALUATION I	3 credit hours
<a href="#">AGEQ 2311</a>	EQUINE SCIENCE II (ADVANCED HORSE PRODUCTION AND MANAGEMENT)	3 credit hours
Total Credit Hours:		12

**Total Credit Hours: 12**

# Esthetician Program

## Stephanie Lindsey

*Chair Human Services & Hospitality Division*

(940) 668-3314

[slindsey@nctc.edu](mailto:slindsey@nctc.edu)

The NCTC Esthetician Program curriculum is governed by the Texas Department of Licensing and Regulations. The 23 semester hour Esthetician curriculum leads to a Level 1 Workforce Certificate and helps prepare graduates to take the TDLR Esthetics Examination. Successful completion of the examination will allow graduates to practice as a licensed esthetician in the state of Texas.

To enroll in the Esthetician certificate program, student must:

- Be at least 17 years of age by state licensure testing date
- Have obtained a high school diploma or the equivalent of, i.e., GED
- Apply to NCTC and complete the college orientation
- Complete required Cosmetology department paperwork
- Complete financial aid forms if applicable
- Provide applicable transcripts
- Pay \$25 fee to the Texas Department of Licensing and Regulation for student permit

# Esthetician Certificate

## Level 1 Workforce Certificate

Upon completion of the Level 1 Workforce Certificate, student will be able to:

1. Demonstrate proper skincare applications
2. Determine the basic physiology of the skin
3. Demonstrate the skills and knowledge required for successful completion of the state licensing examination

### [Gainful Employment Disclosure](#)

Fees associated with the Esthetician Certificate are as follows:

- Textbooks, approximately \$357 if purchased new
- \$25 fee for student permit issued by TDLR
- \$1000 large makeup kit, includes case, enough products to work as a makeup artist and five certifications
- \$300 Dermalogica Kit
- Scrubs with NCTC logo and name embroidered on top. Color determined each semester.

This certificate is offered only through face-to-face classes. The program is designed to take two semesters, or 32 weeks, to complete and is comprised of the following suggested pathway or course of study.

## Certificate Requirements

	<b>First Semester</b>	
<a href="#">CSME 1248</a>	PRINCIPLES OF SKIN CARE	2 credit hours
<a href="#">CSME 1420</a>	ORIENTATION TO FACIAL SPECIALIST	4 credit hours
<a href="#">CSME 1447</a>	PRINCIPLES OF SKIN CARE/FACIALS AND RELATED THEORY	4 credit hours
Total Credit Hours:		10
	<b>Second Semester</b>	
<a href="#">CSME 1421</a>	PRINCIPLES OF FACIAL AND SKIN CARE TECHNOLOGY I	4 credit hours
<a href="#">CSME 1545</a>	PRINCIPLES OF FACIAL AND SKIN CARE TECHNOLOGY II	5 credit hours

[CSME 2431](#)

PRINCIPLES OF  
FACIALS AND SKIN  
CARE TECHNOLOGY III

4 credit hours

Total Credit Hours:

13

**Total Credit Hours: 23**

## Game Design & Application Programming Program

**Susan Svane**

*Chair Information Technology Division*

(940) 498-6292

[ssvane@nctc.edu](mailto:ssvane@nctc.edu)

The Gaming & Application Programming Associate of Applied Science Degree and the Game Design Certificate are designed to prepare students for a variety of careers in gaming and mobile app design. The curriculum provides learning and hands-on training in a variety of skills related to this exciting field, including game development, application programming, animation programming, and video game design.

Upon completion of these programs, students may work for gaming companies and businesses that use multimedia artists and animators, graphic designers, video game developers, and application programmers.

Program curriculum has been developed with the assistance and advice of an advisory council which is composed of service area industry professionals.

Prerequisite: Students in this program must be able to keyboard at a minimum rate of 40 words per minute. Those who cannot meet this requirement must take a keyboarding class to improve their skills prior to enrollment.

## Game Design Certificate

Level 1 Workforce Certificate

The Certificate Program provides similar classes to the degree program; however, there are no academic classes in these individual curricula. A student that commences study as a certificate student and later desires to complete the degree program will find that the classes taken for a certificate will readily transfer to the degree program.

Upon completion of the Level 1 Workforce Certificate, students will be able to:

- Identify the software development cycle.
- Conceive, design, and build a simple computer game.
- Communicate technical issues related to game design through presentations and reports.



[Gainful Employment Disclosure](#)

This Level 1 Workforce Certificate can be completed through a mix of face-to-face, hybrid and online classes. Several of the courses are offered in an 8-week term, rather than a 16-week term. The program is designed to take two semesters, or 32 weeks to complete, and is comprised of the following suggested pathway or course of study.

**Certificate Requirements**

	<b>First Semester</b>	
<a href="#">ARTC 1325</a>	INTRODUCTION TO COMPUTER GRAPHICS	3 credit hours
<a href="#">GAME 1306</a>	DESIGN AND CREATION OF GAMES	3 credit hours
<a href="#">ITSE 2321</a>	OBJECT-ORIENTED PROGRAMMING MOBILE	3 credit hours
<a href="#">ITSE 1333</a>	APPLICATIONS DEVELOPMENT	3 credit hours
<a href="#">GAME 1309</a>	INTRODUCTION TO ANIMATION PROGRAMMING	3 credit hours

Total Credit Hours: 15

	<b>Second Semester</b>	
<a href="#">GAME 1343</a>	GAME AND SIMULATION PROGRAMMING I	3 credit hours
<a href="#">GAME 2342</a>	GAME DEVELOPMENT USING C++	3 credit hours
<a href="#">EECT 1300</a>	TECHNICAL CUSTOMER SERVICE	3 credit hours
<a href="#">GAME 1328</a>	VIDEO GAME DESIGN	3 credit hours
<a href="#">ITSE 2310</a>	iOS APPLICATION PROGRAMMING	3 credit hours

Total Credit Hours: 15

**Total Credit Hours: 30**

Capstone Requirement: Students completing the certificate must pass a comprehensive program exam with a score of 70% or higher to satisfy the capstone requirement. Exam must be scheduled with the Division Chair.

# Game Design & Application Programming AAS

## Associate of Applied Science Degree

Upon completion of the Associate of Applied Science, students will be able to:

- Communicate technical issues related to gaming and application programming through presentations and reports, both written and verbal.
- Demonstrate the ability to work effectively in teams.
- Develop and manipulate digital media products.
- Demonstrate an understanding of data structures, variables and classes.
- Build a portfolio.

The Associate of Applied Science can be completed through a mix of face-to-face, hybrid, and online classes. Several of the courses are offered in an 8-week term, rather than a 16-week term. The program is designed to take two years, or 64 weeks, to complete and is comprised of the following suggested pathway or course of study.

## Degree Requirements

<b>First Semester</b>	
<a href="#">ARTC 1325</a>	INTRODUCTION TO COMPUTER GRAPHICS DESIGN AND CREATION OF GAMES 3 credit hours
<a href="#">GAME 1306</a>	OBJECT-ORIENTED PROGRAMMING MOBILE APPLICATIONS DEVELOPMENT 3 credit hours
<a href="#">ITSE 2321</a>	INTRODUCTION TO ANIMATION PROGRAMMING 3 credit hours
<a href="#">ITSE 1333</a>	
<a href="#">GAME 1309</a>	
Total Credit Hours:	15
<b>Second Semester</b>	
<a href="#">GAME 1343</a>	GAME AND SIMULATION PROGRAMMING I 3 credit hours
<a href="#">GAME 2342</a>	GAME DEVELOPMENT USING C++ 3 credit hours
<a href="#">EECT 1300</a>	TECHNICAL CUSTOMER SERVICE 3 credit hours
<a href="#">GAME 1328</a>	VIDEO GAME DESIGN 3 credit hours
<a href="#">ITSE 2310</a>	iOS APPLICATION PROGRAMMING 3 credit hours

Total Credit Hours: 15

**Third Semester**

[IMED 1345](#) INTERACTIVE DIGITAL MEDIA 3 credit hours

[ITSE 2343](#) ADVANCED MOBILE PROGRAMMING 3 credit hours

[ITSE 2317](#) JAVA PROGRAMMING 3 credit hours

[GAME 1303](#) INTRO TO GAME DESIGN AND DEVELOPMENT 3 credit hours

[ENGL 1301](#) COMPOSITION I 3 credit hours

Total Credit Hours: 15

**Fourth Semester**

[MATH 1332](#) CONTEMPORARY MATHEMATICS I 3 credit hours

[ARTS 1301](#) ART APPRECIATION 3 credit hours

[GOVT 2305](#) FEDERAL GOVERNMENT (Federal constitution & topics) 3 credit hours

[ENGL 2311](#) TECHNICAL & BUSINESS WRITING 3 credit hours

[GAME 2308](#) PORTFOLIO FOR GAME DEVELOPMENT 3 credit hours

Total Credit Hours: 15

**Total Credit Hours: 60**

Capstone Requirement: [GAME 2308](#) Portfolio for Game Development is a capstone experience and may not be substituted. It should be taken the last semester before graduation.

## Heating, Ventilation & Air Conditioning Program

**Kenny Smith**

*Chair Industrial Technology & Energy Division*

(940) 668-7731, ext. 4426

[ksmith@nctc.edu](mailto:ksmith@nctc.edu)

Heating, Ventilation and Air Conditioning technology (HVAC) is considered a high demand occupation throughout Texas. HVAC technicians install and maintain heating and air conditioning units and may work for a general contractor, in building maintenance, for companies that build the HVAC units, and in sales of HVAC equipment. HVAC technicians should display manual dexterity, be able to apply

concepts to real life situations, and develop good customer service habits.

Beginning HVAC students can earn an EPA 608 Certification, which will enable them to handle Freon and dispose and recover refrigerants. Students can also become a Certified HVAC Technician through the Texas Department of License and Regulation (TDLR) when they complete their required first semester courses. North Central Texas College is recognized as an HVAC training site with the Texas Department of License and Regulation. Building Science is also included in the first semester of HVAC courses. Building science is a growing trade all by itself in the state of Texas, as conservation of energy and building efficiency now have to meet required standards. The building science training includes blower door technology training, duct tightness, and effective insulation evaluation.

Beginning HVAC technicians can expect to earn between \$15 and \$18 per hour, and pay increases substantially in urban areas. Advanced HVAC Technicians can earn a contractor's license after completing four years in the field as an HVAC technician. With an HVAC contractor license, they can start their own business, or work as an advanced technician making between \$20 and \$30 per hour.

Students may pursue an Occupational Skills Award (OSA), Level 1 Workforce Certificate, or an Associate of Applied Science Degree.

## Heating, Ventilation & Air Conditioning OSA

### Occupational Skills Award

This OSA can be completed through a mix of face-to-face and online classes. The award is designed to take 16 weeks to complete and is comprised of the following suggested pathway or course of study.

### Occupational Skills Award Requirements

#### First Semester

<a href="#">HART 1307</a>	REFRIGERATION PRINCIPLES	3 credit hours
<a href="#">HART 1301</a>	BASIC ELECTRICITY FOR HVAC	3 credit hours
<a href="#">HART 1256</a>	EPA RECOVERY CERTIFICATION	2 credit hours
<a href="#">HART 1341</a>	RESIDENTIAL AIR CONDITIONING	3 credit hours
<a href="#">RBPT 1300</a>	FUNDAMENTALS OF RESIDENTIAL BUILDING SCIENCE	3 credit hours

Total Credit Hours: 14

**Total Credit Hours: 14**

# Heating, Ventilation & Air Conditioning Certificate

## Level 1 Workforce Certificate

Upon completion of the Level 1 Workforce Certificate, students will be able to:

- Demonstrate communication skills.
- Demonstrate the attributes of a positive work ethic.
- Demonstrate eye and hand coordination and dexterity.
- Demonstrate the application of and the ability to use the common hand tools used in the Heating Ventilation and Air Conditioning trade.
- Demonstrate form perception and spatial relations in the application of methods of installation of Heating, Ventilation and Air Conditioning equipment.

### [Gainful Employment Disclosure](#)

The certificate can be completed through a mix of face-to-face and online classes. The program is designed to take one year, or 42 weeks to complete and is comprised of the following suggested pathway or course of study.

## Certificate Requirements

<a href="#">HART 1307</a>	<b>First Semester</b> REFRIGERATION PRINCIPLES	3 credit hours
<a href="#">HART 1301</a>	BASIC ELECTRICITY FOR HVAC	3 credit hours
<a href="#">HART 1256</a>	EPA RECOVERY CERTIFICATION	2 credit hours
<a href="#">HART 1341</a>	RESIDENTIAL AIR CONDITIONING	3 credit hours
<a href="#">RBPT 1300</a>	FUNDAMENTALS OF RESIDENTIAL BUILDING SCIENCE	3 credit hours
Total Credit Hours:		14
<a href="#">HART 2445</a>	<b>Second Semester</b> RESIDENTIAL AIR CONDITIONING SYSTEMS DESIGN	4 credit hours
<a href="#">HART 2358</a>	TESTING, ADJUSTING, AND BALANCING HVAC SYSTEMS	3 credit hours

<a href="#">HART 2342</a>	COMMERCIAL	3 credit hours
<a href="#">HART 2301</a>	REFRIGERATION	3 credit hours
	AIR CONDITIONING AND REFRIGERATION	
Total Credit Hours:	CODES	13
	<b>Third Semester (Summer)</b>	
	INDUSTRIAL	3 credit hours
<a href="#">TECM 1301</a>	MATHEMATICS	
Total Credit Hours:		3

**Total Credit Hours: 30**

Capstone Requirement: Students completing the certificate must pass a comprehensive program exam with a score of 70% or higher to satisfy the capstone requirement. Exam must be scheduled with the Department Chair.

# Heating, Ventilation & Air Conditioning AAS

## Associate of Applied Science Degree

The Heating, Ventilation and Air Conditioning program is designed to prepare students to install and maintain heating and air conditioning units. HVAC techs may work for general contractors in building maintenance, for companies that build the units, and in sales. Heating, Ventilation and Air Condition is considered a high-demand occupation throughout Texas.

Curriculum includes hands-on training that teaches the student how to safely handle, dispose, and recover refrigerants and in the course of the training the student will acquire an EPA 608 certification for handling refrigerants. Building science is also included in the curriculum in order to provide the student with a full understanding that the HVAC equipment and the building envelope are a system that works together. This building science includes blower door training, duct tightness testing and effective insulation evaluation. Upon completion of the HVAC degree, the student can be a registered certified technician in the State of Texas.

Upon completion of the Associate of Applied Science Degree, students will be able to:

- Demonstrate mechanical reasoning.
- Demonstrate the attributes of working collaboratively or independently under supervision.
- Demonstrate the proper setup and the use of basic procedures related to the Heating Ventilation and Air Conditioning field.
- Demonstrate the application of and the ability to properly use specialty tools used in the Heating Ventilation and Air Conditioning field.

This degree can be completed through a mix of face-to-face classes and online classes. The program is designed to take two years to complete and is comprised of the following suggested pathway or course of study.

## Degree Requirements

<b>First Semester</b>		
<a href="#">HART 1307</a>	REFRIGERATION	3 credit hours
<a href="#">HART 1301</a>	PRINCIPLES BASIC ELECTRICITY FOR HVAC	3 credit hours
<a href="#">HART 1256</a>	EPA RECOVERY CERTIFICATION	2 credit hours
<a href="#">HART 1341</a>	RESIDENTIAL AIR CONDITIONING	3 credit hours
<a href="#">RBPT 1300</a>	FUNDAMENTALS OF RESIDENTIAL BUILDING SCIENCE	3 credit hours
Total Credit Hours:		14

<b>Second Semester</b>		
<a href="#">HART 2445</a>	RESIDENTIAL AIR CONDITIONING SYSTEMS DESIGN	4 credit hours
<a href="#">HART 2358</a>	TESTING, ADJUSTING, AND BALANCING HVAC SYSTEMS COMMERCIAL	3 credit hours
<a href="#">HART 2342</a>	REFRIGERATION	3 credit hours
<a href="#">HART 2301</a>	AIR CONDITIONING AND REFRIGERATION CODES	3 credit hours
Total Credit Hours:		13

<b>Third Semester (Summer)</b>		
	INDUSTRIAL MATHEMATICS	
Total Credit Hours:		

<b>Fourth Semester</b>		
<a href="#">DFTG 1309</a>	BASIC COMPUTER- AIDED DRAFTING	3 credit hours
<a href="#">OSHT 1320</a>	ENERGY INDUSTRIAL SAFETY LEADERSHIP	3 credit hours
<a href="#">ENGL 1301</a>	COMPOSITION I	3 credit hours
<a href="#">HIST 1301</a>	UNITED STATES HISTORY I	3 credit hours
Total Credit Hours:		15

	<b>Fifth Semester</b>	
<a href="#">BMGT 1327</a>	PRINCIPLES OF MANAGEMENT	3 credit hours
<a href="#">MATH 1314</a>	COLLEGE ALGEBRA	3 credit hours
<a href="#">SPCH 1318</a>	INTERPERSONAL COMMUNICATION	3 credit hours
<a href="#">ARTS 1301</a>	ART APPRECIATION	3 credit hours
<a href="#">HART 2380</a>	COOPERATIVE EDUCATION	3 credit hours
Total Credit Hours:		15

**Total Credit Hours: 60**

Capstone Requirement: [HART 2380](#) Cooperative Education - is the capstone requirement and may not be substituted. It should be taken the last semester before graduation.

## Horticulture Program

### Steve Keith

*Chair Agriculture Division*

(940) 668-4217

[skeith@nctc.edu](mailto:skeith@nctc.edu)

### Ashley Hartman

*Horticulture Faculty Advisor*

(940) 668-7731, ext. 4488

[ahartman@nctc.edu](mailto:ahartman@nctc.edu)

The NCTC Horticulture Program is one of the few programs of its kind, providing a broad, technical education in the field of horticulture, emphasizing practical knowledge while preparing students to work in multiple facets of the industry, including landscaping, floristry, horticulture crop production, and greenhouse management. Students learn a variety of horticultural techniques such as plant propagation, organic gardening, soil preparation, plant identification, and pest management. Courses are taught using a range of teaching methods consisting of hands-on labs, one-on-one instruction, field trips, and lectures. A dynamic and diverse field, horticulture is among the few to bridge the gap between science, art, business, and technology. Horticulture is not only a multi-billion dollar industry that offers increasing job opportunities for students seeking careers in the area, but horticulture also offers countless opportunities for hobbyists.

The program is designed to equip students with knowledge and skills directly applicable to a career in horticulture, providing quality workforce education for those seeking to enter the field of horticulture. Classes focus on the specific needs of the student, whether that is to work for a large corporation or to manage a horticulture business as a sole proprietor.



The Landscape Design Occupational Skills Award, Horticulture Management Certificate, and Sustainable Horticulture Certificate are all available in this program.

## Landscape Design OSA

### Occupational Skills Award

The Occupational Skills Award is a short program designed for the student primarily interested in landscape design as a career.

### Occupational Skills Award Requirements

<b>First Semester</b>		
<a href="#">HALT 1422</a>	LANDSCAPE DESIGN	4 credit hours
<a href="#">HALT 1333</a>	LANDSCAPE IRRIGATION	3 credit hours
Total Credit Hours:		7
<b>Second Semester</b>		
<a href="#">HALT 1353</a>	LANDSCAPE COMPUTER DESIGN	3 credit hours
Total Credit Hours:		3
<b>Total Credit Hours:</b>		<b>10</b>

## Horticultural Management Certificate

### Level 1 Workforce Certificate

Upon completion of the Level 1 Workforce Certificate, students will be able to:

- Identify and perform basic horticultural techniques and procedures of growing vegetables, fruits, nuts, flowers and other ornamentals.
- Discuss and apply the principles and elements of design as used in landscape design and floral composition and use appropriate terminology for describing and interpreting the design principles in a landscape or floral composition.
- Identify garden pests and recommend both traditional and non-traditional control measures.
- Propagate herbaceous and woody plants

### [Gainful Employment Disclosure](#)

This certificate is offered through a combination of hybrid and face-to-face classes. The program is designed to take 48 weeks to complete and is comprised of the following suggested pathway or course of study.

## Certificate Requirements

<b>First Semester</b>		
<a href="#">FMKT 1301</a>	FLORAL DESIGN	3 credit hours
<a href="#">HALT 1372</a>	NATURALISTIC HORTICULTURE	3 credit hours
<a href="#">HALT 1331</a>	WOODY PLANTS	3 credit hours
<a href="#">HORT 1401</a>	HORTICULTURE	4 credit hour
<a href="#">HALT 2321</a>	SMALL FARMING	3 credit hours
OR		
<a href="#">HALT 1333</a>	LANDSCAPE IRRIGATION	3 credit hours
OR		
<a href="#">HALT 1353</a>	LANDSCAPE COMPUTER DESIGN	3 credit hours
OR		
<a href="#">HALT 2307</a>	FOOD CROPS	3 credit hours
Total Credit Hours:		16

<b>Second Semester</b>		
<a href="#">HALT 1303</a>	HERBACEOUS PLANTS	3 credit hours
<a href="#">HALT 2308</a>	GREENHOUSE MANAGEMENT	3 credit hours
<a href="#">HALT 1422</a>	LANDSCAPE DESIGN	4 credit hours
<a href="#">HALT 2321</a>	SMALL FARMING	3 credit hours
OR		
<a href="#">HALT 1333</a>	LANDSCAPE IRRIGATION	3 credit hours
OR		
<a href="#">HALT 1353</a>	LANDSCAPE COMPUTER DESIGN	3 credit hours
OR		
<a href="#">HALT 2307</a>	FOOD CROPS	3 credit hours
Total Credit Hours:		13

<b>Third Semester (Summer)</b>		
<a href="#">HALT 2280</a>	COOPERATIVE EDUCATION	2 credit hours
Total Credit Hours:		2

**Total Credit Hours: 31**

Capstone Requirement: [HALT 2280](#) Cooperative Education - is the capstone requirement and may not be substituted. It should be taken the last semester before graduation.

# Sustainable Horticulture Certificate

## Level 1 Workforce Certificate

The Sustainable Horticulture Certificate is a 15 credit hour program focusing on creating productive gardens by encouraging biological diversity. Students will explore procedures of sustainable agriculture systems, plant production in a greenhouse setting, landscaping techniques that encourage biodiversity and organic food production.

Upon completion of the Level 1 Workforce Certificate, students will be able to:

- Discuss the sustainable management practices used on a small farm and the reasoning behind these practices.
- Develop biodiversity in a landscape.
- Produce crops in a small farm setting as well as in a greenhouse environment.
- Create and manage sustainable horticultural soils.

## [Gainful Employment Disclosure](#)

This Level 1 Workforce Certificate can be completed through all face-to-face classes. The program is designed to take two semesters, or 32 weeks to complete, and is comprised of the following suggested pathway or course of study.

## Certificate Requirements

	<b>First Semester</b>	
<a href="#">AGCR 1371</a>	SUSTAINABLE AGRICULTURE	3 credit hours
<a href="#">HALT 1372</a>	NATURALISTIC HORTICULTURE	3 credit hours
<a href="#">HALT 2307</a>	HORTICULTURAL FOOD CROPS	3 credit hours
Total Credit Hours:		9
	<b>Second Semester</b>	
<a href="#">HALT 2308</a>	GREENHOUSE MANAGEMENT	3 credit hours
<a href="#">HALT 2321</a>	SMALL FARMING	3 credit hours
Total Credit Hours:		6

**Total Credit Hours: 15**

Capstone Requirement: Students completing the certificate must pass a comprehensive program exam with a score of 70% or higher to satisfy the capstone requirement. Exam must be scheduled with the Division Chair.

# Horticulture AAS

Associate of Applied Science Degree

Upon completion of the Associate of Applied Science degree, graduates will be able to:

- Identify, propagate, and cultivate horticultural crops.
- Apply the principles and elements of design to create landscape and floral designs.
- Analyze and adjust soil conditions to maximize production of horticultural crops.
- Grow horticultural crops in protected environments.
- Identify garden pests and recommend control measures.

The Associate of Applied Science degree can be completed through a mix of face-to-face, hybrid, and online classes. The program is designed to take two years, or 64 weeks to complete, and is comprised of the following suggested pathway or course of study.

## Degree Requirements

	<b>First Semester</b>	
<a href="#">HALT 2307</a>	HORTICULTURAL FOOD CROPS	3 credit hours
<a href="#">FMKT 1301</a>	FLORAL DESIGN	3 credit hours
<a href="#">HALT 1331</a>	WOODY PLANT MATERIALS	3 credit hours
<a href="#">HORT 1401</a>	HORTICULTURE	4 credit hour
<a href="#">HALT 1372</a>	NATURALISTIC HORTICULTURE	3 credit hours
Total Credit Hours:		16
	<b>Second Semester</b>	
<a href="#">HALT 2321</a>	SMALL FARMING	3 credit hours
<a href="#">HALT 2308</a>	GREENHOUSE MANAGEMENT	3 credit hours
<a href="#">HALT 1303</a>	HERBACEOUS PLANTS	3 credit hours
<a href="#">AGCR 1371</a>	INTRO TO SUSTAINABLE AGRICULTURE	3 credit hours
<a href="#">HALT 1422</a>	LANDSCAPE DESIGN	4 credit hours
Total Credit Hours:		16
	<b>Third Semester</b>	
<a href="#">HALT 1353</a>	LANDSCAPE COMPUTER DESIGN	3 credit hours
<a href="#">HALT 1307</a>	PLANT DISEASES	3 credit hours
<a href="#">ARTS 1301</a>	ART APPRECIATION	3 credit hours
OR		

<a href="#">CORE</a>	Core Humanities/Fine Arts	3 credit hours
<a href="#">ENGL 1301</a>	COMPOSITION I	3 credit hours
<a href="#">BUSG 1301</a>	INTRODUCTION TO BUSINESS	3 credit hours

Total Credit Hours: 15

**Fourth Semester**

<a href="#">HALT 1333</a>	LANDSCAPE IRRIGATION	3 credit hours
<a href="#">SOC1 1301</a>	INTRODUCTION TO SOCIOLOGY	3 credit hours

OR

<a href="#">CORE</a>	CORE SOCIAL/ BEHAVIORAL SCIENCE	3 credit hours
<a href="#">SPCH 1315</a>	PUBLIC SPEAKING	3 credit hours

OR

<a href="#">CORE</a>	CORE COMMUNICATIONS/ SPEECH	3 credit hours
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<a href="#">HALT 2480</a>	COOPERATIVE EDUCATION - APPLIED HORTICULTURE & HORTICULTURAL OPERATIONS, GEN	4 credit hours
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Total Credit Hours: 13

**Total Credit Hours: 60**

Capstone Requirement: [HALT 2280](#) Cooperative Education - is the capstone requirement and may not be substituted. It should be taken the last semester before graduation.

## Industrial Mechanics Program

**Kenny Smith**

(940) 668-7731, ext 4426

[ksmith@nctc.edu](mailto:ksmith@nctc.edu)

The Industrial Mechanics program is designed to prepare students for employment in institutional power plants and maintaining machines in manufacturing facilities. According to the Bureau of Labor Statistics, the outlook for industrial mechanics is growing faster than average. Most industrial mechanics are employed full time during regular business hours. However, mechanics may be on call during the night or weekends.

Beginning industrial mechanics can expect to make between \$14 and \$16 per hour, while experienced industrial mechanics can make upwards of \$22 per hour.

Curriculum includes hands-on training in troubleshooting and repair of electrical, mechanical, pneumatic, hydraulic and pump systems. Training in programmable logic controllers and the ability to troubleshoot them is also part of the curriculum, included in the electrical training for the mechanical technology program. All the courses include the technology training behind each of the courses that are offered.

## Industrial Mechanics OSA

### Occupational Skills Award

The Occupational Skills Award can be completed face-to-face or through a mix of face-to-face classes and online classes. The award is designed to take 16 weeks to complete and is comprised of the following suggested pathway or course of study.

### Occupational Skills Award Requirements

	<b>First Semester</b>	
<a href="#">DFTG 1309</a>	BASIC COMPUTER-AIDED DRAFTING	3 credit hours
<a href="#">INMT 1305</a>	INTRODUCTION TO INDUSTRIAL MAINTENANCE	3 credit hours
<a href="#">HYDR 1345</a>	HYDRAULICS AND PNEUMATICS	3 credit hours
<a href="#">INMT 2303</a>	PUMPS, COMPRESSORS & MECHANICAL DRIVES	3 credit hours
Total Credit Hours:		12

**Total Credit Hours: 12**

## Industrial Mechanics Certificate

### Level 1 Workforce Certificate

Upon completion of the Level 1 Workforce Certificate, students will be able to:

- Demonstrate communication skills.
- Demonstrate the attributes of a positive work ethic.
- Demonstrate eye and hand coordination and dexterity.
- Demonstrate the application of and the ability to properly use the common hand tools.
- Demonstrate form perception and spatial relations in the common construction of hydraulics, pneumatics.
- Demonstrate the skills necessary for maintaining Programmable Logic Controllers (PLC).

[Gainful Employment Disclosure](#)

This certificate can be completed through a mix of face-to-face and online classes. The program is designed to take one year, or 42 weeks, to complete and is comprised of the following suggested pathway or course of study.

**Certificate Requirements**

<b>First Semester</b>		
<a href="#">DFTG 1309</a>	BASIC COMPUTER-AIDED DRAFTING	3 credit hours
<a href="#">INMT 1305</a>	INTRODUCTION TO INDUSTRIAL MAINTENANCE	3 credit hours
<a href="#">HYDR 1345</a>	HYDRAULICS AND PNEUMATICS	3 credit hours
<a href="#">INMT 2303</a>	PUMPS, COMPRESSORS & MECHANICAL DRIVES	3 credit hours
Total Credit Hours:		12

<b>Second Semester</b>		
<a href="#">ELPT 1319</a>	FUNDAMENTALS OF ELECTRICITY I MOTOR	3 credit hours
<a href="#">ELPT 1341</a>	CONTROL MOTORS	3 credit hours
<a href="#">ELPT 2305</a>	AND TRANSFORMERS	3 credit hours
<a href="#">ELPT 2319</a>	PROGRAMMABLE LOGIC CONTROLLERS I INDUSTRIAL	3 credit hours
<a href="#">TECM 1301</a>	MATHEMATICS	3 credit hours
Total Credit Hours:		15

<b>Third Semester (Summer)</b>		
<a href="#">INMT 2345</a>	INDUSTRIAL TROUBLESHOOTING	3 credit hours
Total Credit Hours:		3

**Total Credit Hours: 30**

Capstone Requirement: Students completing the certificate must pass a comprehensive program exam with a score of 70% or higher to satisfy the capstone requirement. Exam must be scheduled with the Division Chair.

# Industrial Mechanics AAS

## Associate of Applied Science Degree

Upon completion of the Associate of Applied Science Degree, students will be able to:

- Demonstrate mechanical reasoning, form perception and spatial relations.
- Demonstrate the attributes of working collaboratively or independently under supervision.
- Demonstrate the proper setup of basic industrial mechanics equipment.
- Demonstrate the application of and the ability to properly use specialty tools used in the industrial mechanics trade.
- Demonstrate form perception and spatial relations in the common construction of pumps and motors drives installation and operation.
- Demonstrate the skills necessary for programming Programmable Logic Controllers (PLC).

This degree can be completed through a mix of face-to-face classes and online classes. The program is designed to take two years to complete and is comprised of the following suggested pathway or course of study.

## Degree Requirements

<a href="#">DFTG 1309</a>	<b>First Semester</b> BASIC COMPUTER-AIDED DRAFTING	3 credit hours
<a href="#">INMT 1305</a>	INTRODUCTION TO INDUSTRIAL MAINTENANCE	3 credit hours
<a href="#">HYDR 1345</a>	HYDRAULICS AND PNEUMATICS	3 credit hours
<a href="#">INMT 2303</a>	PUMPS, COMPRESSORS & MECHANICAL DRIVES	3 credit hours
Total Credit Hours:		12
<a href="#">ELPT 1319</a>	<b>Second Semester</b> FUNDAMENTALS OF ELECTRICITY I	3 credit hours
<a href="#">ELPT 1341</a>	MOTOR CONTROL	3 credit hours
<a href="#">ELPT 2305</a>	MOTORS AND TRANSFORMERS	3 credit hours
<a href="#">ELPT 2319</a>	PROGRAMMABLE LOGIC CONTROLLERS I	3 credit hours
<a href="#">TECM 1301</a>	INDUSTRIAL MATHEMATICS	3 credit hours
Total Credit Hours:		15



**Third Semester (Summer)**

[INMT 2345](#) INDUSTRIAL TROUBLESHOOTING 3 credit hours

Total Credit Hours: 3

**Fourth Semester**

[ELPT 1325](#) NATIONAL ELECTRICAL CODE I 3 credit hours

[SPCH 1318](#) INTERPERSONAL COMMUNICATION 3 credit hours

[OSHT 1320](#) ENERGY INDUSTRIAL SAFETY 3 credit hours

[BMGT 2309](#) LEADERSHIP 3 credit hours

[ENGL 1301](#) COMPOSITION I 3 credit hours

Total Credit Hours: 15

**Fifth Semester**

[MATH 1314](#) COLLEGE ALGEBRA 3 credit hours

[ARTS 1301](#) ART APPRECIATION 3 credit hours

[BMGT 1327](#) PRINCIPLES OF MANAGEMENT 3 credit hours

[HIST 1301](#) UNITED STATES HISTORY I 3 credit hours

[INMT 2380](#) COOPERATIVE EDUCATION-MANUFACTURING TECHNOLOGY 3 credit hours

Total Credit Hours: 15

**Total Credit Hours: 60**

Capstone Requirement: [INMT 2380](#) Cooperative Education is the capstone experience and may not be substituted. It should be taken the last semester before graduation.

## Machining Technology Program

**Kenny Smith**

*Chair Industrial and Energy Technology Division*

(940) 668-7731, ext. 4426

[ksmith@nctc.edu](mailto:ksmith@nctc.edu)

The Machining Technology program is designed to prepare students for a career as a machinist. Machinists typically work at factories, plants, or on construction sites. According to the Bureau of Labor Statistics, the outlook for machinists is growing faster than average.

Most machinists are employed full-time during regular business hours. Beginning machinists can expect to make around \$15 per hour, while experienced machinists can

earn upwards of \$20 per hour.

Curriculum includes hands-on training that teaches the student layout, blueprints, jig bore and grinder, precision measuring, CNC, lathes, G Codes, tool paths, and precision production. Curriculum also includes introduction to manual lathes and converting them to G codes, inputting the G codes into the CNC lathes or mills and producing a part or product.

Students may pursue an Occupational Skills Award (OSA), Level 1 Workforce Certificate, or an AAS in Machining Technology.

## Machining Technology OSA

### Occupational Skills Award

The Occupational Skills Award can be completed through a mix of face-to-face and online classes. The award is designed to take 16 weeks to complete and is comprised of the following suggested pathway or course of study.

### Occupational Skills Award Requirements

	<b>First Semester</b>	
<a href="#">DFTG 1309</a>	BASIC COMPUTER-AIDED DRAFTING	3 credit hours
<a href="#">MCHN 1438</a>	BASIC MACHINE SHOP I	4 credit hours
<a href="#">MCHN 2303</a>	FUNDAMENTALS OF COMPUTER NUMERICAL CONTROLLED (CNC) MACHINE CONTROLS	3 credit hours
<a href="#">TECM 1301</a>	INDUSTRIAL MATHEMATICS	3 credit hours
Total Credit Hours:		13
<b>Total Credit Hours:</b>	<b>13</b>	

## Machining Technology Certificate

### Level 1 Workforce Certificate

Upon completion of the Level 1 Workforce Certificate, students will be able to:

- Demonstrate communication skills.
- Demonstrate proper workplace safety practices.
- Demonstrate the use of basic machining procedures.
- Demonstrate the ability to use the precision measuring tools.
- Demonstrate the ability to use the proper tool necessary for the related task to be performed.
- Demonstrate pattern development for the machining trade.

### [Gainful Employment Disclosure](#)

This certificate can be completed through a mix of face-to-face and online classes. The program is designed to take one year, or 42 weeks, to complete and is comprised of the following suggested pathway or course of study.

## Certificate Requirements

	<b>First Semester</b>	
<a href="#">DFTG 1309</a>	BASIC COMPUTER-AIDED DRAFTING	3 credit hours
<a href="#">MCHN 1438</a>	BASIC MACHINE SHOP I	4 credit hours
<a href="#">MCHN 2303</a>	FUNDAMENTALS OF COMPUTER NUMERICAL CONTROLLED (CNC) MACHINE CONTROLS	3 credit hours
<a href="#">TECM 1301</a>	INDUSTRIAL MATHEMATICS	3 credit hours
Total Credit Hours:		13
	<b>Second Semester</b>	
<a href="#">MCHN 1320</a>	PRECISION TOOLS AND MEASUREMENT	3 credit hours
<a href="#">MCHN 2434</a>	OPERATION OF CNC MACHINING CENTERS	4 credit hours
<a href="#">MCHN 2435</a>	ADVANCED CNC MACHINING	4 credit hours
<a href="#">METL 1301</a>	INTRODUCTION TO METALLURGY	3 credit hours
Total Credit Hours:		14
	<b>Third Semester</b>	
<a href="#">MCHN 1302</a>	PRINT READING FOR MACHINING TRADES	3 credit hours
<a href="#">MCHN 1343</a>	MACHINE SHOP MATHEMATICS	3 credit hours
Total Credit Hours:		6
<b>Total Credit Hours:</b>		<b>33</b>

Capstone Requirement: Students completing the certificate must pass a comprehensive program exam with a score of 70% or higher to satisfy the capstone requirement. Exam must be scheduled with the Division Chair.

# Machining Technology AAS

Associate of Applied Science Degree

Upon completion of the Associate of Applied Science, students will be able to:

- Demonstrate mechanical reasoning, form perception and spatial relations.
- Demonstrate the attributes of a positive work ethic.
- Demonstrate eye and hand coordination.
- Demonstrate the application of and the ability to use the common hand tools.
- Demonstrate the ability to use the proper tool necessary for the related task to be performed.
- Demonstrate the perception and spatial relations in the applications of geometric construction.

This degree can be completed through a mix of face-to-face and online classes. The program is designed to take two years to complete and is comprised of the following suggested pathway or course of study.

## Degree Requirements

<b>First Semester</b>		
<a href="#">DFTG 1309</a>	BASIC COMPUTER-AIDED DRAFTING	3 credit hours
<a href="#">MCHN 1438</a>	BASIC MACHINE SHOP I	4 credit hours
<a href="#">MCHN 2303</a>	FUNDAMENTALS OF COMPUTER NUMERICAL CONTROLLED (CNC) MACHINE CONTROLS	3 credit hours
<a href="#">TECM 1301</a>	INDUSTRIAL MATHEMATICS	3 credit hours
Total Credit Hours:		13
<b>Second Semester</b>		
<a href="#">MCHN 1320</a>	PRECISION TOOLS AND MEASUREMENT	3 credit hours
<a href="#">MCHN 2434</a>	OPERATION OF CNC MACHINING CENTERS	4 credit hours
<a href="#">MCHN 2435</a>	ADVANCED CNC MACHINING	4 credit hours

[METL 1301](#) INTRODUCTION TO METALLURGY 3 credit hours

Total Credit Hours: 14

**Third Semester (Summer)**

[MCHN 1302](#) PRINT READING FOR MACHINING TRADES 3 credit hours

[MCHN 1343](#) MACHINE SHOP MATHEMATICS 3 credit hours

Total Credit Hours: 6

**Fourth Semester**

[OSHT 1320](#) ENERGY INDUSTRIAL SAFETY 3 credit hours

[BMGT 2309](#) LEADERSHIP 3 credit hours

[ENGL 1301](#) COMPOSITION I 3 credit hours

[HIST 1301](#) UNITED STATES HISTORY I 3 credit hours

Total Credit Hours: 12

**Fifth Semester**

[MATH 1314](#) COLLEGE ALGEBRA 3 credit hours

[SPCH 1318](#) INTERPERSONAL COMMUNICATION 3 credit hours

[BMGT 1327](#) PRINCIPLES OF MANAGEMENT 3 credit hours

[ARTS 1301](#) ART APPRECIATION 3 credit hours

[MCHN 2380](#) COOPERATIVE EDUCATION-MACHINE TOOL TECHNOLOGY/MACHINIST 3 credit hours

Total Credit Hours: 15

**Total Credit Hours: 60**

Capstone Requirement: [MCHN 2380](#) Cooperative Education - Machine Tool Technology/Machinist is the capstone requirement and may not be substituted. It should be taken the last semester before graduation.

# Networking Technology Program

**Susan Svane**

*Division Chair Information Technology*

(940) 498-6292

[ssvane@nctc.edu](mailto:ssvane@nctc.edu)

The Networking Technology Program is an exciting opportunity for those who find interest in computer networking. The curriculum provides learning opportunities and hands-on training in the fundamentals of CISCO, Network Security, Linux, and the Microsoft Windows Server platform.

Our labs offer all required equipment as outlined in the CISCO Networking Academy®, as well as the most current versions of Windows Server.

Upon completion of the program, students may find employment with high-tech firms, school districts, Internet provider companies, government agencies, and other businesses that employ skilled networking technicians.

The Networking curriculum has been developed with the assistance and advice of an advisory council which is composed of service area industry professionals.

**Prerequisite:** Students in this program must be able to keyboard at a minimum rate of 40 words per minute (WPM). Those who cannot meet this requirement must take a keyboarding class to improve their skills prior to enrollment.

## Computer Network Systems AAS

### Associate of Applied Science Degree

Upon completion of the Associate of Applied Science Degree, students will be able to:

- Communicate technical issues related to computer networks through presentations and reports, both written and verbal.
- Demonstrate the ability to work effectively in teams.
- Demonstrate the ability to implement network design and construct network info structure.
- Demonstrate working knowledge of the OSI and TCP layered models.

This degree can be completed through a mix of face-to-face, hybrid and online classes. Several of the courses are offered in an 8-week term, rather than a 16-week term. The program is designed to take two years to complete and is comprised of the following suggested pathway or course of study.

## Degree Requirements

	<b>First Semester</b>	
<a href="#">ITSC 1316</a>	LINUX INSTALLATION AND CONFIGURATION	3 credit hours
<a href="#">ITNW 1308</a>	IMPLEMENTING AND SUPPORTING CLIENT OPERATING SYSTEMS	3 credit hours
<a href="#">ITCC 1414</a>	CCNA 1: INTRODUCTION TO NETWORKS	4 credit hours
<a href="#">ITCC 1440</a>	CCNA 2: ROUTING AND SWITCHING ESSENTIALS	4 credit hours
Total Credit Hours:		14
	<b>Second Semester</b>	
<a href="#">ITCC 2412</a>	CCNA 3: SCALING NETWORKS	4 credit hours
<a href="#">ITCC 2413</a>	CCNA 4: CONNECTING NETWORKS	4 credit hours
<a href="#">ITNW 1313</a>	COMPUTER VIRTUALIZATION	3 credit hours
<a href="#">ITNW 1353</a>	SUPPORTING NETWORK SERVER INFRASTRUCTURE	3 credit hours
Total Credit Hours:		14
	<b>Third Semester</b>	
<a href="#">ITNW 1354</a>	IMPLEMENTING AND SUPPORTING SERVER ENVIRONMENT	3 credit hours
<a href="#">ITSY 1342</a>	INFORMATION TECHNOLOGY SECURITY	3 credit hours
<a href="#">ITNW 1335</a>	INFORMATION STORAGE AND MANAGEMENT	3 credit hours
<a href="#">ENGL 1301</a>	COMPOSITION I	3 credit hours
<a href="#">ITSC 2325</a>	ADVANCED LINUX	3 credit hours
Total Credit Hours:		15

	<b>Fourth Semester</b>	
<a href="#">MATH 1332</a>	CONTEMPORARY MATHEMATICS	3 credit hours
<a href="#">ENGL 2311</a>	TECHNICAL & BUSINESS WRITING ART APPRECIATION	3 credit hours
<a href="#">ARTS 1301</a>	TECHNICAL CUSTOMER SERVICE	3 credit hours
<a href="#">EECT 1300</a>	FEDERAL GOVERNMENT	3 credit hours
<a href="#">GOVT 2305</a>	COOPERATIVE EDUCATION-COMPUTER SYSTEMS NETWORKING	2 credit hours
<a href="#">ITNW 2280</a>		

Total Credit Hours: 17

**Total Credit Hours:** 60

Capstone Requirement: [ITNW 2280](#) Cooperative Education - Computer Systems Networking and Telecommunications is the capstone requirement and may not be substituted. It should be taken the last semester before graduation.

## Computer Network Systems Certificate

### Level 1 Workforce Certificate

Curriculum provides similar classes to the degree program however there are no academic classes in the certificate. A student that commences study as a certificate student and later desires to complete the degree program will find that the classes taken for the certificate will readily transfer to the degree program.

Upon completion of the Level 1 Workforce Certificate, students will be able to:

- Communicate technical issues related to computer networks through presentations and reports.
- Demonstrate working knowledge of the OSI and TCP layered models..

#### [Gainful Employment Disclosure](#)

The certificate can be completed through a mix of face-to-face and online classes. The program is designed to take one year, or 32 weeks, to complete, and is comprised of the following suggested pathway or course of study.



## Certificate Requirements

<b>First Semester</b>	
<a href="#">ITSC 1325</a>	PERSONAL COMPUTER HARDWARE 3 credit hours
<a href="#">ITNW 1358</a>	NETWORK+ 3 credit hours
<a href="#">ITSC 1316</a>	LINUX INSTALLATION AND CONFIGURATION 3 credit hours
<a href="#">ITNW 1313</a>	COMPUTER VIRTUALIZATION 3 credit hours
<a href="#">ITNW 1308</a>	IMPLEMENTING AND SUPPORTING CLIENT SYSTEMS 3 credit hours
Total Credit Hours:	15

<b>Second Semester</b>	
<a href="#">ITSY 1342</a>	INFORMATION TECHNOLOGY SECURITY 3 credit hours
<a href="#">EECT 1300</a>	TECHNICAL CUSTOMER SERVICE SUPPORTING 3 credit hours
<a href="#">ITNW 1353</a>	NETWORK SERVER INFRASTRUCTURE 3 credit hours
<a href="#">ITNW 1354</a>	IMPLEMENTING AND SUPPORTING SERVER ENVIRONMENT 3 credit hours
Total Credit Hours:	12

\* *Capstone for this certificate will consist of passing a comprehensive departmental exam.*

### **Total Credit Hours: 27**

Capstone Requirement: Students completing the certificate must pass a comprehensive program exam with a score of 70% or higher to satisfy the capstone requirement. Exam must be scheduled with the Division Chair.

## CISCO System Certificate

Curriculum provides similar classes to the degree program, however, there are no academic classes in the certificate. A student that commences study as a certificate student and later desires to complete the degree program will find that the classes taken for the certificate will readily transfer to the degree program.

Upon completion of the Level 1 Workforce Certificate, students will be able to:

- Communicate technical issues related to computer networks through presentations and reports.
- Demonstrate working knowledge of the OSI and TCP layered models.

### [Gainful Employment Disclosure](#)

Students successfully completing this program are eligible to sit for Cisco CCENT exam and CCNA Routing and Switching exam 200-125.

### Gainful Employment Disclosure

The certificate can be completed through a mix of face-to-face and online classes. The program is designed to take one year, or 32 weeks, to complete, and is comprised of the following suggested pathway or course of study.

## Certificate Requirements

<b>First Semester</b>		
<a href="#">ITSC 1316</a>	LINUX INSTALLATION AND CONFIGURATION	3 credit hours
<a href="#">ITNW 1308</a>	IMPLEMENTING AND SUPPORTING CLIENT OPERATING SYSTEMS	3 credit hours
<a href="#">ITCC 1414</a>	CCNA 1: INTRODUCTION TO NETWORKS	4 credit hours
<a href="#">ITCC 1440</a>	CCNA 2: ROUTING AND SWITCHING ESSENTIALS	4 credit hours
Total Credit Hours:		14
<b>Second Semester</b>		
<a href="#">ITCC 2412</a>	CCNA 3: SCALING NETWORKS	4 credit hours
<a href="#">ITCC 2413</a>	CCNA 4: CONNECTING NETWORKS COMPUTER	4 credit hours
<a href="#">ITNW 1313</a>	VIRTUALIZATION SUPPORTING	3 credit hours
<a href="#">ITNW 1353</a>	NETWORK SERVER INFRASTRUCTURE	3 credit hours
<a href="#">EECT 1300</a>	TECHNICAL CUSTOMER SERVICE	3 credit hours
Total Credit Hours:		17

**Total Credit Hours: 31**

Capstone Requirement: Students completing the certificate must pass a comprehensive program exam with a score of 70% or higher to satisfy the capstone requirement. Exam must be scheduled with the Division Chair.

# CISCO Basic Certificate

The Cisco Basic Level 1 Workforce Certificate is designed for students interested in completing only the four Cisco courses required for certification.

Upon completion of the Level 1 Workforce Certificate students will be able to:

- Identify and describe networking architecture.
- Explain the basic principles of routing and routing protocols.
- Configure routers and switches.
- Configure and troubleshoot network devices.

## [Gainful Employment Disclosure](#)

Students successfully completing the program are eligible to sit for Cisco CCENT exam and CCNA Routing and Switching exam 200-125.

This certificate can be completed face-to-face. The program is designed to take two semesters, or 32 weeks, to complete and is comprised of the following suggested pathway or course of study.

## Certificate Requirements

<b>First Semester</b>		
<a href="#">ITCC 1414</a>	CCNA 1: INTRODUCTION TO NETWORKS	4 credit hours
<a href="#">ITCC 1440</a>	CCNA 2: ROUTING AND SWITCHING ESSENTIALS	4 credit hours
Total Credit Hours:		8
<b>Second Semester</b>		
<a href="#">ITCC 2412</a>	CCNA 3: SCALING NETWORKS	4 credit hours
<a href="#">ITCC 2413</a>	CCNA 4: CONNECTING NETWORKS	4 credit hours
Total Credit Hours:		8
<b>Total Credit Hours: 16</b>		

Verification of Workplace Competencies: Eligibility to sit for Cisco CCENT exam and CCNA Routing and Switching exam 200-125.

# Petroleum Technology Program

## Malea Clarke

(940) 872-4002 ext 5219

[mclarke@nctc.edu](mailto:mclarke@nctc.edu)

The petroleum industry supplies not only the majority of energy consumed in the United States, but also provides thousands of other valuable products. This world-wide industry provides opportunities for jobs in interesting, exciting, rewarding activities locally and around the world using the latest technology. There are opportunities for everyone including women. Some jobs require bilingual skills, so there are excellent opportunities for those who speak more than one language.

NCTC's Petroleum Technology Program is designed to equip students with the knowledge and skills necessary to enter the oil and gas industry competently and successfully. It prepares students for entry-level careers in various sectors of the industry, and enhances the value, opportunities, and earning power of students already employed in the industry.

The technical courses, which are offered only on the Bowie Campus and Graham Campus (limited), teach the fundamentals of the petroleum industry with emphasis on technical knowledge, safety, hands-on skills, computer skills, effective communication and teamwork skills. These classes are taught face-to-face with about 50% lecture and 50% hands-on learning activities. Curriculum includes industrial safety, drilling, oil & gas production/processing, petroleum computer applications, instrumentation, and basic electricity. The program utilizes labs with actual oilfield equipment, as well as training equipment that provides simulations and hands-on learning of basic concepts.

## Petroleum Technology AAS

### Associate of Applied Science Degree

Students who complete the AAS in Petroleum Technology can transfer 100% of those credits into the 4-year Bachelor of Applied Arts & Sciences (BAAS) Program at University of North Texas and complete that degree in just two more years. One of the degree options can be completed almost entirely online.

The academic support courses for the AAS Degree can be completed at any NCTC campus-Gainesville, Corinth, Flower Mound, Bowie, or Graham. Some are offered online.

Upon completion of the Associate of Applied Science Degree, students will be able to:

- Describe the basic functions of common petroleum industry processes and equipment.
- Demonstrate competence in basic hands-on skills common in the petroleum industry.
- Describe the safe work practices associated with common petroleum industry processes and equipment.

- Demonstrate the ability to work cooperatively with others.
- Demonstrate the ability to communicate effectively in the work environment.

This degree can be completed face-to-face. The program is designed to take two years to complete and is comprised of the following suggested pathway or course of study.

## Associate of Applied Science Degree

<b>First Semester</b>		
<a href="#">PTRT 1301</a>	INTRODUCTION TO PETROLEUM INDUSTRY	3 credit hours
<a href="#">TECM 1301</a>	INDUSTRIAL MATHEMATICS	3 credit hours
<a href="#">OSHT 1320</a>	ENERGY INDUSTRIAL SAFETY	3 credit hours
<a href="#">ELPT 1341</a>	MOTOR CONTROL	3 credit hours
<a href="#">PTRT 1307</a>	RECOVERY AND PRODUCTION METHODS	3 credit hours
Total Credit Hours:		15

<b>Second Semester</b>		
<a href="#">ELPT 1319</a>	FUNDAMENTALS OF ELECTRICITY I	3 credit hours
<a href="#">PTRT 1324</a>	PETROLEUM INSTRUMENTATION	3 credit hours
<a href="#">PTRT 1303</a>	DRILLING	3 credit hours
<a href="#">WLDG 1323</a>	WELDING SAFETY, TOOLS, AND EQUIPMENT	3 credit hours
<a href="#">PTRT 2331</a>	WELL COMPLETIONS	3 credit hours
Total Credit Hours:		15

<b>Third Semester</b>		
<a href="#">PTRT 1317</a>	NATURAL GAS PROCESSING I	3 credit hours
<a href="#">PTRT 2359</a>	PETROLEUM COMPUTER APPLICATIONS	3 credit hours
<a href="#">BMGT 2309</a>	LEADERSHIP	3 credit hours
<a href="#">BMGT 1327</a>	PRINCIPLES OF MANAGEMENT	3 credit hours
<a href="#">SPCH 1321</a>	BUSINESS AND PROFESSIONAL COMMUNICATION	3 credit hours

OR

<a href="#">SPCH 1315</a>	PUBLIC SPEAKING	3 credit hours
Total Credit Hours:		15

**Fourth Semester**

<a href="#">PTRT 2380</a>	COOPERATIVE EDUCATION - PETROLEUM TECHNOLOGY/ TECHNICIAN COLLEGE	3 credit hours
<a href="#">MATH 1314</a>	ALGEBRA	3 credit hours

OR

<a href="#">MATH 1342</a>	ELEMENTARY STATISTICAL METHODS	3 credit hours
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OR

<a href="#">MATH 1332</a>	CONTEMPORARY MATHEMATICS	3 credit hours
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<a href="#">ARTS 1301</a>	ART APPRECIATION	3 credit hours
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<a href="#">ENGL 2311</a>	TECHNICAL & BUSINESS WRITING	3 credit hours
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<a href="#">CORE</a>	SOCIAL/BEHAVIORAL SCIENCE CORE	3 credit hours
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Total Credit Hours:		15
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**Total Credit Hours: 60**

Capstone Requirement: [PTRT 2380](#) Cooperative Education - Petroleum Technology/ Technician is the capstone requirement and may not be substituted. It should be taken the last semester before graduation.

## Petroleum Technology Certificate

### Level 1 Workforce Certificate

The Certificate curriculum consists of ten petroleum technology courses. These same ten courses are included in the AAS, along with three additional petroleum technology courses, and core academic courses.

Upon completion of the Level 1 Workforce Certificate, students will be able to:

- Describe the basic functions of common petroleum industry processes and equipment and associated safe work practices.
- Demonstrate competence in basic hands-on skills common in the petroleum industry.
- Demonstrate the ability to work cooperatively with others.
- Describe the safe work practices associated with common petroleum industry processes and equipment.

[Gainful Employment Disclosure](#)

This certificate can be completed face-to-face. The program is designed to take two semesters, or 32 weeks, to complete and is comprised of the following suggested pathway or course of study.

## Certificate Requirements

<b>First Semester</b>		
<a href="#">PTRT 1301</a>	INTRODUCTION TO PETROLEUM INDUSTRY	3 credit hours
<a href="#">TECM 1301</a>	INDUSTRIAL MATHEMATICS	3 credit hours
<a href="#">OSHT 1320</a>	ENERGY INDUSTRIAL SAFETY	3 credit hours
<a href="#">ELPT 1341</a>	MOTOR CONTROL	3 credit hours
<a href="#">PTRT 1307</a>	RECOVERY AND PRODUCTION METHODS	3 credit hours
Total Credit Hours:		15

<b>Second Semester</b>		
<a href="#">ELPT 1319</a>	FUNDAMENTALS OF ELECTRICITY I	3 credit hours
<a href="#">PTRT 1324</a>	PETROLEUM INSTRUMENTATION	3 credit hours
<a href="#">PTRT 1303</a>	DRILLING	3 credit hours
<a href="#">WLDG 1323</a>	WELDING SAFETY, TOOLS, AND EQUIPMENT	3 credit hours
<a href="#">PTRT 2331</a>	WELL COMPLETIONS	3 credit hours
Total Credit Hours:		15

**Total Credit Hours: 30**

Capstone Requirement: Students completing the certificate must pass a comprehensive program exam with a score of 70% or higher to satisfy the capstone requirement. Exam must be scheduled with the Division Chair.

## Web Development Program

**Susan Svane**

*Chair Information Technology Division*

(940) 498-6438

[ssvane@nctc.edu](mailto:ssvane@nctc.edu)

The Web Development curriculum is designed to prepare students for careers in the high demand of Web Development segment of the workforce.

Each area of the curriculum provides entry level skills and prepares the student for industry certification in the chosen field of study. The curriculum has been developed with the assistance and advice of an advisory council which is composed of service area industry professionals.

*Prerequisite:* Students in this program must be able to keyboard at a minimum rate of 40 words per minute. Those who cannot meet this requirement must take a keyboarding class to improve their skills prior to enrollment.

## Web Design Certificate

### Level 1 Workforce Certificate

Upon completion of the Level 1 Workforce Certificate, students will be able to:

- Design and implement a dynamic website.
- Communicate technical issues related to web design through presentations and reports.

#### [Gainful Employment Disclosure](#)

This certificate can be completed completely through a mix of face-to-face classes and online classes. The program is designed to take one year or 32 academic weeks to complete and is comprised of the following suggested pathway or course of study.

### Certificate Requirements

<b>First Semester</b>		
<a href="#">ARTC 1302</a>	DIGITAL IMAGING I (PHOTOSHOP)	3 credit hours
<a href="#">IMED 1316</a>	WEB PAGE DESIGN I	3 credit hours
<a href="#">ARTC 1325</a>	INTRODUCTION TO COMPUTER GRAPHICS	3 credit hours
<a href="#">ITSE 2321</a>	OBJECT-ORIENTED PROGRAMMING	3 credit hours
<a href="#">ITSE 1302</a>	COMPUTER PROGRAMMING	3 credit hours
Total Credit Hours:		15
<b>Second Semester</b>		
<a href="#">ITSE 2302</a>	INTERMEDIATE WEB PROGRAMMING	3 credit hours
<a href="#">ITSW 1307</a>	INTRODUCTION TO DATABASE	3 credit hours
<a href="#">IMED 1345</a>	INTERACTIVE DIGITAL MEDIA	3 credit hours
<a href="#">INEW 2334</a>	ADVANCED WEB PROGRAMMING	3 credit hours



<a href="#">ITSE 2317</a>	JAVA PROGRAMMING	3 credit hours
<a href="#">EECT 1300</a>	TECHNICAL CUSTOMER SERVICE	3 credit hours

Total Credit Hours: 18

**Total Credit Hours: 33**

Capstone Requirement: Students completing the certificate must pass a comprehensive program exam with a score of 70% or higher to satisfy the capstone requirement. Exam must be scheduled with the Division Chair.

## Welding Technology Program

**Kenny Smith**

*Chair Industrial and Energy Technology Division*

(940) 668-7731 ext 4426

[ksmith@nctc.edu](mailto:ksmith@nctc.edu)

The Welding Technology program is designed to prepare students for the high-demand field of welding. Welders work with aluminum, stainless steel and mild metals in manufacturing, oil fields, design, farming and ranching. Beginning welders may work on assembly lines, but can advance to precision welders, quality control, and sales. Many welders decide to work for themselves, and some specialize in underwater welding, decorative metal work, and automobile body welding. North Texas welders can expect to earn between \$12 and \$20 per hour, based on experience and welding skill.

Curriculum includes hands-on training in multiple welding processes including Oxy-Fuel and Cutting, Shielded Metal Arc, Gas Metal Arc, Gas Tungsten Arc, and Flux Cored Arc. It also includes blueprint reading for welders and welding technology for each of the five processes that are taught. Students are required to pass two welding tests for each process and can receive a qualification for each of the successful completion of a welding test in a process. The tests given are common welding tests that are used to qualify welders in industry today. Students completing the program may be qualified in a number of processes.

Students may pursue an Occupational Skills Award (OSA), Level 1 Workforce Certificate or an AAS in Welding.

## Welding Technology OSA

Occupational Skills Award

The Occupational Skills Award can be completed face-to-face or through a mix of face-to-face classes and online classes. The award is designed to take 16 weeks to complete and is comprised of the following suggested pathway or course of study.

## Occupational Skills Award Requirements

	<b>First Semester</b>	
<a href="#">WLDG 1413</a>	INTRODUCTION TO BLUEPRINT READING FOR WELDERS	4 credit hours
<a href="#">WLDG 1407</a>	INTRODUCTION TO WELDING USING MULTIPLE PROCESSES	4 credit hours
<a href="#">WLDG 2413</a>	INTERMEDIATE WELDING USE MULTIPLE PROCESSES	4 credit hours

Total Credit Hours: 12

**Total Credit Hours: 12**

## Welding Technology Certificate

### Level 1 Workforce Certificate

Upon completion of the Level 1 Workforce Certificate, students will be able to:

- Demonstrate communication skills.
- Demonstrate proper safety practices in the workplace.
- Demonstrate basic welding techniques.
- Demonstrate the basic use of cutting tools.
- Demonstrate the ability to use the proper tool necessary for the related task to be performed.
- Demonstrate proper welding joint design and proper joint preparation.

### [Gainful Employment Disclosure](#)

This certificate can be completed through a mix of face-to-face and online classes. The program is designed to take one year, or 42 weeks, to complete and is comprised of the following suggested pathway or course of study.

### Level 1 Workforce Certificate

	<b>First Semester</b>	
<a href="#">WLDG 1413</a>	INTRODUCTION TO BLUEPRINT READING FOR WELDERS	4 credit hours
<a href="#">WLDG 1407</a>	INTRODUCTION TO WELDING USING MULTIPLE PROCESSES	4 credit hours

<a href="#">WLDG 2413</a>	INTERMEDIATE WELDING USE MULTIPLE PROCESSES	4 credit hours
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Total Credit Hours:		12
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<a href="#">WLDG 2447</a>	<b>Second Semester</b> ADVANCED GAS METAL ARC WELDING (GMAW)	4 credit hours
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<a href="#">WLDG 1435</a>	INTRODUCTION TO PIPE WELDING	4 credit hours
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<a href="#">WLDG 1427</a>	WELDING CODES	4 credit hours
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Total Credit Hours:		12
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<a href="#">WLDG 2352</a>	<b>Third Semester (Summer)</b> ADVANCED FLUX CORED ARC WELDING	3 credit hours
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<a href="#">TECM 1301</a>	INDUSTRIAL MATHEMATICS	3 credit hours
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Total Credit Hours:		6
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**Total Credit Hours: 30**

Capstone Requirement: Students completing the certificate must pass a comprehensive program exam with a score of 70% or higher to satisfy the capstone requirement. Exam must be scheduled with the Division Chair.

## Welding Technology AAS

Associate of Applied Science Degree

Upon completion of the Associate of Applied Science Degree, students will be able to:

- Demonstrate mechanical reasoning, form perception and spatial relations.
- Demonstrate the attributes of a positive work ethic.
- Demonstrate eye and hand coordination and dexterity.
- Demonstrate the ability to use common metal working tools.
- Demonstrate the ability to use the proper tool necessary for the related task to be performed.
- Demonstrate the perception and spatial relations in the applications of geometric construction.

This degree can be completed through a mix of face-to-face classes and online classes. The program is designed to take two years to complete and is comprised of the following suggested pathway or course of study.

## Associate of Applied Science Degree

	<b>First Semester</b>	
<a href="#">WLDG 1413</a>	INTRODUCTION TO BLUEPRINT READING FOR WELDERS	4 credit hours
<a href="#">WLDG 1407</a>	INTRODUCTION TO WELDING USING MULTIPLE PROCESSES	4 credit hours
<a href="#">WLDG 2413</a>	INTERMEDIATE WELDING USE MULTIPLE PROCESSES	4 credit hours
Total Credit Hours:		12
	<b>Second Semester</b>	
<a href="#">WLDG 2447</a>	ADVANCED GAS METAL ARC WELDING (GMAW)	4 credit hours
<a href="#">WLDG 1435</a>	INTRODUCTION TO PIPE WELDING	4 credit hours
<a href="#">WLDG 1427</a>	WELDING CODES	4 credit hours
Total Credit Hours:		12
	<b>Third Semester (Summer)</b>	
<a href="#">WLDG 2352</a>	ADVANCED FLUX CORED ARC WELDING	3 credit hours
<a href="#">TECM 1301</a>	INDUSTRIAL MATHEMATICS	3 credit hours
Total Credit Hours:		6
	<b>Fourth Semester</b>	
<a href="#">DFTG 1309</a>	BASIC COMPUTER-AIDED DRAFTING	3 credit hours
<a href="#">SPCH 1318</a>	INTERPERSONAL COMMUNICATION	3 credit hours
<a href="#">OSHT 1320</a>	ENERGY INDUSTRIAL SAFETY	3 credit hours
<a href="#">BMGT 2309</a>	LEADERSHIP	3 credit hours
<a href="#">ENGL 1301</a>	COMPOSITION I	3 credit hours
Total Credit Hours:		15
	<b>Fifth Semester</b>	
<a href="#">HIST 1301</a>	UNITED STATES HISTORY I	3 credit hours
<a href="#">MATH 1314</a>	COLLEGE ALGEBRA	3 credit hours
<a href="#">ARTS 1301</a>	ART APPRECIATION	3 credit hours
<a href="#">BMGT 1327</a>	PRINCIPLES OF MANAGEMENT	3 credit hours

<a href="#">WLDG 2380</a>	COOPERATIVE EDUCATION- WELDING TECHNOLOGY	3 credit hours
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Total Credit Hours: 15

**Total Credit Hours: 60**

Capstone Requirement: [WLDG 2380](#) Cooperative Education - Welding Technology is the capstone requirement and may not be substituted. It should be taken the last semester before graduation.

# Curricula Health Sciences

North Central Texas College's Division of Health Sciences includes the following courses of study:

- Associate Degree Nursing (ADN) - for students wishing to qualify for licensure as Registered Nurses (RNs).
- Emergency Medical Services (EMS) - for students wishing to qualify for certification as EMTs.
- Fire Sciences - for students wishing to qualify for Texas Fire Fighter certification.
- Radiological Technology - for students wishing to qualify for registry as Radiological Technologists.
- Surgical Technology - for students wishing to qualify for certification as Surgical Technologists.
- Vocational Nursing (LVN) - for students wishing to qualify for licensure as Licensed Vocational Nurses (LVNs).

To earn either an Associate degree or Certificate, students must achieve an overall grade point average of at least 2.0 and complete the minimum number of semester hours specified for each program. Eighteen of the semester hours required for completion of the degree/certificate must be taken at NCTC.

NOTE: Admission to Health Sciences/Nursing Programs

Admission to a Health Sciences or Nursing program is contingent upon admission to North Central Texas College; however, granting of admission to the College does not guarantee admission to a Health Sciences or Nursing program. Refer also to specific programs on the following pages for any additional admission requirements.

## Associate Degree Nursing (ADN) Program

North Central Texas College's Associate Degree in Nursing program is located on the Gainesville campus and is approved by the Texas Board of Nursing and has full accreditation from the Accreditation Commission for Education in Nursing Inc.

### ACEN

3343 Peachtree Rd NE Suite 850  
Atlanta, GA 30326  
(404) 975

## Programmatic Outcomes

Upon completion of an Associate Degree in Nursing a student should be able to:

- Act as a Member of the Profession.
- Function within the nurse's legal scope of practice and in accordance with the policies and procedures of the employing health care institution or practice setting.
- Assume responsibility and accountability for the quality of nursing care provided to patients and their families.
- Participate in activities that promote the development and practice of professional nursing.
- Demonstrate responsibility for continued competence in nursing practice, and develop insight through reflection, self-analysis, self-care, and lifelong learning.
- Become a Provider of Patient-Centered Care.
- Use clinical reasoning and knowledge based on the diploma or associate degree nursing program of study and evidence-based practice outcomes as a basis for decision making in nursing practice.
- Determine the physical and mental health status, needs, and preferences of culturally, ethnically, and socially diverse patients and their families based upon interpretation of comprehensive health assessment findings compared with evidence-based health data derived from the diploma or associate degree nursing program of study.
- Analyze assessment data to identify problems, formulate goals/outcomes, and develop plans of care for patients and their families using information from evidence-based practice in collaboration with patients, their families, and the interdisciplinary health care team.
- Provide safe, compassionate, comprehensive nursing care to patients and their families through a broad array of health care services.
- Implement the plan of care for patients and their families within legal, ethical, and regulatory parameters and in consideration of disease prevention, wellness, and promotion of healthy lifestyles.
- Evaluate and report patient outcomes and responses to therapeutic interventions in comparison to benchmarks from evidence-based practice and plan follow-up nursing care.
- Develop, implement, and evaluate teaching plans for patients and their families to address health promotion, maintenance and restoration.
- Coordinate human, information, and material resources in providing care for patients and their families.
- Serve as a Patient Safety Advocate, and demonstrate knowledge of the Texas Nursing Practice Act and the Texas Board of Nursing Rules that emphasize safety, as well as all federal, state, and local government and accreditation organization safety requirements and standards.
- Implement measures to promote quality and a safe environment for patients, self, and others.
- Formulate goals and outcomes using evidence-based data to reduce patient risks.
- Obtain instruction, supervision, or training as needed when implementing nursing procedures or practices.
- Comply with mandatory reporting requirements of the Texas Nursing Practice Act.
- Accept and make assignments and delegate tasks that take into consideration patient safety and organizational policy.

- Become a Member of the Health Care Team: Coordinate, collaborate, and communicate with patients, their families, and the interdisciplinary health care team to plan, deliver, and evaluate patient-centered care.
- Serve as a health care advocate in monitoring and promoting quality and access to health care for patients and their families.
- Refer patients and their families to resources that facilitate continuity of care, health promotion, maintenance, and restoration and ensure confidentiality and communicate and collaborate in a timely manner with members of the interdisciplinary health care team to promote and maintain optimal health status of patients and their families.
- Communicate and manage information using technology to support decision making to improve patient care.
- Assign and/or delegate nursing care to other members of the health care team based upon an analysis of patient or unit need.
- Supervise nursing care provided by others for whom the nurse is responsible by using evidence-based nursing practice.

## Admission

To be officially admitted to the Associate Degree in Nursing program at NCTC students must meet qualification requirements beyond college standards and carefully follow the step-by-step process outlined below.

Attending an Associate Degree in Nursing program information session is recommended, but not mandatory. Times and locations for the information sessions are posted and updated on the Information Session link of the nursing program website. Applying for the next class has additional detailed information regarding testing including a checklist of things needed before making application to the program.

### Step One

A student may apply for Admission to NCTC through Apply Texas or print the NCTC Admissions Application in PDF format. Complete the college admission process as outlined on <https://www.applytexas.org>

An applicant should submit official transcripts from every college attended by sending them to the Admissions Office. To complete the process, an applicant should submit a Degree Audit/Transcript Evaluation form to the NCTC Admissions Office. This must be done early enough so that a degree audit can be completed by the Admissions Office before making application to the nursing program, August 1<sup>st</sup> for Spring admission and March 15<sup>th</sup> for Fall admission.



## Step Two

Once all admission requirements are met, an applicant will be notified by the Admissions Office of acceptance to NCTC. At this point an applicant may begin the process of registering for the pre-requisite and general academic (non-nursing) courses as needed.

Any applicant who has a history of mental illness or substance abuse must file paperwork with the Board of Nursing (BON) previous to making application to the Associate Degree in Nursing program.

## Step Three

After an applicant has completed steps one and two, an applicant should apply for admission to the Associate Degree in Nursing Program. Associate Degree Nursing Applications should be submitted online to the myNCTC page. Copies of transcripts from all colleges other than NCTC and a copy of a degree audit must be provided at the time submission.

Applications may be completed between:

- March 1–31 for Fall Semester admission
- August 1–31 for Spring Semester admission
- Transition LVN to RN—February 1-28 for Summer admission

If an applicant is not admitted to the Associate Degree in Nursing Program after submitting an application, they must submit a new application during the next application period in order to be considered for admission in subsequent semesters.

## Step Four

An applicant's transcript will be evaluated to determine eligibility for the Associate Degree in Nursing program. Refer to the Points requirement.

Applicants will be ranked according to application points and scores on the TEAS Entrance Exam:

- Application points will be given for the prerequisite courses including Anatomy & Physiology I, Anatomy & Physiology II
- Points may be deducted for any prerequisite course that was repeated.
- The TEAS Entrance Exam consists of four areas; Reading, Math, Writing, and Science. Applicants will be given point based on their scores.

## Step Five

Candidates with the highest application points will be considered for admission to the Associate Degree Nursing Program. Applicants may not take the entrance exam more than twice during an academic year (August through July). Applicants accepted into the program will be registered in nursing courses by the nursing program. Students do not enroll themselves in nursing courses.

- 50 entry level applicants are accepted each spring and fall
- The LVN-to-RN applicants are accepted during the Summer
- Candidates with the next highest application points will be listed as alternates.

If any of those who have been admitted are not able to begin the program for that particular semester, the alternate with the next highest application points may be admitted. Any applicant wishing to re-apply for the following semester must go through the admission process again in order to be considered.

## Step Six

Those students selected for admission will be sent details on the following items:

- Physical Examination form signed by a physician
- Proof of major medical insurance coverage or accident insurance coverage.
- Malpractice insurance. This is added to the tuition/fees bill at the time of registration. Malpractice insurance must be renewed each fall semester.
- A Urine Drug Screen will be required of all students. The nursing office will arrange this.
- Proof of current CPR certification (American Heart Association - Basic Life Support)
- Meet the required Immunizations

Students must complete a total of 60 semester credit hours — 36 in Nursing courses and 24 in pre-requisites and required support courses in order to complete the degree requirements for an Associate Degree in Nursing.

Students in the Transition program may complete less hours - a total of 52 hours - to provide credit for LVN licensure. The LVN Transition Program is 12 months. Nursing courses are grouped in progressive levels of complexity, and students must successfully complete all course work in one level before progressing to the next. The Associate Degree in Nursing program is designed to be completed in four long semesters.

Transfer is considered on a space available basis. Applicants must meet all requirements of the nursing program in addition to those of North Central Texas College.

- All college credits from other institutions will be evaluated on an individual basis to determine their possible application to the nursing curriculum requirements.
- A letter grade of "C" or better is required for transfer for all previous nursing courses and academic support courses.
- Previous nursing courses must be from a regionally accredited program of nursing. A transfer will not be considered if the student has missed a full semester of enrollment in a nursing program.
- The student must submit
  - A letter stating the reason for transfer
  - Course descriptions and/or course syllabi for previous nursing courses
  - Resume of previous clinical experience to include documentation of skills provided by the faculty of the transferring school.
  - Letter of recommendation from the Department Head of the school from which the applicant is transferring.
- Students will be evaluated on an individual basis by the Division Chair to determine their level of entry.

In order to succeed in the Associate Degree in Nursing Program students must:

- Make a grade of "C" or higher in all required courses
- Adhere to the program's course of study– including completion of support courses
- Maintain current CPR certification and immunization status.
- Successfully complete the Clinical Math Exams with a grade of 100 each semester. Failure to make a 100 will result in a clinical failure and dismissal from the nursing program. Three attempts are given for each Clinical Math Exam.

Students will not be allowed to continue in the Associate Degree in Nursing program without satisfying these criteria. However, when deficiencies are corrected, the student may petition to be readmitted to the appropriate courses. Students will be allowed to continue only with approval of the ADN Program Admission, Progression, and Advisement (APA) Committee.

## **Grading Policy**

Course grades (non-clinical performance) are based on a numerical average with corresponding letter grades. A grade of "C" or higher is required in all courses in the Associate Degree in Nursing curriculum. Grades will not be rounded.

- 90-100 = A
- 81-89 = B
- 75-80 = C
- 66-74 = D
- 65 or lower = F

## About Clinicals

Clinical courses require students to travel to sites off the college campus. Clinical sites include - but are not limited to - hospitals and other health care facilities in Gainesville, Muenster, Sherman, Denton, Decatur, Corinth, Flower Mound, and Lewisville. Students must be prepared to drive to any of these locations for clinicals.

Students not successful in completing any course in their first semester are required to reapply to the program and start the process from the beginning. Refer to the NCTC Associate Degree Nursing Student Handbook for more detailed information about this procedure.

## Summary of Costs for ADN Students

The total per-semester cost for the Associate Degree in Nursing Program at North Central Texas College is the sum of:

- Tuition
- “Combined” student fees (such as malpractice insurance and testing fees)
- Textbooks
- Supplies and incidentals
- Nursing kits
- Laboratory fees

These are extra fees charged for all courses requiring a lab (in addition to the classroom lecture). For Associate Degree in Nursing students, a lab fee of \$24 will also be charged for each clinical course. Lab fees for other non-nursing science courses are normally \$24.

Except for items 4 and 5, charges are calculated the same for all NCTC students. Due to the special nature of the Associate Degree in Nursing program, expenses in categories 3-5 may be higher than those paid by students in most other majors.

### Supplies & Incidentals

Students admitted to the ADN program are required to buy:

- Uniforms – specific scrubs for class and clinical
- Patches
- Lab coat
- Nursing shoes
- Stethoscope
- Skills kit
- Wristwatch with a second hand
- Students will need normal school supplies

### Other costs include Major Medical Insurance

- Physical examination and immunizations
- CPR training
- Graduation fees

- State Board of Nursing fees
- NCLEX-RN testing fees.

ADN students must have access to a computer with internet access.

## Credit Hours

- A 1:1 ratio is used for lecture hours – 1 lecture hour is equivalent to one credit.
- A 2:1 ratio is used to determine lab hours to credit hours – 2 lab hours are equivalent to 1 credit.
- A 3:1 ratio is used to determine clinical hours – 3 clinical hours are equivalent to 1 credit.

See catalog course descriptions for the number of hours, lecture, laboratory, and clinical hours required for each course.

## Graduation

Graduates may apply to take the National Council Licensure Examination for Registered Nurses (NCLEX-RN), which is administered by the Texas Board of Nursing. Graduates become RNs once the NCLEX-RN is passed.

Graduates must pass the state-mandated jurisprudence exam with a minimum grade of 75 before applying for the NCLEX-RN.

NCTC Associate Degree in Nursing graduates are encouraged to continue nursing education toward a bachelor's degree or higher. Associate Degree in Nursing students completing requirements for their Associate of Applied Science Degree are highly encouraged, as are all graduates, to participate in the College's formal commencement ceremonies.

## Criminal Offenses

Criminal background checks will be completed on all applicants to the program. The following histories may disqualify an individual from consideration for clinical rotations and could affect acceptance into the Associate Degree in Nursing program:

- Felony convictions, even if deferred or adjudicated
- Misdemeanor convictions involving crimes against persons (personal or sexual)
- Felony deferred adjudications for the sale, possession, distribution, or transfer of narcotics or controlled substances
- Registered sex offender

Any applicant who has been arrested or charged with a serious criminal offense must submit a Petition for a Declaratory Order to the Texas Board of Nursing and receive resolution from the BON prior to applying to the nursing program. Contact the Associate Degree in Nursing Program Director for additional information.

## BSN Pathway

The Associate Degree in Nursing program at NCTC partners with major universities to offer students the opportunity for a smoother transition from Associate Degree in Nursing to Bachelor of Science in Nursing through the Consortium for the Advancement of Baccalaureate Nursing Education in Texas (CABNET) agreement. Since the BSN Pathway curriculum has been standardized, students that graduate with an Associate Degree in Nursing from NCTC, pass the NCLEX-RN, and complete all BSN pre-requisite courses will be able to complete the BSN program with 30 hours of online courses at one of our partner universities.

## Associate Degree Nursing

### Degree Requirements

	<b>Prerequisite Courses</b>	
<a href="#">BIOL 2401</a>	HUMAN ANATOMY AND PHYSIOLOGY I	4 credit hours
<a href="#">BIOL 2402</a>	HUMAN ANATOMY AND PHYSIOLOGY II	4 credit hours
<a href="#">MATH 1342</a>	ELEMENTARY STATISTICAL METHODS	3 credit hours
Total Credit Hours:		11
	<b>First Semester</b>	
<a href="#">BIOL 2420</a>	MICROBIOLOGY-For Pre- Nursing or Health Science Majors	4 credit hours
<a href="#">RNSG 1219</a>	INTEGRATED NURSING SKILLS I	2 credit hours
<a href="#">RNSG 1423</a>	INTRODUCTION TO PROFESSIONAL NURSING FOR INTEGRATED PROGRAMS	4 credit hours
<a href="#">RNSG 1300</a>	HEALTH ASSESSMENT ACROSS THE LIFESPAN	3 credit hours
<a href="#">RNSG 1261</a>	CLINICAL NURSING I	2 credit hours
Total Credit Hours:		15

<b>Second Semester</b>		
<a href="#">PSYC 2314</a>	LIFESPAN GROWTH & DEVELOPMENT	3 credit hours
<a href="#">ENGL 1301</a>	COMPOSITION I	3 credit hours
<a href="#">RNSG 2404</a>	INTEGRATED CARE OF THE PATIENT WITH COMMON HEALTH CARE NEEDS CLINICAL NURSING II	4 credit hours
<a href="#">RNSG 1462</a>		4 credit hours
Total Credit Hours:		14

<b>Minimester</b>		
<a href="#">RNSG 1163</a>	CLINICAL -PSYCHIATRIC NURSING	1 credit hour
Total Credit Hours:		0-1

<b>Third Semester</b>		
	LANGUAGE, PHILOSOPHY AND CULTURE, OR CREATIVE ARTS ELECTIVE	3 credit hours
<a href="#">RNSG 2414</a>	INTEGRATED CARE OF THE PATIENT WITH COMPLEX HEALTH CARE NEEDS	4 credit hours
<a href="#">RNSG 2461</a>	CLINICAL NURSING III	4 credit hours
Total Credit Hours:		11

<b>Fourth Semester</b>		
<a href="#">RNSG 2435</a>	INTEGRATED PATIENT CARE MANAGEMENT	4 credit hours
<a href="#">RNSG 2462</a>	CLINICAL NURSING IV	4 credit hours
Total Credit Hours:		8

**Total Credit Hours: 60**

*BIOL2420, PSYC2314, ENGL1301, and the Language/Philosophy/Culture or Creative Arts Elective courses may be taken prior to the semester indicated but no later than the semester in which they are listed. All coursework must be completed with a "C" or better.*

The Chemistry course for the BSN Pathway must be either Introduction to Chemistry or General Chemistry.

**Degree Audit Note:** Since some courses may not transfer, have all transcripts sent to the Registrar's Office and request a Degree Audit.

# Vocational Nursing (LVN) Program

## **Theresa J Borden**

*RN Program Coordinator*

Gainesville Campus room 2411-B

(940) 668-7731 ext 4330

[tjborden@nctc.edu](mailto:tjborden@nctc.edu)

The Vocational Nursing program is fully approved by the Texas Board of Nursing (BON) and is a certificate program. This program is designed to prepare entry-level practitioners to provide direct care to patients of all age groups under the supervision of a registered nurse or licensed physician. Emphasis is placed upon the ability to make sound judgements based on the knowledge of scientific principles and the ability to utilize technical skills in a variety of settings.

Classes are admitted in the fall semester on the Gainesville, Corinth, Bowie and Graham campuses and in the spring semester on Gainesville Campus. The program is 12 months in length. Upon successful completion of the program, the student will be awarded a certificate of completion and is eligible to make application to write the National Council Licensing Examination - Practical Nurse (NCLEX-PN).

Students admitted to the online e-campus are enrolled in the spring semester. The online curriculum is identical to the one taken by students in the traditional classroom; however, e-campus students will have clinical experiences assigned on weekends. The students accepted to the e-campus will complete the curriculum in 12 months, will be awarded a certificate of completion, and will be eligible to make application to write the NCLEX-PN.

Classroom and online instruction is correlated with clinical practice where students apply the theory and skills of nursing in giving direct care to patients. Active, student-centered learning is the goal. Students will participate in a combination of classroom, hybrid and online learning during the course of the program. Clinical experiences are offered in a variety of settings such as hospitals, long-term care, physician's offices, home health facilities and community venues. Graduates successfully completing the program demonstrate the following program learning outcomes:

- **Provider of Patient-Centered Care**
  - Assist in determining health status/needs
  - Assist in formulating goals/outcomes
  - Implement plan of care within legal and ethical parameters
  - Implement teaching plan for the client and family with common health problems
  - Assist in evaluation of client's responses and outcomes
  - Provide safe, compassionate basic nursing care to assigned multiple clients
  - Use problem-solving approach for decision making in practice



- **Member of a Healthcare Team**
  - Participate as an advocate in activities to promote and improve healthcare to patients and families
  - Communicate patient data using appropriate, available technology
  - Communicate and collaborate in a timely manner with clients and health care team members in all aspects of patient care delivery
  - Participate in identification of client needs for community resources that facilitate continuity of care and maintain confidentiality
  - Participate in support of structured health care setting
  - Supervise nursing care provided by others for whom the nurse is responsible
  
- **Member of a Profession**
  - Demonstrate accountability for own nursing practice
  - Participate as advocate for improving the health care team
  - Demonstrate behaviors that promote vocational nursing
  - Function within the nurse's legal scope of practice and in accordance with policies and procedures of the employing healthcare institution
  
- **Patient Safety Advocate**
  - Demonstrate knowledge of Texas Nursing Practice Act and the Texas Board of Nursing Rules that emphasize safety, as well as state, federal, and local regulations for accreditation of employment agency
  - Implement measures to promote quality and a safe environment for all
  - Assist in formulating goals and outcomes to reduce patient risks
  - Obtain instruction and supervision as needed when implementing direct patient care
  - Comply with mandatory reporting requirements of the Texas Nursing Practice Act
  - Accept and make assignments that take into consideration patient safety and organization policies

## Career Opportunities

Vocational nurses practice under the direct supervision of registered nursing staff and physicians. They may perform basic nursing duties independently or may assist registered nurses or physicians in more complex nursing situations. The average entry level salary for vocational nurses ranges from \$40,000 to \$49,000. Employment may occur in hospitals, extended care facilities, doctor's offices, home health organizations and a variety of other health care settings.

## **Licensure of Persons with Mental Illness, Substance Abuse, or Criminal Background Histories**

Any student who has a history of mental illness or substance abuse or who has been convicted of a felony must file paperwork with the Board of Nursing (BON) before entering the Vocational Nursing Program. The BON regulations stipulate that a person convicted of a felony may not be permitted to take the state licensing exam. Any student who has been arrested for anything other than a minor traffic violation will need to submit a Petition for Declaratory Order of Eligibility (DOE) to the BON. The DOE process takes a minimum of three to six months to complete. Contact the program coordinator for more information.

Criminal background checks will be completed on all applicants accepted to the program. The following histories will disqualify an individual from consideration for clinical rotations:

- Felony convictions
- Misdemeanor convictions or felony deferred adjudications involving crimes against persons (physical or sexual abuse, etc.)
- Misdemeanor convictions related to moral turpitude (prostitution, public lewdness/exposure, etc.)
- Felony deferred adjudications for the sale, possession, distribution, or transfer of narcotics or controlled substances
- Registered sex offenders

## **Admission**

Students seeking admission to the Vocational Nursing program must first apply for and be accepted for admission to North Central Texas College. Faculty will advise students of special admission requirements for the Vocational Nursing program. The admissions process requires that a student attend an information session, complete an application for admission to NCTC and an application to the Vocational Nursing program. In addition, the student must submit an official high school transcript, notarized home school academic record or documented proof of GED certification. For more information regarding the LVN program contact the Vocational Nursing office at 940-668-4291.

Being granted admission to the College does not guarantee admission to the Vocational Nursing program. Before admission to the program will be considered-on a space-available basis-applicants must attend an information session, take an entrance exam and achieve satisfactory scores. The information sessions are conducted on selected dates during the school year. To view these dates and additional information on how to gain admission to the College and enroll in the program, an applicant can contact the Vocational Nursing office at (940)668-4291 or may access the information on the NCTC web site.

Admission criteria have been established and enrollment is limited. Acceptance is based upon the applicant's performance on pre-admission testing. All students completing the admissions process for the LVN program are notified of their status via email from the office of Vocational Nursing. Students accepted into the program will then complete a urine drug screen and a criminal background check prior to admissions. All International students must meet with the International Advisor in the Admissions and Registrar's Office.

## **Advanced Placement**

Students who have been enrolled in other nursing programs may be eligible for advanced placement into the second semester of the NCTC Vocational Nursing Program. Students seeking advanced placement must make a formal application to the Vocational Nursing Program, including copies of all transcripts from prior nursing programs, and make an appointment for an interview with the program director.

## **Progression Criteria**

Students must make a "C" or better in all classroom and clinical courses to progress within the Vocational Nursing program. Students not meeting this standard will be unable to continue in the program; however, they may be readmitted one time, if qualified, on a space-available basis.

## **Readmission**

Any student who has an interruption in the normal progression of his/her nursing studies, whether by failure or withdrawal, may apply for readmission to the Vocational Nursing Department Director. In order for an application for readmission to be considered, it must be reviewed by the Vocational Nursing program faculty; therefore, it should be submitted 2-3 months prior to the desired starting date.

A completed application for readmission must include: (1) a new application, (2) a current transcript and (3) a written request identifying the reason(s) the program was interrupted and (4) actions taken to ensure success if readmission is granted. Readmission may include stipulations such as requiring that the student repeat and pass (C or higher) courses and clinicals they had previously taken and passed with a C or higher. When a course is repeated, the most recent grade will determine progression in the Program. Faculty may also require that applicants for readmission follow and complete the admission process in effect for first time applicants.

## **Grading Policy**

Grades in classroom work are based on numerical averages, with corresponding letter grades assigned, providing all required assignments have been satisfactorily completed. Students must make at least a "C" in each theory course, including Anatomy

and Physiology courses, and in each clinical practicum in order to progress within the program. The point system used within the Vocational Nursing Program is:

**A = 90-100% B = 80-89% C = 77-79% D = 66-76% F = 0-65%**

## **Program Cost**

Basic tuition and fees for nursing students are figured just as they are for all other students; however, due to the special nature of the program, students will have some additional costs that they should be aware of:

Laboratory fees will be charged for all courses requiring a lab (in addition to the classroom lecture). For VN students, a lab fee of \$24 will be charged for each course designed as a "clinical" and for the "skills" course.

Fees in addition to lab fees will be due at the time of course registration for such things as supplies, standardized tests, malpractice insurance. These fees may vary from year to year but specific information can be obtained from the Vocational Nursing Office.

Nursing textbooks are highly specialized medical books and can be expensive.

For students not yet officially admitted to the VN program and who may be taking general education courses, textbook costs will vary according to which particular courses are taken, but, on average, plan to spend about \$300 per semester hour for books. The approximate cost of the Vocational Nursing Program is \$6,200 to \$8,400. The cost of the textbooks are included in the tuition and fees charged at registration for the first semester. Students receive a package of books that can be picked up in the campus bookstore after proof of payment from the Business Office.

## **Supplies and Incidentals**

Once admitted to the Program, VN students will need to buy school clinical uniforms (plus patches), a lab jacket, shoes, and a stethoscope. A good wristwatch with a second hand is also needed. Also, the student will need normal school supplies, the LVN Student skills kit, and other costs will include such items as state board fees. Some of these expenses will not be incurred until the latter part of the program.

## **Health Insurance**

Students will need to show proof of Major Medical Insurance or Accidental Injury Medical Insurance before going to clinical agencies.

## **Immunizations**

Students accepted into the LVN program must show proof of the following immunizations:

- One dose of tetanus-diphtheria-pertussis (TDAP) toxoid in the last 10 years
- Two doses of measles vaccine, administered since 1968
- Two doses of rubella vaccine

- Two doses of mumps vaccine
- Complete Hepatitis B vaccine. This series takes 6 months to complete
- Two doses of varicella (chicken pox) These must be administered at least 8 weeks apart.
- A statement from parents or physician that you had chicken pox is NOT sufficient proof.
- One influenza vaccine (given seasonally for the flu)
- Serologic (blood test) proof of immunity or serologic evidence of infection, is acceptable in lieu of the vaccinations.
- All students must have negative results of two Mantoux TB tests or a negative chest x-ray report prior to admission

## Vocational Nursing Certificate

### Certificate Requirements

#### Spring Admission

<b>Summer Semester 10 weeks - Level II</b>		
<a href="#">VNSG 1509</a>	NURSING IN HEALTH AND ILLNESS II	5 credit hours
<a href="#">VNSG 1331</a>	PHARMACOLOGY	3 credit hours
<a href="#">VNSG 1363</a>	CLINICAL II - SPRING ADMISSION	3 credit hours
Total Credit Hours:		11

#### Spring Admission

<b>Spring Semester 16 weeks - Level I</b>		
<a href="#">VNSG 1420</a>	ANATOMY AND PHYSIOLOGY FOR ALLIED HEALTH	4 credit hours
<a href="#">VNSG 1323</a>	BASIC NURSING SKILLS	3 credit hours
<a href="#">VNSG 1400</a>	NURSING IN HEALTH AND ILLNESS I	4 credit hours
<a href="#">VNSG 1227</a>	ESSENTIALS OF MEDICATION ADMINISTRATION	2 credit hours
<a href="#">VNSG 1360</a>	CLINICAL I	3 credit hours
Total Credit Hours:		16

VNSG1420 may be taken before admission to the program, but no later than the first semester after admission. BIOL2401 and BIOL2402 (Anatomy and Physiology I and II) may be substituted for VNSG1420. Both semesters of Anatomy and Physiology must be taken for credit to be given.

### Fall Admission

<b>Summer Semester 10 weeks - Level III</b>		
<a href="#">VNSG 2510</a>	NURSING IN HEALTH AND ILLNESS III	5 credit hours
<a href="#">VNSG 1219</a>	PROFESSIONAL DEVELOPMENT	2 credit hours
<a href="#">VNSG 2360</a>	CLINICAL III - FALL ADMISSION*	3 credit hours
Total Credit Hours:		10

\*VNSG2360 will constitute the capstone experience.

### Fall Admission

<b>Fall Semester 16 weeks - Level I</b>		
<a href="#">VNSG 1420</a>	ANATOMY AND PHYSIOLOGY FOR ALLIED HEALTH	4 credit hours
<a href="#">VNSG 1323</a>	BASIC NURSING SKILLS	3 credit hours
<a href="#">VNSG 1400</a>	NURSING IN HEALTH AND ILLNESS I	4 credit hours
<a href="#">VNSG 1227</a>	ESSENTIALS OF MEDICATION ADMINISTRATION	2 credit hours
<a href="#">VNSG 1360</a>	CLINICAL I	3 credit hours
Total Credit Hours:		16

VNSG1420 may be taken before admission to the program, but no later than the first semester after admission. BIOL2401 and BIOL2402 (Anatomy and Physiology I and II) may be substituted for VNSG1420. Both semesters of Anatomy and Physiology must be taken for credit to be given.

### Fall Admission

<b>Spring Semester 16 weeks - Level II</b>		
<a href="#">VNSG 1509</a>	NURSING IN HEALTH AND ILLNESS II	5 credit hours
<a href="#">VNSG 1331</a>	PHARMACOLOGY	3 credit hours
<a href="#">VNSG 1230</a>	MATERNAL-NEONATAL NURSING	2 credit hours

<a href="#">VNSG 1234</a>	PEDIATRICS	2 credit hours
<a href="#">VNSG 1463</a>	CLINICAL II - FALL ADMISSION	4 credit hours

Total Credit Hours: 16

### Spring Admission

	<b>Fall Semester 16 weeks - Level III</b>	
<a href="#">VNSG 1230</a>	MATERNAL-NEONATAL NURSING	2 credit hours
<a href="#">VNSG 1234</a>	PEDIATRICS	2 credit hours
<a href="#">VNSG 2510</a>	NURSING IN HEALTH AND ILLNESS III	5 credit hours
<a href="#">VNSG 1219</a>	PROFESSIONAL DEVELOPMENT	2 credit hours
<a href="#">VNSG 2460</a>	CLINICAL III - SPRING ADMISSION*	4 credit hours

Total Credit Hours: 15

*\*VNSG2460 will constitute the capstone experience.*

## LVN to RN Transition Program

The ADN Nursing program offers a revised 12 month LVN to RN Transition Program. This program is an accelerated program that reduces the number of clinical hours while including the same didactic courses as the generic program. Transition learners can expect to use the Leo & Mabel Scott Health Science Center with its new Simulation Center for many of the clinical learning experiences.

Course content will be blocked in 8 week segments with the bulk of clinical learning experiences provided as a concentrated practicum at the end of the program. Each group of students will start the program each July and complete the program at the end of June the following year. At the end of the program, learners should expect and plan to attend clinical learning experiences 5 days a week during the last 5 weeks.

Applications for the RN Transition Program will be accepted from April 15- May 15. The program description, programmatic outcomes and admission process is the same as the generic program.

## Degree Plan

### **Prerequisite Courses (*must be completed prior to application to the Transition Program*)**

<a href="#">BIOL 2401</a>	HUMAN ANATOMY AND PHYSIOLOGY I	4 credit hours
<a href="#">BIOL 2402</a>	HUMAN ANATOMY AND PHYSIOLOGY II	4 credit hours
<a href="#">MATH 1342</a>	ELEMENTARY STATISTICAL METHODS	3 credit hours
<a href="#">BIOL 2420</a>	MICROBIOLOGY	4 credit hours
<a href="#">PSYC 2314</a>	LIFESPAN GROWTH & DEVELOPMENT	3 credit hours
<a href="#">ENGL 1301</a>	COMPOSITION I	3 credit hours
<a href="#">CORE</a>	LANG/PHIL/CULTURAL or ARTS ELECTIVE	3 credit hours

### **Apply to the Transition Program**

	<b>Summer Session II</b>	
<a href="#">RNSG 1229</a>	INTEGRATED NURSING SKILLS II	2 credit hours
<a href="#">RNSG 1300</a>	HEALTH ASSESSMENT ACROSS THE LIFESPAN	3 credit hours
	<b>Fall Semester I</b>	
<a href="#">RNSG 1327</a>	TRANSITION TO PROFESSIONAL NURSING	3 credit hours
<a href="#">RNSG 1162</a>	TRANSITION CLINICAL I	1 credit hours
	<b>Fall Semester II</b>	
<a href="#">RNSG 2404</a>	INTEGRATED CARE OF THE PATIENT WITH COMMON HEALTH CARE NEEDS	4 credit hours
<a href="#">RNSG 2162</a>	TRANSITION CLINICAL II	4 credit hours
	<b>Spring Semester I</b>	
<a href="#">RNSG 2414</a>	INTEGRATED CARE OF THE PATIENT WITH COMPLEX HEALTH CARE NEEDS	4 credit hours
<a href="#">RNSG 2161</a>	TRANSITION CLINICAL III	4 credit hours



	<b>Spring Semester II</b>	
<a href="#">RNSG 1163</a>	CLINICAL-PSYCHIATRIC NURSING INTEGRATED	1 credit hour
<a href="#">RNSG 2435</a>	PATIENT CARE MANAGEMENT	4 credit hours
	<b>Summer Session I</b>	
<a href="#">RNSG 2462</a>	FINAL CLINICAL PRACTICUM	4 credit hours

All coursework must be completed with a "C" or better. Failure to successfully complete the Clinical Math Exams will result in a clinical failure and dismissal from the nursing program. Students must also complete a state mandated jurisprudence exam with a score of 75 in order to take the NCLEX-RN.

## Graduation & NCLEX for Licensure

Students with prior vocational nursing experience and training may apply for admission to [RNSG 1227](#), Transition to Professional Nursing. Students will also take [RNSG 1300](#) Health Assessment Across the Lifespan during their first semester. All Students seeking admission to the transition course are expected to be competent in basic nursing skills.

Students should also understand that they must complete all academic courses required of other ADN students. Completing the majority of all non-nursing courses prior to entrance will be to the student's advantage for acceptance into the program.

After successful completion of this first semester, transition students would then take the Mini-mester Psychiatric clinical and the Second Year courses as listed on the previous page. Traditional transition students should be able to complete the program in two years. An online/hybrid transition track option begins each Fall.

## Admission Process

Transition students must follow the same admission process as new Associate Degree in Nursing students. Documentation of current licensure as a vocational/practical nurse is required.

## About Transfer Credit

Admission by Transfer is considered on a space available basis. Applicants must meet all requirements of the nursing program in addition to those of North Central Texas College. All college credits from other institutions will be evaluated on an individual basis to determine their possible application to the nursing curriculum requirements. A letter grade of "C" (75) or better is required for transfer for all previous nursing courses and academic support courses. Students who have not been academically successful in other nursing programs will not be considered for transfer. Previous nursing courses must be from an accredited program of nursing. A transfer will not be considered if the student has missed a full semester of enrollment in a nursing program. The student must submit:

- A letter stating the reason for transfer.
- Course descriptions and/or course syllabi for previous nursing courses.
- Resume of previous clinical experience to include documentation of skills provided by the faculty of the transferring school.
- Letter of recommendation from the Department Head of the school from which the applicant is transferring.

Students will be evaluated on an individual basis by the Division Chair to determine their level of entry.

## Emergency Medical Services (EMS) Program

***Available at the Corinth Campus.***

**Strider Floyd**

*Division Chair, Emergency Services*

(940) 498-6254

[sfloyd@nctc.edu](mailto:sfloyd@nctc.edu)

The Emergency Medical Technician (EMT) program at North Central Texas College teaches basic life support procedures. EMT is the entry-level certification for EMS. EMTs work alongside paramedics in the delivery of pre-hospital care.

Upon completion of the certificate students will be able to:

Successful completion of this program entitles the student to sit for the National Registry examination and apply for the certification through the [Texas Department of State Health Services](#).

Courses are taught through lecture, case study skills, written assignments, skills demonstrations, and hands-on training. Clinical experiences and Internships are completed through area hospitals and EMS/fire departments. The certificate requirement of Anatomy & Physiology (VNSG1420) can be taught via classroom lecture or online.

Individuals interested in either the EMT-Basic or Paramedic programs must attend an Advisement Session in order to be considered for admission. Once potential EMT-Basic students have attended an Advisement Session, they will be required to complete the HESI test. The top 25 highest scores from the HESI test will be accepted into the Emergency Medical Technology Program. The top 20 highest scores from the HESI test will be accepted into the Paramedic program.

Potential students who wish to gain admission to the EMT-Basic or Paramedic Programs must complete the following:

- Attend an Advisement Session
- Take the HESI Test

Once accepted to the program of their choice, the student must complete the following:

- Submit Application for Admission to NCTC with official transcripts
- Criminal Background Check
- Immunizations
- Drug Screen
- Physical
- CPR Certification (Healthcare Provider only)

Criteria for enrolling into the EMS programs:

- Must have a social security number.
- Must be at 18 years old.
- Must be a high school graduate or have a GED.
- Must have medical insurance (can be purchased through agencies that work with NCTC).

The Emergency Medical Services Program is designed to give the student a well-rounded education for a professional career in emergency medicine. The Department of State Health Services has approved the program. There is one certificate and one-degree track offered to meet the student's desire for certification or licensure. Levels of EMS certification are:

1. Emergency Medical Technician
2. Emergency Medical Technician Paramedic
3. RN to Emergency Medical Technician Paramedic

Courses are taught through lecture, case study skills, written assignments, skills demonstrations, and hands-on training. Clinical experiences and Internships are completed through area hospitals and EMS/fire departments.

Following successful completion of the program, the graduate will be able to:

- Describe the scope of paramedic practice within local, state and national parameters.
- Demonstrate the desirable qualities of an EMS provider that contribute to high professional and ethical standards.
- Recognize, assess and manage medical and traumatic emergencies while establishing priorities under the appropriate medical control. Procedures will include physical assessment, extrication, basic life support, airway control and ventilation, fluid resuscitation, drug therapy, emergency delivery, cardiac monitoring and electrical intervention, psychological support and other forms of basic and advanced life support.
- Coordinate scene management, patient care, and transportation with other agencies.
- Establish rapport with first responders, agencies, patient's family members, and staff of receiving hospitals.

- Concisely document through written and oral communications, events relative to the provision of emergency care.
- In the event of contingencies, exercise personal judgment that is sound and appropriate for the situation.

## **Admission Process**

### **Qualifications**

To be eligible to enroll in the EMS Program, the applicant must show proof of the following at the time of registration:

- Be at least 18 years of age to sit for certification.
- Be a high school graduate or have passed the GED test.
- Be physically able to handle patients and equipment normally used in EMS.

### **To Apply**

Prospective students should obtain a program information packet from the EMS Program and follow the instructions in the packet for securing admission to the EMS Program or on the NCTC EMS website. The following will be submitted to the EMS Program:

1. Application for Admission to NCTC
2. Application to the EMS Program
3. High school transcripts
4. College transcripts
5. Current state or national EMS certifications and current medically related certificates of completion
6. Complete physical which includes a drug screen and immunizations
7. Carry a current Health Care Provider CPR card or equivalent.
8. Must have current medical insurance

### **Program Acceptance**

At the EMT level, students are accepted on a first come, first serve basis. Due to the large volume of students for limited positions within the EMS Program, a priority acceptance ranking is based upon (1) current enrollment in the EMT program and (2) all other applicants.

### **Progression**

To progress through the EMS Program, the student must maintain a "C" average or above. Any student who has an interruption in the normal progression of his/her EMS training may reapply for readmission to the EMS Program through the department program coordinator. Time limitations are determined by department policy and are

available by request. Readmission application does not guarantee applicant will receive acceptance into the program.

### **Advanced Standing Courses and Transfer Credit**

Nationally registered EMTs must petition the Department of State Health Services, EMS Division to transfer their certification to the State of Texas.

### **Paramedics Seeking an Associate Degree**

Texas or nationally certified paramedics trained at a school other than North Central Texas College may apply for the Associate of Applied Science degree. Application procedures, entrance requirements, credit for certifications, and other requirements are available upon request.

### **Grading Policy**

Grades in the EMS Program are determined by theory, writing assignments, skills performance, Internet assignments, written exams and clinical practice. At the completion of each EMSP course, the student must have a department average and Final Exam Grade of 75% or above to complete course work. Letter grades are assigned based on the following scale:

**A = 91-100% B = 82-90% C = 75-81% D = 66-74% F = 0-65%**

### **Cost Considerations for EMS Students**

#### **Summary of Costs**

The total per-semester cost of enrolling in the EMS Program at North Central Texas College is the sum of: (1) tuition; (2) "combined student fees"; (3) laboratory fees; (4) textbooks; and (5) supplies and incidentals. Except for item 5, charges are figured just as they are for all other students. However, EMS students should be aware that due to the special nature of the program, expenses in categories 3-5 will probably be considerably higher than those paid by students in most other majors.

#### **Laboratory Fees**

These are extra fees charged for all courses requiring a lab (in addition to the classroom lecture). For EMS students, a lab fee of \$24 will be charged for each clinical course and courses with a skills component. Lab fees for other non-EMS science courses are normally \$24.

## **Textbooks**

EMS textbooks are highly specialized and can be expensive, as much as \$300 or more in the first semester of Paramedicine. Keep in mind that the EMS program is an integrated course of study, meaning you will buy most of your EMS books the first semester. Therefore, book costs will be considerably less in the later semesters.

## **Supplies and Incidentals**

Once admitted to the EMS Program, students will need to buy classroom uniforms, clinical uniforms, patches, stethoscope, pen light and trauma shears. A good wristwatch with a second hand is essential. Also, the student will need normal school supplies, and other costs that will include such items as major medical insurance, physical examination (including immunizations), Hepatitis B vaccine, CPR training, Drug Testing, Graduation fees and National Registry Examination fee as well as, the Department of State Health Services State Examination fee. An additional fee for malpractice insurance and National Registry Site fee will be added to the tuition/fees bill. Additional costs may include meals while attending clinicals and Internship. Some of these expenses will not be incurred until the latter part of the program.

**NOTE:** All tuition rates, fees and other elements of expense for attending North Central Texas College are subject to change by the NCTC Board of Regents.

## **Graduation**

Students are granted an Associate of Applied Science degree or Certificate in Paramedicine after successful completion of the prescribed curriculum within the EMS Program.

Eligible students completing certification or degree coursework will receive a Certificate of Course Completion necessary to take the Texas Department of State Health Services State Examination and the National Registry Examination. EMTs and EMT-Ps will be required to take both examinations to become a certified EMT or a certified / licensed Paramedic in the state of Texas.

## **Certificate of Completion/AAS Degree**

All course work to be applied toward certification or the Associate of Applied Science degree must be completed with a grade of "C" or above. Students should consult a department representative to file a certificate or degree plan.

*Students must be a current certified EMT to begin the EMT-P Certificate Program.*

# Emergency Medical Technician-Basic

## EMT-B

The Emergency Medical Technician (EMT) program at North Central Texas College teaches basic life support procedures. EMT is the entry-level certification for EMS. EMTs work alongside paramedics in the delivery of prehospital care.

Upon completion of the certificate students will be able to:

Successful completion of this program entitles the student to sit for the National Registry examination and apply for the certification through the Texas Department of State Health Services.

## Certificate Requirements

	Offered Fall, Spring & Summer III	
<a href="#">EMSP 1501</a>	Emergency Medical Technician	5 credit hours
<a href="#">EMSP 1160</a>	Clinical - Emergency Medical Technician/Technology	1 credit hours

# Emergency Medical Services Certificate (Paramedic)

## Strider Floyd

*Division Chair, Emergency Services*

(940) 498-6254

[sfloyd@nctc.edu](mailto:sfloyd@nctc.edu)

The Paramedic program at North Central Texas College teaches basic and advanced life support. Certified paramedics are the primary care providers in advanced level ambulances and fire departments.

Upon completion of the certificate students will be able to:

- Describe the scope of paramedic practice within local, state and national parameters.
- Demonstrate the desirable qualities of an EMS provider that contribute to high professional and ethical standards.
- Recognize, assess and manage medical and traumatic emergencies while establishing priorities under the appropriate medical control. Procedures will include physical assessment, extrication, basic life support, airway control and ventilation, fluid resuscitation, drug therapy, emergency delivery, cardiac monitoring and electrical intervention, psychological support and other forms of basic and advanced life support.

- Coordinate scene management, patient care, and transportation with other agencies.
- Establish rapport with first responders, agencies, patient's family members, and staff of receiving hospitals.
- Concisely document through written and oral communications, events relative to the provision of emergency care.
- In the event of contingencies, exercise personal judgment that is sound and appropriate for the situation.

Courses are taught through lecture, case study skills, written assignments, skills demonstrations, and hands-on training. Clinical experiences and Internships are completed through area hospitals and EMS/fire departments. The certificate requirement of Anatomy & Physiology (VNSG1420) can be taught via classroom lecture or online.

Individuals interested in either the EMT-Basic or Paramedic programs must attend an Advisement Session in order to be considered for admission. Once potential EMT-Basic students have attended an Advisement Session, they will be required to complete the HESI test. The top 25 highest scores from the HESI test will be accepted into the Emergency Medical Technology Program. The top 20 highest scores from the HESI test will be accepted into the Paramedic program.

Potential students who wish to gain admission to the EMT-Basic or Paramedic Programs must complete the following:

- Attend an Advisement Session
- Take the HESI Test

Once accepted to the program of their choice, the student must complete the following:

- Submit Application for Admission to NCTC with official transcripts
- Criminal Background Check
- Immunizations
- Drug Screen
- Physical
- CPR Certification (Healthcare Provider only)

Criteria for enrolling into the EMS programs:

- Must have a social security number.
- Must be at 18 years old.
- Must be a high school graduate or have a GED.
- Must have medical insurance (can be purchased through agencies that work with NCTC).
- Must be currently certified as National Registered EMT or Texas Department of State Health Services (DSHS) EMT



The Paramedic Certificate program is designed to take 3 semesters (1 year) to complete and is comprised of the following suggested pathway or course of study. This degree can be completed either completely face-to-face or through a mix of face-to-face classes and online classes.

## Certificate Requirements

<b>First Semester</b>		
<a href="#">EMSP 2261</a>	CLINICAL I - EMERGENCY MEDICAL TECHNICIAN/ PARAMEDIC	2 credit hours
<a href="#">EMSP 1338</a>	INTRODUCTION TO ADVANCED PRACTICE	3 credit hours
<a href="#">EMSP 2544</a>	CARDIOLOGY	5 credit hours
<a href="#">EMSP 2206</a>	EMERGENCY PHARMACOLOGY	2 credit hours
<a href="#">VNSG 1420</a>	ANATOMY AND PHYSIOLOGY FOR ALLIED HEALTH	4 credit hours
Total Credit Hours:		16

<b>Second Semester</b>		
<a href="#">EMSP 1355</a>	TRAUMA MANAGEMENT	3 credit hours
<a href="#">EMSP 1356</a>	PATIENT ASSESSMENT AND AIRWAY MANAGEMENT	3 credit hours
<a href="#">EMSP 2262</a>	CLINICAL II - EMERGENCY MEDICAL TECHNICIAN/ PARAMEDIC	2 credit hours
<a href="#">EMSP 2434</a>	MEDICAL EMERGENCIES	4 credit hours
Total Credit Hours:		12

<b>Third Semester</b>		
<a href="#">EMSP 2352</a>	EMERGENCY MEDICAL SERVICES RESEARCH *	3 credit hours
<a href="#">EMSP 2563</a>	CLINICAL - EMT-P INTERNSHIP	5 credit hours
<a href="#">EMSP 2305</a>	EMS OPERATIONS	3 credit hours
Total Credit Hours:		11

\* *EMSP2563: Capstone Experience*

**Total Credit Hours: 39**

# Emergency Medical Services AAS (Paramedic)

## Associate of Applied Science Degree

**Strider Floyd**

*Division Chair, Emergency Services*

(940) 498-6254

[sfloyd@nctc.edu](mailto:sfloyd@nctc.edu)

The Paramedic program at North Central Texas College teaches basic and advanced life support. Certified paramedics are the primary care providers in advanced level ambulances and fire departments. The Associate of Applied Science degree has the EMS courses but also includes Academic courses, so the student may pursue their Paramedic Licensure and Associate of Applied Science Degree in Paramedicine. Licensure through the Department of State Health and Human Services of Texas requires Licensed Paramedics to have a degree.

Upon completion of the certificate students will be able to:

- Describe the scope of paramedic practice within local, state and national parameters.
- Demonstrate the desirable qualities of an EMS provider that contribute to high professional and ethical standards.
- Recognize, assess and manage medical and traumatic emergencies while establishing priorities under the appropriate medical control. Procedures will include physical assessment, extrication, basic life support, airway control and ventilation, fluid resuscitation, drug therapy, emergency delivery, cardiac monitoring and electrical intervention, psychological support and other forms of basic and advanced life support.
- Coordinate scene management, patient care, and transportation with other agencies.
- Establish rapport with first responders, agencies, patient's family members, and staff of receiving hospitals.
- Concisely document through written and oral communications, events relative to the provision of emergency care.
- In the event of contingencies, exercise personal judgment that is sound and appropriate for the situation.

Courses are taught through lecture, case study skills, written assignments, skills demonstrations, and hands-on training. Clinical experiences and Internships are completed through area hospitals and EMS/fire departments. The certificate requirement of Anatomy & Physiology (VNSG1420) can be taught via classroom lecture or online. Other academic courses may be completed via classroom or online.

Individuals interested in either the EMT-Basic or Paramedic programs must attend an Advisement Session in order to be considered for admission. Once potential EMT-Basic students have attended an Advisement Session, they will be required to complete

the HESI test. The top 25 highest scores from the HESI test will be accepted into the Emergency Medical Technology Program. The top 20 highest scores from the HESI test will be accepted into the Paramedic program.

Potential students who wish to gain admission to the EMT-Basic or Paramedic Programs must complete the following:

- Attend an Advisement Session
- Take the HESI Test

Once accepted to the program of their choice, the student must complete the following:

- Submit Application for Admission to NCTC with official transcripts
- Criminal Background Check
- Immunizations
- Drug Screen
- Physical
- CPR Certification (Healthcare Provider only)

Criteria for enrolling into the EMS programs:

- Must have a social security number.
- Must be at 18 years old.
- Must be a high school graduate or have a GED.
- Must have medical insurance (can be purchased through agencies that work with NCTC.
- Must be currently certified as National Registered EMT or Texas Department of State Health Services (DSHS) EMT

The Paramedicine degree is designed to take 4 semesters to complete and is comprised of the following suggested pathway or course of study. This degree can be completed either completely face-to-face or through a mix of face-to-face classes and online classes.

## Degree Requirements

	<b>First Semester</b>	
<a href="#">ENGL 1301</a>	COMPOSITION I	3 credit hours
<a href="#">EMSP 1160</a>	CLINICAL - EMERGENCY MEDICAL TECHNICIAN/ TECHNOLOGY	1 credit hour
<a href="#">EMSP 1501</a>	EMERGENCY MEDICAL TECHNICIAN	5 credit hours
<a href="#">VNSG 1420</a>	ANATOMY AND PHYSIOLOGY FOR ALLIED HEALTH	4 credit hours
Total Credit Hours:		13

**Second Semester**

<a href="#">PSYC 2314</a>	LIFESPAN GROWTH & DEVELOPMENT	3 credit hours
<a href="#">EMSP 2261</a>	CLINICAL I - EMERGENCY MEDICAL TECHNICIAN/ PARAMEDIC	2 credit hours
<a href="#">EMSP 1338</a>	INTRODUCTION TO ADVANCED PRACTICE	3 credit hours
<a href="#">EMSP 2206</a>	EMERGENCY PHARMACOLOGY	2 credit hours
<a href="#">EMSP 2544</a>	CARDIOLOGY	5 credit hours
Total Credit Hours:		15

**Third Semester**

	ANY LANGUAGE, PHILOSOPHY AND CULTURE, OR CREATIVE ARTS ELECTIVE	3 credit hours
<a href="#">EMSP 2262</a>	CLINICAL II - EMERGENCY MEDICAL TECHNICIAN/ PARAMEDIC	2 credit hours
<a href="#">EMSP 2434</a>	MEDICAL EMERGENCIES	4 credit hours
<a href="#">EMSP 1355</a>	TRAUMA MANAGEMENT	3 credit hours
<a href="#">EMSP 1356</a>	PATIENT ASSESSMENT AND AIRWAY MANAGEMENT	3 credit hours
Total Credit Hours:		15

**Fourth Semester**

<a href="#">MATH 1314</a>	COLLEGE ALGEBRA	3 credit hours
<a href="#">SPCH 1315</a>	PUBLIC SPEAKING	3 credit hours
<a href="#">EMSP 2563</a>	* CLINICAL - EMT-P INTERNSHIP	5 credit hours
<a href="#">EMSP 2352</a>	EMERGENCY MEDICAL SERVICES RESEARCH	3 credit hours
<a href="#">EMSP 2305</a>	EMS OPERATIONS	3 credit hours
Total Credit Hours:		17

\* *EMSP2563 Capstone Experience*

**Total Credit Hours: 60**

# Fire Science Program

***A minimum of Emergency Medical Technician - Basic (EMT-B) is a prerequisite for admission to the fire academy.***

**Strider Floyd**

*Division Chair, Emergency Services*

(940) 498-6254

[sfloyd@nctc.edu](mailto:sfloyd@nctc.edu)

## Fire Science Certificate

### Basic Firefighter Certificate

The Basic Fire Academy is designed to give the student a well-rounded education for a professional career in the fire service.

Following successful completion of the program, the graduate will be able to:

- Demonstrate the desirable qualities of a basic firefighter that contribute to high professional and ethical standards.
- Function effectively during high stress situations. Such situations may include physical exertion, austere environments, victim extrication, basic or advanced life support patient treatments, victim rescue, and fire suppression.
- Coordinate scene management during hazardous situations.
- Establish rapport with first responders, agencies, patients, victims, and the public.
- Concisely document through written and oral communications, events relative to the provision of emergency care, rescue and fire incidents.
- Courses are taught through lecture, written assignments, skills demonstrations, and hands-on training. Clinical experiences and Internships are completed through local fire departments.

Individuals interested in either the Basic Firefighter Certificate must attend an Advisement Session in order to be considered for admission. Once potential students have attended an Advisement Session, they will be required to complete the HESI test. The top 25 highest scores from the HESI test will be accepted into the program.

Potential students who wish to gain admission to the Basic Firefighter Programs must complete the following:

- Attend an Advisement Session
- Take the HESI Test

Once accepted to the program of their choice, the student must complete the following:

- Submit Application for Admission to NCTC with official transcripts
- Criminal Background Check
- Immunizations
- Drug Screen

- Physical
- Physical Agility Exam Waivers
- CPR Certification (Healthcare Provider only)

Criteria for enrolling into the Fire program:

- Must have a social security number.
- Must be at 18 years old.
- Must be a high school graduate or have a GED.
- Must have medical insurance (can be purchased through agencies that work with NCTC).

## **Fire Science Degree**

The Associate of Applied Science (AAS) - Fire Science degree is designed for individuals employed in fire service who want to further enhance their career through expanded experience and/or education:

Following successful completion of the program, the graduate will be able to:

- Demonstrate the desirable qualities of a basic firefighter that contribute to high professional and ethical standards.
- Function effectively during high stress situations. Such situations may include physical exertion, austere environments, victim extrication, basic or advanced life support patient treatments, victim rescue, and fire suppression.
- Coordinate scene management during hazardous situations.
- Establish rapport with first responders, agencies, patients, victims, and the public.
- Concisely document through written and oral communications, events relative to the provision of emergency care, rescue and fire incidents.

Courses are taught through lecture, written assignments, skills demonstrations, and hands-on training. Clinical experiences and Internships are completed through local fire departments.

Individuals interested in either the Basic Firefighter Certificate must attend an Advisement Session in order to be considered for admission. Once potential students have attended an Advisement Session, they will be required to complete the HESI test. The top 25 highest scores from the HESI test will be accepted into the program.

Potential students who wish to gain admission to the Basic Firefighter Programs must complete the following:

- Attend an Advisement Session
- Take the HESI Test

Once accepted to the program of their choice, the student must complete the following:

- Submit Application for Admission to NCTC with official transcripts
- Criminal Background Check
- Immunizations

- Drug Screen
- Physical
- Physical Agility Exam Waivers
- CPR Certification (Healthcare Provider only)

Criteria for enrolling into the Fire program:

- Must have a social security number.
- Must be at 18 years old.
- Must be a high school graduate or have a GED.
- Must have medical insurance (can be purchased through agencies that work with NCTC).

This degree can be completed either completely face-to-face or through a mix of face-to-face classes and online classes.

## **Fire Science Certificate**

### **Basic Firefighter Certificate**

#### **Strider Floyd**

*Division Chair, Emergency Services*

(940) 498-6254

[sfloyd@nctc.edu](mailto:sfloyd@nctc.edu)

The Basic Fire Academy is designed to give the student a well-rounded education for a professional career in the fire service.

Following successful completion of the program, the graduate will be able to:

- Demonstrate the desirable qualities of a basic firefighter that contribute to high professional and ethical standards.
- Function effectively during high stress situations. Such situations may include physical exertion, austere environments, victim extrication, basic or advanced life support patient treatments, victim rescue, and fire suppression.
- Coordinate scene management during hazardous situations.
- Establish rapport with first responders, agencies, patients, victims, and the public.
- Concisely document through written and oral communications, events relative to the provision of emergency care, rescue and fire incidents.

Courses are taught through lecture, written assignments, skills demonstrations, and hands-on training. Clinical experiences and Internships are completed through local fire departments.

Individuals interested in either the Basic Firefighter Certificate must attend an Advisement Session in order to be considered for admission. Once potential students have attended an Advisement Session, they will be required to complete the HESI test. The top 25 highest scores from the HESI test will be accepted into the program.

Potential students who wish to gain admission to the Basic Firefighter Programs must complete the following:

- Attend an Advisement Session
- Take the HESI Test

Once accepted to the program of their choice, the student must complete the following:

- Submit Application for Admission to NCTC with official transcripts
- Criminal Background Check
- Immunizations
- Drug Screen
- Physical
- Physical Agility Exam Waivers
- CPR Certification (Healthcare Provider only)

Criteria for enrolling into the Fire program:

- Must have a social security number.
- Must be at 18 years old.
- Must be a high school graduate or have a GED.
- Must have medical insurance (can be purchased through agencies that work with NCTC).

The Basic Fire Academy program is provided in both day and night class settings. The Day Class is designed to take 1 semester to complete and the Night Class is designed to take 2 semesters. Both class options are comprised of the following suggested pathway or course of study.

## Certificate Requirements

	<b>First Semester</b>	
<a href="#">FIRS 1203</a>	FIRE FIGHTER AGILITY AND FITNESS PREPARATION	2 credit hours
<a href="#">FIRS 1301</a>	FIREFIGHTER CERTIFICATION I	3 credit hours
<a href="#">FIRS 1313</a>	FIREFIGHTER CERTIFICATION III	3 credit hours
<a href="#">FIRS 1319</a>	FIREFIGHTER CERTIFICATION IV	3 credit hours
<a href="#">FIRS 1323</a>	FIREFIGHTER CERTIFICATION V	3 credit hours
<a href="#">FIRS 1329</a>	FIREFIGHTER CERTIFICATION VI	3 credit hours



<a href="#">FIRT 2188</a>	INTERNSHIP-FIRE PROTECTION AND SAFETY TECHNOLOGY/TECHNICIAN	1 credit hours
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Total Credit Hours		18
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**Second Semester**

<a href="#">EMSP 1160</a>	CLINICAL - EMERGENCY MEDICAL TECHNICIAN/TECHNOLOGY	1 credit hour
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<a href="#">EMSP 1501</a>	EMERGENCY MEDICAL TECHNICIAN	5 credit hours
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Total Credit Hours		6
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**Total Credit Hours 24**

## Fire Science AAS

### Associate of Applied Science Degree

**Strider Floyd**

*Emergency Service Programs Coordinator*

(940) 498-6254

[sfloyd@nctc.edu](mailto:sfloyd@nctc.edu)

The Associate of Applied Science (A.A.S.) - Fire Science degree is designed for individuals employed in fire service who want to further enhance their career through expanded experience and/or education:

Following successful completion of the program, the graduate will be able to:

- Demonstrate the desirable qualities of a basic firefighter that contribute to high professional and ethical standards.
- Function effectively during high stress situations. Such situations may include physical exertion, austere environments, victim extrication, basic or advanced life support patient treatments, victim rescue, and fire suppression.
- Coordinate scene management during hazardous situations.
- Establish rapport with first responders, agencies, patients, victims, and the public.
- Concisely document through written and oral communications, events relative to the provision of emergency care, rescue and fire incidents.

Courses are taught through lecture, written assignments, skills demonstrations, and hands-on training. Clinical experiences and Internships are completed through local fire departments.

Individuals interested in either the Basic Firefighter Certificate must attend an Advisement Session in order to be considered for admission. Once potential students have attended an Advisement Session, they will be required to complete the HESI test.

have attended an Advisement Session, they will be required to complete the HESI test. The top 25 highest scores from the HESI test will be accepted into the program.

Potential students who wish to gain admission to the Basic Firefighter Programs must complete the following:

- Attend an Advisement Session
- Take the HESI Test

Once accepted to the program of their choice, the student must complete the following:

- Submit Application for Admission to NCTC with official transcripts
- Criminal Background Check
- Immunizations
- Drug Screen
- Physical
- Physical Agility Exam Waivers
- CPR Certification (Healthcare Provider only)

Criteria for enrolling into the Fire program:

- Must have a social security number.
- Must be at 18 years old.
- Must be a high school graduate or have a GED.
- Must have medical insurance (can be purchased through agencies that work with NCTC).

This degree can be completed either completely face-to-face or through a mix of face-to-face classes and online classes.

## Degree Requirements

	<b>First Semester</b>	
<a href="#">FIRS 1203</a>	FIRE FIGHTER AGILITY AND FITNESS PREPARATION	2 credit hours
<a href="#">FIRS 1301</a>	FIREFIGHTER CERTIFICATION I	3 credit hours
<a href="#">FIRS 1313</a>	FIREFIGHTER CERTIFICATION III	3 credit hours
<a href="#">FIRS 1319</a>	FIREFIGHTER CERTIFICATION IV	3 credit hours
<a href="#">FIRS 1323</a>	FIREFIGHTER CERTIFICATION V	3 credit hours
<a href="#">FIRS 1329</a>	FIREFIGHTER CERTIFICATION VI	3 credit hours

<a href="#">FIRT 2188</a>	INTERNSHIP-FIRE PROTECTION AND SAFETY TECHNOLOGY/TECHNICIAN	1 credit hours
Total Credit Hours		18
<b>Second Semester</b>		
<a href="#">CORE</a>	ARTS ART, MUSIC, OR FILM APPRECIATION	3 credit hours
<a href="#">EMSP 1160</a>	CLINICAL - EMERGENCY MEDICAL TECHNICIAN/TECHNOLOGY	1 credit hour
<a href="#">EMSP 1501</a>	EMERGENCY MEDICAL TECHNICIAN	5 credit hours
<a href="#">FIRT 1319</a>	FIREFIGHTER HEALTH & SAFETY	3 credit hours
Total Credit Hours		12
<b>Third Semester</b>		
<a href="#">ENGL 1301</a> , <a href="#">ENGL 2311</a>	COMPOSITION I OR TECHNICAL WRITING	3 credit hours
<a href="#">FIRT 1307</a>	FIRE PREVENTION CODES & INSPECTIONS	3 credit hours
<a href="#">FIRT 1309</a>	FIRE ADMINISTRATION I	3 credit hours
<a href="#">MATH 1314</a>	COLLEGE ALGEBRA	3 credit hours
<a href="#">PSYC 2301</a>	INTRO TO GENERAL PSYCHOLOGY	3 credit hours
Total Credit Hours		15
<b>Fourth Semester</b>		
<a href="#">FIRT 1329</a>	BUILDING CODES & CONSTRUCTION	3 credit hours
<a href="#">FIRT 1333</a>	FIRE CHEMISTRY I	3 credit hours
<a href="#">FIRT 1338</a>	FIRE PROTECTION SYSTEMS	3 credit hours
<a href="#">GOVT 2305</a>	FEDERAL GOVERNMENT	3 credit hours
OR		
<a href="#">GOVT 2306</a>	TEXAS GOVERNMENT	3 credit hours
<a href="#">FIRT 2309</a>	FIREFIGHTING STRATEGIES & TACTICS I	3 credit hours
Total Credit Hours:		15
<b>Total Credit Hours 60</b>		

# Radiological Technology Program

**Melanie Billmeier** *MSRS, ARRT, RT(R)*

(940)668-3392

[mbillmeier@nctc.edu](mailto:mbillmeier@nctc.edu)

The Radiological Technology Program is a two-year, 60 credit hour curriculum leading to the Associate of Applied Science Degree that prepares students to assume the role of a radiological technologist, sometimes called rad techs or x-ray techs. Radiological technologists use x-ray equipment to create images of the internal body to diagnose injury and disease. Their services are performed at the request and under the supervision of a physician.

## Programmatic Outcomes

*Program Level Outcomes taken Directly from TracDat*

- Gainful Employment (If Applicable)
- (Updated report information taken directly from our public report)
- Modality of Program
- Face-to-face on the Gainesville campus
- Suggested Pathway or Course of Study

The Radiological Technology Program will accept students every fall semester. The clinical training begins during the second half of the first semester and the hours will be set by the clinical institution to which the student is assigned. This may include days, evenings, nights and/or weekend shifts. The student will attend clinical 16 hours a week for five weeks at the end of the first semester. The clinical experience remains 16 hours a week during the entire spring semester and increases to 24 hours a week during the summer and during the last year (fall and spring) of the curriculum.

Students are encouraged to take all the academic support courses prior to entering the program. The program is rigorous, and completing the support courses enables the student to complete the program successfully while maintaining personal responsibilities such as work and family commitments.

The Radiological Technology student will employ cognitive, psychomotor, and affective skills in acquisition of their degree. They will be expected to perform as radiographic technologists who must lift and move patients as well as push, pull, lift, and carry heavy equipment. Additionally, students will be required to stoop, bend, and stand for long periods of time and will be required to move quickly in emergency situations. Interpersonal skills are an integral part of the profession and require that the student be able to function appropriately in highly stressful situations.

A physical examination and proof of immunization must be submitted prior to beginning the program. Students must be certified in cardiopulmonary resuscitation (CPR) at the Health Care Provider level as designated by the American Heart Association. A copy of a current CPR card must be submitted to the student's instructor prior to attending clinical.

Students are required to undergo a criminal background check prior to enrolling in the program and to a drug screen prior to beginning clinical experiences. The criminal background check is conducted once the student has been deemed eligible to enter the program but prior to admission. Therefore, if a student does not pass the criminal background check, the student will not be admitted to the program and will not have incurred the expenses associated with enrollment. The drug screen will be conducted after the student has been accepted to the program. Results of this screen will be reviewed and verification to determine that a student is eligible to attend clinical rotations. The student is responsible for all charges incurred for these screenings and will pay this fee upon registration for the program. Students are responsible for their own transportation arrangements to campus and to their assigned health care facilities for clinical experiences.

Acceptance into the Radiological Technology Program is accomplished by way of a competitive selection process based on an pre-admission assessment exam and a points system composed of:

- grade point average of academic support courses in the curriculum
- number of academic support courses completed
- grade in Anatomy and Physiology I
- grade in Anatomy and Physiology II

All students applying for fall admission are invited to take a pre-admission exam which will determine their admission to the program.

Students will only be admitted to the program during the fall semester of each year.

## Admission Requirements

1. Apply and gain admission to North Central Texas College. Applicant must have earned either a high school diploma or a General Education Development (GED) certificate in addition to complying with the Texas Success Initiative requirements.
2. Attend a Radiological Technology advisory session. Please contact the Radiology Department for a schedule of these information sessions.
3. Complete the four prerequisite courses. These courses include:
  - a. [BIOL 2401](#) Anatomy and Physiology I
  - b. [BIOL 2402](#) Anatomy and Physiology II
  - c. [MATH 1314](#) College Algebra or [MATH 1342](#) Elementary Statistical Methods
  - d. [ENGL 1301](#) Composition I

Admission Points will be awarded as follows:

<b>Points</b>	<b>For GPA in academic support courses in the curriculum:</b>
3	4.0
2	3.5
1	3.0

It is strongly advised that students complete as many co-requisite courses as possible before applying for admission into the Radiological Technology program.

These courses include:

- [PSYC 2301](#)
- [Humanities/Arts elective](#)

Early completion of all academic support courses enhances progression in the radiology program. The academic support courses can be taken at any time prior to admission into the program but must be completed in the semester in which they are listed in the curriculum. Course work completed with a "C" or better prior to admission will result in:

## Admission Points

	Points	For completion of:
3		23 hours
2		17 hours
1		8 hours

**Admission Points** are awarded for performance in the two biology prerequisite courses.

For BIOL2401 Anatomy and Physiology I and BIOL2401 Anatomy and Physiology II, admission points are awarded as follows for each course:

	Points	For a grade of:
4		A
3		B
2		C

Complete and submit to the Radiological Technology Program Office at the Gainesville Campus a Declaration of Intent to Enroll form - a formal statement of your intention to enroll in the upcoming fall class scheduled to begin at NCTC. A degree audit and copies of transcripts of all courses must be provided at the time the Declaration of Intent is completed.

It must be completed and submitted between May 1 -June 1

These declaration forms **DO NOT** "carry over". If for any reason you are not admitted to the Radiological Technology Program after submitting your first declaration form, you must submit a new form in order to be considered again for admission.

All applications who have submitted a Declaration of Intent form will be notified of the scheduled dates to take the pre-admission assessment exam given in late June and/or early July.

## Selection Process

Applicants are selected for acceptance according to the following ranking process: Total admission points are added to the cumulative admission assessment exam score. The new total is then used to rank applicants from highest to lowest.

Candidates with the highest combined pre-admission exam scores and priority points will be considered for admission to the Radiological Technology Program. Candidates with the next highest scores will be listed as alternates. If any of those who have been admitted are not able to begin the program for that particular semester, the next highest scoring alternate will be admitted. Anyone wishing to re-apply the following year must go through this admission procedure again in order to be considered for the upcoming semester (including alternates who did not get in). The pre-admission exam may only be taken twice. Those students accepted for admission to the Radiological Technology Program will be registered in the first semester courses by the program staff.

# Radiological Technology AAS

## Associate of Applied Science Degree

### Gainesville Campus

### Degree Requirements

	<b>Prerequisites</b>	
<a href="#">BIOL 2401</a>	HUMAN ANATOMY AND PHYSIOLOGY I	4 credit hours
<a href="#">BIOL 2402</a>	HUMAN ANATOMY AND PHYSIOLOGY II	4 credit hours
<a href="#">ENGL 1301</a>	COMPOSITION I	3 credit hours
<a href="#">MATH 1314</a>	COLLEGE ALGEBRA	3 credit hours
OR		
<a href="#">MATH 1342</a>	ELEMENTARY STATISTICAL METHODS	3 credit hours
Total Credit Hours:		14
	<b>First Semester</b>	
<a href="#">RADR 1201</a>	INTRODUCTION TO RADIOGRAPHY	2 credit hours
<a href="#">RADR 1411</a>	BASIC RADIOGRAPHIC PROCEDURES PATIENT CARE	4 credit hours
<a href="#">RADR 1303</a>		3 credit hours
Total Credit Hours:		9
	<b>Second Semester</b>	
<a href="#">RADR 1313</a>	PRINCIPLES OF RADIOGRAPHIC IMAGING I	3 credit hours
<a href="#">RADR 2401</a>	INTERMEDIATE RADIOGRAPHIC PROCEDURES	4 credit hours

<a href="#">RADR 2401</a>	INTERMEDIATE RADIOGRAPHY PROCEDURES	4 credit hours
<a href="#">RADR 2209</a>	RADIOGRAPHIC IMAGING EQUIPMENT	2 credit hours
<a href="#">RADR 1166</a>	PRACTICUM I	1 credit hours
Total Credit Hours:		10

**Third Semester**

<a href="#">RADR 2313</a>	RADIATION BIOLOGY AND PROTECTION	3 credit hours
<a href="#">RADR 1267</a>	PRACTICUM II	2 credit hours
Total Credit Hours:		5

**Fourth Semester**

<a href="#">PSYC 2301</a>	GENERAL PSYCHOLOGY	3 credit hours
<a href="#">RADR 2217</a>	RADIOGRAPHIC PATHOLOGY	2 credit hours
<a href="#">RADR 2205</a>	PRINCIPLES OF IMAGING II	2 credit hours
<a href="#">RADR 2466</a>	PRACTICUM III	4 credit hours
Total Credit Hours:		11

**Fifth Semester ART**

<a href="#">ARTS 1301</a>	APPRECIATION	3 credit hours
OR		
<a href="#">MUSI 1306</a>	MUSIC APPRECIATION	3 credit hours
<a href="#">RADR 2333</a>	ADVANCED MEDICAL IMAGING	3 credit hours
<a href="#">RADR 2335</a>	RADIOLOGIC TECH SEMINAR	3 credit hours
<a href="#">RADR 2267</a>	PRACTICUM IV	2 credit hours
Total Credit Hours:		11

**Total Credit Hours: 60**



# Surgical Technology Program

## Corinth Campus

The Surgical Technology program is a one-year certificate program that prepares the student to assume the responsibilities of a Surgical Technologist. Surgical Technologists participate in all aspects of preparing and monitoring instruments and procedures in the sterile operating room environment. The courses are taught in the classroom, the Surgical Technology lab, and at clinical sites throughout the NCTC service area.

The program is nationally accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP), 25400 US Highway 19 N, Clearwater, FL 33763 Phone: (727) 210-2350, Fax (727)210-2354 oversight of which is by the Accreditation Review Counsel on Education in Surgical Technology and Surgical Assisting (ARC/STSA), 6 W. Dry Creek Circle, Suite #110, Littleton, CO 80120, Phone: (303) 694-9262 Fax: (303) 741-3655 [info@arcstsa.org](mailto:info@arcstsa.org).

Surgical Technologists may obtain professional certification from the National Board of Surgical Technology and Surgical Assisting (NBSTSA) by graduating from a CAAHEP-accredited program and passing a national certification examination. They may then use the designation Certified Surgical Technologist, or CST.

The NCTC Surgical Technology program runs August to August and can only accept 24 students a year. There are no prerequisites. As a certificate program, passing the college entrance exam (TSI) is not required.

There are only 2 Surgical Technology courses that may be taken in advance of the complete curriculum. Medical Terminology (HITT1205) is offered year-round and only online. The other course that may be taken in advance is Anatomy and Physiology. There are two types and the Surgical Technology Program will accept either one. Anatomy and Physiology for Allied Health ([VNSG 1420](#)) is a one semester course and is not transferable for college credit as a science. It only counts toward some certificate programs and regular college entrance tests are not required to take it. The other, A&P ([BIOL 2401](#) and [2402](#)) requires the student to take the TSI Assessment, or be exempt from placement testing, before registration. Whichever A&P course one chooses, it must be completed by the end of the first semester of Surgical Technology classes with a passing grade of at least a "C" or the student will not be allowed to continue in the program.

Criminal background checks and drug screens will be conducted on all students and may disqualify individuals from the program. Titer evidence of immunity to Hepatitis B and communicable diseases according to CDC guidelines is required. American Heart Healthcare Provider CPR certification is required. A physical exam by private physician is required. Documentation of personal health insurance is required. Attendance at class and clinicals is required. NCTC Allied Health programs have a non-tobacco policy.

## Program Costs

Cost of the Surgical Technology program is figured the same as degree seeking students. However, the Surgical Technology student can expect to pay additional costs for being in a Health Science Program, such as uniform costs, laboratory fees, physical, immunizations, health insurance, background checks, drug screening and CPR training. Textbooks for the course are purchased in the first semester of study for the entire program, and they are estimated at \$600. Estimated costs for the program is between \$5,500 to \$6,500.

## Admission Process

1. Register for and attend a Surgical Technology Program information session. These are held in the spring at a variety of times on the NCTC Corinth Campus. The schedule is on the NCTC website [nctc.edu/health-sciences/surgical-technology.html](http://nctc.edu/health-sciences/surgical-technology.html) and registration can be done via e-mail or phone.
2. At the information session, apply to the Surgical Technology program and receive permission to take the admission test. Pay for the test at the NCTC Business Office and take the receipt to the test site on the test date.
3. Complete the admission process into North Central Texas College. The applicant must have earned either a high school diploma or a GED (General Equivalency Diploma). If one has attended college before, official transcripts from each college attended are required. If one has not attended college before, high school transcripts or GED scores are required. Other requirements may apply to international students.
4. Contact the Financial Aid Department and fill out a FAFSA form if needed.
5. Sit for the admission test on the designated date.
6. Admission is offered in rank order of the admission exam composite scores. The program attempts to start with 24 students, but no alternates are admitted after the course begins.
7. The student must be at least 18 years old the first day of class.

The overall program goal is to prepare competent entry-level surgical technologists in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains. The curriculum uses the three areas of learning acquisition arranged in a hierarchy of simple to complex

## Programmatic Outcomes

Upon successful completion of this course, the student will be able to:

- Identify the physical, interpersonal, and ethical aspects of the perioperative environment
- Discuss basic concepts of surgical pharmacology and anesthesia
- Identify basic concepts of technological sciences
- Demonstrate patient care concepts

## Modality of Program

The Surgical Technology classes are face to face.

**NOTICE:** The Surgical Technology Program reserves the right to change the curriculum and program requirements as deemed necessary for maintenance of high quality education.

# Surgical Technology Certificate

## Certificate Requirements

<b>First Semester</b>		
<a href="#">VNSG 1420</a>	ANATOMY AND PHYSIOLOGY FOR ALLIED HEALTH	4 credit hours
<a href="#">SRGT 1505</a>	INTRODUCTION TO SURGICAL TECHNOLOGY	5 credit hours
<a href="#">SRGT 1509</a>	FUNDAMENTALS OF PERIOPERATIVE CONCEPTS AND TECHNIQUES	5 credit hours
<a href="#">SRGT 1261</a>	CLINICAL - SURGICAL/ OPERATING ROOM TECHNICIAN (INTRODUCTORY)	2 credit hours
<a href="#">HITT 1205</a>	MEDICAL TERMINOLOGY	2 credit hours
Total Credit Hours:		18
<b>Second Semester</b>		
<a href="#">SRGT 1441</a>	SURGICAL PROCEDURES I	4 credit hours
<a href="#">SRGT 1442</a>	SURGICAL PROCEDURES II	4 credit hours
<a href="#">SRGT 1661</a>	CLINICAL - SURGICAL/ OPERATING ROOM TECHNICIAN (INTERMEDIATE)	6 credit hours
Total Credit Hours:		14

	<b>Third Semester</b>	
<a href="#">SRGT 1662</a>	CLINICAL - SURGICAL/ OPERATING ROOM TECHNICIAN (ADVANCED)	6 credit hours

Total Credit Hours: 6

**Total Credit Hours: 38**

*\*SRGT1662 Will constitute the capstone experience.*

# Surgical Technology AAS

Associate of Applied Science Degree

## Graduation Requirements

A minimum of 60 semester hours is required for graduation with an Associate of Applied Science Degree.

Students who have completed the NCTC Certificate in Surgical Technology may, with completion of the additional 26 required academic hours, apply to NCTC to be awarded an AAS in Surgical Technology. Academic courses may be taken before, during or after the certificate portion of the program. Degree seeking students must pass all sections of the Texas Success Initiative (TSI).

## Degree Requirements

	<b>First Semester</b>	
<a href="#">BIOL 2401</a>	HUMAN ANATOMY AND PHYSIOLOGY I	4 credit hours
<a href="#">ENGL 1301</a>	COMPOSITION I	3 credit hours
<a href="#">BIOL 1322</a>	NUTRITION & DIET THERAPY I	3 credit hours
	ANY LANGUAGE, PHILOSOPHY AND CULTURE, OR CREATIVE ARTS ELECTIVE	3 credit hours

Total Credit Hours: 13

**Second Semester**

<a href="#">BIOL 2402</a>	HUMAN ANATOMY AND PHYSIOLOGY II	4 credit hours
<a href="#">ENGL 1302</a>	COMPOSITION II	3 credit hours
<a href="#">MATH 1342</a>	ELEMENTARY STATISTICAL METHODS	3 credit hours
<a href="#">PSYC 2314</a>	LIFESPAN GROWTH & DEVELOPMENT	3 credit hours
Total Credit Hours:		13

**Third Semester**

<a href="#">HITT 1205</a>	MEDICAL TERMINOLOGY	2 credit hours
<a href="#">SRGT 1261</a>	CLINICAL - SURGICAL/ OPERATING ROOM TECHNICIAN (INTRODUCTORY)	2 credit hours
<a href="#">SRGT 1505</a>	INTRODUCTION TO SURGICAL TECHNOLOGY	5 credit hours
<a href="#">SRGT 1509</a>	FUNDAMENTALS OF PERIOPERATIVE CONCEPTS AND TECHNIQUES	5 credit hours
Total Credit Hours:		14

**Fourth Semester**

<a href="#">SRGT 1441</a>	SURGICAL PROCEDURES I	4 credit hours
<a href="#">SRGT 1442</a>	SURGICAL PROCEDURES II	4 credit hours
<a href="#">SRGT 1661</a>	CLINICAL - SURGICAL/ OPERATING ROOM TECHNICIAN (INTERMEDIATE)	6 credit hours
Total Credit Hours:		14

**Fifth Semester**

<a href="#">SRGT 1662</a>	CLINICAL - SURGICAL/ OPERATING ROOM TECHNICIAN (ADVANCED)	6 credit hours
Total Credit Hours:		6

**Total Credit Hours: 60**

# Transfer Pathways

North Central Texas College strives to provide students the courses of study that match their educational goals. To accomplish this academic pathways are provided to shape a student's educational experience. Pathways do not supplant degree plans nor are they prescriptive, but are more general in nature. Students seeking more detail are encouraged to visit a Counselor or Advisor on their campus for pathways that provide more transfer information. Additionally, Counselors and advisors can provide degree plans more specifically tied to their educational needs.

- [Associate of Arts in Teaching \(AAT\) Pathways](#)
- [Associate of Arts \(AA\) Pathways](#)
- [Associate of Science \(AS\) Pathways](#)

## NCTC ASSOCIATE OF ARTS IN TEACHING (AAT) DEGREE, GRADES 7-12

### SUGGESTED PATHWAY FOR ENGLISH MAJORS (TEACHER CERTIFICATION)

The Associate of Arts in Teaching (AAT) degree is designed to transfer into a bachelor's degree at a four-year public university in the state of Texas. The transfer university is the final authority on determining if all the courses within the NCTC Associate of Arts in Teaching degree are transferable and applicable for an intended major, so students should consult with an advisor at the university level regarding all coursework to be completed at NCTC. The following is a recommended sequence of courses for students intending on majoring in English (7-12, Teacher Certification) at a Texas public university. Students placing at college preparatory levels will have additional courses to complete before taking eligible college-level courses in this sequence, and some courses may have prerequisites; please check the course descriptions in the NCTC catalog. The amount of courses taken each semester can also be adjusted as several core classes are offered during Summer and Mini-mesters; this sequence only takes into account Fall and Spring semesters. **Depending on how many credit hours you have already attempted, all courses on this pathway may not be eligible for Financial Aid through NCTC.**

<b>FIRST SEMESTER</b>		<b>CREDIT HOURS</b>
ENGL 1301	Composition I	3
EDUC 1300	Learning Frameworks	3
HIST 1301	U.S. History I ( <i>up to 1865</i> )	3
MATH Core	MATH 1332-Contemporary Math	3
SOCIAL/BEHAV Core	SPCH 1318-Interpersonal Comm. or other Social Science core	<u>3</u>
		<b>15</b>
<b>SECOND SEMESTER</b>		
ENGL 1302	Composition II	3
HIST 1302	U.S. History II ( <i>1865 to present</i> )	3
1 <sup>st</sup> LAB SCIENCE Core	BIOL 1408 or 2406, CHEM 1406 or PHYS 1415, ASTR 1403 or 1404, GEOL 1401 or 1402, or HORT 1401 ( <i>options for non-Science majors</i> )	4
ARTS Core	DRAM 1310-Intro. to Theater or other Creative Arts core	3
Elective	EDUC 1301-Intro. to the Teaching Profession*	<u>3</u>
		<b>16</b>
<b>THIRD SEMESTER</b>		
GOVT 2305	American National Government	3
2 <sup>nd</sup> LAB SCIENCE	BIOL 1408 or 2406, CHEM 1406 or PHYS 1415, ASTR 1403 or 1404, GEOL 1401 or 1402, or HORT 1401 ( <i>options for non-Science majors</i> )	4
Elective	ENGL 2327-American Lit. I* or Foreign Language I ( <i>if required</i> )*	3-4
Elective	ENGL 2322-British Lit. I*	3
Elective	EDUC 2301-Intro. to Special Populations*	<u>3</u>
		<b>15-16</b>
<b>FOURTH SEMESTER</b>		
GOVT 2306	Texas Government	3
SPCH 1315 or 1321	Public Speaking or Business and Professional Speech	3
LANG/PHIL/CULTURE Core	HUMA 1301-Intro. to Humanities or other Lang/Phil/Culture core	3
Elective	ENGL 2328-American Lit. II* or Foreign Language II ( <i>if required</i> )*	3-4
Elective	ENGL 2323-British Lit. II*	<u>3</u>
		<b>15-16</b>
	<u>Total Credit Hours</u>	<b>61-63*</b>

\*Consult with your intended transfer university AND an advisor at NCTC to determine which courses would satisfy both elective and core requirements for your major, and also how many credit hours beyond the 60 hours required for an AAT degree are transferable. Some universities may require 12-14 hours of a Foreign Language for Bachelor of Arts majors, or proven language proficiency through credits earned by CLEP testing.

Specific courses/major requirements for some common transfer universities are listed below:

#### Midwestern State University:

<http://www.mwsu.edu/academics/undergraduate-majors-and-programs>

#### Texas Woman's University:

<http://www.twu.edu/undergraduate-studies/graduate-on-time.asp>

#### University of North Texas:

<http://registrar.unt.edu/transfer-guides>

Sam Houston State: <http://www.shsu.edu/prospects/transfer/>  
 Southeastern Oklahoma University: <http://www.se.edu/2plus2/>  
 Texas A&M University (College Station):  
<http://admissions.tamu.edu/transfer/majors>

#### Texas Tech University:

<http://www.depts.ttu.edu/admissions/advising/>  
 UT Austin: <http://www.utexas.edu/student/admissions/tccn/>  
 University of Texas at Dallas:  
<https://www.utdallas.edu/enroll/transfer/plans/>

**NCTC Advising Questions:** [counseling@nctc.edu](mailto:counseling@nctc.edu)

**NCTC ASSOCIATE OF ARTS IN TEACHING (AAT) DEGREE, GRADES 7-12****SUGGESTED PATHWAY FOR HISTORY MAJORS (TEACHER CERTIFICATION)**

The Associate of Arts in Teaching (AAT) degree is designed to transfer into a bachelor's degree at a four-year public university in the state of Texas. The transfer university is the final authority on determining if all the courses within the NCTC Associate of Arts in Teaching degree are transferable and applicable for an intended major, so students should consult with an advisor at the university level regarding all coursework to be completed at NCTC. The following is a recommended sequence of courses for students intending on majoring in History (7-12, Teacher Certification) at a Texas public university. Students placing at college preparatory levels will have additional courses to complete before taking eligible college-level courses in this sequence, and some courses may have prerequisites; please check the course descriptions in the NCTC catalog. The amount of courses taken each semester can also be adjusted as several core classes are offered during Summer and Mini-mesters; this sequence only takes into account Fall and Spring semesters. **Depending on how many credit hours you have already attempted, all courses on this pathway may not be eligible for Financial Aid through NCTC.**

<b>FIRST SEMESTER</b>		<b>CREDIT HOURS</b>
ENGL 1301	Composition I	3
HIST 1301	U.S. History I ( <i>up to 1865</i> )	3
EDUC/PSYC 1300	Learning Frameworks	3
MATH Core	MATH 1342-Elementary Stats. or MATH 1332-Contemporary Math	3
SOCIAL/BEHAV Core	SOCI 1301-Intro. to Sociology	<u>3</u>
		<b>15</b>
<b>SECOND SEMESTER</b>		
2 <sup>nd</sup> ENGL Core	ENGL 1302-Composition II or ENGL 2311-Technical Writing	3
HIST 1302	U.S. History II ( <i>1865 to present</i> )	3
LANG/PHIL/CULTURE Core	HUMA 1301-Intro. to Humanities or other Lang/Phil/Culture core	3
1 <sup>st</sup> LAB SCIENCE Core	BIOL 1408 or 2406, CHEM 1406 or PHYS 1415, ASTR 1403 or 1404, GEOL 1401 or 1402, or HORT 1401 ( <i>options for non-Science majors</i> )	4
ARTS Core	ARTS 1301-Art Appreciation or other Creative Arts core	<u>3</u>
		<b>16</b>
<b>THIRD SEMESTER</b>		
GOVT 2305	American National Government	3
SPCH 1315 or 1321	Public Speaking or Business and Professional Speech	3
2 <sup>nd</sup> LAB SCIENCE Core	BIOL 1408 or 2406, CHEM 1406 or PHYS 1415, ASTR 1403 or 1404, GEOL 1401 or 1402, or HORT 1401 ( <i>options for non-Science majors</i> )	4
Elective	HIST 2321-World Civilizations I or Foreign Language I ( <i>if required</i> )*	3-4
Elective	EDUC 1301-Intro. to the Teaching Profession	<u>3</u>
		<b>16-17</b>
<b>FOURTH SEMESTER</b>		
GOVT 2306	Texas Government	3
Elective	HIST 2322-World Civilizations II*	3
Elective	HIST 2301-Texas History or Foreign Language II ( <i>if required</i> )*	3-4
Elective	EDUC 2301-Intro. to Special Populations*	3
Elective	ENGL 2327-American Literature I*	<u>3</u>
		<b>15-16</b>
	<u>Total Credit Hours</u>	62-64*

\*Consult with your intended transfer university AND an advisor at NCTC to determine which courses would satisfy both elective and core requirements for your major, and also how many credit hours beyond the 60 hours required for an AAT degree are transferable. Some universities may require 12-14 hours of a Foreign Language for Bachelor of Arts majors, or proven language proficiency through credits earned by CLEP testing.

Specific courses/major requirements for some common transfer universities are listed below:

**Midwestern State University:**

<http://www.mwsu.edu/academics/undergraduate-majors-and-programs>

**Texas Woman's University:**

<http://www.twu.edu/undergraduate-studies/graduate-on-time.asp>

**University of North Texas:**

<http://registrar.unt.edu/transfer-guides>

Sam Houston State: <http://www.shsu.edu/prospects/transfer/>  
 Southeastern Oklahoma University: <http://www.se.edu/2plus2/>  
 Texas A&M University (College Station):  
<http://admissions.tamu.edu/transfer/majors>

**Texas Tech University:**

<http://www.depts.ttu.edu/admissions/advising/>

UT Austin: <http://www.utexas.edu/student/admissions/tccn/>

**University of Texas at Dallas:**

<https://www.utdallas.edu/enroll/transfer/plans/>

**NCTC Advising Questions:** [counseling@nctc.edu](mailto:counseling@nctc.edu)



**NCTC ASSOCIATE OF ARTS IN TEACHING (AAT) DEGREE, GRADES 7-12**  
**SUGGESTED PATHWAY FOR KINESIOLOGY MAJORS (TEACHER CERTIFICATION)**

The Associate of Arts in Teaching (AAT) degree is designed to transfer into a bachelor's degree at a four-year public university in the state of Texas. The transfer university is the final authority on determining if all the courses within the NCTC Associate of Arts in Teaching degree are transferable and applicable for an intended major, so students should consult with an advisor at the university level regarding all coursework to be completed at NCTC. The following is a recommended sequence of courses for students intending on majoring in Kinesiology (7-12, Teacher Certification) at a Texas public university. Students placing at college preparatory levels will have additional courses to complete before taking eligible college-level courses in this sequence, and some courses may have prerequisites; please check the course descriptions in the NCTC catalog. The amount of courses taken each semester can also be adjusted as several core classes are offered during Summer and Mini-mesters; this sequence only takes into account Fall and Spring semesters. **Depending on how many credit hours you have already attempted, all courses on this pathway may not be eligible for Financial Aid through NCTC.**

FIRST SEMESTER		CREDIT HOURS
ENGL 1301	Composition I	3
EDUC/PSYC 1300	Learning Frameworks	3
HIST 1301	U.S. History I (up to 1865)	3
MATH Core	MATH 1342-Elementary Statistics	3
Elective	BIOL 1322-Nutrition*	<u>3</u>
		<b>15</b>
SECOND SEMESTER		
2 <sup>nd</sup> ENGL Core	ENGL 1302-Composition II or ENGL 2311-Technical Writing	3
HIST 1302	U.S. History II (1865 to present)	3
1 <sup>st</sup> LAB SCIENCE Core	BIOL 2401-Anatotomy and Physiology I	4
SOCIAL/BEHAV Core	PSYC 2314-Lifespan Growth and Dev.	3
Elective	PHED 1301-Intro. to Physical Fitness/Sport*	<u>3</u>
		<b>16</b>
THIRD SEMESTER		
GOVT 2305	American National Government	3
2 <sup>nd</sup> LAB SCIENCE Core	BIOL 2402-Anatotomy and Physiology II	4
LANG/PHIL/CULTURE Core	HUMA 1301-Intro. to Humanities or other Lang/Phil/Culture core	3
Elective	PHED 1338-Concepts of Fitness*	3
Elective	EDUC 1301-Intro. to the Teaching Profession*	<u>3</u>
		<b>16</b>
FOURTH SEMESTER		
GOVT 2306	Texas Government	3
ARTS Core	ARTS 1301-Art Appreciation or other Creative Arts core	3
SPCH 1315 or 1321	Public Speaking or Business and Professional Speech	3
Elective	EDUC 2301-Intro. to Special Populations*	3
Elective	PHED 1321-Theories of Coaching I*	<u>3</u>
		<b>15</b>
	<u>Total Credit Hours</u>	<b>62*</b>

\*Consult with your intended transfer university AND an advisor at NCTC to determine which courses would satisfy both elective and core requirements for your major, and also how many credit hours beyond the 60 hours required for an AAT degree are transferable.

Specific courses/major requirements for some common transfer universities are listed below:

**Midwestern State University:**

<http://www.mwsu.edu/academics/undergraduate-majors-and-programs>

**Texas Woman's University:**

<http://www.twu.edu/undergraduate-studies/graduate-on-time.asp>

**University of North Texas:**

<http://registrar.unt.edu/transfer-guides>

**Sam Houston State:** <http://www.shsu.edu/prospects/transfer/>  
**Southeastern Oklahoma University:** <http://www.se.edu/2plus2/>  
**Texas A&M University (College Station):**  
<http://admissions.tamu.edu/transfer/majors>  
**Texas Tech University:**  
<http://www.depts.ttu.edu/admissions/advising/>  
**UT Austin:** <http://www.utexas.edu/student/admissions/tccn/>  
**University of Texas at Dallas:**  
<https://www.utdallas.edu/enroll/transfer/plans/>

**NCTC Advising Questions:** [counseling@nctc.edu](mailto:counseling@nctc.edu)

**NCTC ASSOCIATE OF ARTS IN TEACHING (AAT) DEGREE, GRADES 7-12****SUGGESTED PATHWAY FOR MATH MAJORS (TEACHER CERTIFICATION)**

The Associate of Arts in Teaching (AAT) degree is designed to transfer into a bachelor's degree at a four-year public university in the state of Texas. The transfer university is the final authority on determining if all the courses within the NCTC Associate of Arts in Teaching degree are transferable and applicable for an intended major, so students should consult with an advisor at the university level regarding all coursework to be completed at NCTC. The following is a recommended sequence of courses for students intending on majoring in Math (7-12, Teacher Certification) at a Texas public university. Students placing at college preparatory levels will have additional courses to complete before taking eligible college-level courses in this sequence, and some courses may have prerequisites; please check the course descriptions in the NCTC catalog. The amount of courses taken each semester can also be adjusted as several core classes are offered during Summer and Mini-mesters; this sequence only takes into account Fall and Spring semesters. **Depending on how many credit hours you have already attempted, all courses on this pathway may not be eligible for Financial Aid through NCTC.**

FIRST SEMESTER		CREDIT HOURS
ENGL 1301	Composition I	3
EDUC 1300	Learning Frameworks	3
HIST 1301	U.S. History I (up to 1865)	3
MATH Core	MATH 1316-Trigonometry or MATH 2412-Pre-Calculus**	3
SOCIAL/BEHAV Core	SOCI 1301-Intro. to Sociology or other Social Science core	<u>3</u>
		<b>15</b>
SECOND SEMESTER		
ENGL 2311	Technical Writing	3
HIST 1302	U.S. History II (1865 to present)	3
1 <sup>st</sup> MATH Elective	MATH 2413-Calculus I*	4
1 <sup>st</sup> LAB SCIENCE Core Elective	BIOL 1406-Bio. for Science Majors I or CHEM 1411-General Chemistry I**	4
	EDUC 1301-Intro. to the Teaching Profession*	<u>3</u>
		<b>17</b>
THIRD SEMESTER		
GOVT 2305	American National Government	3
SPCH 1315 or 1321	Public Speaking or Business and Professional Speech	3
2 <sup>nd</sup> MATH Elective	MATH 2414-Calculus II*	4
2 <sup>nd</sup> LAB SCIENCE Elective	BIOL 1407-Bio. for Science Majors II or CHEM 1412-General Chemistry II	4
	EDUC 2301-Intro. to Special Populations*	<u>3</u>
		<b>17</b>
FOURTH SEMESTER		
GOVT 2306	Texas Government	3
LANG/PHIL/CULTURE Core	HUMA 1301-Intro. to Humanities or other Lang/Phil/Culture core	3
ARTS Core	MUSI 1306 or other Creative Arts core	3
3 <sup>rd</sup> MATH Elective	MATH 2415-Calculus III*	<u>4</u>
		<b>13</b>
	<u>Total Credit Hours</u>	<b>62*</b>

\*\*MATH 1314 is a prerequisite to MATH 1316, MATH 2412, and CHEM 1411; MATH 1314 along with either MATH 1316 or 2412 are prerequisites to PHYS 1401 or 2425. Credit for some Math prerequisites may be earned through approved scores on CLEP, AP, IB, ACT, SAT, or the Accuplacer College Math Test. Please see an advisor at NCTC for details, or consult the "Placement Testing" section of the NCTC catalog.

\*Consult with your intended transfer university AND an advisor to determine which NCTC courses would satisfy both elective and core requirements for your major, and also how many credit hours beyond the 60 hours required for an AS degree are transferable.

Specific courses/major requirements for some common transfer universities are listed below:

**Midwestern State University:**

<http://www.mwsu.edu/academics/undergraduate-majors-and-programs>

**Texas Woman's University:**

<http://www.twu.edu/undergraduate-studies/graduate-on-time.asp>

**University of North Texas:**

<http://registrar.unt.edu/transfer-guides>

Sam Houston State: <http://www.shsu.edu/prospects/transfer/>

Southeastern Oklahoma University: <http://www.se.edu/2plus2/>

Texas A&M University (College Station):

<http://admissions.tamu.edu/transfer/majors>

Texas Tech University:

<http://www.depts.ttu.edu/admissions/advising/>

UT Austin: <http://www.utexas.edu/student/admissions/tccn/>

University of Texas at Dallas:

<https://www.utdallas.edu/enroll/transfer/plans/>

**NCTC Advising Questions:** [counseling@nctc.edu](mailto:counseling@nctc.edu)

## NCTC ASSOCIATE OF ARTS IN TEACHING (AAT) DEGREE, GRADES 7-12

### SUGGESTED PATHWAY FOR **BIOLOGY** MAJORS (TEACHER CERTIFICATION)

The Associate of Arts in Teaching (AAT) degree is designed to transfer into a bachelor's degree at a four-year public university in the state of Texas. The transfer university is the final authority on determining if all the courses within the NCTC Associate of Arts in Teaching degree are transferable and applicable for an intended major, so students should consult with an advisor at the university level regarding all coursework to be completed at NCTC. The following is a recommended sequence of courses for students intending on majoring in Biology (7-12, Teacher Certification) at a Texas public university. Students placing at college preparatory levels will have additional courses to complete before taking eligible college-level courses in this sequence, and some courses may have prerequisites; please check the course descriptions in the NCTC catalog. The amount of courses taken each semester can also be adjusted as several core classes are offered during Summer and Mini-mesters; this sequence only takes into account Fall and Spring semesters. **Depending on how many credit hours you have already attempted, all courses on this pathway may not be eligible for Financial Aid through NCTC.**

<b>FIRST SEMESTER</b>		<b>CREDIT HOURS</b>
ENGL 1301	Composition I	3
EDUC 1300	Learning Frameworks	3
HIST 1301	U.S. History I (up to 1865)	3
MATH Core	MATH 1316-Trigonometry or MATH 2412-Pre-Calculus**	3
1 <sup>st</sup> LAB SCIENCE Core	BIOL 1406-Bio. for Science Majors I	<u>4</u>
		<b>16</b>
<b>SECOND SEMESTER</b>		
ENGL 2311	Technical Writing	3
HIST 1302	U.S. History II (1865 to present)	3
1 <sup>st</sup> MATH Elective	MATH 2413-Calculus I*	4
2 <sup>nd</sup> LAB SCIENCE Core	BIOL 1407-Bio. for Science Majors II	4
Elective	EDUC 1301-Intro. to the Teaching Profession*	<u>3</u>
		<b>17</b>
<b>THIRD SEMESTER</b>		
GOVT 2305	American National Government	3
SPCH 1315 or 1321	Public Speaking or Business and Professional Speech	3
SOCIAL/BEHAV Core	SOCI 1301-Intro. to Sociology or other Social Science core	3
3 <sup>rd</sup> LAB SCIENCE Elec.	CHEM 1411-General Chemistry I*	4
Elective	EDUC 2301-Intro. to Special Populations*	<u>3</u>
		<b>16</b>
<b>FOURTH SEMESTER</b>		
GOVT 2306	Texas Government	3
LANG/PHIL/CULTURE Core	HUMA 1301-Intro. to Humanities or other Lang/Phil/Culture core	3
ARTS Core	MUSI 1306-Music Appreciation or other Creative Arts core	3
4 <sup>th</sup> LAB SCIENCE Elec.	CHEM 1412-General Chemistry II*	<u>4</u>
		<b>13</b>
	<u>Total Credit Hours</u>	<b>62*</b>

**\*\*MATH 1314 is a prerequisite to MATH 1316, MATH 2412, and CHEM 1411; MATH 1314 along with either MATH 1316 or 2412 are prerequisites to PHYS 1401 or 2425. Credit for some Math prerequisites may be earned through approved scores on CLEP, AP, IB, ACT, SAT, or the Accuplacer College Math Test. Please see an advisor at NCTC for details, or consult the "Placement Testing" section of the NCTC catalog.**

*\*Consult with your intended transfer university AND an advisor to determine which NCTC courses would satisfy both elective and core requirements for your major, and also how many credit hours beyond the 60 hours required for an AAT degree are transferable.*

Specific courses/major requirements for some common transfer universities are listed below:

#### Midwestern State University:

<http://www.mwsu.edu/academics/undergraduate-majors-and-programs>

#### Texas Woman's University:

<http://www.twu.edu/undergraduate-studies/graduate-on-time.asp>

#### University of North Texas:

<http://registrar.unt.edu/transfer-guides>

Sam Houston State: <http://www.shsu.edu/prospects/transfer/>

Southeastern Oklahoma University: <http://www.se.edu/2plus2/>

Texas A&M University (College Station):

<http://admissions.tamu.edu/transfer/majors>

Texas Tech University:

<http://www.depts.ttu.edu/admissions/advising/>

UT Austin: <http://www.utexas.edu/student/admissions/tccn/>

University of Texas at Dallas:

<https://www.utdallas.edu/enroll/transfer/plans/>

**NCTC Advising Questions: [counseling@nctc.edu](mailto:counseling@nctc.edu)**

**NCTC ASSOCIATE OF ARTS IN TEACHING (AAT) DEGREE, GRADES 7-12**  
**SUGGESTED PATHWAY FOR CHEMISTRY MAJORS (TEACHER CERTIFICATION)**

The Associate of Arts in Teaching (AAT) degree is designed to transfer into a bachelor's degree at a four-year public university in the state of Texas. The transfer university is the final authority on determining if all the courses within the NCTC Associate of Arts in Teaching degree are transferable and applicable for an intended major, so students should consult with an advisor at the university level regarding all coursework to be completed at NCTC. The following is a recommended sequence of courses for students intending on majoring in Chemistry (7-12, Teacher Certification) at a Texas public university. Students placing at college preparatory levels will have additional courses to complete before taking eligible college-level courses in this sequence, and some courses may have prerequisites; please check the course descriptions in the NCTC catalog. The amount of courses taken each semester can also be adjusted as several core classes are offered during Summer and Mini-mesters; this sequence only takes into account Fall and Spring semesters. **Depending on how many credit hours you have already attempted, all courses on this pathway may not be eligible for Financial Aid through NCTC.**

FIRST SEMESTER		CREDIT HOURS
ENGL 1301	Composition I	3
EDUC 1300	Learning Frameworks	3
HIST 1301	U.S. History I (up to 1865)	3
MATH Core	MATH 1316-Trigonometry or MATH 2412-Pre-Calculus**	3
1 <sup>st</sup> LAB SCIENCE Core	CHEM 1411-General Chemistry I*	4
		<b>16</b>
SECOND SEMESTER		
ENGL 2311	Technical Writing	3
HIST 1302	U.S. History II (1865 to present)	3
1 <sup>st</sup> MATH Elective	MATH 2413-Calculus I*	4
2 <sup>nd</sup> LAB SCIENCE Core	CHEM 1412-General Chemistry II*	4
Elective	EDUC 1301-Intro. to the Teaching Profession*	3
		<b>17</b>
THIRD SEMESTER		
GOVT 2305	American National Government	3
SPCH 1315 or 1321	Public Speaking or Business and Professional Speech	3
SOCIAL/BEHAV Core	SOCI 1301-Intro. to Sociology or other Social Science core	3
3 <sup>rd</sup> LAB SCIENCE Elec.	CHEM 2423-Organic Chemistry I or PHYS 1401-College Physics I*	4
Elective	EDUC 2301-Intro. to Special Populations*	3
		<b>16</b>
FOURTH SEMESTER		
GOVT 2306	Texas Government	3
LANG/PHIL/CULTURE Core	HUMA 1301-Intro. to Humanities or other Lang/Phil/Culture core	3
ARTS Core	MUSI 1306-Music Appreciation or other Creative Arts core	3
4 <sup>th</sup> LAB SCIENCE Elec.	CHEM 2425-Organic Chemistry II or PHYS 1402-College Physics II*	4
		<b>13</b>
	<u>Total Credit Hours</u>	<b>62*</b>

\*\*MATH 1314 is a prerequisite to MATH 1316, MATH 2412, and CHEM 1411; MATH 1314 along with either MATH 1316 or 2412 are prerequisites to PHYS 1401 or 2425. Credit for some Math prerequisites may be earned through approved scores on CLEP, AP, IB, ACT, SAT, or the Accuplacer College Math Test. Please see an advisor at NCTC for details, or consult the "Placement Testing" section of the NCTC catalog.

\*Consult with your intended transfer university AND an advisor to determine which NCTC courses would satisfy both elective and core requirements for your major, and also how many credit hours beyond the 60 hours required for an AS degree are transferable.

Specific courses/major requirements for some common transfer universities are listed below:

**Midwestern State University:**

<http://www.mwsu.edu/academics/undergraduate-majors-and-programs>

**Texas Woman's University:**

<http://www.twu.edu/undergraduate-studies/graduate-on-time.asp>

**University of North Texas:**

<http://registrar.unt.edu/transfer-guides>

Sam Houston State: <http://www.shsu.edu/prospects/transfer/>  
 Southeastern Oklahoma University: <http://www.se.edu/2plus2/>  
 Texas A&M University (College Station):  
<http://admissions.tamu.edu/transfer/majors>

**Texas Tech University:**

<http://www.depts.ttu.edu/admissions/advising/>  
 UT Austin: <http://www.utexas.edu/student/admissions/tccn/>  
 University of Texas at Dallas:  
<https://www.utdallas.edu/enroll/transfer/plans/>

**NCTC Advising Questions:** [counseling@nctc.edu](mailto:counseling@nctc.edu)

## NCTC ASSOCIATE OF ARTS IN TEACHING (AAT) DEGREE, GRADES EC-6 & 4-8 SUGGESTED PATHWAY FOR *INTERDISCIPLINARY STUDIES (EC-6 & 4-8)* MAJORS

The Associate of Arts in Teaching (AAT) General Studies degree is designed to transfer into a bachelor's degree at a four-year public university in the state of Texas. The transfer university is the final authority on determining if all the courses within the NCTC Associate of Arts degree are transferable and applicable for an intended major, so students should consult with an advisor at the university level regarding all coursework to be completed at NCTC. The following is a recommended sequence of courses for students intending on majoring in Interdisciplinary Studies (EC-6 & 4-8) at a Texas public university. Students placing at college preparatory levels will have additional courses to complete before taking eligible college-level courses in this sequence, and some courses may have pre-requisites; please check the course descriptions in the NCTC catalog. The amount of courses taken each semester can also be adjusted as several core classes are offered during Summer and Mini-mesters; this sequence only takes into account Fall and Spring semesters. **Depending on how many credit hours you have already attempted, all courses on this pathway may not be eligible for Financial Aid through NCTC.**

FIRST SEMESTER		CREDIT HOURS
ENGL 1301	Composition I	3
EDUC 1300	Learning Frameworks	3
HIST 1301	U.S. History I ( <i>up to 1865</i> )	3
MATH Core	MATH 1314-College Algebra	3
SOCIAL/BEHAV Core	SOCI 1301-Intro. to Sociology or other Social Science core	<u>3</u>
		<b>15</b>
SECOND SEMESTER		
2 <sup>nd</sup> ENGL Core	ENGL 1302-Composition II	3
HIST 1302	U.S. History II ( <i>1865 to present</i> )	3
1 <sup>st</sup> LAB SCIENCE Core	BIOL 1408 or 2406, PHYS 1415, GEOL 1401 or 1402	4
2 <sup>nd</sup> Math Elec.	MATH 1350-Mathematics for Teachers I	3
Elective	EDUC 1301-Intro. to the Teaching Profession*	<u>3</u>
		<b>16</b>
THIRD SEMESTER		
GOVT 2305	American National Government	3
2 <sup>nd</sup> LAB SCIENCE Core	BIOL 1408 or 2406, PHYS 1415, GEOL 1401 or 1402	4
LANG/PHIL/CULTURE Core	ENGL 2327-American Lit. I or ENGL 2332-World Lit. I	3
3 <sup>rd</sup> Math Elec.	MATH 1351-Mathematics for Teachers II*	3
Elective	EDUC 2301-Intro. to Special Populations*	<u>3</u>
		<b>16</b>
FOURTH SEMESTER		
GOVT 2306	Texas Government	3
ARTS Core	ARTS 1301-Art Appreciation or other Creative Arts core	3
SPCH 1315 or 1321	Public Speaking or Business and Professional Speech	3
3 <sup>rd</sup> LAB SCIENCE Elec.	BIOL 1408 or 2406, PHYS 1415, GEOL 1401 or 1402*	<u>4</u>
		<b>13</b>
<i>Total Credit Hours</i>		60* ( <i>traditional AA is 60 hours</i> )

\*Consult with your intended transfer university AND an advisor at NCTC to determine which courses would satisfy both elective and core requirements for your major, and also how many credit hours beyond the 60 hours required for an AAT degree are transferable.

Specific courses/major requirements for some common transfer universities are listed below:

### Midwestern State University:

<http://www.mwsu.edu/academics/undergraduate-majors-and-programs>

### Texas Woman's University:

<http://www.twu.edu/undergraduate-studies/graduate-on-time.asp>

### University of North Texas:

<http://registrar.unt.edu/transfer-guides>

Sam Houston State: <http://www.shsu.edu/prospects/transfer/>  
 Southeastern Oklahoma University: <http://www.se.edu/2plus2/>  
 Texas A&M University (College Station):  
<http://admissions.tamu.edu/transfer/majors>  
 Texas Tech University:  
<http://www.depts.ttu.edu/admissions/advising/>  
 UT Austin: <http://www.utexas.edu/student/admissions/tccn/>  
 University of Texas at Dallas:  
<https://www.utdallas.edu/enroll/transfer/plans/>

**NCTC Advising Questions:** [counseling@nctc.edu](mailto:counseling@nctc.edu)

**NCTC ASSOCIATE OF ARTS IN TEACHING (AAT) DEGREE, GRADES 7-12**  
**SUGGESTED PATHWAY FOR VISUAL ARTS MAJORS (TEACHER CERTIFICATION)**

The Associate of Arts in Teaching (AAT) degree is designed to transfer into a bachelor's degree at a four-year public university in the state of Texas. The transfer university is the final authority on determining if all the courses within the NCTC Associate of Arts in Teaching degree are transferable and applicable for an intended major, so students should consult with an advisor at the university level regarding all coursework to be completed at NCTC. The following is a recommended sequence of courses for students intending on majoring in Visual Arts (7-12, Teacher Certification) at a Texas public university. Students placing at college preparatory levels will have additional courses to complete before taking eligible college-level courses in this sequence, and some courses may have prerequisites; please check the course descriptions in the NCTC catalog. The amount of courses taken each semester can also be adjusted as several core classes are offered during Summer and Mini-mesters; this sequence only takes into account Fall and Spring semesters. **Depending on how many credit hours you have already attempted, all courses on this pathway may not be eligible for Financial Aid through NCTC.**

<b>FIRST SEMESTER</b>		<b>CREDIT HOURS</b>
ENGL 1301	Composition I	3
HIST 1301	U.S. History I ( <i>up to 1865</i> )	3
EDUC/PSYC 1300	Learning Frameworks	3
MATH Core	MATH 1332-Contemporary Math	3
SOCIAL/BEHAV Core	SOCI 1301-Intro. to Sociology	<u>3</u>
		<b>15</b>
<b>SECOND SEMESTER</b>		
2 <sup>nd</sup> ENGL Core	ENGL 1302-Composition II or ENGL 2311-Technical Writing	3
HIST 1302	U.S. History II ( <i>1865 to present</i> )	3
1 <sup>st</sup> LAB SCIENCE Core	BIOL 1408 or 2406, CHEM 1406 or PHYS 1415, ASTR 1403 or 1404, GEOL 1401 or 1402, or HORT 1401 ( <i>options for non-Science majors</i> )	4
ARTS Core	ARTS 1301-Art Appreciation	3
Elective	EDUC 1301-Intro. to the Teaching Profession*	<u>3</u>
		<b>16</b>
<b>THIRD SEMESTER</b>		
GOVT 2305	American National Government	3
2 <sup>nd</sup> LAB SCIENCE Core	BIOL 1408 or 2406, CHEM 1406 or PHYS 1415, ASTR 1403 or 1404, GEOL 1401 or 1402, or HORT 1401 ( <i>options for non-Science majors</i> )	4
Elective	ARTS 1316-Drawing I*	3
Elective	ARTS 1303-Art History I*	3
Elective	EDUC 2301-Intro. to Special Populations*	<u>3</u>
		<b>16</b>
<b>FOURTH SEMESTER</b>		
GOVT 2306	Texas Government	3
SPCH 1315 or 1321	Public Speaking or Business and Professional Speech	3
LANG/PHIL/CULTURE Core	PHIL 1301-Intro. to Philosophy or other Lang/Phil/Culture core	3
Elective	ARTS 1317-Drawing II*	3
Elective	ARTS 1304-Art History II*	<u>3</u>
		<b>15</b>
	<u>Total Credit Hours</u>	<b>62*</b>

\*Consult with your intended transfer university AND an advisor at NCTC to determine which courses would satisfy both elective and core requirements for your major, and also how many credit hours beyond the 60 hours required for an AAT degree are transferable.

Specific courses/major requirements for some common transfer universities are listed below:

**Midwestern State University:**

<http://www.mwsu.edu/academics/undergraduate-majors-and-programs>

**Texas Woman's University:**

<http://www.twu.edu/undergraduate-studies/graduate-on-time.asp>

**University of North Texas:**

<http://registrar.unt.edu/transfer-guides>

**Sam Houston State:** <http://www.shsu.edu/prospects/transfer/>  
**Southeastern Oklahoma University:** <http://www.se.edu/2plus2/>  
**Texas A&M University (College Station):**  
<http://admissions.tamu.edu/transfer/majors>  
**Texas Tech University:**  
<http://www.depts.ttu.edu/admissions/advising/>  
**UT Austin:** <http://www.utexas.edu/student/admissions/tccc/>  
**University of Texas at Dallas:**  
<https://www.utdallas.edu/enroll/transfer/plans/>

**NCTC Advising Questions:** [counseling@nctc.edu](mailto:counseling@nctc.edu)  
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**NCTC ASSOCIATE OF ARTS (AA) GENERAL STUDIES DEGREE****SUGGESTED PATHWAY FOR ANTHROPOLOGY MAJORS**

The Associate of Arts (AA) General Studies degree is designed to transfer into a bachelor's degree at a four-year public university in the state of Texas. The transfer university is the final authority on determining if all the courses within the NCTC Associate of Arts degree are transferable and applicable for an intended major, so students should consult with an advisor at the university level regarding all coursework to be completed at NCTC. The following is a recommended sequence of courses for students intending on majoring in Anthropology at a Texas public university. Students placing at college preparatory levels will have additional courses to complete before taking eligible college-level courses in this sequence, and some courses may have pre-requisites; please check the course descriptions in the NCTC catalog. The amount of courses taken each semester can also be adjusted as several core classes are offered during Summer and Mini-mesters; this sequence only takes into account Fall and Spring semesters. **Depending on how many credit hours you have already attempted, all courses on this pathway may not be eligible for Financial Aid through NCTC.**

<b>FIRST SEMESTER</b>		<b>CREDIT HOURS</b>
ENGL 1301	Composition I	3
HIST 1301	U.S. History I ( <i>up to 1865</i> )	3
EDUC/PSYC 1300	Learning Frameworks	3
MATH Core	MATH 1342-Elementary Stats.	3
SOCIAL/BEHAV Core	ANTH 2346-General Anthropology	<u>3</u>
		<b>15</b>
<b>SECOND SEMESTER</b>		
2 <sup>nd</sup> ENGL Core	ENGL 1302-Composition II or ENGL 2311-Technical Writing	3
HIST 1302	U.S. History II ( <i>1865 to present</i> )	3
LANG/PHIL/CULTURE Core	HUMA 1301 or other Lang/Phil/Culture core	3
1 <sup>st</sup> LAB SCIENCE Core	BIOL 1408 or 2406, CHEM 1406 or PHYS 1415, ASTR 1403 or 1404, GEOL 1401 or 1402, or HORT 1401 ( <i>options for non-Science majors</i> )	4
ARTS Core	ARTS 1301-Art Appreciation or other Creative Arts core	<u>3</u>
		<b>16</b>
<b>THIRD SEMESTER</b>		
GOVT 2305	American National Government	3
SPCH 1315 or 1321	Public Speaking or Business and Professional Speech	3
2 <sup>nd</sup> LAB SCIENCE Core	BIOL 1408 or 2406, CHEM 1406 or PHYS 1415, ASTR 1403 or 1404, GEOL 1401 or 1402, or HORT 1401 ( <i>options for non-Science majors</i> )	4
Elective	HIST 2321-World Civilizations I*	3
Elective	SOCI 1301-Intro. to Sociology or Foreign Language I ( <i>if required</i> )*	<u>3-4</u>
		<b>16-17</b>
<b>FOURTH SEMESTER</b>		
GOVT 2306	Texas Government	3
Elective	ANTH 2351-Cultural Anthropology*	3
Elective	HIST 2322-World Civilizations II*	3
Elective	SOCI 2319-Minority Studies*	3
Elective	PSYC 2301-Intro. to Psychology or Foreign Language II ( <i>if required</i> )*	<u>3-4</u>
		<b>15-16</b>
	<u>Total Credit Hours</u>	62-64*

\*Consult with your intended transfer university AND an advisor at NCTC to determine which courses would satisfy both elective and core requirements for your major, and also how many credit hours beyond the 60 hours required for an AA degree are transferable. Some universities may require 12-14 hours of a Foreign Language for Bachelor of Arts majors, or proven language proficiency through credits earned by CLEP testing.

Specific courses/major requirements for some common transfer universities are listed below:

**Midwestern State University:**

<http://www.mwsu.edu/academics/undergraduate-majors-and-programs>

**Texas Woman's University:**

<http://www.twu.edu/undergraduate-studies/graduate-on-time.asp>

**University of North Texas:**

<http://registrar.unt.edu/transfer-guides>

Sam Houston State: <http://www.shsu.edu/prospects/transfer/>  
 Southeastern Oklahoma University: <http://www.se.edu/2plus2/>  
 Texas A&M University (College Station):  
<http://admissions.tamu.edu/transfer/majors>  
 Texas Tech University:  
<http://www.depts.ttu.edu/admissions/advising/>  
 UT Austin: <http://www.utexas.edu/student/admissions/tccn/>  
 University of Texas at Dallas:  
<https://www.utdallas.edu/enroll/transfer/plans/>

**NCTC Advising Questions: [counseling@nctc.edu](mailto:counseling@nctc.edu)**

**NCTC ASSOCIATE OF ARTS (AA) GENERAL STUDIES DEGREE**  
**SUGGESTED PATHWAY FOR ACCOUNTING, BUSINESS, & ECONOMICS MAJORS**

The Associate of Arts (AA) General Studies degree is designed to transfer into a bachelor's degree at a four-year public university in the state of Texas. The transfer university is the final authority on determining if all the courses within the NCTC Associate of Arts degree are transferable and applicable for an intended major, so students should consult with an advisor at the university level regarding all coursework to be completed at NCTC. The following is a recommended sequence of courses for students intending on majoring in Accounting, Business, or Economics at a Texas public university. Students placing at college preparatory levels will have additional courses to complete before taking eligible college-level courses in this sequence, and some courses may have pre-requisites; please check the course descriptions in the NCTC catalog. The amount of courses taken each semester can also be adjusted as several core classes are offered during Summer and Mini-mesters; this sequence only takes into account Fall and Spring semesters. **Depending on how many credit hours you have already attempted, all courses on this pathway may not be eligible for Financial Aid through NCTC.**

<b>FIRST SEMESTER</b>		<b>CREDIT HOURS</b>
ENGL 1301	Composition I	3
EDUC/PSYC 1300	Learning Frameworks	3
HIST 1301	U.S. History I (up to 1865)	3
MATH Core	MATH 1314-College Algebra or MATH 1324-Business Analysis Math	3
SOCIAL/BEHAV Core	ECON 2301-Macroeconomics	<u>3</u>
		<b>15</b>
<b>SECOND SEMESTER</b>		
2 <sup>nd</sup> ENGL Core	ENGL 1302-Composition II or ENGL 2311-Technical Writing	3
HIST 1302	U.S. History II (1865 to present)	3
1 <sup>st</sup> LAB SCIENCE Core	BIOL 1408 or 2406, CHEM 1406 or PHYS 1415, ASTR 1403 or 1404, GEOL 1401 or 1402, or HORT 1401 (options for non-Science majors)	4
Elective	MATH 1325-Business Calculus*	3
Elective	ECON 2302-Microeconomics*	<u>3</u>
		<b>16</b>
<b>THIRD SEMESTER</b>		
GOVT 2305	American National Government	3
2 <sup>nd</sup> LAB SCIENCE Core	BIOL 1408 or 2406, CHEM 1406 or PHYS 1415, ASTR 1403 or 1404, GEOL 1401 or 1402, or HORT 1401 (options for non-Science majors)	4
LANG/PHIL/CULTURE Core	PHIL 2306-Intro. to Ethics or other Lang/Phil/Culture core	3
SPCH 1315 or 1321	Public Speaking or Business and Professional Speech	3
Elective	ACCT 2301-Principles of Accounting I*	<u>3</u>
		<b>16</b>
<b>FOURTH SEMESTER</b>		
GOVT 2306	Texas Government	3
ARTS Core	ARTS 1301-Art Appreciation or other Creative Arts core	3
Elective	BCIS 1305-Bus. Computer Applications*	3
Elective	ACCT 2302-Principles of Accounting II*	3
Elective	MATH 1342-Elem. Statistics*	<u>3</u>
		<b>15</b>
	<u>Total Credit Hours</u>	<b>62*</b>

\*Consult with your intended transfer university AND an advisor at NCTC to determine which courses would satisfy both elective and core requirements for your major, and also how many credit hours beyond the 60 hours required for an AA degree are transferable.

Specific courses/major requirements for some common transfer universities are listed below:

**Midwestern State University:**

<http://www.mwsu.edu/academics/undergraduate-majors-and-programs>

**Texas Woman's University:**

<http://www.twu.edu/undergraduate-studies/graduate-on-time.asp>

**University of North Texas:**

<http://registrar.unt.edu/transfer-guides>

Sam Houston State: <http://www.shsu.edu/prospects/transfer/>  
 Southeastern Oklahoma University: <http://www.se.edu/2plus2/>  
 Texas A&M University (College Station):  
<http://admissions.tamu.edu/transfer/majors>  
 Texas Tech University:  
<http://www.depts.ttu.edu/admissions/advising/>  
 UT Austin: <http://www.utexas.edu/student/admissions/tccn/>  
 University of Texas at Dallas:  
<https://www.utdallas.edu/enroll/transfer/plans/>

**NCTC Advising Questions:** [counseling@nctc.edu](mailto:counseling@nctc.edu)



**NCTC ASSOCIATE OF ARTS (AA) GENERAL STUDIES DEGREE****SUGGESTED PATHWAY FOR DRAMA/THEATER ARTS MAJORS** (NON-TEACHER CERTIFICATION)

The Associate of Arts (AA) General Studies degree is designed to transfer into a bachelor's degree at a four-year public university in the state of Texas. The transfer university is the final authority on determining if all the courses within the NCTC Associate of Arts degree are transferable and applicable for an intended major, so students should consult with an advisor at the university level regarding all coursework to be completed at NCTC. The following is a recommended sequence of courses for students intending on majoring in Drama/Theater Arts (without Teacher Certification) at a Texas public university. Students placing at college preparatory levels will have additional courses to complete before taking eligible college-level courses in this sequence, and some courses may have pre-requisites; please check the course descriptions in the NCTC catalog. The amount of courses taken each semester can also be adjusted as several core classes are offered during Summer and Mini-mesters; this sequence only takes into account Fall and Spring semesters. **Depending on how many credit hours you have already attempted, all courses on this pathway may not be eligible for Financial Aid through NCTC.**

FIRST SEMESTER		CREDIT HOURS
ENGL 1301	Composition I	3
HIST 1301	U.S. History I ( <i>up to 1865</i> )	3
EDUC/PSYC 1300	Learning Frameworks	3
MATH Core	MATH 1332-Contemporary Math	3
ARTS Core	DRAM 1310-Intro. to Theater	3
Elective	DRAM 1120-Theater Practicum I*	<u>1</u>
		<b>16</b>
SECOND SEMESTER		
2 <sup>nd</sup> ENGL Core	ENGL 1302-Composition II or ENGL 2311-Technical Writing	3
HIST 1302	U.S. History II ( <i>1865 to present</i> )	3
1 <sup>st</sup> LAB SCIENCE Core	BIOL 1408 or 2406, CHEM 1406 or PHYS 1415, ASTR 1403 or 1404, GEOL 1401 or 1402, or HORT 1401 ( <i>options for non-Science majors</i> )	4
SOCIAL/BEHAV Core	SPCH 1318-Interpersonal Comm. or other Social Science core	3
Elective	DRAM 1121-Theater Practicum II*	<u>1</u>
		<b>14</b>
THIRD SEMESTER		
GOVT 2305	American National Government	3
2 <sup>nd</sup> LAB SCIENCE Core	BIOL 1408 or 2406, CHEM 1406 or PHYS 1415, ASTR 1403 or 1404, GEOL 1401 or 1402, or HORT 1401 ( <i>options for non-Science majors</i> )	4
LANG/PHIL/CULTURE Core	HUMA 1301-Intro. to Humanities or other Lang/Phil/Culture core	3
Elective	DRAM 1351-Acting I*	3
Elective	DRAM 2120-Theater Practicum III*	1
Elective	DRAM 1330-Stagecraft I or Foreign Language I ( <i>if required</i> )*	<u>3-4</u>
		<b>17-18</b>
FOURTH SEMESTER		
GOVT 2306	Texas Government	3
SPCH 1315 or 1321	Public Speaking or Business and Professional Speech	3
Elective	DRAM 1352-Acting II*	3
Elective	DRAM 2121-Theater Practicum IV*	1
Elective	DRAM 2366-Intro. to Cinema or Foreign Language II ( <i>if required</i> )*	<u>3-4</u>
		<b>13-14</b>
<u>Total Credit Hours</u>		<b>60-62*</b>

\*Consult with your intended transfer university AND an advisor at NCTC to determine which courses would satisfy both elective and core requirements for your major, and also how many credit hours beyond the 60 hours required for an AA degree are transferable. Some universities may require 12-14 hours of a Foreign Language for Bachelor of Arts majors, or proven language proficiency through credits earned by CLEP testing.

Specific courses/major requirements for some common transfer universities are listed below:

**Midwestern State University:**

<http://www.mwsu.edu/academics/undergraduate-majors-and-programs>

**Texas Woman's University:**

<http://www.twu.edu/undergraduate-studies/graduate-on-time.asp>

**University of North Texas:**

<http://registrar.unt.edu/transfer-guides>

Sam Houston State: <http://www.shsu.edu/prospects/transfer/>  
 Southeastern Oklahoma University: <http://www.se.edu/2plus2/>  
 Texas A&M University (College Station):  
<http://admissions.tamu.edu/transfer/majors>

**Texas Tech University:**

<http://www.depts.ttu.edu/admissions/advising/>

UT Austin: <http://www.utexas.edu/student/admissions/tccn/>

**University of Texas at Dallas:**

<https://www.utdallas.edu/enroll/transfer/plans/>

**NCTC ASSOCIATE OF ARTS (AA) GENERAL STUDIES DEGREE**  
**SUGGESTED PATHWAY FOR ENGLISH MAJORS** (NON-TEACHER CERTIFICATION)

The Associate of Arts (AA) General Studies degree is designed to transfer into a bachelor's degree at a four-year public university in the state of Texas. The transfer university is the final authority on determining if all the courses within the NCTC Associate of Arts degree are transferable and applicable for an intended major, so students should consult with an advisor at the university level regarding all coursework to be completed at NCTC. The following is a recommended sequence of courses for students intending on majoring in English (without Teacher Certification) at a Texas public university. Students placing at college preparatory levels will have additional courses to complete before taking eligible college-level courses in this sequence, and some courses may have pre-requisites; please check the course descriptions in the NCTC catalog. The amount of courses taken each semester can also be adjusted as several core classes are offered during Summer and Mini-mesters; this sequence only takes into account Fall and Spring semesters. **Depending on how many credit hours you have already attempted, all courses on this pathway may not be eligible for Financial Aid through NCTC.**

FIRST SEMESTER		CREDIT HOURS
ENGL 1301	Composition I	3
HIST 1301	U.S. History I ( <i>up to 1865</i> )	3
EDUC/PSYC 1300	Learning Frameworks	3
MATH Core	MATH 1332-Contemporary Math	3
SOCIAL/BEHAV Core	SPCH 1318-Interpersonal Comm. or other Social Science core	<u>3</u>
		<b>15</b>
SECOND SEMESTER		
2 <sup>nd</sup> ENGL Core	ENGL 1302-Composition II	3
HIST 1302	U.S. History II ( <i>1865 to present</i> )	3
LANG/PHIL/CULTURE Core	HUMA 1301-Intro. to Humanities or other Lang/Phil/Culture core	3
1 <sup>st</sup> LAB SCIENCE Core	BIOL 1408 or 2406, CHEM 1406 or PHYS 1415, ASTR 1403 or 1404, GEOL 1401 or 1402, or HORT 1401 ( <i>options for non-Science majors</i> )	4
ARTS Core	DRAM 1310-Intro. to Theater or other Creative Arts core	<u>3</u>
		<b>16</b>
THIRD SEMESTER		
GOVT 2305	American National Government	3
2 <sup>nd</sup> LAB SCIENCE Core	BIOL 1408 or 2406, CHEM 1406 or PHYS 1415, ASTR 1403 or 1404, GEOL 1401 or 1402, or HORT 1401 ( <i>options for non-Science majors</i> )	4
Elective	ENGL 2327-American Lit. I*	3
Elective	ENGL 2322-British Lit. I*	3
Elective	ENGL 2332-World Lit. I or Foreign Language I ( <i>if required</i> )*	<u>3-4</u>
		<b>16-17</b>
FOURTH SEMESTER		
GOVT 2306	Texas Government	3
SPCH 1315 or 1321	Public Speaking or Business and Professional Speech	3
Elective	ENGL 2328-American Lit. II*	3
Elective	ENGL 2323-British Lit. II*	3
Elective	ENGL 2333-World Lit. II or Foreign Language II ( <i>if required</i> )*	<u>3-4</u>
		<b>15-16</b>
	<u>Total Credit Hours</u>	<b>62-64*</b>

\*Consult with your intended transfer university AND an advisor at NCTC to determine which courses would satisfy both elective and core requirements for your major, and also how many credit hours beyond the 60 hours required for an AA degree are transferable. Some universities may require 12-14 hours of a Foreign Language for Bachelor of Arts majors, or proven language proficiency through credits earned by CLEP testing.

Specific courses/major requirements for some common transfer universities are listed below:

**Midwestern State University:**

<http://www.mwsu.edu/academics/undergraduate-majors-and-programs>

**Texas Woman's University:**

<http://www.twu.edu/undergraduate-studies/graduate-on-time.asp>

**University of North Texas:**

<http://registrar.unt.edu/transfer-guides>

Sam Houston State: <http://www.shsu.edu/prospects/transfer/>  
 Southeastern Oklahoma University: <http://www.se.edu/2plus2/>  
 Texas A&M University (College Station):  
<http://admissions.tamu.edu/transfer/majors>  
 Texas Tech University:  
<http://www.depts.ttu.edu/admissions/advising/>  
 UT Austin: <http://www.utexas.edu/student/admissions/tccn/>  
 University of Texas at Dallas:  
<https://www.utdallas.edu/enroll/transfer/plans/>

**NCTC Advising Questions: [counseling@nctc.edu](mailto:counseling@nctc.edu)**

**NCTC ASSOCIATE OF ARTS (AA) GENERAL STUDIES DEGREE****SUGGESTED PATHWAY FOR GOVERNMENT MAJORS**

The Associate of Arts (AA) General Studies degree is designed to transfer into a bachelor's degree at a four-year public university in the state of Texas. The transfer university is the final authority on determining if all the courses within the NCTC Associate of Arts degree are transferable and applicable for an intended major, so students should consult with an advisor at the university level regarding all coursework to be completed at NCTC. The following is a recommended sequence of courses for students intending on majoring in Government at a Texas public university. Students placing at college preparatory levels will have additional courses to complete before taking eligible college-level courses in this sequence, and some courses may have pre-requisites; please check the course descriptions in the NCTC catalog. The amount of courses taken each semester can also be adjusted as several core classes are offered during Summer and Mini-mesters; this sequence only takes into account Fall and Spring semesters. **Depending on how many credit hours you have already attempted, all courses on this pathway may not be eligible for Financial Aid through NCTC.**

<b>FIRST SEMESTER</b>		<b>CREDIT HOURS</b>
ENGL 1301	Composition I	3
HIST 1301	U.S. History I ( <i>up to 1865</i> )	3
EDUC/PSYC 1300	Learning Frameworks	3
MATH Core	MATH 1342-Elementary Stats. or MATH 1332-Contemporary Math	3
SOCIAL/BEHAV Core	SOCI 1301-Intro. to Sociology	<u>3</u>
		<b>15</b>
<b>SECOND SEMESTER</b>		
2 <sup>nd</sup> ENGL Core	ENGL 1302-Composition II or ENGL 2311-Technical Writing	3
HIST 1302	U.S. History II ( <i>1865 to present</i> )	3
LANG/PHIL/CULTURE Core	HUMA 1301-Intro. to Humanities or other Lang/Phil/Culture core	3
1 <sup>st</sup> LAB SCIENCE Core	BIOL 1408 or 2406, CHEM 1406 or PHYS 1415, ASTR 1403 or 1404, GEOL 1401 or 1402, or HORT 1401 ( <i>options for non-Science majors</i> )	4
ARTS Core	ARTS 1301-Art Appreciation or other Creative Arts core	<u>3</u>
		<b>16</b>
<b>THIRD SEMESTER</b>		
GOVT 2305	American National Government	3
SPCH 1315 or 1321	Public Speaking or Business and Professional Speech	3
2 <sup>nd</sup> LAB SCIENCE Core	BIOL 1408 or 2406, CHEM 1406 or PHYS 1415, ASTR 1403 or 1404, GEOL 1401 or 1402, or HORT 1401 ( <i>options for non-Science majors</i> )	4
Elective	HIST 2321-World Civilizations I*	3
Elective	PHIL 1301-Intro. to Philosophy or Foreign Language I ( <i>if required</i> )*	<u>3-4</u>
		<b>16-17</b>
<b>FOURTH SEMESTER</b>		
GOVT 2306	Texas Government	3
Elective	HIST 2322-World Civilizations II*	3
Elective	HIST 2301-Texas History*	3
Elective	ENGL 2327-American Literature I*	3
Elective	PHIL 2306-Intro. to Ethics or Foreign Language II ( <i>if required</i> )*	<u>3-4</u>
		<b>15-16</b>
	<u>Total Credit Hours</u>	<b>62-64*</b>

\*Consult with your intended transfer university AND an advisor at NCTC to determine which courses would satisfy both elective and core requirements for your major, and also how many credit hours beyond the 60 hours required for an AA degree are transferable. Some universities may require 12-14 hours of a Foreign Language for Bachelor of Arts majors, or proven language proficiency through credits earned by CLEP testing.

Specific courses/major requirements for some common transfer universities are listed below:

**Midwestern State University:**

<http://www.mwsu.edu/academics/undergraduate-majors-and-programs>

**Texas Woman's University:**

<http://www.twu.edu/undergraduate-studies/graduate-on-time.asp>

**University of North Texas:**

<http://registrar.unt.edu/transfer-guides>

Sam Houston State: <http://www.shsu.edu/prospects/transfer/>  
 Southeastern Oklahoma University: <http://www.se.edu/2plus2/>  
 Texas A&M University (College Station):  
<http://admissions.tamu.edu/transfer/majors>  
 Texas Tech University:  
<http://www.depts.ttu.edu/admissions/advising/>  
 UT Austin: <http://www.utexas.edu/student/admissions/tccn/>  
 University of Texas at Dallas:  
<https://www.utdallas.edu/enroll/transfer/plans/>

**NCTC Advising Questions: [counseling@nctc.edu](mailto:counseling@nctc.edu)**

**NCTC ASSOCIATE OF ARTS (AA) GENERAL STUDIES DEGREE****SUGGESTED PATHWAY FOR HISTORY MAJORS**

The Associate of Arts (AA) General Studies degree is designed to transfer into a bachelor's degree at a four-year public university in the state of Texas. The transfer university is the final authority on determining if all the courses within the NCTC Associate of Arts degree are transferable and applicable for an intended major, so students should consult with an advisor at the university level regarding all coursework to be completed at NCTC. The following is a recommended sequence of courses for students intending on majoring in History at a Texas public university. Students placing at college preparatory levels will have additional courses to complete before taking eligible college-level courses in this sequence, and some courses may have pre-requisites; please check the course descriptions in the NCTC catalog. The amount of courses taken each semester can also be adjusted as several core classes are offered during Summer and Mini-mesters; this sequence only takes into account Fall and Spring semesters. **Depending on how many credit hours you have already attempted, all courses on this pathway may not be eligible for Financial Aid through NCTC.**

<b>FIRST SEMESTER</b>		<b>CREDIT HOURS</b>
ENGL 1301	Composition I	3
HIST 1301	U.S. History I ( <i>up to 1865</i> )	3
EDUC/PSYC 1300	Learning Frameworks	3
MATH Core	MATH 1342-Elementary Stats. or MATH 1332-Contemporary Math	3
SOCIAL/BEHAV Core	SOCI 1301-Intro. to Sociology	<u>3</u>
		<b>15</b>
<b>SECOND SEMESTER</b>		
2 <sup>nd</sup> ENGL Core	ENGL 1302-Composition II or ENGL 2311-Technical Writing	3
HIST 1302	U.S. History II ( <i>1865 to present</i> )	3
LANG/PHIL/CULTURE Core	HUMA 1301-Intro. to Humanities or other Lang/Phil/Culture core	3
1 <sup>st</sup> LAB SCIENCE Core	BIOL 1408 or 2406, CHEM 1406 or PHYS 1415, ASTR 1403 or 1404, GEOL 1401 or 1402, or HORT 1401 ( <i>options for non-Science majors</i> )	4
ARTS Core	ARTS 1301-Art Appreciation or other Creative Arts core	<u>3</u>
		<b>16</b>
<b>THIRD SEMESTER</b>		
GOVT 2305	American National Government	3
SPCH 1315 or 1321	Public Speaking or Business and Professional Speech	3
2 <sup>nd</sup> LAB SCIENCE Core	BIOL 1408 or 2406, CHEM 1406 or PHYS 1415, ASTR 1403 or 1404, GEOL 1401 or 1402, or HORT 1401 ( <i>options for non-Science majors</i> )	4
Elective	HIST 2321-World Civilizations I*	3
Elective	PHIL 1301-Intro. to Philosophy or Foreign Language I ( <i>if required</i> )*	<u>3-4</u>
		<b>16-17</b>
<b>FOURTH SEMESTER</b>		
GOVT 2306	Texas Government	3
Elective	HIST 2322-World Civilizations II*	3
Elective	HIST 2301-Texas History*	3
Elective	ENGL 2327-American Literature I*	3
Elective	PHIL 2306-Intro. to Ethics or Foreign Language II ( <i>if required</i> )*	<u>3-4</u>
		<b>15-16</b>
	<u>Total Credit Hours</u>	<b>62-64*</b>

\*Consult with your intended transfer university AND an advisor at NCTC to determine which courses would satisfy both elective and core requirements for your major, and also how many credit hours beyond the 60 hours required for an AA degree are transferable. Some universities may require 12-14 hours of a Foreign Language for Bachelor of Arts majors, or proven language proficiency through credits earned by CLEP testing.

Specific courses/major requirements for some common transfer universities are listed below:

**Midwestern State University:**

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**University of North Texas:**

<http://registrar.unt.edu/transfer-guides>

Sam Houston State: <http://www.shsu.edu/prospects/transfer/>  
 Southeastern Oklahoma University: <http://www.se.edu/2plus2/>  
 Texas A&M University (College Station):  
<http://admissions.tamu.edu/transfer/majors>  
 Texas Tech University:  
<http://www.depts.ttu.edu/admissions/advising/>  
 UT Austin: <http://www.utexas.edu/student/admissions/tccn/>  
 University of Texas at Dallas:  
<https://www.utdallas.edu/enroll/transfer/plans/>

**NCTC ASSOCIATE OF ARTS (AA) GENERAL STUDIES DEGREE****SUGGESTED PATHWAY FOR HUMANITIES MAJORS**

The Associate of Arts (AA) General Studies degree is designed to transfer into a bachelor's degree at a four-year public university in the state of Texas. The transfer university is the final authority on determining if all the courses within the NCTC Associate of Arts degree are transferable and applicable for an intended major, so students should consult with an advisor at the university level regarding all coursework to be completed at NCTC. The following is a recommended sequence of courses for students intending on majoring in Humanities at a Texas public university. Students placing at college preparatory levels will have additional courses to complete before taking eligible college-level courses in this sequence, and some courses may have pre-requisites; please check the course descriptions in the NCTC catalog. The amount of courses taken each semester can also be adjusted as several core classes are offered during Summer and Mini-mesters; this sequence only takes into account Fall and Spring semesters. **Depending on how many credit hours you have already attempted, all courses on this pathway may not be eligible for Financial Aid through NCTC.**

<b>FIRST SEMESTER</b>		<b>CREDIT HOURS</b>
ENGL 1301	Composition I	3
HIST 1301	U.S. History I ( <i>up to 1865</i> )	3
EDUC/PSYC 1300	Learning Frameworks	3
MATH Core	MATH 1342-Elementary Stats. or MATH 1332-Contemporary Math	3
SOCIAL/BEHAV Core	SOCI 1301-Intro. to Sociology	<u>3</u>
		<b>15</b>
<b>SECOND SEMESTER</b>		
2 <sup>nd</sup> ENGL Core	ENGL 1302-Composition II or ENGL 2311-Technical Writing	3
HIST 1302	U.S. History II ( <i>1865 to present</i> )	3
LANG/PHIL/CULTURE Core	HUMA 1301-Intro. to Humanities	3
1 <sup>st</sup> LAB SCIENCE Core	BIOL 1408 or 2406, CHEM 1406 or PHYS 1415, ASTR 1403 or 1404, GEOL 1401 or 1402, or HORT 1401 ( <i>options for non-Science majors</i> )	4
ARTS Core	ARTS 1301-Art Appreciation or other Creative Arts core	<u>3</u>
		<b>16</b>
<b>THIRD SEMESTER</b>		
GOVT 2305	American National Government	3
SPCH 1315 or 1321	Public Speaking or Business and Professional Speech	3
2 <sup>nd</sup> LAB SCIENCE Core	BIOL 1408 or 2406, CHEM 1406 or PHYS 1415, ASTR 1403 or 1404, GEOL 1401 or 1402, or HORT 1401 ( <i>options for non-Science majors</i> )	4
Elective	HIST 2321-World Civilizations I*	3
Elective	PHIL 1301-Intro. to Philosophy or Foreign Language I ( <i>if required</i> )*	<u>3-4</u>
		<b>16-17</b>
<b>FOURTH SEMESTER</b>		
GOVT 2306	Texas Government	3
Elective	ANTH 2351-Cultural Anthropology*	3
Elective	HIST 2322-World Civilizations II*	3
Elective	ENGL 2332-World Literature I*	3
Elective	DRAM 1310-Intro. to Theater or Foreign Language II ( <i>if required</i> )*	<u>3-4</u>
		<b>15-16</b>
	<u>Total Credit Hours</u>	<b>62-64*</b>

\*Consult with your intended transfer university AND an advisor at NCTC to determine which courses would satisfy both elective and core requirements for your major, and also how many credit hours beyond the 60 hours required for an AA degree are transferable. Some universities may require 12-14 hours of a Foreign Language for Bachelor of Arts majors, or proven language proficiency through credits earned by CLEP testing.

Specific courses/major requirements for some common transfer universities are listed below:

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<http://registrar.unt.edu/transfer-guides>

Sam Houston State: <http://www.shsu.edu/prospects/transfer/>  
 Southeastern Oklahoma University: <http://www.se.edu/2plus2/>  
 Texas A&M University (College Station):  
<http://admissions.tamu.edu/transfer/majors>  
 Texas Tech University:  
<http://www.depts.ttu.edu/admissions/advising/>  
 UT Austin: <http://www.utexas.edu/student/admissions/tccn/>  
 University of Texas at Dallas:  
<https://www.utdallas.edu/enroll/transfer/plans/>

**NCTC Advising Questions: [counseling@nctc.edu](mailto:counseling@nctc.edu)**

**NCTC ASSOCIATE OF ARTS (AA) GENERAL STUDIES DEGREE****SUGGESTED PATHWAY FOR KINESIOLOGY MAJORS**

The Associate of Arts (AA) General Studies degree is designed to transfer into a bachelor's degree at a four-year public university in the state of Texas. The transfer university is the final authority on determining if all the courses within the NCTC Associate of Arts degree are transferable and applicable for an intended major, so students should consult with an advisor at the university level regarding all coursework to be completed at NCTC. The following is a recommended sequence of courses for students intending on majoring in Kinesiology at a Texas public university. Students placing at college preparatory levels will have additional courses to complete before taking eligible college-level courses in this sequence, and some courses may have pre-requisites; please check the course descriptions in the NCTC catalog. The amount of courses taken each semester can also be adjusted as several core classes are offered during Summer and Mini-mesters; this sequence only takes into account Fall and Spring semesters. **Depending on how many credit hours you have already attempted, all courses on this pathway may not be eligible for Financial Aid through NCTC.**

<b>FIRST SEMESTER</b>		<b>CREDIT HOURS</b>
ENGL 1301	Composition I	3
EDUC/PSYC 1300	Learning Frameworks	3
HIST 1301	U.S. History I (up to 1865)	3
MATH Core	MATH 1342-Elementary Statistics	3
Elective	BIOL 1322-Nutrition*	<u>3</u>
		<b>15</b>
<b>SECOND SEMESTER</b>		
2 <sup>nd</sup> ENGL Core	ENGL 1302-Composition II or ENGL 2311-Technical Writing	3
HIST 1302	U.S. History II (1865 to present)	3
1 <sup>st</sup> LAB SCIENCE Core	BIOL 2401-Anatotomy and Physiology I	4
SOCIAL/BEHAV Core	PSYC 2314-Lifespan Growth and Dev.	3
Elective	PHED 1301-Intro. to Physical Fitness/Sport*	<u>3</u>
		<b>16</b>
<b>THIRD SEMESTER</b>		
GOVT 2305	American National Government	3
2 <sup>nd</sup> LAB SCIENCE Core	BIOL 2402-Anatotomy and Physiology II	4
LANG/PHIL/CULTURE Core	ANTH 2346-General Anthropology or other Lang/Phil/Culture core	3
SPCH 1315 or 1321	Public Speaking or Business and Professional Speech	3
Elective	PHED 1308-Sports Officiating I*	<u>3</u>
		<b>16</b>
<b>FOURTH SEMESTER</b>		
GOVT 2306	Texas Government	3
ARTS Core	ARTS 1301-Art Appreciation or other Creative Arts core	3
Elective	PHED 2356-Care and Prevention*	3
Elective	PHED 1338-Concepts of Fitness*	3
Elective	PHED 1309-Sports Officiating II*	<u>3</u>
		<b>15</b>
	<u>Total Credit Hours</u>	<b>62*</b>

\*Consult with your intended transfer university AND an advisor at NCTC to determine which courses would satisfy both elective and core requirements for your major, and also how many credit hours beyond the 60 hours required for an AA degree are transferable.

Specific courses/major requirements for some common transfer universities are listed below:

**Midwestern State University:**

<http://www.mwsu.edu/academics/undergraduate-majors-and-programs>

**Texas Woman's University:**

<http://www.twu.edu/undergraduate-studies/graduate-on-time.asp>

**University of North Texas:**

<http://registrar.unt.edu/transfer-guides>

Sam Houston State: <http://www.shsu.edu/prospects/transfer/>

Southeastern Oklahoma University: <http://www.se.edu/2plus2/>

Texas A&M University (College Station):

<http://admissions.tamu.edu/transfer/majors>

Texas Tech University:

<http://www.depts.ttu.edu/admissions/advising/>

UT Austin: <http://www.utexas.edu/student/admissions/tccn/>

University of Texas at Dallas:

<https://www.utdallas.edu/enroll/transfer/plans/>

**NCTC Advising Questions: [counseling@nctc.edu](mailto:counseling@nctc.edu)**

**NCTC ASSOCIATE OF ARTS (AA) GENERAL STUDIES DEGREE****SUGGESTED PATHWAY FOR *MUSIC* MAJORS**

The Associate of Arts (AA) General Studies degree is designed to transfer into a bachelor's degree at a four-year public university in the state of Texas. The transfer university is the final authority on determining if all the courses within the NCTC Associate of Arts degree are transferable and applicable for an intended major, so students should consult with an advisor at the university level regarding all coursework to be completed at NCTC. The following is a recommended sequence of courses for students intending on majoring in Music at a Texas public university. Students placing at college preparatory levels will have additional courses to complete before taking eligible college-level courses in this sequence, and some courses may have pre-requisites; please check the course descriptions in the NCTC catalog. The amount of courses taken each semester can also be adjusted as several core classes are offered during Summer and Mini-mesters; this sequence only takes into account Fall and Spring semesters. **Depending on how many credit hours you have already attempted, all courses on this pathway may not be eligible for Financial Aid through NCTC.**

<b>FIRST SEMESTER</b>		<b>CREDIT HOURS</b>
ENGL 1301	Composition I	3
HIST 1301	U.S. History I ( <i>up to 1865</i> )	3
EDUC/PSYC 1300	Learning Frameworks	3
MATH Core	MATH 1332-Contemporary Math	3
ARTS Core	MUSI 1306-Music Appreciation	3
Elective	MUEN-Ensemble or Applied Lessons*	<u>1</u>
		<b>16</b>
<b>SECOND SEMESTER</b>		
2 <sup>nd</sup> ENGL Core	ENGL 1302-Composition II or ENGL 2311-Technical Writing	3
HIST 1302	U.S. History II ( <i>1865 to present</i> )	3
1 <sup>st</sup> LAB SCIENCE Core	BIOL 1408 or 2406, CHEM 1406 or PHYS 1415, ASTR 1403 or 1404, GEOL 1401 or 1402, or HORT 1401 ( <i>options for non-Science majors</i> )	4
SOCIAL/BEHAV Core	SOCI 1301-Intro. to Sociology or other Social Science core	3
Elective	MUSI 1301-Fundamentals of Music*	<u>3</u>
		<b>16</b>
<b>THIRD SEMESTER</b>		
GOVT 2305	American National Government	3
2 <sup>nd</sup> LAB SCIENCE Core	BIOL 1408 or 2406, CHEM 1406 or PHYS 1415, ASTR 1403 or 1404, GEOL 1401 or 1402, or HORT 1401 ( <i>options for non-Science majors</i> )	4
LANG/PHIL/CULTURE Core	HUMA 1301-Intro. to Humanities or other Lang/Phil/Culture core	3
Elective	MUSI 1311 and 1116-Music Theory and Sight Singing*	4
Elective	MUEN-Applied Lessons*	1
Elective	MUEN-Ensemble or Foreign Language I ( <i>if required</i> )*	<u>1-4</u>
		<b>16-20</b>
<b>FOURTH SEMESTER</b>		
GOVT 2306	Texas Government	3
SPCH 1315 or 1321	Public Speaking or Business and Professional Speech	3
Elective	MUSI 1312 and 1117-Music Theory II and Sight Singing II*	4
Elective	MUEN-Applied Lessons*	1
Elective	MUEN-Ensemble or Foreign Language II ( <i>if required</i> )*	<u>1-4</u>
		<b>12-14</b>
<u>Total Credit Hours</u>		<b>60-66*</b>

\*Consult with your intended transfer university AND an advisor at NCTC to determine which courses would satisfy both elective and core requirements for your major, and also how many credit hours beyond the 60 hours required for an AA degree are transferable. Some universities may require 12-14 hours of a Foreign Language for Bachelor of Arts majors, or proven language proficiency through credits earned by CLEP testing.

Specific courses/major requirements for some common transfer universities are listed below:

**Midwestern State University:**

<http://www.mwsu.edu/academics/undergraduate-majors-and-programs>

**Texas Woman's University:**

<http://www.twu.edu/undergraduate-studies/graduate-on-time.asp>

**University of North Texas:**

<http://registrar.unt.edu/transfer-guides>

Sam Houston State: <http://www.shsu.edu/prospects/transfer/>  
 Southeastern Oklahoma University: <http://www.se.edu/2plus2/>  
 Texas A&M University (College Station):  
<http://admissions.tamu.edu/transfer/majors>

**Texas Tech University:**

<http://www.depts.ttu.edu/admissions/advising/>

UT Austin: <http://www.utexas.edu/student/admissions/tccn/>

**University of Texas at Dallas:**

<https://www.utdallas.edu/enroll/transfer/plans/>

**NCTC ASSOCIATE OF ARTS (AA) GENERAL STUDIES DEGREE****SUGGESTED PATHWAY FOR PHILOSOPHY MAJORS**

The Associate of Arts (AA) General Studies degree is designed to transfer into a bachelor's degree at a four-year public university in the state of Texas. The transfer university is the final authority on determining if all the courses within the NCTC Associate of Arts degree are transferable and applicable for an intended major, so students should consult with an advisor at the university level regarding all coursework to be completed at NCTC. The following is a recommended sequence of courses for students intending on majoring in Philosophy at a Texas public university. Students placing at college preparatory levels will have additional courses to complete before taking eligible college-level courses in this sequence, and some courses may have pre-requisites; please check the course descriptions in the NCTC catalog. The amount of courses taken each semester can also be adjusted as several core classes are offered during Summer and Mini-mesters; this sequence only takes into account Fall and Spring semesters. **Depending on how many credit hours you have already attempted, all courses on this pathway may not be eligible for Financial Aid through NCTC.**

<b>FIRST SEMESTER</b>		<b>CREDIT HOURS</b>
ENGL 1301	Composition I	3
HIST 1301	U.S. History I ( <i>up to 1865</i> )	3
EDUC/PSYC 1300	Learning Frameworks	3
MATH Core	MATH 1342-Elementary Stats. or MATH 1332-Contemporary Math	3
SOCIAL/BEHAV Core	PSYC 2301-Intro. to Psychology	<u>3</u>
		<b>15</b>
<b>SECOND SEMESTER</b>		
2 <sup>nd</sup> ENGL Core	ENGL 1302-Composition II or ENGL 2311-Technical Writing	3
HIST 1302	U.S. History II ( <i>1865 to present</i> )	3
LANG/PHIL/CULTURE Core	PHIL 1301-Intro. to Philosophy	3
1 <sup>st</sup> LAB SCIENCE Core	BIOL 1408 or 2406, CHEM 1406 or PHYS 1415, ASTR 1403 or 1404, GEOL 1401 or 1402, or HORT 1401 ( <i>options for non-Science majors</i> )	4
ARTS Core	ARTS 1301-Art Appreciation or other Creative Arts core	<u>3</u>
		<b>16</b>
<b>THIRD SEMESTER</b>		
GOVT 2305	American National Government	3
SPCH 1315 or 1321	Public Speaking or Business and Professional Speech	3
2 <sup>nd</sup> LAB SCIENCE Core	BIOL 1408 or 2406, CHEM 1406 or PHYS 1415, ASTR 1403 or 1404, GEOL 1401 or 1402, or HORT 1401 ( <i>options for non-Science majors</i> )	4
Elective	PHIL 2306-Intro. to Ethics*	3
Elective	HUMA 1301-Intro. to Humanities or Foreign Language I ( <i>if required</i> )*	<u>3-4</u>
		<b>16-17</b>
<b>FOURTH SEMESTER</b>		
GOVT 2306	Texas Government	3
Elective	PHIL 2303-Intro. to Logic	3
Elective	ANTH 2351-Cultural Anthropology*	3
Elective	ENGL 2332-World Literature I*	3
Elective	ARTS 1303-Art History I or Foreign Language II ( <i>if required</i> )*	<u>3-4</u>
		<b>15-16</b>
	<u>Total Credit Hours</u>	<b>62-64*</b>

\*Consult with your intended transfer university AND an advisor at NCTC to determine which courses would satisfy both elective and core requirements for your major, and also how many credit hours beyond the 60 hours required for an AA degree are transferable. Some universities may require 12-14 hours of a Foreign Language for Bachelor of Arts majors, or proven language proficiency through credits earned by CLEP testing.

Specific courses/major requirements for some common transfer universities are listed below:

**Midwestern State University:**

<http://www.mwsu.edu/academics/undergraduate-majors-and-programs>

**Texas Woman's University:**

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**University of North Texas:**

<http://registrar.unt.edu/transfer-guides>

Sam Houston State: <http://www.shsu.edu/prospects/transfer/>  
 Southeastern Oklahoma University: <http://www.se.edu/2plus2/>  
 Texas A&M University (College Station):  
<http://admissions.tamu.edu/transfer/majors>  
 Texas Tech University:  
<http://www.depts.ttu.edu/admissions/advising/>  
 UT Austin: <http://www.utexas.edu/student/admissions/tccn/>  
 University of Texas at Dallas:  
<https://www.utdallas.edu/enroll/transfer/plans/>

**NCTC Advising Questions: [counseling@nctc.edu](mailto:counseling@nctc.edu)**



**NCTC ASSOCIATE OF ARTS (AA) GENERAL STUDIES DEGREE****SUGGESTED PATHWAY FOR PSYCHOLOGY MAJORS**

The Associate of Arts (AA) General Studies degree is designed to transfer into a bachelor's degree at a four-year public university in the state of Texas. The transfer university is the final authority on determining if all the courses within the NCTC Associate of Arts degree are transferable and applicable for an intended major, so students should consult with an advisor at the university level regarding all coursework to be completed at NCTC. The following is a recommended sequence of courses for students intending on majoring in Psychology at a Texas public university. Students placing at college preparatory levels will have additional courses to complete before taking eligible college-level courses in this sequence, and some courses may have pre-requisites; please check the course descriptions in the NCTC catalog. The amount of courses taken each semester can also be adjusted as several core classes are offered during Summer and Mini-mesters; this sequence only takes into account Fall and Spring semesters. **Depending on how many credit hours you have already attempted, all courses on this pathway may not be eligible for Financial Aid through NCTC.**

<b>FIRST SEMESTER</b>		<b>CREDIT HOURS</b>
ENGL 1301	Composition I	3
HIST 1301	U.S. History I ( <i>up to 1865</i> )	3
EDUC/PSYC 1300	Learning Frameworks	3
MATH Core	MATH 1342-Elementary Stats.	3
SOCIAL/BEHAV Core	PSYC 2301-Intro. to Psychology	<u>3</u>
		<b>15</b>
<b>SECOND SEMESTER</b>		
2 <sup>nd</sup> ENGL Core	ENGL 1302-Composition II or ENGL 2311-Technical Writing	3
HIST 1302	U.S. History II ( <i>1865 to present</i> )	3
LANG/PHIL/CULTURE Core	PHIL 2306-Intro. to Ethics or other Lang/Phil/Culture core	3
1 <sup>st</sup> LAB SCIENCE Core	BIOL 1408 or 2406, CHEM 1406 or PHYS 1415, ASTR 1403 or 1404, GEOL 1401 or 1402, or HORT 1401 ( <i>options for non-Science majors</i> )	4
ARTS Core	ARTS 1301-Art Appreciation or other Creative Arts core	<u>3</u>
		<b>16</b>
<b>THIRD SEMESTER</b>		
GOVT 2305	American National Government	3
SPCH 1315 or 1321	Public Speaking or Business and Professional Speech	3
2 <sup>nd</sup> LAB SCIENCE Core	BIOL 1408 or 2406, CHEM 1406 or PHYS 1415, ASTR 1403 or 1404, GEOL 1401 or 1402, or HORT 1401 ( <i>options for non-Science majors</i> )	4
Elective	PSYC 2314-Lifepsan Growth and Dev.*	3
Elective	SOCI 1301-Intro. to Sociology or Foreign Language I ( <i>if required</i> )*	<u>3-4</u>
		<b>16-17</b>
<b>FOURTH SEMESTER</b>		
GOVT 2306	Texas Government	3
Elective	PSYC 2319-Social Psychology*	3
Elective	PSYC 2306-Human Sexuality*	3
Elective	PSYC 2315-Psychology of Adjustment*	3
Elective	SOCI 1306-Social Problems or Foreign Language II ( <i>if required</i> )*	<u>3-4</u>
		<b>15-16</b>
	<u>Total Credit Hours</u>	<b>62-64*</b>

\*Consult with your intended transfer university AND an advisor at NCTC to determine which courses would satisfy both elective and core requirements for your major, and also how many credit hours beyond the 60 hours required for an AA degree are transferable. Some universities may require 12-14 hours of a Foreign Language for Bachelor of Arts majors, or proven language proficiency through credits earned by CLEP testing.

Specific courses/major requirements for some common transfer universities are listed below:

**Midwestern State University:**

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**University of North Texas:**

<http://registrar.unt.edu/transfer-guides>

Sam Houston State: <http://www.shsu.edu/prospects/transfer/>  
 Southeastern Oklahoma University: <http://www.se.edu/2plus2/>  
 Texas A&M University (College Station):  
<http://admissions.tamu.edu/transfer/majors>  
 Texas Tech University:  
<http://www.depts.ttu.edu/admissions/advising/>  
 UT Austin: <http://www.utexas.edu/student/admissions/tccn/>  
 University of Texas at Dallas:  
<https://www.utdallas.edu/enroll/transfer/plans/>

**NCTC Advising Questions: [counseling@nctc.edu](mailto:counseling@nctc.edu)**

**NCTC ASSOCIATE OF ARTS (AA) GENERAL STUDIES DEGREE****SUGGESTED PATHWAY FOR SOCIOLOGY MAJORS**

The Associate of Arts (AA) General Studies degree is designed to transfer into a bachelor's degree at a four-year public university in the state of Texas. The transfer university is the final authority on determining if all the courses within the NCTC Associate of Arts degree are transferable and applicable for an intended major, so students should consult with an advisor at the university level regarding all coursework to be completed at NCTC. The following is a recommended sequence of courses for students intending on majoring in Sociology at a Texas public university. Students placing at college preparatory levels will have additional courses to complete before taking eligible college-level courses in this sequence, and some courses may have pre-requisites; please check the course descriptions in the NCTC catalog. The amount of courses taken each semester can also be adjusted as several core classes are offered during Summer and Mini-mesters; this sequence only takes into account Fall and Spring semesters. **Depending on how many credit hours you have already attempted, all courses on this pathway may not be eligible for Financial Aid through NCTC.**

<b>FIRST SEMESTER</b>		<b>CREDIT HOURS</b>
ENGL 1301	Composition I	3
HIST 1301	U.S. History I ( <i>up to 1865</i> )	3
EDUC/PSYC 1300	Learning Frameworks	3
MATH Core	MATH 1342-Elementary Stats.	3
SOCIAL/BEHAV Core	SOCI 1301-Intro. to Sociology	<u>3</u>
		<b>15</b>
<b>SECOND SEMESTER</b>		
2 <sup>nd</sup> ENGL Core	ENGL 1302-Composition II or ENGL 2311-Technical Writing	3
HIST 1302	U.S. History II ( <i>1865 to present</i> )	3
LANG/PHIL/CULTURE Core	HUMA 1301-Intro. to Humanities or other Lang/Phil/Culture core	3
1 <sup>st</sup> LAB SCIENCE Core	BIOL 1408 or 2406, CHEM 1406 or PHYS 1415, ASTR 1403 or 1404, GEOL 1401 or 1402, or HORT 1401 ( <i>options for non-Science majors</i> )	4
ARTS Core	ARTS 1301-Art Appreciation or other Creative Arts core	<u>3</u>
		<b>16</b>
<b>THIRD SEMESTER</b>		
GOVT 2305	American National Government	3
SPCH 1315 or 1321	Public Speaking or Business and Professional Speech	3
2 <sup>nd</sup> LAB SCIENCE Core	BIOL 1408 or 2406, CHEM 1406 or PHYS 1415, ASTR 1403 or 1404, GEOL 1401 or 1402, or HORT 1401 ( <i>options for non-Science majors</i> )	4
Elective	SOCI 1306-Contemporary Social Problems*	3
Elective	PSYC 2301-Intro. to Psychology or Foreign Language I ( <i>if required</i> )*	<u>3-4</u>
		<b>16-17</b>
<b>FOURTH SEMESTER</b>		
GOVT 2306	Texas Government	3
Elective	SOCI 2301-Marriage and Family*	3
Elective	SOCI 2319-Minority Studies*	3
Elective	PHIL 2306-Intro. to Ethics*	3
Elective	ANTH 2351-Cultural Anthropology or Foreign Language II ( <i>if required</i> )*	<u>3-4</u>
		<b>15-16</b>
	<u>Total Credit Hours</u>	<b>62-64*</b>

\*Consult with your intended transfer university AND an advisor at NCTC to determine which courses would satisfy both elective and core requirements for your major, and also how many credit hours beyond the 60 hours required for an AA degree are transferable. Some universities may require 12-14 hours of a Foreign Language for Bachelor of Arts majors, or proven language proficiency through credits earned by CLEP testing.

Specific courses/major requirements for some common transfer universities are listed below:

**Midwestern State University:**

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<http://registrar.unt.edu/transfer-guides>

Sam Houston State: <http://www.shsu.edu/prospects/transfer/>

Southeastern Oklahoma University: <http://www.se.edu/2plus2/>

Texas A&M University (College Station):

<http://admissions.tamu.edu/transfer/majors>

Texas Tech University:

<http://www.depts.ttu.edu/admissions/advising/>

UT Austin: <http://www.utexas.edu/student/admissions/tccn/>

University of Texas at Dallas:

<https://www.utdallas.edu/enroll/transfer/plans/>

**NCTC Advising Questions: [counseling@nctc.edu](mailto:counseling@nctc.edu)**

**NCTC ASSOCIATE OF ARTS (AA) GENERAL STUDIES DEGREE****SUGGESTED PATHWAY FOR VISUAL ARTS MAJORS**

The Associate of Arts (AA) General Studies degree is designed to transfer into a bachelor's degree at a four-year public university in the state of Texas. The transfer university is the final authority on determining if all the courses within the NCTC Associate of Arts degree are transferable and applicable for an intended major, so students should consult with an advisor at the university level regarding all coursework to be completed at NCTC. The following is a recommended sequence of courses for students intending on majoring in Visual Arts at a Texas public university. Students placing at college preparatory levels will have additional courses to complete before taking eligible college-level courses in this sequence, and some courses may have pre-requisites; please check the course descriptions in the NCTC catalog. The amount of courses taken each semester can also be adjusted as several core classes are offered during Summer and Mini-mesters; this sequence only takes into account Fall and Spring semesters. **Depending on how many credit hours you have already attempted, all courses on this pathway may not be eligible for Financial Aid through NCTC.**

<b>FIRST SEMESTER</b>		<b>CREDIT HOURS</b>
ENGL 1301	Composition I	3
HIST 1301	U.S. History I ( <i>up to 1865</i> )	3
EDUC/PSYC 1300	Learning Frameworks	3
MATH Core	MATH 1332-Contemporary Math	3
SOCIAL/BEHAV Core	SOCI 1301-Intro. to Sociology	<u>3</u>
		<b>15</b>
<b>SECOND SEMESTER</b>		
2 <sup>nd</sup> ENGL Core	ENGL 1302-Composition II or ENGL 2311-Technical Writing	3
HIST 1302	U.S. History II ( <i>1865 to present</i> )	3
LANG/PHIL/CULTURE Core	PHIL 1301-Intro. to Philosophy or other Lang/Phil/Culture core	3
1 <sup>st</sup> LAB SCIENCE Core	BIOL 1408 or 2406, CHEM 1406 or PHYS 1415, ASTR 1403 or 1404, GEOL 1401 or 1402, or HORT 1401 ( <i>options for non-Science majors</i> )	4
ARTS Core	ARTS 1301-Art Appreciation	<u>3</u>
		<b>16</b>
<b>THIRD SEMESTER</b>		
GOVT 2305	American National Government	3
2 <sup>nd</sup> LAB SCIENCE Core	BIOL 1408 or 2406, CHEM 1406 or PHYS 1415, ASTR 1403 or 1404, GEOL 1401 or 1402, or HORT 1401 ( <i>options for non-Science majors</i> )	4
Elective	ARTS 1316-Drawing I*	3
Elective	ARTS 1303-Art History I*	3
Elective	ARTS 1311-Design I or Foreign Language I ( <i>if required</i> )*	<u>3-4</u>
		<b>16-17</b>
<b>FOURTH SEMESTER</b>		
GOVT 2306	Texas Government	3
SPCH 1315 or 1321	Public Speaking or Business and Professional Speech	3
Elective	ARTS 1317-Drawing II*	3
Elective	ARTS 1304-Art History II*	3
Elective	ARTS 1312-Design II or Foreign Language II ( <i>if required</i> )*	<u>3-4</u>
		<b>15-16</b>
	<u>Total Credit Hours</u>	<b>62-64*</b>

\*Consult with your intended transfer university AND an advisor at NCTC to determine which courses would satisfy both elective and core requirements for your major, and also how many credit hours beyond the 60 hours required for an AA degree are transferable. Some universities may require 12-14 hours of a Foreign Language for Bachelor of Arts majors, or proven language proficiency through credits earned by CLEP testing.

Specific courses/major requirements for some common transfer universities are listed below:

**Midwestern State University:**

<http://www.mwsu.edu/academics/undergraduate-majors-and-programs>

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**University of North Texas:**

<http://registrar.unt.edu/transfer-guides>

Sam Houston State: <http://www.shsu.edu/prospects/transfer/>  
 Southeastern Oklahoma University: <http://www.se.edu/2plus2/>  
 Texas A&M University (College Station):  
<http://admissions.tamu.edu/transfer/majors>  
 Texas Tech University:  
<http://www.depts.ttu.edu/admissions/advising/>  
 UT Austin: <http://www.utexas.edu/student/admissions/tccn/>  
 University of Texas at Dallas:  
<https://www.utdallas.edu/enroll/transfer/plans/>

**NCTC Advising Questions: [counseling@nctc.edu](mailto:counseling@nctc.edu)**

## NCTC ASSOCIATE OF SCIENCE (AS) GENERAL STUDIES DEGREE

### SUGGESTED PATHWAY FOR **BIOLOGY MAJORS** (NON-TEACHER CERTIFICATION)

The Associate of Science (AS) General Studies degree is designed to transfer into a bachelor's degree at a four-year public university in the state of Texas. The transfer university is the final authority on determining if all the courses within the NCTC Associate of Science degree are transferable and applicable for an intended major, so students should consult with an advisor at the university level regarding all coursework to be completed at NCTC. The following is a recommended sequence of courses for students intending on majoring in Biology (without Teacher Certification) at a Texas public university. Students placing at college preparatory levels will have additional courses to complete before taking eligible college-level courses in this sequence, and some courses may have prerequisites; please check the course descriptions in the NCTC catalog. The amount of courses taken each semester can also be adjusted as several core classes are offered during Summer and Mini-mesters; this sequence only takes into account Fall and Spring semesters. **Depending on how many credit hours you have already attempted, all courses on this pathway may not be eligible for Financial Aid through NCTC.**

FIRST SEMESTER		CREDIT HOURS
ENGL 1301	Composition I	3
EDUC 1300	Learning Frameworks	3
HIST 1301	U.S. History I ( <i>up to 1865</i> )	3
MATH Core	MATH 1314-College Algebra	3
1 <sup>st</sup> LAB SCIENCE Core	BIOL 1406-Biology for Science Majors I or BIOL 1411-Botany	<u>4</u>
		<b>16</b>
SECOND SEMESTER		
ENGL 2311	Technical Writing	3
HIST 1302	U.S. History II ( <i>1865 to present</i> )	3
ARTS Core	MUSI 1306 or other Creative Arts core	3
2 <sup>nd</sup> MATH	MATH 1316-Trigonometry or MATH 2412-Pre-Calculus	4
2 <sup>nd</sup> LAB SCIENCE Core	BIOL 1407-Biology for Science Majors II or BIOL 1413-Zoology	<u>4</u>
		<b>17</b>
THIRD SEMESTER		
GOVT 2305	American National Government	3
SPCH 1315 or 1321	Public Speaking or Business and Professional Speech	3
SOCIAL/BEHAV Core	ANTH 2346-General Anthropology or other Social Science core	3
3 <sup>rd</sup> LAB SCIENCE	CHEM 1411-General Chem. I**	4
Elective	PHYS 1401-General Physics I or PHYS 2425-Engineering Physics I**	<u>4</u>
		<b>17</b>
FOURTH SEMESTER		
GOVT 2306	Texas Government	3
LANG/PHIL/CULTURE Core	HUMA 1301-Intro. to Humanities or other Lang/Phil/Culture core	3
4 <sup>th</sup> LAB SCIENCE	CHEM 1412-General Chem. II	4
Elective	PHYS 1402-General Physics II or PHYS 2426-Engineering Physics II*	<u>4</u>
		<b>14</b>
	<u>Total Credit Hours</u>	<b>64*</b>

\*\*MATH 1314 is a prerequisite to MATH 1316, MATH 2412, and CHEM 1411; MATH 1314 along with either MATH 1316 or 2412 are prerequisites to PHYS 1401 or 2425. Credit for some Math prerequisites may be earned through approved scores on CLEP, AP, IB, ACT, SAT, or the Accuplacer College Math Test. Please see an advisor at NCTC for details, or consult the "Placement Testing" section of the NCTC catalog.

\*Consult with your intended transfer university AND an advisor to determine which NCTC courses would satisfy both elective and core requirements for your major, and also how many credit hours beyond the 60 hours required for an AS degree are transferable.

Specific courses/major requirements for some common transfer universities are listed below:

#### Midwestern State University:

<http://www.mwsu.edu/academics/undergraduate-majors-and-programs>

#### Texas Woman's University:

<http://www.twu.edu/undergraduate-studies/graduate-on-time.asp>

#### University of North Texas:

<http://registrar.unt.edu/transfer-guides>

Sam Houston State: <http://www.shsu.edu/prospects/transfer/>  
 Southeastern Oklahoma University: <http://www.se.edu/2plus2/>  
 Texas A&M University (College Station):  
<http://admissions.tamu.edu/transfer/majors>  
 Texas Tech University:  
<http://www.depts.ttu.edu/admissions/advising/>  
 UT Austin: <http://www.utexas.edu/student/admissions/tccn/>  
 University of Texas at Dallas:  
<https://www.utdallas.edu/enroll/transfer/plans/>

**NCTC Advising Questions:** [counseling@nctc.edu](mailto:counseling@nctc.edu)  
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## NCTC ASSOCIATE OF SCIENCE (AS) GENERAL STUDIES DEGREE

### SUGGESTED PATHWAY FOR CHEMISTRY MAJORS (NON-TEACHER CERTIFICATION)

The Associate of Science (AS) General Studies degree is designed to transfer into a bachelor's degree at a four-year public university in the state of Texas. The transfer university is the final authority on determining if all the courses within the NCTC Associate of Science degree are transferable and applicable for an intended major, so students should consult with an advisor at the university level regarding all coursework to be completed at NCTC. The following is a recommended sequence of courses for students intending on majoring in Chemistry (without Teacher Certification) at a Texas public university. Students placing at college preparatory levels will have additional courses to complete before taking eligible college-level courses in this sequence, and some courses may have prerequisites; please check the course descriptions in the NCTC catalog. The amount of courses taken each semester can also be adjusted as several core classes are offered during Summer and Mini-mesters; this sequence only takes into account Fall and Spring semesters. **Depending on how many credit hours you have already attempted, all courses on this pathway may not be eligible for Financial Aid through NCTC.**

FIRST SEMESTER		CREDIT HOURS
ENGL 1301	Composition I	3
EDUC 1300	Learning Frameworks	3
HIST 1301	U.S. History I (up to 1865)	3
MATH Core	MATH 1316-Trigonometry or MATH 2412-Pre-Calculus	3
1 <sup>st</sup> LAB SCIENCE Core	CHEM 1411-General Chem. I**	<u>4</u>
		<b>16</b>
SECOND SEMESTER		
ENGL 2311	Technical Writing	3
HIST 1302	U.S. History II (1865 to present)	3
ARTS Core	MUSI 1306-Music Appreciation or other Creative Arts core	3
2 <sup>nd</sup> MATH	MATH 1316-Trigonometry or MATH 2412-Pre-Calculus	4
2 <sup>nd</sup> LAB SCIENCE Core	CHEM 1412-General Chem. II	<u>4</u>
		<b>17</b>
THIRD SEMESTER		
GOVT 2305	American National Government	3
SPCH 1315 or 1321	Public Speaking or Business and Professional Speech	3
SOCIAL/BEHAV Core	ANTH 2346-General Anthropology or other Social Science core	3
3 <sup>rd</sup> LAB SCIENCE	CHEM 2423-Organic Chemistry I	4
Elective	PHYS 1401-General Physics I or PHYS 2425-Engineering Physics I**	<u>4</u>
		<b>17</b>
FOURTH SEMESTER		
GOVT 2306	Texas Government	3
LANG/PHIL/CULTURE Core	HUMA 1301-Intro. to Humanities or other Lang/Phil/Culture core	3
4 <sup>th</sup> LAB SCIENCE	CHEM 2425-Organic Chemistry II	4
Elective	PHYS 1402-General Physics II or PHYS 2426-Engineering Physics II*	<u>4</u>
		<b>14</b>
	<u>Total Credit Hours</u>	<b>64*</b>

\*\*MATH 1314 is a prerequisite to MATH 1316, MATH 2412, and CHEM 1411; MATH 1314 along with either MATH 1316 or 2412 are prerequisites to PHYS 1401 or 2425. Credit for some Math prerequisites may be earned through approved scores on CLEP, AP, IB, ACT, SAT, or the Accuplacer College Math Test. Please see an advisor at NCTC for details, or consult the "Placement Testing" section of the NCTC catalog.

\*Consult with your intended transfer university AND an advisor to determine which NCTC courses would satisfy both elective and core requirements for your major, and also how many credit hours beyond the 60 hours required for an AS degree are transferable.

Specific courses/major requirements for some common transfer universities are listed below:

#### Midwestern State University:

<http://www.mwsu.edu/academics/undergraduate-majors-and-programs>

#### Texas Woman's University:

<http://www.twu.edu/undergraduate-studies/graduate-on-time.asp>

#### University of North Texas:

<http://registrar.unt.edu/transfer-guides>

Sam Houston State: <http://www.shsu.edu/prospects/transfer/>  
 Southeastern Oklahoma University: <http://www.se.edu/2plus2/>  
 Texas A&M University (College Station):  
<http://admissions.tamu.edu/transfer/majors>  
 Texas Tech University:  
<http://www.depts.ttu.edu/admissions/advising/>  
 UT Austin: <http://www.utexas.edu/student/admissions/tccn/>  
 University of Texas at Dallas:  
<https://www.utdallas.edu/enroll/transfer/plans/>

**NCTC Advising Questions:** [counseling@nctc.edu](mailto:counseling@nctc.edu)  
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**NCTC ASSOCIATE OF SCIENCE (AS) GENERAL STUDIES DEGREE****SUGGESTED PATHWAY FOR COMPUTER SCIENCE MAJORS**

The Associate of Science (AS) General Studies degree is designed to transfer into a bachelor's degree at a four-year public university in the state of Texas. The transfer university is the final authority on determining if all the courses within the NCTC Associate of Science degree are transferable and applicable for an intended major, so students should consult with an advisor at the university level regarding all coursework to be completed at NCTC. The following is a recommended sequence of courses for students intending on majoring in Computer Science at a Texas public university. Students placing at college preparatory levels will have additional courses to complete before taking eligible college-level courses in this sequence, and some courses may have prerequisites; please check the course descriptions in the NCTC catalog. The amount of courses taken each semester can also be adjusted as several core classes are offered during Summer and Mini-mesters; this sequence only takes into account Fall and Spring semesters. **Depending on how many credit hours you have already attempted, all courses on this pathway may not be eligible for Financial Aid through NCTC.**

FIRST SEMESTER		CREDIT HOURS
ENGL 1301	Composition I	3
EDUC 1300	Learning Frameworks	3
HIST 1301	U.S. History I ( <i>up to 1865</i> )	3
MATH Core	MATH 1316-Trigonometry or MATH 2412-Pre-Calculus**	3
1 <sup>st</sup> LAB SCIENCE Core	BIOL 1406-Bio. for Science Majors I or CHEM 1411-General Chem. I**	<u>4</u>
		<b>16</b>
SECOND SEMESTER		
ENGL 2311	Technical Writing	3
HIST 1302	U.S. History II ( <i>1865 to present</i> )	3
ARTS Core	MUSI 1306-Music Appreciation or other Creative Arts core	3
2 <sup>nd</sup> MATH	MATH 2413-Calculus I	4
2 <sup>nd</sup> LAB SCIENCE Core	PHYS 2425-Engineering Physics I**	<u>4</u>
		<b>17</b>
THIRD SEMESTER		
GOVT 2305	American National Government	3
SOCIAL/BEHAV Core	ECON 2301-Macroeconomics or other Social Science core	3
Elective	MATH 2414-Calculus II*	4
Elective	COSC 1436-Programming Fundamentals I*	4
3 <sup>rd</sup> LAB SCIENCE	PHYS 2426-Engineering Physics II	<u>4</u>
		<b>17</b>
FOURTH SEMESTER		
GOVT 2306	Texas Government	3
LANG/PHIL/CULTURE Core	PHIL 2306-Intro. to Ethics or other Lang/Phil/Culture core	3
SPCH 1315 or 1321	Public Speaking or Business and Professional Speech	3
Elective	COSC 1437-Programming Fundamentals II*	4
4 <sup>th</sup> LAB SCIENCE	CHEM 1412-General Chem. II**	<u>3-4</u>
		<b>17</b>
	<i>Total Credit Hours</i>	<b>67*</b>

\*\*MATH 1314 is a prerequisite to MATH 1316, MATH 2412, and CHEM 1411; MATH 1314 along with either MATH 1316 or 2412 are prerequisites to PHYS 1401 or 2425. Credit for some Math prerequisites may be earned through approved scores on CLEP, AP, IB, ACT, SAT, or the Accuplacer College Math Test. Please see an advisor at NCTC for details, or consult the "Placement Testing" section of the NCTC catalog.

\*Consult with your intended transfer university AND an advisor to determine which NCTC courses would satisfy both elective and core requirements for your major, and also how many credit hours beyond the 60 hours required for an AS degree are transferable.

Specific courses/major requirements for some common transfer universities are listed below:

**Midwestern State University:**

<http://www.mwsu.edu/academics/undergraduate-majors-and-programs>

**Texas Woman's University:**

<http://www.twu.edu/undergraduate-studies/graduate-on-time.asp>

**University of North Texas:**

<http://registrar.unt.edu/transfer-guides>

Sam Houston State: <http://www.shsu.edu/prospects/transfer/>  
 Southeastern Oklahoma University: <http://www.se.edu/2plus2/>  
 Texas A&M University (College Station):  
<http://admissions.tamu.edu/transfer/majors>  
 Texas Tech University:  
<http://www.depts.ttu.edu/admissions/advising/>  
 UT Austin: <http://www.utexas.edu/student/admissions/tccn/>  
 University of Texas at Dallas:  
<https://www.utdallas.edu/enroll/transfer/plans/>

**NCTC Advising Questions:** [counseling@nctc.edu](mailto:counseling@nctc.edu)  
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## NCTC ASSOCIATE OF SCIENCE (AS) GENERAL STUDIES DEGREE SUGGESTED PATHWAY FOR ENGINEERING OR PHYSICS MAJORS

The Associate of Science (AS) General Studies degree is designed to transfer into a bachelor's degree at a four-year public university in the state of Texas. The transfer university is the final authority on determining if all the courses within the NCTC Associate of Science degree are transferable and applicable for an intended major, so students should consult with an advisor at the university level regarding all coursework to be completed at NCTC. The following is a recommended sequence of courses for students intending on majoring in Engineering or Physics at a Texas public university. Students placing at college preparatory levels will have additional courses to complete before taking eligible college-level courses in this sequence, and some courses may have prerequisites; please check the course descriptions in the NCTC catalog. The amount of courses taken each semester can also be adjusted as several core classes are offered during Summer and Mini-mesters; this sequence only takes into account Fall and Spring semesters. **Depending on how many credit hours you have already attempted, all courses on this pathway may not be eligible for Financial Aid through NCTC.**

<b>FIRST SEMESTER</b>		<b>CREDIT HOURS</b>
ENGL 1301	Composition I	3
EDUC 1300	Learning Frameworks	3
HIST 1301	U.S. History I ( <i>up to 1865</i> )	3
MATH Core	MATH 1316-Trigonometry or MATH 2412-Pre-Calculus**	3
1 <sup>st</sup> LAB SCIENCE Core	CHEM 1411-General Chem. I**	<u>4</u>
		<b>16</b>
<b>SECOND SEMESTER</b>		
ENGL 2311	Technical Writing	3
HIST 1302	U.S. History II ( <i>1865 to present</i> )	3
ARTS Core	MUSI 1306 or other Creative Arts core	3
2 <sup>nd</sup> MATH	MATH 2413-Calculus I	4
2 <sup>nd</sup> LAB SCIENCE Core	PHYS 2425-Engineering Physics I**	<u>4</u>
		<b>17</b>
<b>THIRD SEMESTER</b>		
GOVT 2305	American National Government	3
SPCH 1315 or 1321	Public Speaking or Business and Professional Speech	3
SOCIAL/BEHAV Core	ANTH 2346-General Anthropology or other Social Science core	3
Elective	MATH 2414-Calculus II*	4
3 <sup>rd</sup> LAB SCIENCE	PHYS 2426-Engineering Physics II	<u>4</u>
		<b>17</b>
<b>FOURTH SEMESTER</b>		
GOVT 2306	Texas Government	3
LANG/PHIL/CULTURE Core	PHIL 2306-Intro. to Ethics or other Lang/Phil/Culture core	3
Elective	MATH 2415-Calculus III*	4
4 <sup>th</sup> LAB SCIENCE	CHEM 1412-General Chem. II*	<u>4</u>
		<b>14</b>
<u>Total Credit Hours</u>		<b>64*</b>

\*\*MATH 1314 is a prerequisite to MATH 1316, MATH 2412, and CHEM 1411; MATH 1314 along with either MATH 1316 or 2412 are prerequisites to PHYS 1401 or 2425. Credit for some Math prerequisites may be earned through approved scores on CLEP, AP, IB, ACT, SAT, or the Accuplacer College Math Test. Please see an advisor at NCTC for details, or consult the "Placement Testing" section of the NCTC catalog.

\*Consult with your intended transfer university AND an advisor to determine which NCTC courses would satisfy both elective and core requirements for your major, and also how many credit hours beyond the 60 hours required for an AS degree are transferable.

Specific courses/major requirements for some common transfer universities are listed below:

### Midwestern State University:

<http://www.mwsu.edu/academics/undergraduate-majors-and-programs>

### Texas Woman's University:

<http://www.twu.edu/undergraduate-studies/graduate-on-time.asp>

### University of North Texas:

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Sam Houston State: <http://www.shsu.edu/prospects/transfer/>  
 Southeastern Oklahoma University: <http://www.se.edu/2plus2/>  
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 Texas Tech University:  
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 UT Austin: <http://www.utexas.edu/student/admissions/tccn/>  
 University of Texas at Dallas:  
<https://www.utdallas.edu/enroll/transfer/plans/>

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**NCTC ASSOCIATE OF SCIENCE (AS) GENERAL STUDIES DEGREE****SUGGESTED PATHWAY FOR MATH MAJORS** (NON-TEACHER CERTIFICATION)

The Associate of Science (AS) General Studies degree is designed to transfer into a bachelor's degree at a four-year public university in the state of Texas. The transfer university is the final authority on determining if all the courses within the NCTC Associate of Science degree are transferable and applicable for an intended major, so students should consult with an advisor at the university level regarding all coursework to be completed at NCTC. The following is a recommended sequence of courses for students intending on majoring in Math (without Teacher Certification) at a Texas public university. Students placing at college preparatory levels will have additional courses to complete before taking eligible college-level courses in this sequence, and some courses may have prerequisites; please check the course descriptions in the NCTC catalog. The amount of courses taken each semester can also be adjusted as several core classes are offered during Summer and Mini-mesters; this sequence only takes into account Fall and Spring semesters. **Depending on how many credit hours you have already attempted, all courses on this pathway may not be eligible for Financial Aid through NCTC.**

FIRST SEMESTER		CREDIT HOURS
ENGL 1301	Composition I	3
EDUC 1300	Learning Frameworks	3
HIST 1301	U.S. History I (up to 1865)	3
MATH Core	MATH 1316-Trigonometry or MATH 2412-Pre-Calculus**	3
1 <sup>st</sup> LAB SCIENCE Core	BIOL 1406-Bio. for Science Majors I or CHEM 1411-General Chem. I**	<u>4</u>
		<b>16</b>
SECOND SEMESTER		
ENGL 2311	Technical Writing	3
HIST 1302	U.S. History II (1865 to present)	3
ARTS Core	MUSI 1306-Music Appreciation or other Creative Arts core	3
2 <sup>nd</sup> MATH	MATH 2413-Calculus I	4
2 <sup>nd</sup> LAB SCIENCE Core	PHYS 2425-Engineering Physics I**	<u>4</u>
		<b>17</b>
THIRD SEMESTER		
GOVT 2305	American National Government	3
SPCH 1315 or 1321	Public Speaking or Business and Professional Speech	3
SOCIAL/BEHAV Core	ECON 2301-Macroeconomics or other Social Science core	3
Elective	MATH 2414-Calculus II*	4
3 <sup>rd</sup> LAB SCIENCE	PHYS 2426-Engineering Physics II	<u>4</u>
		<b>17</b>
FOURTH SEMESTER		
GOVT 2306	Texas Government	3
LANG/PHIL/CULTURE Core	PHIL 2306-Intro. to Ethics or other Lang/Phil/Culture core	3
Elective	MATH 2415-Calculus III*	4
4 <sup>th</sup> LAB SCIENCE	CHEM 1412-General Chem. II*	<u>4</u>
		<b>14</b>
	<u>Total Credit Hours</u>	<b>64*</b>

\*\*MATH 1314 is a prerequisite to MATH 1316, MATH 2412, and CHEM 1411; MATH 1314 along with either MATH 1316 or 2412 are prerequisites to PHYS 1401 or 2425. Credit for some Math prerequisites may be earned through approved scores on CLEP, AP, IB, ACT, SAT, or the Accuplacer College Math Test. Please see an advisor at NCTC for details, or consult the "Placement Testing" section of the NCTC catalog.

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Southeastern Oklahoma University: <http://www.se.edu/2plus2/>

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<http://admissions.tamu.edu/transfer/majors>

Texas Tech University:

<http://www.depts.ttu.edu/admissions/advising/>

UT Austin: <http://www.utexas.edu/student/admissions/tccn/>

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# North Central Texas College Course Catalog

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## **ACCT 2301 - PRINCIPLES OF FINANCIAL ACCOUNTING**

This course is an introduction to the fundamental concepts of financial accounting as prescribed by U.S. generally accepted accounting principles (GAAP) and applied to transactions and events that affect business organizations. Students will examine the procedures and systems to accumulate, analyze, measure, and record financial transactions. Students will use recorded financial information to prepare a balance sheet, income statement, statement of cash flows, and statement of shareholders' equity to communicate the business entity's results of operations and financial position to users of financial information who are external to the company. Students will study the nature of assets, liabilities, and owners' equity while learning to use reported financial information for purposes of making decisions about the company. Students will be exposed to International Financial Reporting Standards (IFRS).

Upon completion, students will be able to:

- Use basic accounting terminology and the assumptions, principles, and constraints of the accounting environment
- Identify the difference between accrual and cash basis accounting
- Analyze and record business events in accordance with U.S. generally accepted accounting principles (GAAP)
- Prepare adjusting entries and close the general ledger
- Prepare financial statements in an appropriate U.S. GAAP format, including the following: income statement, balance sheet, statement of cash flows, and statement of shareholders' equity
- Analyze and interpret financial statements using financial analysis techniques
- Describe the conceptual differences between International Financial Reporting Standards and U.S. generally accepted accounting principles

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 48.0

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## **ACCT 2302 - PRINCIPLES OF MANAGERIAL ACCOUNTING**

This course is an introduction to the fundamental concepts of managerial accounting appropriate for all organizations. Students will study information from the entity's accounting system relevant to decisions made by internal managers, as distinguished from information relevant to users who are external to the company. The emphasis is on the identification and assignment of product costs, operational budgeting and planning, cost control, and management decision making. Topics include product costing

methodologies, cost behavior, operational and capital budgeting, and performance evaluation.

Upon completion, students will be able to:

- Identify the role and scope of financial and managerial accounting and the use of accounting information in the decision making process of managers
- Define operational and capital budgeting, and explain its role in planning, control, and decision making
- Prepare an operating budget, identify its major components, and explain the interrelationships among its various components
- Explain methods of performance evaluation
- Use appropriate financial information to make operational decisions
- Demonstrate use of accounting data in the areas of product costing, cost behavior, cost control, and operational and capital budgeting for management decisions

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 48.0

**Prerequisites:**

- [ACCT 2301](#) - PRINCIPLES OF FINANCIAL ACCOUNTING
- 

## **ACNT 1303 - INTRODUCTION TO ACCOUNTING I**

A study of analyzing, classifying, and recording business transactions in a manual and computerized environment. Emphasis on understanding the complete accounting cycle and preparing financial statements, bank reconciliations and payroll. Lab fees apply

Upon completion, students will be able to:

- Define accounting terminology
- Analyze and record business transactions in a manual and computerized environment
- Complete the accounting cycle
- Prepare financial statements
- Apply accounting concepts related to cash and payroll
- Prepare bank reconciliations
- Correct accounting errors

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 32.0

**Lab hours:** 32.0

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## **ACNT 1311 - INTRODUCTION TO COMPUTERIZED ACCOUNTING**

Introduction to utilizing the computer in maintaining accounting records with primary emphasis on a general ledger package. Lab fees apply

Upon completion, students will be able to:

- Utilize an application software to perform accounting tasks
- Maintain records
- Prepare reports
- Analyze reports for a business entity
- Complete a comprehensive project
- Explain the components of general ledger software

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 32.0

**Lab hours:** 32.0

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## **HALT 2331 - ADVANCED LANDSCAPE DESIGN**

In-depth coverage of advanced practices in landscape planning for commercial and residential landscapes. Topics include advanced design analysis, architectural elements, space articulation, and land engineering concepts. Lab fees apply

Upon completion, students will be able to:

- Design landscape plans including construction and planting details and specifications
- Produce a graphic drawing of a landscape

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 32.0

**Lab hours:** 32.0

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## **ITSC 2325 - ADVANCED LINUX**

Provides instruction in advance open-source Linux operating system. Develops directory services for clients, support users remotely, and install and configure network services. Lab fees apply

Upon completion, students will be able to:

- Install, administer, and manage advanced network environment using a Linux system
- Demonstrate advanced skills and proficiency with Linux utilities and configurations
- Deploy secure networks

- Integrate Linux networks with existing networks

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 32.0

**Lab hours:** 32.0

**Prerequisites:**

- [ITSC 1316](#) - LINUX INSTALLATION AND CONFIGURATION
- 

## **AGAH 1291 - SPECIAL TOPICS IN ANIMAL SCIENCES, GENERAL**

Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course was designed to be repeated multiple times to improve student proficiency. Lab fees apply Learning outcomes and objectives are determined by local occupational need and business and industry trends.

**Grade Basis:** L

**Credit hours:** 2.0

**Lecture hours:** 16.0

**Lab hours:** 32.0

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## **AGAH 1372 - AGRICULTURAL SPANISH**

This is an industry specific Spanish course designed for agricultural students. The scope of this course will include the English to Spanish translation for terminology and phrases associated with production agriculture. The primary goal of this course is to provide students some basic communication skills so that they will be able to interact with Spanish speaking employees in different work environments and under different situations within their specific agricultural fields. Lab fees apply NOTE: This is not a University Transfer course. This course does not fulfill any core curriculum requirements at NCTC.

Upon completion, students will be able to:

- Demonstrate proficiency in Spanish terminology that may be needed in a farm or ranch workplace safety or emergency situation
- Demonstrate recollection and pronunciation of common colors, numbers, mathematical units, weights and measures
- Demonstrate ability to provide mock employees work details in Spanish related to farm, ranch and equine workplace situations
- Demonstrate the ability to discuss wages and employment terms with farm and ranch employees

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 48.0

**Lab hours:** 32.0

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## **AGAH 1443 - ANIMAL HEALTH**

An overview of anatomy and physiology as it relates to animal health. Topics include disease symptoms, basic immunology, diagnosis, prevention, and control of infectious and non-infectious diseases of animals. Lab fees apply

Upon completion, students will be able to:

- Summarize the importance of livestock diseases and animal health
- Diagnose symptoms and identify causes of various animal diseases
- Implement preventative and treatment methods for various animal diseases

**Grade Basis:** L

**Credit hours:** 4.0

**Lecture hours:** 48.0

**Lab hours:** 32.0

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## **AGAH 1453 - BEEF CATTLE PRODUCTION**

An overview of the beef cattle industry. Topics include the organization and operation of beef cattle enterprises, selection breeding, reproduction, health, nutrition, management, and marketing. Lab fees apply

Upon completion, students will be able to:

- Summarize the importance of the beef cattle industry and its role in food production
- Identify beef cattle breeds, classes, and products
- Implement managerial practices designed to increase the efficiency of beef cattle production

**Grade Basis:** L

**Credit hours:** 4.0

**Lecture hours:** 48.0

**Lab hours:** 32.0

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## **AGAH 2270 - ARTIFICIAL INSEMINATION**

A course to train persons to inseminate cattle. In addition to spending many hours learning the inseminating technique, various management practices to insure a successful overall program will be presented. These subjects include handling of frozen semen and equipment, reproductive problems and diseases, heat detection, cycle control, nutrition and methods of bull evaluation for maximum genetics and conformation progress. Lab fees apply

Upon completion, students will be able to:

- Discover the value of artificial insemination in livestock breeding and reproduction
- Examine the anatomy and physiology of reproduction
- Identify the importance of nutrition to reproduction
- Identify reproductive problems and diseases
- Show the economic advantages of artificial insemination
- Handle frozen semen and equipment
- Use artificial insemination to improve the quality of beef and dairy herds
- Discover methods of bull evaluation for maximum genetics and conformation progress
- Utilize technology in agriculture using the Ag Network Satellite program

**Grade Basis:** L

**Credit hours:** 2.0

**Lecture hours:** 16.0

**Lab hours:** 32.0

---

## **AGAH 2271 - CATTLE REPRODUCTION**

This is a training course in the reproductive management and artificial insemination of cattle. Students will become familiar with and learn the anatomy of the cow reproductive tract. This course is designed to acquaint students with the techniques of artificial insemination and pregnancy diagnosis in the cow, and to familiarize students with the collection, evaluation, processing, and handling of semen. The class will also participate in a mock embryo transfer in order to acquaint students with estrus synchronization, drug protocols, and the mechanics of uterine flushing. Lab fees apply

Upon completion, students will be able to:

- Demonstrate knowledge of animal physiology and management considerations for an artificial insemination and/or rectal palpation
- Describe changes in the uterus and uterine horns in relation to the different stages of pregnancy
- Demonstrate basic skills required to successfully perform artificial insemination in cattle and/or demonstrate basic skills in using rectal palpation method of determining cattle pregnancy
- Demonstrate proper semen handling technique from the storage tank up to being placed in the cow

**Grade Basis:** L

**Credit hours:** 2.0

**Lecture hours:** 16.0

**Lab hours:** 32.0

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## **AGAH 2313 - PRINCIPLES OF FEEDS & FEEDING**

Study of the role and application of feed nutrients and additives. Topics include comparative aspects of digestion, absorption, and metabolism of nutrients. Emphasis on identification of nutrient requirements and formulation of dietary feeding regimen. Lab fees apply

Upon completion, students will be able to:

- Outline the roles and functions of feed nutrients and non-nutritive feed additives
- Describe and compare digestion, absorption, and metabolism
- Compute dietary feeding regimens
- Identify nutritional problems as related to digestive systems

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 48.0

**Lab hours:** 16.0

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## **AGCR 1371 - SUSTAINABLE AGRICULTURE**

Introduction to history, principles, and practices of sustainable agriculture as applied to local and global agriculture. A comparison and evaluation of sustainability of conventional agricultural practices will be made from the environmental, economic, and social perspectives ("planet, profit, and people"). Case studies and other tools will be used to relate principles of sustainable agriculture to basic farming practices.

Upon completion, students will be able to:

- Describe and demonstrate various techniques and management practices used to optimize agriculture from an environmental, social, and financial perspective
- Identify environmental, social and financial factors which are important in both sustainable and conventional
- Express and discuss the importance of sustainable agriculture as it compares to conventional agriculture
- Utilize computer programs and agriculture related programs associated with this course and various aspects of the agriculture related industry
- Demonstrate the implementation of planning, establishing, and maintaining agricultural operations under sustainable practices

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 32.0

**Lab hours:** 32.0

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## **AGCR 1441 - FORAGE & PASTURE MANAGEMENT**

Study of the production and management of forage crops and pastures including establishment, fertilization, weed control, grazing systems, hay, seed production, and harvesting.

Upon completion, students will be able to:

- Develop techniques and management practices to optimize pasture and forage production
- Determine forage nutritive quality in relation to livestock production
- Identify forage and pasture plants and weed species

**Grade Basis:** L

**Credit hours:** 4.0

**Lecture hours:** 48.0

**Lab hours:** 32.0

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## **AGCR 2405 - ENTOMOLOGY**

Study of the morphology, physiology, and classification of the common insect orders and related arthropods with emphasis on species of economic or biological importance. Emphasis on integrated pest management concepts and proper use of pesticides. Lab fees apply

Upon completion, students will be able to:

- Describe basic insect morphology and physiology
- Classify insects to the order level
- Identify common insect and arthropod pest and beneficial species
- Interpret pesticide labels and state and federal laws
- Explain pesticide application procedures
- Apply integrated pest management techniques to specific pest situations

**Grade Basis:** L

**Credit hours:** 4.0

**Lecture hours:** 48.0

**Lab hours:** 32.0

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## **AGEQ 1205 - EQUINE ENTERPRISE MANAGEMENT**

Overview of the equine industry. Includes equine industry segments, job market and economic impact. Course is designed as a business survey of the equine industry as a whole. Topics will include all areas involved directly and indirectly with the equine industry and the applied management techniques that are involved with these areas. Lecture will be supplemented with guest speakers and field trips to area farms and businesses. Lab fees apply



Upon completion, students will be able to:

- Define the various equine industry segments and explain their economic significance
- Identify employment opportunities in the equine industry

**Grade Basis:** L

**Credit hours:** 2.0

**Lecture hours:** 16.0

**Lab hours:** 32.0

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## **AGEQ 1291 - CATTLE REPRODUCTION**

This is a training course in the reproductive management and artificial insemination of cattle. Students will become familiar with and learn the anatomy of the cow reproductive tract. This course is designed to acquaint students with the techniques of artificial insemination and pregnancy diagnosis in the cow, and to familiarize student with the collection, evaluation, processing, and handling of semen. The class will also participate in a mock embryo transfer in order to acquaint students with estrus synchronization, drug protocols, and the mechanics of uterine flushing. Lab fees apply Learning outcomes and objectives are determined by local occupational need and business and industry trends.

**Grade Basis:** L

**Credit hours:** 2.0

**Lecture hours:** 16.0

**Lab hours:** 32.0

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## **AGEQ 1300 - ENGLISH EQUITATION I**

Course in basic equitation skills, including handling, saddling, bridling, mounting, riding, grooming, safety, and basic health care. Topics will include correct riding position, leg strengthening exercises, and balance exercises. NCTC School horse and appropriate tack will be provided for use. Lab fees apply

Upon completion, students will be able to:

- Identify and employ basic handling and riding safety practices
- Identify and care for equipment and tack
- Demonstrate proper leg, seat, and hand positions as they relate to riding techniques

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 32.0

**Lab hours:** 32.0

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## **AGEQ 1315 - HORSE EVALUATION I**

Instruction in evaluation and selection of horses based on breed and performance criteria. Topics include basic anatomy and its relation to function, breed type, and characteristics, and standard performance classes. Emphasis will be given to breed standards and rules of judging performance horses. Lab fees apply

Upon completion, students will be able to:

- Relate conformation to equine functions
- Prioritize and utilize criteria as related to evaluation and selection
- Employ appropriate terminology used in discussing evaluation and selection processes

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 32.0

**Lab hours:** 32.0

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## **AGEQ 1319 - WESTERN HORSEMANSHIP I**

Instruction in basic horsemanship skills including handling, saddling, bridling, mounting, riding, grooming, safety, and basic health care. Emphasis will be given to proper riding techniques, use of aids and cues, and proper leg, seat, and hand position. NCTC School horse and appropriate tack will be provided for use.

Upon completion, students will be able to:

- Recognize and employ basic handling and riding safety practices
- Identify and care for equipment and tack
- Demonstrate proper leg, seat, and hand positions as they relate to riding techniques

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 32.0

**Lab hours:** 32.0

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## **AGEQ 1322 - FUNDAMENTALS OF RIDING INSTRUCTION**

Methodologies of riding instruction. Includes safety, horsemanship, teaching techniques, group control, and professionalism. Students will develop basic skills needed to become an effective riding instructor. Through classroom and arena exercises students will gain skills in organization, development of lesson plans, and a variety of teaching techniques. Students will be working with first year students.

Upon completion, students will be able to:

- Develop teaching techniques in riding instruction
- Implement safe practices
- Evaluate risk management factors
- Demonstrate effective communication skills

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 48.0

**Prerequisites:**

- [AGEQ 1300](#) - ENGLISH EQUITATION I
- [AGEQ 1319](#) - WESTERN HORSEMANSHIP I
- [AGEQ 1370](#) - LOCAL NEEDS - PRINCIPLES OF RANCH HORSE RIDING I

**Restrictions:**

- Course requires approval of instructor.
- 

## **AGEQ 1350 - EQUINE REPRODUCTION**

Reproductive anatomy, physiological functions, and common management practices related to equine reproductive facilities. Lecture portion of this course is conducted in the first 6 weeks of the semester with emphasis on anatomy and physiology of the mare and stallion as it relates to management for maximum reproductive efficiency. Basic principles of artificial insemination, embryonic development, parturition, and care of the pregnant mare and newborn will be discussed. Semen collection, evaluation, and shipping will also be discussed. The lab portion is the remainder of the semester, and consists of students working on well-respected breeding farms in the area. Lab fees apply

Upon completion, students will be able to:

- Identify equine reproductive organs and functions
- Relate endocrinology to the reproductive process
- Implement managerial practices designed to improve reproductive efficiency

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 32.0

**Lab hours:** 64.0

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## **AGEQ 1370 - LOCAL NEEDS - PRINCIPLES OF RANCH HORSE RIDING I**

Instruction in the basic principles of Ranch Horse riding. To include, but not limited to handling, saddling, bridling, mounting, riding, grooming, safety, basic health care, basic

rope handling, basic cow handling and tactics for competing in Ranch Horse events.  
Lab fees apply

Upon completion, students will be able to:

- Recognize and employ basic handling and riding safety practices
- Identify and care for equipment and tack
- Demonstrate proper leg, seat, and hand positions as they relate to basic principles of Ranch Horse riding
- Identify core areas of focus for training the versatile ranch horse
- Generalize rules and procedures related to Ranch Horse competitions

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 32.0

**Lab hours:** 64.0

**Restrictions:**

- Must have instructor approved personally owned horse to be in this course.
- 

## **AGEQ 1371 - LOCAL NEEDS - PRINCIPLES OF RANCH HORSE RIDING II**

Introduction to the advanced principles of Ranch Horse riding. To include, but not limited to handling, saddling, bridling, mounting, riding, grooming, safety, health care, advanced rope handling, advanced cow handling and tactics for competing in Ranch Horse events. Lab fees apply

Upon completion, students will be able to:

- Assess and rate individual horses based upon their performance and abilities as a versatile ranch horse
- Interpret horse reaction to various headgear/bit selections and further use this information in selecting the best headgear & bit for each individual horse
- Propose and implement a conditioning and training schedule for their own horse
- Demonstrate proper and safe rope handling from horseback
- Exhibit proper use of the mechanical cow for training purposes
- Employ tactics facilitated in the course during the working of live cattle

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 32.0

**Lab hours:** 64.0

**Restrictions:**

- Must have instructor approved personally owned horse to be in this course.
-

### **AGEQ 1391 - SPECIAL TOPICS III**

This course will address recently identified current events, skills, knowledge, and behaviors pertinent to the equine industry and relevant to the professional development of the student. Lab fees apply Learning outcomes and objectives are determined by local occupational need and business and industry trends.

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 16.0

**Lab hours:** 64.0

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### **AGEQ 1401 - EQUINE BEHAVIOR & TRAINING I**

Instruction in basic equine behavior and training methods will be discussed. Topics will include anatomy and physiology, safety, behavior, health care and management, and training methods. Students will use a systematic approach to training a yearling and a weanling horse while learning proper safety and training techniques used in the industry. Horses and appropriate tack and equipment will be provided for use in this course.

Upon completion, students will be able to:

- Recognize behavioral patterns as they relate to training methods and desired results
- Implement appropriate training strategies
- Evaluate progress and adapt training method(s) accordingly

**Grade Basis:** L

**Credit hours:** 4.0

**Lecture hours:** 16.0

**Lab hours:** 144.0

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### **AGEQ 1411 - EQUINE SCIENCE I**

An introduction to the horse industry. Includes history, organization and operation of equine enterprises, selection, breeds, breeding, reproduction, health, nutrition, management, and marketing. Topics will also include basic management techniques and theories related to horses and horse facilities. Laboratory exercises will be supplemented by lecture presentations, guest speakers, and field trips to area farms and businesses. Lab fees apply

Upon completion, students will be able to:

- Explain the historical significance of the horse to society
- Identify horse breeds
- Identify basic anatomy and physiological functions
- Outline managerial practices relevant to the horse industry

**Grade Basis:** L

**Credit hours:** 4.0

**Lecture hours:** 48.0

**Lab hours:** 32.0

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## **AGEQ 2310 - EQUINE BUSINESS MANAGEMENT**

Instruction in the management of the equine business will be discussed. Topics will include record keeping, insurance and liability, show management, equine promotion and sales, as well as employer relationships. Lectures will be supplemented with industry speakers and students will complete an in-depth business plan of their choice.

Upon completion, students will be able to:

- Initiate equine business records
- Explain insurance and liability needs
- Outline and demonstrate the proper procedures for show management
- Summarize equine marketing
- Identify the socioeconomic factors involved in the equine industry

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 48.0

**Prerequisites:**

- [AGEQ 1205](#) - EQUINE ENTERPRISE MANAGEMENT
- 

## **AGEQ 2311 - EQUINE SCIENCE II**

Study of advanced concepts in horse production. Emphasis on management practices utilized in the horse industry. Topics include advanced anatomy, physiology and nutrition of the horse as it relates to exercise and fitness. Discussion will focus on techniques and theories related to management of the horse for athletic events. Lab fees apply

Upon completion, students will be able to:

- Identify and assess needs in the production & management of horses
- Employ critical thinking skills in management decisions
- Implement management practices

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 32.0

**Lab hours:** 32.0

**Prerequisites:**

- [AGEQ 1411](#) - EQUINE SCIENCE I
- 

## **AGEQ 2315 - HORSE EVALUATION II**

Study of the advanced concepts in evaluation and selection of horses. Students in this course will be part of the horse judging team and participate in judging contests on a state and national level. Students will also learn how to organize a judging contest, perfect oral reason presentation and learn to judge other's oral reasons. Students must be enrolled in this course to travel with the judging team. Lab fees apply

Upon completion, students will be able to:

- Evaluate conformation as it applies to equine functions
- Evaluate western and English performance classes
- Organize, apply, and defend criteria as related to the evaluation and selection of horses

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 32.0

**Lab hours:** 32.0

**Prerequisites:**

- [AGEQ 1315](#) - HORSE EVALUATION I

**Restrictions:**

- Requires Instructor/Coach approval
- 

## **AGEQ 2339 - WESTERN HORSEMANSHIP II**

Instruction in advanced horsemanship skills including cues, lead changes, head-set, side-pass, and pivots. Emphasis will be given to proper use of cues, legs, and seat during maneuvers; as well as proper training concepts and methods of working horses for specific performance areas. NCTC School horse and appropriate tack will be provided for use. Lab fees apply

Upon completion, students will be able to:

- Demonstrate a balanced seat and posture in all natural gaits
- Maintain correct leads
- Develop and utilize proper cues

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 32.0

**Lab hours:** 32.0

## **AGEQ 2359 - ENGLISH EQUITATION II**

Advanced equitation skills. Includes cues, lead changes, headset, side-pass, and pivots. Topics will include supplying exercises for the horse and rider, ground pole exercises to gain strength and stability, in addition to exercises in stride length and rhythm. NCTC School horse and appropriate tack will be provided for use. Lab fees apply

Upon completion, students will be able to:

- Demonstrate a balanced seat and posture in all natural gaits
- Maintain correct leads
- Develop and utilize proper cues

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 32.0

**Lab hours:** 32.0

**Prerequisites:**

- [AGEQ 1300](#) - ENGLISH EQUITATION I
- 

## **AGEQ 2370 - LOCAL NEEDS - REINING**

Fundamentals of selecting, training, working and showing reining horses will be taught. Topics include history, development, rules, judging, conditioning, training and showing reining horses. Showing in at least on competition is required. Student must provide their own horse for training and or competition. Lab fees apply

Upon completion, students will be able to:

- Describe the kind of horse that is most likely to succeed in reining competition
- Recognize which families of horses are most likely to succeed as reining horses based on past success in show ring
- Demonstrate industry recognized training methods
- Explain and develop proper riding techniques
- Exhibit basic reining maneuvers and patterns
- Evaluate effective training equipment
- Distinguish the proper use and function of bits
- Develop proper showmanship and sportsmanship

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 32.0

**Lab hours:** 32.0

**Restrictions:**



- Must have instructor/coach approved personal horse to be in this course. NCTC School Horse is not provided.
- 

## **AGEQ 2371 - LOCAL NEEDS - ADVANCED RANCH HORSE RIDING**

An advanced course in the principles and fundamentals of finishing and riding the versatile ranch horse; instruction will focus on the use of the horse to assist in the management of cattle as commonly utilized for both ranch work and cowhorse competitions. Topics will include reading cattle, roping, handling cattle on the end of the rope, sorting and control of an individual cow. Course will also include techniques for tuning and elevating the performance of finished horses in the area of cow work. Lab fees apply

Upon completion, students will be able to:

- Demonstrate industry recognized training methods for finishing horses in the area of cow work
- Exhibit the ability to rope live cattle and properly handle cattle in a manner which is safe for both horse and rider
- Summarize the fundamentals to be employed when reading cattle for handling purposes
- Show the ability to handle and manipulate the movement of an individual cow
- Identify and appraise the characteristics of individual horses and their abilities when performing cow work
- Demonstrate progressive ability in completing a competitive cow horse pattern

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 32.0

**Lab hours:** 32.0

**Restrictions:**

- Must have instructor approved personal horse to be in this course. NCTC School Horse is not provided.
- 

## **AGEQ 2372 - LOCAL NEEDS - ADVANCED REINING**

Advanced principles in training, working and showing reining horses will be taught. Topics include rules, judging, conditioning, and advanced showmanship. Students will also learn methods for keeping their horses healthy and in competitive condition during the rigors of traveling to and from shows. Showing in at least two competitions is required. Student must provide their own horse for training and or competition. Lab fees apply

Upon completion, students will be able to:

- Demonstrate the ability to judge and properly score a reining horse in competition
- Explain and outline a proper conditioning routine for a horse that will be shown in advanced levels of reining competition
- • Demonstrate advancement in riding skill by scoring higher in all required maneuvers performed in reining
- Explain areas of concern during hauling to competitions as well as strategies for addressing these concerns as it relates to horse health and competitive condition

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 32.0

**Lab hours:** 32.0

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## **AGEQ 2373 - INTRODUCTION TO EQUINE VETERINARY TECHNOLOGY**

Basic concepts of equine veterinary care will be taught. The course will be a survey of equine veterinary medicine from the physical exam to medical terminology, preventive medicine and pharmacology as well as basic principles of alternative therapies, diagnostic imagery, medical records and client communication.

Upon completion, students will be able to:

- Calculate correct drug dosage for frequently used equine pharmaceuticals
- Design a vaccination protocol for different types of equine operations
- Identify anatomic parts of the equine patient in medical terminology
- Interpret clinical pathology results
- Explain proper restraint methods of an equine patient for various veterinary procedures

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 32.0

**Lab hours:** 32.0

**Prerequisites:**

- [AGEQ 1411](#) - EQUINE SCIENCE I
  - [AGEQ 2311](#) - EQUINE SCIENCE II
- 

## **AGEQ 2374 - BASICS OF DRESSAGE**

The fundamental principles of dressage will be addressed. Basic riding exercises and dressage movements will be introduced emphasizing horse and rider fitness, and the development of the equine athlete through the classical and sequential training scale of rhythm, relaxation, connection, impulsion, straightness, and finally collection. Western Dressage principles will also be discussed and use of a western, hunt seat, or traditional

dressage saddle will be acceptable. NCTC School horse and appropriate tack will be provided for use. Use of personal horse and tack is accepted per instructor approval. Classic dressage saddles are not provided, but western and hunt seat saddles are available and acceptable for use in this class. Lab fees apply

Upon completion, students will be able to:

- Demonstrate progressive ability to ride a horse forward with rhythm, relaxation, and connection, with the goal of achieving impulsion, straightness and finally collection through a variety of basic dressage movements. (USDF Pyramid of Training adapted from the German training scale)
- Understand and demonstrate elements of a balanced riding position and the coordination and timing of the aids. Circle of the Aids
- Exhibit ability to successfully complete an appropriate level Classical or Western Dressage test

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 32.0

**Lab hours:** 32.0

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## **AGEQ 2386 - INTERNSHIP - EQUINE SCIENCE**

A work-based learning experience that enables the student to apply specialized occupational theory, skills and concepts. A learning plan is developed by the college and the employer. Each student will be placed in the horse industry under the supervision of a prominent person who specializes in the student's main areas of interest. The student's industry training will be supervised by the instructor as well as their immediate supervisor on the job. Internship is typically completed 8 weeks, full time hours, during the summer, or part time hours during the fall or spring semester. This course serves as the external or capstone experience.

Upon completion, students will be able to:

- Apply the theory, concepts, and skills involving specialized materials, tools, equipment, procedures, regulations, laws, and interactions within and among political, economic, environmental, social, and legal systems associated with the occupation and the business/industry
- Demonstrate legal and ethical behavior, safety practices, interpersonal and teamwork skills, and appropriate written and verbal communication skills using the terminology of the occupation and the business/industry

**Grade Basis:** L

**Credit hours:** 3.0

**Restrictions:**

- Departmental approval required for registration in this course.
-

## **AGEQ 2401 - EQUINE BEHAVIOR & TRAINING II**

A study of advanced concepts in equine behavioral patterns that is relevant to specific performance training strategies. Emphasis will be given to safety, and different training methods involved with working a young horse. Students will use a systematic approach to training a two-year old horse from the ground to working specified maneuvers and patterns. Lab fees apply

Upon completion, students will be able to:

- Identify appropriate equine training methods for specific results
- Identify equine behavioral patterns
- Implement appropriate equine training procedures for desired results

**Grade Basis:** L

**Credit hours:** 4.0

**Lecture hours:** 16.0

**Lab hours:** 144.0

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## **AGME 1307 - AGRICULTURE EQUIPMENT & TOOLS**

Introduction to hand tool and shop equipment skills and safety. Lab fees apply

Upon completion, students will be able to:

- Identify hand tools and shop equipment
- Demonstrate their applications, maintenance, and safe operational procedures

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 32.0

**Lab hours:** 64.0

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## **AGME 1315 - FARM & RANCH SHOP SKILLS**

Study and application of shop skills used in agricultural processes including arc welding, oxyacetylene cutting and welding, drawing and planning projects, tool maintenance, metal working, woodworking, plumbing, and concrete. Lab fees apply

Upon completion, students will be able to:

- Demonstrate oxyacetylene cutting procedures
- Demonstrate arc welding
- Identify shop tools
- Utilize shop plans
- Describe construction processes

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 32.0

**Lab hours:** 64.0

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## **AGME 1415 - FARM & RANCH SHOP SKILLS I**

Study and application of shop skills used in agricultural processes including arc welding, oxyacetylene cutting and welding, drawing and planning projects, tool maintenance, metal working, woodworking, plumbing, and concrete. Lab fees apply

Upon completion, students will be able to:

- Demonstrate oxyacetylene cutting procedures
- Demonstrate arc welding
- Identify shop tools
- Utilize shop plans
- Describe construction processes

**Grade Basis:** L

**Credit hours:** 4.0

**Lecture hours:** 48.0

**Lab hours:** 32.0

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## **AGME 1449 - FARM & RANCH EQUIPMENT**

Planning and application of farm and ranch maintenance equipment. Includes basic repair and adjustment to tractors and other agricultural equipment and design and use of maintenance records. Lab fees apply

Upon completion, students will be able to:

- Summarize maintenance of farm and ranch equipment
- Demonstrate repair and adjustment of equipment

**Grade Basis:** L

**Credit hours:** 4.0

**Lecture hours:** 48.0

**Lab hours:** 32.0

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## **AGMG 2280 - COOPERATIVE EDUCATION - AGRICULTURAL BUSINESS & MANAGEMENT, GENERAL**

Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.

Upon completion, students will be able to:

- Apply the theory, concepts, and skills involving specialized materials, tools, equipment, procedures, regulations, laws, and interactions within and among political, economic, environmental, social, and legal systems associated with the occupation and the business/industry
- Demonstrate legal and ethical behavior, safety practices, interpersonal and teamwork skills, and appropriate written and verbal communication skills using the terminology of the occupation and the business/industry

**Grade Basis:** L

**Credit hours:** 4.0

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## **AGMG 2301 - LIVESTOCK BUSINESS MANAGEMENT**

Instruction in contracts, leases, laws and regulations, estate planning, and applications of personnel and management principles.

Upon completion, students will be able to:

- Discuss contract terms related to livestock and real estate
- Explain laws and regulations pertaining to the livestock industry
- Illustrate the importance of estate planning
- Compare the personnel and management techniques employed in the livestock industry

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 48.0

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## **AGMG 2480 - COOPERATIVE EDUCATION - AGRICULTURAL BUSINESS & MANAGEMENT, GENERAL**

Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.

Upon completion, students will be able to:

- Apply the theory, concepts, and skills involving specialized materials, tools, equipment, procedures, regulations, laws, and interactions within and among political, economic, environmental, social, and legal systems associated with the occupation and the business/industry
- Demonstrate legal and ethical behavior, safety practices, interpersonal and teamwork skills, and appropriate written and verbal communication skills using the terminology of the occupation and the business/industry

**Grade Basis:** L

**Credit hours:** 4.0

**Lecture hours:** 16.0

**Lab hours:** 336.0

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## **AGRI 1131 - THE AGRICULTURE INDUSTRY**

Overview of world agriculture, nature of the industry, resource conservation, and the American agricultural system, including production, distribution, and marketing.

Upon completion, students will be able to:

- Identify the principles of food science related to food production, quality, safety, nutrition, and distribution
- Describe common and emerging technologies in food science
- Explain how engineering, microbiology, and chemistry are applied in food production and processing systems
- Describe food safety procedures in U.S. production systems
- Demonstrate appropriate food handling/food safety procedures
- Explain nutrient composition and the link between nutrition and health
- Examine the dynamics of global food supply

**Grade Basis:** L

**Credit hours:** 1.0

**Lecture hours:** 16.0

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## **AGRI 1309 - COMPUTERS IN AGRICULTURE**

Use of computers in agricultural applications. Introduction to programming languages, word processing, electronic spreadsheets, and agricultural software. Lab fees apply

Upon completion, students will be able to:

- Demonstrate a basic understanding and use of word processing, spreadsheet, presentation, and communication software in agriculture
- Identify common uses of computers in agriculture
- Demonstrate appropriate use of the internet for agricultural purposes

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 32.0

**Lab hours:** 32.0

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## **AGRI 1325 - MARKETING OF AGRICULTURE PRODUCTS**

Operations in the movement of agricultural commodities from producer to consumer, including the essential marketing functions of buying, selling, transporting, storing, financing, standardizing, pricing, and risk bearing.

Upon completion, students will be able to:

- Explain the essential marketing functions of buying, selling, transporting, storing, financing, standardizing, pricing, and risk bearing
- Apply economic principles to the marketing of agricultural products
- Identify alternatives in marketing of agricultural commodities/products
- Examine the structure of agricultural markets

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 48.0

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## **AGRI 1407 - AGRONOMY**

Principles and practices in the development, production, and management of field crops including plant breeding, plant diseases, soils, insect control, and weed control. Lab fees apply

Upon completion, students will be able to:

- Summarize the role of climate and geography in present and past crop production
- Explain the growth and development of crops
- Analyze the impact of climate on crops
- Assess the interactions of soils, water, and fertility on crop production
- Contrast methods of pest management in crop production
- Differentiate production methods based on geography and crop selection
- Apply scientific reasoning to investigate questions and utilize scientific and agronomic tools to collect and analyze data and demonstrate methods
- Use critical thinking and scientific problem-solving to make informed decisions
- Communicate effectively the results of scientific investigations
- Summarize the role of climate and geography in present and past crop production

**Grade Basis:** L

**Credit hours:** 4.0

**Lecture hours:** 48.0

**Lab hours:** 32.0

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## **AGRI 1419 - INTRODUCTORY ANIMAL SCIENCE**

Scientific animal agriculture. Importance of livestock and meat industries. Selection, reproduction, nutrition, management, and marketing of livestock. Lab fees apply



Upon completion, students will be able to:

- Explain the role of animal agriculture in providing benefits for mankind
- Identify common livestock breeds and classes
- Define terminology specific to animal science disciplines
- Demonstrate understanding of fundamental animal science principles including selection, reproduction, nutrition, and health
- Apply animal science principles by solving common problems
- Identify animal issues of interest to society, and related responsibilities
- Apply scientific reasoning to investigate questions and utilize animal science tools to collect and analyze data and demonstrate methods
- Use critical thinking and scientific problem-solving to make informed decisions
- Communicate effectively the results of scientific investigations

**Grade Basis:** L

**Credit hours:** 4.0

**Lecture hours:** 48.0

**Lab hours:** 32.0

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## **AGRI 2301 - AGRICULTURAL POWER UNITS**

Fundamentals of internal combustion engines: gasoline, diesel, and liquefied petroleum. Maintenance and adjustments of the electrical, ignition, fuel, lubricating, and cooling systems of agricultural power machinery. Lab fees apply

Upon completion, students will be able to:

- Recount the operating fundamentals of both four-stroke and two-stroke internal combustion engines
- Demonstrate ability to disassemble and reassemble small single cylinder gasoline engine
- Identify important points in maintenance of an internal combustion engine
- Discuss considerations when selecting a lubricating fluid or grease

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 32.0

**Lab hours:** 32.0

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## **AGRI 2303 - AGRICULTURAL CONSTRUCTION I**

Selection, use, and maintenance of hand and power tools; arc and oxy-acetylene welding; and construction materials and principles. Lab fees apply

Upon completion, students will be able to:

- Demonstrate proper safety procedures in an agricultural construction laboratory

- Determine the proper usage of common hand and power tools
- Demonstrate principles of project layout (e.g. measurements, squaring, leveling)
- Demonstrate proper use of metal cutting and welding equipment
- Apply basic wiring and plumbing techniques
- Illustrate the principles of surveying and concrete layout

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 32.0

**Lab hours:** 64.0

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## **AGRI 2317 - INTRODUCTION TO AGRICULTURAL ECONOMICS**

Fundamental economic principles and their applications to the problems of the industry of agriculture.

Upon completion, students will be able to:

- Describe fundamental macro- and micro-economic principles
- Apply economic principles to agricultural production, marketing, and consumption
- Describe the different agricultural economics fields (e.g. food industry, demand theory, supply theory, competitive environments)

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 48.0

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## **AGRI 2321 - LIVESTOCK EVALUATION I**

Evaluation and grading of market cattle, swine, sheep, and goats and their carcasses and wholesale cuts. Emphasis will be placed on value determination. Selection and evaluation of breeding cattle, sheep, swine, and goats with emphasis on economically important traits. Lab fees apply

Upon completion, students will be able to:

- Accurately evaluate and grade meat animals (cattle, swine, sheep, and goats), their carcasses, and wholesale cuts according to USDA and industry standards
- Determine market value for meat animals, carcasses, and whole cuts
- Evaluate and select breeding animals based upon their economic potential in common production scenarios
- Apply knowledge of both subjective and objective techniques, tools, and information in order to make evaluation, grading, and selection decisions in practical production scenarios

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 32.0

**Lab hours:** 48.0

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## **AGRI 2330 - WILDLIFE CONSERVATION & MANAGEMENT**

Principles and practices used in the production and improvement of wildlife resources. Aesthetic, ecological, and recreational uses of public and private lands. Lab fees apply

Upon completion, students will be able to:

- Explain basic ecological principles of population dynamics, habitat, succession, and ecosystems
- Describe how these ecological principles can be applied to manage wildlife populations and habitats
- Contrast wildlife management strategies for different purposes (i.e. recreation, conservation, and preservation)
- Use critical thinking and scientific problem-solving to make informed decisions about wildlife and natural resources management strategies
- Discuss the impact of current trends and societal issues on wildlife and increased demands on natural resources

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 32.0

**Lab hours:** 32.0

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## **ANTH 2346 - GENERAL ANTHROPOLOGY**

The study of human beings, their antecedents and related primates, and their cultural behaviors and institutions. Introduces the major sub-fields: physical and cultural anthropology, archaeology, linguistics, their applications, and ethics in the discipline. Meets NCTC Core Curriculum Requirements

Upon completion, students will be able to:

- Describe the key concepts and methods of anthropology
- Compare and contrast the sub-fields of anthropology, including but not limited to physical anthropology, cultural anthropology, and archaeology
- Demonstrate an understanding of anthropological approaches to human diversity

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 48.0

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## **ANTH 2351 - CULTURAL ANTHROPOLOGY**

The study of human cultures. Topics may include social organization, institutions, diversity, interactions between human groups, and ethics in the discipline. Meets NCTC Core Curriculum Requirement

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 48.0

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## **ARTC 1302 - DIGITAL IMAGING I: PHOTOSHOP**

Digital Imaging using raster image editing and/or image creation software: scanning, resolution, file formats, output devices, color systems, and image-acquisitions. Lab fees apply

Upon completion, students will be able to:

- Identify terminology, advantages and limitations of image editing software
- Distinguish bit-mapped resolutions for image acquisitions and output devices
- Use digital editing and painting tools
- Use basic half-tone theory in production of images, manipulate, create, and edit digital images for print and for web
- Specify appropriate file formats

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 32.0

**Lab hours:** 32.0

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## **ARTC 1325 - INTRODUCTION TO COMPUTER GRAPHICS**

A survey of computer design concepts, terminology, processes, and procedures. Topics include computer graphics hardware, electronic images, electronic publishing, vector based graphics, and interactive multimedia. Lab fees apply

Upon completion, students will be able to:

- Define computer terminology
- Identify peripherals
- Demonstrate page layout, multimedia, and peripherals software use

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 32.0

**Lab hours:** 32.0

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## **ARTS 1301 - ART APPRECIATION**

A general introduction to the visual arts designed to create an appreciation of the vocabulary, media, techniques, and purposes of the creative process. Students will critically interpret and evaluate works of art within formal, cultural, and historical contexts. Meets NCTC Core Curriculum Requirement

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 48.0

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## **ARTS 1303 - ART HISTORY I: Prehistoric to 14th Century**

A chronological analysis of the historical and cultural contexts of the visual arts from prehistoric times to the 14th century.

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 48.0

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## **ARTS 1304 - ART HISTORY II: 14th Century to Present**

A chronological analysis of the historical and cultural contexts of the visual arts from the 14th century to the present day.

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 48.0

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## **ARTS 1311 - DESIGN I: 2-Dimensional**

An introduction to the fundamental terminology, concepts, theory, and application of two-dimensional design.

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 48.0

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## **ARTS 1312 - DESIGN II: 3-Dimensional**

An introduction to the fundamental terminology, concepts, theory, and application of three-dimensional design.

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 48.0

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## **ARTS 1316 - DRAWING I**

A foundation studio course exploring drawing with emphasis on descriptive, expressive, and conceptual approaches. Students will learn to see and interpret a variety of subjects while using diverse materials and techniques. Course work will facilitate a dialogue in which students will engage in critical analysis and begin to develop their understanding of drawing as a discipline.

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 48.0

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## **ARTS 1317 - DRAWING II**

A studio course exploring drawing with continued emphasis on descriptive, expressive, and conceptual approaches. Students will further develop the ability to see and interpret a variety of subjects while using diverse materials and techniques. Course work will facilitate a dialogue in which students will employ critical analysis to broaden their understanding of drawing as a discipline.

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 48.0

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## **ASTR 1403 - STARS AND GALAXIES**

Study of stars, galaxies, and the universe outside our solar system. May or may not include a laboratory. Lab fees apply

**Grade Basis:** L

**Credit hours:** 4.0

**Lecture hours:** 48.0

**Lab hours:** 48.0

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## **ASTR 1404 - SOLAR SYSTEM**

Study of the sun and its solar system, including its origin.

**Grade Basis:** L

**Credit hours:** 4.0

**Lecture hours:** 48.0

**Lab hours:** 48.0

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## **CHEF 1301 - BASIC FOOD PREPARATION**

A study of the fundamental principles of food preparation and cookery to include Brigade System, cooking techniques, material handling, heat transfer, sanitation, safety, nutrition, and professionalism. Lab fees apply

Upon completion, students will be able to:

- Demonstrate skills in knife tool and equipment handling
- Operate equipment safely and correctly
- Demonstrate proficiency in dry and moist heat cooking methods
- Produce a variety of food products applying principles of food handling and preparation
- Implement professional standards in food production

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 32.0

**Lab hours:** 48.0

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## **BCIS 1305 - BUSINESS COMPUTER APPLICATIONS**

Students will study computer terminology, hardware, and software related to the business environment. The focus of this course is on business productivity software applications and professional behavior in computing, including word processing (as needed), spreadsheets, databases, presentation graphics, and business-oriented utilization of the Internet. Lab fees apply

Upon completion, students will be able to:

- Describe the fundamentals of Information Technology (IT) infrastructure components: hardware, software, and data communications systems
- Explain the guiding principles of professional behavior in computing
- Demonstrate proper file management techniques to manipulate electronic files and folders in a local and networked environment
- Use business productivity software to manipulate data and find solutions to business problems
- Explain the concepts and terminology used in the operation of application systems in a business environment
- Identify emerging technologies for use in business applications
- Complete projects that integrate business software applications

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 32.0

**Lab hours:** 32.0

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## **BIOL 1322 - NUTRITION & DIET THERAPY I**

This course introduces general nutritional concepts in health and disease and includes practical applications of that knowledge. Special emphasis is given to nutrients and nutritional processes including functions, food sources, digestion, absorption, and metabolism. Food safety, availability, and nutritional information including food labels, advertising, and nationally established guidelines are addressed.

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 48.0

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## **BIOL 1406 - BIOLOGY FOR SCIENCE MAJORS I**

Fundamental principles of living organisms will be studied, including physical and chemical properties of life, organization, function, evolutionary adaptation, and classification. Concepts of cytology, reproduction, genetics, and scientific reasoning are included. This laboratory-based course accompanies Biology 1306, Biology for Science Majors I. Laboratory activities will reinforce the fundamental principles of living organisms, including physical and chemical properties of life, organization, function, evolutionary adaptation, and classification. Study and examination of the concepts of cytology, reproduction, genetics, and scientific reasoning are included. Lab fees apply

**Grade Basis:** L

**Credit hours:** 4.0

**Lecture hours:** 48.0

**Lab hours:** 48.0

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## **BIOL 1407 - BIOLOGY FOR SCIENCE MAJORS II**

The diversity and classification of life will be studied, including animals, plants, protists, fungi, and prokaryotes. Special emphasis will be given to anatomy, physiology, ecology, and evolution of plants and animals. Lab required. This laboratory-based course accompanies Biology 1307, Biology for Science Majors II. Laboratory activities will reinforce study of the diversity and classification of life, including animals, plants, protists, fungi, and prokaryotes. Special emphasis will be given to anatomy, physiology, ecology, and evolution of plants and animals. Lab fees apply

**Grade Basis:** L

**Credit hours:** 4.0

**Lecture hours:** 48.0

**Lab hours:** 48.0

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## **BIOL 1408 - BIOLOGY FOR NON-SCIENCE MAJORS I**

Provides a survey of biological principles with an emphasis on humans, including chemistry of life, cells, structure, function, and reproduction. This laboratory-based course accompanies BIOL 1308, Biology for Non-Science Majors I. Laboratory activities will reinforce a survey of biological principles with an emphasis on humans, including chemistry of life, cells, structure, function, and reproduction. Lab fees apply

**Grade Basis:** L

**Credit hours:** 4.0

**Lecture hours:** 48.0

**Lab hours:** 48.0

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## **BIOL 1411 - GENERAL BOTANY**

Fundamental biological concepts relevant to plant physiology, life cycle, growth and development, structure and function, and cellular and molecular metabolism. The role of plants in the environment, evolution, and phylogeny of major plant groups, algae, and fungi. This course is intended for science majors. This laboratory-based course accompanies Biology 1311, General Botany. Laboratory activities will reinforce fundamental biological concepts relevant to plant physiology, life cycle, growth and development, structure and function, and cellular and molecular metabolism. The role of plants in the environment, evolution, and phylogeny of major plant groups, algae, and fungi. Lab fees apply

**Grade Basis:** L

**Credit hours:** 4.0

**Lecture hours:** 48.0

**Lab hours:** 48.0

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## **BIOL 1413 - GENERAL ZOOLOGY**

Fundamental biological concepts relevant to animals, including systematics, evolution, structure, and function, cellular and molecular metabolism, reproduction, development, diversity, phylogeny, and ecology. This course is intended for science majors. This laboratory-based course accompanies Biology 1313, General Zoology. Laboratory activities will reinforce fundamental biological concepts relevant to animals, including systematics, evolution, structure and function, cellular and molecular metabolism, reproduction, development, diversity, phylogeny, and ecology. Lab fees apply

**Grade Basis:** L

**Credit hours:** 4.0

**Lecture hours:** 48.0

**Lab hours:** 48.0

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## **BIOL 2401 - HUMAN ANATOMY AND PHYSIOLOGY I**

Anatomy and Physiology I is the first part of a two-course sequence. It is a study of the structure and function of the human body including cells, tissues and organs of the following systems: integumentary, skeletal, muscular, nervous and special senses. Emphasis is on interrelationships among systems and regulation of physiological functions involved in maintaining homeostasis. The lab provides a hands-on learning experience for exploration of human system components and basic physiology. Systems to be studied include integumentary, skeletal, muscular, nervous, and special senses. Lab fees apply

**Grade Basis:** L

**Credit hours:** 4.0

**Lecture hours:** 48.0

**Lab hours:** 32.0

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## **BIOL 2402 - HUMAN ANATOMY AND PHYSIOLOGY II**

Anatomy and Physiology II is the second part of a two-course sequence. It is a study of the structure and function of the human body including the following systems: endocrine, cardiovascular, immune, lymphatic, respiratory, digestive including nutrition, urinary including fluid and electrolyte balance, and reproductive including human development and genetics. Emphasis is on interrelationships among systems and regulation of physiological functions involved in maintaining homeostasis. The lab provides a hands-on learning experience for exploration of human system components and basic physiology. Systems to be studied include endocrine, cardiovascular, immune, lymphatic, respiratory, digestive including nutrition, urinary including fluid and electrolyte balance, and reproductive including human development and genetics. Lab fees apply

**Grade Basis:** L

**Credit hours:** 4.0

**Lecture hours:** 48.0

**Lab hours:** 32.0

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## **BIOL 2406 - ENVIRONMENTAL BIOLOGY**

Principles of environmental systems and ecology, including biogeochemical cycles, energy transformations, abiotic interactions, symbiotic relationships, natural resources and their management, lifestyle analysis, evolutionary trends, hazards and risks, and approaches to ecological research. This laboratory-based course accompanies Biology 2306, Environmental Biology. Laboratory activities will reinforce principles of environmental systems and ecology, including biogeochemical cycles, energy transformations, abiotic interactions, symbiotic relationships, natural resources and their management, lifestyle analysis, evolutionary trends, hazards and risks, and approaches to ecological research. Lab fees apply

**Grade Basis:** L

**Credit hours:** 4.0

**Lecture hours:** 48.0

**Lab hours:** 32.0

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## **BIOL 2420 - MICROBIOLOGY - For Pre-Nursing or Health Science Majors**

This course covers basic microbiology and immunology and is primarily directed at pre-nursing, pre-allied health, and non-science majors. It provides an introduction to historical concepts of the nature of microorganisms, microbial diversity, the importance of microorganisms and acellular agents in the biosphere, and their roles in human and animal diseases. Major topics include bacterial structure as well as growth, physiology, genetics, and biochemistry of microorganisms. Emphasis is on medical microbiology, infectious diseases, and public health. This course covers basics of culture and identification of bacteria and microbial ecology. This course is primarily directed at pre-nursing and other pre-allied health majors and covers basics of microbiology. Emphasis is on medical microbiology, infectious diseases, and public health. Lab fees apply

**Grade Basis:** L

**Credit hours:** 4.0

**Lecture hours:** 48.0

**Lab hours:** 32.0

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## **BMGT 1327 - PRINCIPLES OF MANAGEMENT**

Concepts, terminology, principles, theories, and issues in the field of management.

Upon completion, students will be able to:

- Explain various theories, processes, and functions of management
- Apply theories to a business environment
- Identify leadership roles in organizations
- Describe elements of the communication process

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 48.0

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## **BMGT 2309 - LEADERSHIP**

Leadership and its relationship to management. Prepares the student with leadership and communication skills needed to motivate and identify leadership styles.

Upon completion, students will be able to:

- Determine individual leadership styles

- Distinguish differences between leadership and management
- Explain the effects of leadership style in various organizational environments
- Apply principles of leadership

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 48.0

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## **BUSG 1301 - INTRODUCTION TO BUSINESS**

Fundamental business principles including structure, functions, resources, and operational processes.

Upon completion, students will be able to:

- Identify business functions of accounting, management, marketing, and economics
- Describe the relationships of social responsibility, ethics, and law
- Describe the scope of global business enterprise

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 48.0

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## **BUSG 1304 - FINANCIAL LITERACY**

A study of the financial principles when managing financial affairs. Includes topics such as budgeting, retirement, property ownership, savings, and investment planning.

Upon completion, students will be able to:

- Identify the concepts associated with the time value of money
- Identify the differences among various savings and investment programs and classes of securities
- Identify the options for insurance
- Describe retirement and estate planning techniques
- Explain owning versus renting real property
- Describe consumer protection legislation

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 48.0

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## **BUSG 2305 - BUSINESS LAW & CONTRACTS**

Principles of law which form the legal framework for business activity including applicable statutes, contracts, and agency.

Upon completion, students will be able to:

- Define fundamental legal terminology regarding contracts, torts, property, and wills.
- Differentiate between business ethics and legal issues.
- Explain required elements of torts, requirements of contracts, and various consumer laws as applied to business and individuals.

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 48.0

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## **BUSG 2380 - COOPERATIVE EDUCATION - BUSINESS & COMMERCE, GENERAL**

Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.

Upon completion, students will be able to:

- As outlined in the learning plan, apply the theory, concepts, and skills involving specialized materials, tools, equipment, procedures, regulations, laws, and interactions within and among political, economic, environmental, social, and legal systems associated with the occupation and the business/industry
- Will demonstrate legal and ethical behavior, safety practices, interpersonal and teamwork skills, and appropriate written and verbal communication skills using the terminology of the occupation and the business/industry.

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 16.0

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## **CETT 1302 - ELECTRICITY PRINCIPLES**

Principles of electricity including proper use of test equipment, A/C and D/C circuits, and component theory and operation. Lab fees apply

Upon completion, students will be able to:

- Identify basic principles of electricity (A/C and D/C), voltage, current, and circuitry
- Apply Ohm's law to electrical calculations
- Use test equipment to measure continuity, voltage, and current values
- Use electrical safety practices

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 32.0

**Lab hours:** 32.0

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## **CHEM 1406 - INTRODUCTORY CHEMISTRY**

Survey course introducing chemistry. Topics may include inorganic, organic, biochemistry, food/physiological chemistry, and environmental/consumer chemistry. Designed for allied health students and for students who are not science majors. Lab fees apply

**Grade Basis:** L

**Credit hours:** 4.0

**Lecture hours:** 48.0

**Lab hours:** 48.0

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## **CHEM 1411 - GENERAL CHEMISTRY I**

Fundamental principles of chemistry for majors in the sciences, health sciences, and engineering; topics include measurements, fundamental properties of matter, states of matter, chemical reactions, chemical stoichiometry, periodicity of elemental properties, atomic structure, chemical bonding, molecular structure, solutions, properties of gases, and an introduction to thermodynamics and descriptive chemistry. Basic laboratory experiments supporting theoretical principles presented in CHEM 1406; introduction of the scientific method, experimental design, data collection and analysis, and preparation of laboratory reports. Lab fees apply

**Grade Basis:** L

**Credit hours:** 4.0

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## **CHEM 1412 - GENERAL CHEMISTRY II**

Chemical equilibrium; phase diagrams and spectrometry; acid-base concepts; thermodynamics; kinetics; electrochemistry; nuclear chemistry; an introduction to organic chemistry and descriptive inorganic chemistry. A continuation of CHEM1411. Basic laboratory experiments supporting theoretical principles presented in CHEM 1312; introduction of the scientific method, experimental design, chemical instrumentation, data collection and analysis, and preparation of laboratory reports. Lab fees apply

**Grade Basis:** L

**Credit hours:** 4.0

**Prerequisites:**

- [CHEM 1411](#) - GENERAL CHEMISTRY I
-

## CHEM 2423 - ORGANIC CHEMISTRY I

Fundamental principles of organic chemistry will be studied, including the structure, bonding, properties, and reactivity of organic molecules; and properties and behavior of organic compounds and their derivatives. Emphasis is placed on organic synthesis and mechanisms. Includes study of covalent and ionic bonding, nomenclature, stereochemistry, structure and reactivity, reaction mechanisms, functional groups, and synthesis of simple molecules. This course is intended for students in science or pre-professional programs. This laboratory-based course accompanies CHEM 2323, Organic Chemistry I. Laboratory activities will reinforce fundamental principles of organic chemistry, including the structure, bonding, properties, and reactivity of organic molecules, and properties and behavior of organic compounds and their derivatives. Emphasis is placed on organic synthesis and mechanisms. Includes study of covalent and ionic bonding, nomenclature, stereochemistry, structure and reactivity, reaction mechanisms, functional groups, and synthesis of simple molecules. Methods for the purification and identification of organic compounds will be examined. Lab fees apply

**Grade Basis:** L

**Credit hours:** 4.0

**Prerequisites:**

- [CHEM 1412](#) - GENERAL CHEMISTRY II
- 

## CHEM 2425 - ORGANIC CHEMISTRY II

Advanced principles of organic chemistry will be studied, including the structure, properties, and reactivity of aliphatic and aromatic organic molecules; and properties and behavior of organic compounds and their derivatives. Emphasis is placed on organic synthesis and mechanisms. Includes study of covalent and ionic bonding, nomenclature, stereochemistry, structure and reactivity, reaction mechanisms, functional groups, and synthesis of simple molecules. This course is intended for students in science or pre-professional programs. This laboratory-based course accompanies CHEM 2325, Organic Chemistry II. Laboratory activities reinforce advanced principles of organic chemistry, including the structure, properties, and reactivity of aliphatic and aromatic organic molecules, and properties and behavior of organic compounds and their derivatives. Emphasis is placed on organic synthesis and mechanisms. Includes study of covalent and ionic bonding, nomenclature, stereochemistry, structure and reactivity, reaction mechanisms, functional groups, and synthesis of simple molecules. Lab fees apply

**Grade Basis:** L

**Credit hours:** 4.0

**Prerequisites:**

- [CHEM 2423](#) - ORGANIC CHEMISTRY I
-

## **CJCR 1304 - PROBATION & PAROLE**

A survey of the structure, organization, and operation of probation and parole services. Emphasis on applicable state statutes and administrative guidelines.

Upon completion, students will be able to:

- Describe the professional qualifications for employment as a probation or parole practitioner
- Demonstrate skills in management and treatment practices
- Create and develop community relations strategies

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 48.0

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## **CJSA 1317 - JUVENILE JUSTICE SYSTEM**

A study of the juvenile justice process to include specialized juvenile law, role of the juvenile law, role of the juvenile courts, role of police agencies, role of correctional agencies, and theories concerning delinquency.

Upon completion, students will be able to:

- Describe the juvenile law and the role of juvenile courts
- Explain the roles of police and correctional agencies concerning delinquency
- Review and contrast the theories of delinquent conduct

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 48.0

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## **CJSA 1325 - CRIMINOLOGY**

Current theories and empirical research pertaining to crime and criminal behavior and its causes, methods of prevention, systems of punishment, and rehabilitation.

Upon completion, students will be able to:

- Identify and explain the various theories of causation of criminal behavior
- Identify and appraise the avenue of prevention
- Outline the various research methods/methodology used in criminological research
- Identify the categories and sources of criminological data utilized in interpreting crime trends

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 48.0



## **CJSA 1330 - CYBER CRIMES**

An introduction to cybercrime. Topics include specific laws, investigative techniques, and criminological theories applicable to computer crime.

Upon completion, students will be able to:

- Identify and describe the major types of internet crimes and their elements
- List the trends involving digital crime; outline the investigative process in cyber crimes
- Apply existing laws to actions and events in computer crime investigations
- Identify future areas of legal concern in computer crime cases

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 48.0

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## **CJSA 1342 - CRIMINAL INVESTIGATION**

Investigative theory; collection and preservation of evidence, sources of information, interview and interrogation, uses of forensic sciences, case and trial preparation.

Upon completion, students will be able to:

- Define the goals and objectives of criminal investigation
- Demonstrate ability to conduct proper crime scene investigations
- Illustrate the use of forensic science for various statutory offenses
- Organize the criminal case including field notes, reports, crime scene activities, and mandatory documentation of statutory warning

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 48.0

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## **CJSA 1348 - ETHICS IN CRIMINAL JUSTICE**

Ethical philosophies and issues pertaining to the various professions in the criminal justice system. Includes ethical issues emanating from constitutional conflict with public protection and individual rights, civil liberties, and correctional policies.

Upon completion, students will be able to:

- Explain the foundation of ethics
- Compare and contrast theories of ethics with personal and professional practices
- Interpret and apply ethical considerations in policing, the courts, and corrections

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 48.0

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## **CJSA 1351 - USE OF FORCE**

Study of the use of force including introduction to and statutory authority for the use of force, deadly force, and related legal issues. Fulfills the Texas Commission on Law Enforcement Use of Force Intermediate Certificate requirement. This course was designed to be repeated multiple times to improve student proficiency.

Upon completion, students will be able to:

- Identify the status pertaining to use of force
- Explain the use of force continuum
- Describe key elements of major court cases involving use of force issues

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 48.0

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## **CJSA 2331 - CHILD ABUSE - PREVENTION & INVESTIGATION**

Forms of child abuse and neglect and the traits of typical abusers. Includes strategies to investigate abuse, interview victims and witnesses, document evidence in accordance with state law, and conduct case studies.

Upon completion, students will be able to:

- Identify forms of abuse and neglect
- Compare and contrast characteristics of typical abusers
- Outline investigative strategies

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 48.0

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## **CJSA 2334 - CONTEMPORARY ISSUES IN CRIMINAL JUSTICE**

A series of lectures and class participation exercises presenting selected topics currently confronting criminal justice personnel and the public they serve.

Upon completion, students will be able to:

- Explore an assigned contemporary topic in criminal justice
- List specific problems within the topic and suggest solutions

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 48.0

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## **CJSA 2388 - INTERNSHIP**

A work-based learning experience that enables the student to apply specialized occupational theory, skills and concepts. A learning plan is developed by the college and the employer.

Upon completion, students will be able to:

- Apply the theory, concepts, and skills involving specialized materials, tools, equipment, procedures, regulations, laws, and interactions within and among political, economic, environmental, social, and legal systems associated with the occupation and the business/industry
- Demonstrate legal and ethical behavior, safety practices, interpersonal and teamwork skills, and appropriate written and verbal communication skills using the terminology of the occupation and the business/industry

**Grade Basis:** L

**Credit hours:** 3.0

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## **CJSA 2302 - POLICE MANAGEMENT, SUPERVISION, AND RELATED TOPICS**

Techniques and theories regarding dealing with people, their performance, and problems. Topics include basic supervision, leadership, time management, first-line supervision, and management by objectives.

Upon completion, students will be able to:

- Describe the various leadership/management theories, skills, and styles.
- Apply human relations aspects of leadership role.

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 48.0

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## **CNBT 1311 - CONSTRUCTION METHODS & MATERIALS**

Introduction to construction materials and methods and their applications. Lab fees apply

Upon completion, students will be able to:

- Identify construction materials
- List their applications

- Describe the various methods of construction
- Explain the development and use of new materials being introduced to the construction industry under sustainable building standards

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 32.0

**Lab hours:** 32.0

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## **ITSC 2380 - COOPERATIVE EDUCATION - COMPUTER & INFORMATION SCIENCES, GENERAL**

Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.

Upon completion, students will be able to:

- Apply the theory, concepts, and skills involving specialized materials, tools, equipment, procedures, regulations, laws, and interactions within and among political, economic, environmental, social, and legal systems associated with the occupation and the business/industry.
- Demonstrate legal and ethical behavior, safety practices, interpersonal and teamwork skills, and appropriate written and verbal communication skills using the terminology of the occupation and the business/industry.

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 16.0

**Restrictions:**

- Division Chair approval required unless student is in last semester of the Information Technology degree.
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## **COSC 1436 - PROGRAMMING FUNDAMENTALS I**

This course introduces the fundamental concepts of structured programming, and provides a comprehensive introduction to programming for computer science and technology majors. Topics include software development methodology, data types, control structures, functions, arrays, and the mechanics of running, testing, and debugging.. This course assumes computer literacy. This course is included in the Field of Study Curriculum for Computer Science.

Upon completion, students will be able to:

- Describe how data are represented, manipulated, and stored in a computer

- Categorize different programming languages and their uses
- Understand and use the fundamental concepts of data types, structured programming, algorithmic design, and user interface design
- Demonstrate a fundamental understanding of software development methodologies, including modular design, pseudo code, flowcharting, structure charts, data types, control structures, functions, and arrays
- Develop projects that utilize logical algorithms from specifications and requirements statements
- Demonstrate appropriate design, coding, testing, and documenting of computer programs that implement project specifications and requirements
- Apply computer programming concepts to new problems or situations

**Grade Basis:** L

**Credit hours:** 4.0

**Lecture hours:** 48.0

**Lab hours:** 32.0

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## **COSC 1437 - PROGRAMMING FUNDAMENTALS II**

This course focuses on the object-oriented programming paradigm, emphasizing the definition and use of classes along with fundamentals of object-oriented design. The course includes basic analysis of algorithms, searching and sorting techniques, and an introduction to software engineering processes. Students will apply techniques for testing and debugging software. This course is included in the Field of Study Curriculum for Computer Science.

Upon completion, students will be able to:

- Identify and explain a programming development lifecycle, including planning, analysis, design, development, and maintenance
- Demonstrate a basic understanding of object-oriented programming by using structs and classes in software projects
- Use object-oriented programming techniques to develop executable programs that include elements such as inheritance and polymorphism
- Document and format code in a consistent manner
- Apply basic searching and sorting algorithms in software design
- Apply single- and multi-dimensional arrays in software
- Use a symbolic debugger to find and fix runtime and logical errors in software
- Demonstrate a basic understanding of programming methodologies, including object-oriented, structured, and procedural programming
- Describe the phases of program translation from source code

**Grade Basis:** L

**Credit hours:** 4.0

**Lecture hours:** 48.0

**Lab hours:** 32.0

---

## **COSC 2425 - COMPUTER ORGANIZATION**

The organization of computer systems is introduced using assembly language. Topics include basic concepts of computer architecture and organization, memory hierarchy, data types, computer arithmetic, control structures, interrupt handling, instruction sets, performance metrics, and the mechanics of testing and debugging computer systems. Embedded systems and device interfacing are introduced. Lab fees apply

Upon completion, students will be able to:

- Explain contemporary computer system organization
- Describe data representation in digital computers
- Explain the concepts of memory hierarchy, interrupt processing, and input/output mechanisms
- Measure the performance of a computer system
- Design and develop assembly language applications
- Explain the interfaces between software and hardware components
- Explain the design of instruction set architectures
- Develop a single-cycle processor
- Explain the concept of virtual memory and how it is realized in hardware and software
- Explain the concepts of operating system virtualization

**Grade Basis:** L

**Credit hours:** 4.0

**Lecture hours:** 48.0

**Lab hours:** 32.0

**Prerequisites:**

- [COSC 1436](#) - PROGRAMMING FUNDAMENTALS I

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## **COSC 2436 - PROGRAMMING FUNDAMENTALS III**

Further applications of programming techniques, introducing the fundamental concepts of data structures and algorithms. Topics include data structures including stacks, queues, linked lists, hash tables, trees, and graphs, searching, sorting, recursion, and algorithmic analysis. Programs will be implemented in an appropriate object oriented language. This course is included in the Field of Study Curriculum for Computer Science. Lab fees apply

Upon completion, students will be able to:

- Design and develop programs that implement basic data structures, including stacks, queues, linked lists, hash tables, trees, and graphs
- Apply recursive techniques and algorithms to solve problems
- Implement searching and sorting algorithms

- Understand algorithm efficiency, Big-O notation, and why it should be considered in programming
- Analyze and select appropriate data structures to implement a solution to a problem
- Design and implement data structures using classes and incorporating object-oriented concepts
- Demonstrate best practices of software development including testing, validation, and documentation

**Grade Basis:** L

**Credit hours:** 4.0

**Lecture hours:** 48.0

**Lab hours:** 32.0

**Prerequisites:**

- [COSC 1437](#) - PROGRAMMING FUNDAMENTALS II
- 

## **CRIJ 1301 - INTRODUCTION TO CRIMINAL JUSTICE**

This course provides a historical and philosophical overview of the American criminal justice system, including the nature, extent, and impact of crime; criminal law; and justice agencies and processes.

Upon completion, students will be able to:

- Describe the history and philosophy of the American criminal justice system
- Explain the nature and extent of crime in America
- Analyze the impact and consequences of crime
- Evaluate the development, concepts, and functions of law in the criminal justice system
- Describe the structure of contemporary federal, state, and local justice agencies and processes

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 48.0

---

## **CRIJ 1306 - COURT SYSTEMS & PRACTICES**

This course is a study of the court system as it applies to the structures, procedures, practices and sources of law in American courts, using federal and Texas statutes and case law.

Upon completion, students will be able to:

- Describe the American judicial systems (civil, criminal, and juvenile) , their jurisdiction, development, and structure

- Analyze the function and dynamics of the courtroom work group
- Identify judicial processes from pretrial to appeal
- Describe the significant Constitutional Amendments, doctrines, and other sources of law in the American judicial system

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 48.0

---

## **CRIJ 1310 - FUNDAMENTALS OF CRIMINAL LAW**

This course is the study of criminal law including application of definitions, statutory elements, defenses, and penalties using Texas statutes, the Model Penal Code, and case law. The course also analyzes the philosophical and historical development of criminal law and criminal culpability.

Upon completion, students will be able to:

- Identify the elements of crimes and defenses under Texas statutes, Model Penal Code, and case law
- Classify offenses and articulate penalties for various crimes
- Compare culpable mental states when assigning criminal responsibility
- Assess the impact of history and philosophy on current criminal laws
- Evaluate the application of criminal law to other areas of criminal justice such as law enforcement and corrections

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 48.0

---

## **CRIJ 2313 - CORRECTIONAL SYSTEMS & PRACTICES**

This course is a survey of institutional and non-institutional corrections. Emphasis will be placed on the organization and operation of correctional systems, treatment and rehabilitation, populations served, Constitutional issues, and current and future issues.

Upon completion, students will be able to:

- Describe the organization and operation of correctional systems and alternatives to institutionalization
- Describe treatment and rehabilitative programs
- Differentiate between the short-term incarceration and long-term institutional environments
- Evaluate current and future correctional issues
- Identify the Constitutional rights applicable to the correctional setting

**Grade Basis:** L



**Credit hours:** 3.0

**Lecture hours:** 48.0

---

## **CRIJ 2328 - POLICE SYSTEMS & PRACTICES**

This course examines the establishment, role and function of police in a democratic society. It will focus on types of police agencies and their organizational structure, police-community interaction, police ethics, and use of authority.

Upon completion, students will be able to:

- Describe the types of police agencies and explain the role of police in America within the context of a democratic society
- Describe means and methods utilized to ensure police accountability
- Explain the historical development of policing
- Describe the selection process for police officers
- Compare and contrast organizational structures, policies, strategies and tactics employed to ensure police effectiveness, efficiency and equity

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 48.0

---

## **CSME 1248 - PRINCIPLES OF SKIN CARE**

An introduction of the theory and practice of skin care.

Upon completion, students will be able to:

- Define terminology related to skin care treatments
- Demonstrate skin care procedures
- Practice safety and sanitation according to the laws and rules of the state licensing agency
- Exhibit workplace competencies in skin care

**Grade Basis:** L

**Credit hours:** 2.0

**Lecture hours:** 16.0

**Lab hours:** 64.0

---

## **CSME 1401 - ORIENTATION TO COSMETOLOGY**

An overview of the skills and knowledge necessary for the field of cosmetology. Lab fees apply

Upon completion, students will be able to:

- Demonstrate introductory skills, professional ethics, safety, and sanitation
- Explain the laws and rules of the state

**Grade Basis:** L

**Credit hours:** 4.0

**Lecture hours:** 32.0

**Lab hours:** 128.0

---

## **CSME 1405 - FUNDAMENTALS OF COSMETOLOGY**

A course in the basic fundamentals of cosmetology. Topics include safety and sanitation, service preparation, manicure, facial, chemical services, shampoo, haircut, wet styling, and comb out. Lab fees apply

Upon completion, students will be able to:

- Identify fundamental concepts related to skills required by the Texas Department of Licensing and Regulation (TDLR)
- Demonstrate basic required skills by TDLR standards

**Grade Basis:** L

**Credit hours:** 4.0

**Lecture hours:** 32.0

**Lab hours:** 128.0

---

## **CSME 1410 - INTRODUCTION TO HAIR-CUTTING & RELATED THEORY**

Introduction to the theory and practice of hair cutting. Topics include terminology, implements, sectioning and finishing techniques.

Upon completion, students will be able to:

- Define terminology
- Practice basic workplace competencies related to hair-cutting and finishing techniques
- Demonstrate use of implements, sectioning, hair-cutting, and finishing skills

**Grade Basis:** L

**Credit hours:** 4.0

**Lecture hours:** 32.0

**Lab hours:** 128.0

---

## **CSME 1420 - ORIENTATION TO FACIAL SPECIALIST**

An overview of the skills and knowledge necessary for the field of facials and skin care.

Upon completion, students will be able to:

- Demonstrate facial and skin care skills
- Practice safety and sanitation according to the rules of the state licensing agency
- Practice professional ethics

**Grade Basis:** L

**Credit hours:** 4.0

**Lecture hours:** 32.0

**Lab hours:** 96.0

---

## **CSME 1421 - PRINCIPLES OF FACIAL & SKIN CARE TECHNOLOGY I**

An introduction to the principles of facial and skin care technology. Topics include anatomy, physiology, theory and related skills of facial and skin care technology. Lab fees apply

Upon completion, students will be able to:

- Explain the basic anatomy and physiology of the skin and demonstrate the related skills of skin care and cosmetics

**Grade Basis:** L

**Credit hours:** 4.0

**Lecture hours:** 48.0

**Lab hours:** 32.0

---

## **CSME 1443 - MANICURING & RELATED THEORY**

Presentation of the theory and practice of nail services. Topics include terminology, application, and workplace competencies related to nail services. Lab fees apply

Upon completion, students will be able to:

- Define terminology related to nail services
- Demonstrate the basic procedures of nail services
- Practice safety and sanitation according to the laws and rules of the state licensing agency
- Exhibit workplace competencies in nail services

**Grade Basis:** L

**Credit hours:** 4.0

**Lecture hours:** 32.0

**Lab hours:** 96.0

---

## **CSME 1545 - PRINCIPLES OF FACIAL & SKIN CARE TECHNOLOGY II**

A continuation of the concepts and principles in skin care and other related technologies. Topics include advanced instruction in anatomy, physiology, theory, and related skills of facial and skin care technology.

Upon completion, students will be able to:

- Demonstrate the use of facial machines
- Explain the chemical composition of products
- Practice advanced applications of skin care and cosmetics
- Remove superfluous hair

**Grade Basis:** L

**Credit hours:** 5.0

**Lecture hours:** 32.0

**Lab hours:** 144.0

---

## **CSME 1447 - PRINCIPLES OF SKIN CARE, FACIALS & RELATED THEORY**

A continuation of the concepts and principles in skin care and other related technologies. Topics include advanced instruction in anatomy, physiology, theory, and related skills of facial and skin care technology.

Upon completion, students will be able to:

- Define terminology related to the skin, products, and treatments
- Demonstrate applications related to skin care and cosmetics
- Practice safety and sanitation according to the laws and rules of the state licensing agency
- Exhibit workplace competencies in skin care and cosmetics

**Grade Basis:** L

**Credit hours:** 4.0

**Lecture hours:** 32.0

**Lab hours:** 128.0

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## **CSME 1453 - CHEMICAL REFORMATION & RELATED THEORY**

Presentation of the theory and practice of chemical reformation including terminology, application, and workplace competencies. Lab fees apply

Upon completion, students will be able to:

- Define terminology related to chemical reformation
- Follow safety and sanitation laws and rules according to the state licensing agency
- Exhibit workplace competencies related to chemical reformation

**Grade Basis:** L  
**Credit hours:** 4.0  
**Lecture hours:** 32.0  
**Lab hours:** 128.0

---

## **CSME 1534 - COSMETOLOGY INSTRUCTOR I**

The fundamentals of instruction of cosmetology students.

Upon completion, students will be able to:

- Demonstrate classroom/clinic management
- Differentiate teaching methodologies
- Identify different learning styles
- Assess lesson plans

**Grade Basis:** L  
**Credit hours:** 5.0  
**Lecture hours:** 32.0  
**Lab hours:** 144.0

---

## **CSME 1535 - ORIENTATION TO THE INSTRUCTION OF COSMETOLOGY**

An overview of the skills and knowledge necessary for the instruction of cosmetology students. Lab fees apply

Upon completion, students will be able to:

- Identify teaching methodologies
- Observe lesson plan implementation
- Monitor various learning settings

**Grade Basis:** L  
**Credit hours:** 5.0  
**Lecture hours:** 32.0  
**Lab hours:** 144.0

---

## **CSME 2237 - ADVANCED COSMETOLOGY TECHNIQUES**

Mastery of advanced cosmetology techniques including hair designs, professional cosmetology services, and workplace competencies. Lab fees apply

Upon completion, students will be able to:

- Utilize a variety of hair techniques
- Perform professional cosmetology services

- Demonstrate workplace competencies

**Grade Basis:** L

**Credit hours:** 2.0

**Lecture hours:** 16.0

**Lab hours:** 64.0

---

## **CSME 2410 - ADVANCED HAIR-CUTTING AND RELATED THEORY**

Advanced concepts and practice of haircutting. Topics include haircuts utilizing scissors, razor, and/or clippers.

Upon completion, students will be able to:

- Utilize correct terminology related to advanced hair-cutting techniques
- Demonstrate work place competencies related to advanced hair-cutting techniques

**Grade Basis:** L

**Credit hours:** 4.0

**Lecture hours:** 16.0

**Lab hours:** 128.0

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## **CSME 2343 - SALON DEVELOPMENT**

Procedures necessary for salon development. Topics include professional ethics, goal setting, salon operation, and record keeping. Lab fees apply

Upon completion, students will be able to:

- Create a salon portfolio or business plan
- Demonstrate organizational skills related to salon operation and management

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 32.0

**Lab hours:** 64.0

---

## **CSME 2501 - PRINCIPLES OF HAIR COLORING & RELATED THEORY**

Presentation of the theory, practice, and chemistry of hair color. Topics include terminology, application, and workplace competencies related to hair color. Lab fees apply

Upon completion, students will be able to:

- Define terminology
- Demonstrate hair color application

- Practice safety and sanitation according to the laws and rules of the state licensing agency
- Practice workplace competencies related to hair color

**Grade Basis:** L

**Credit hours:** 5.0

**Lecture hours:** 32.0

**Lab hours:** 144.0

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### **CSME 2431 - PRINCIPLES OF FACIALS & SKIN CARE TECHNOLOGY III**

Advanced concepts and principles of skin care and other related technologies.

Upon completion, students will be able to:

- Demonstrate professional ethics
- Design salon management
- Perform advanced skin care services
- Exhibit related skills in preparation for the state licensing examination

**Grade Basis:** L

**Credit hours:** 4.0

**Lecture hours:** 32.0

**Lab hours:** 96.0

---

### **CSME 2441 - PREPARATION FOR TEXAS DEPARTMENT OF LICENSING & REGULATIONS**

Preparation for the state licensing examination. Lab fees apply

Upon completion, students will be able to:

- Review for the written state licensing exam
- Prepare for the practical state licensing exam
- Practice safety and sanitation according to the laws and rules of the state licensing agency

**Grade Basis:** L

**Credit hours:** 4.0

**Lecture hours:** 32.0

**Lab hours:** 128.0

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### **CSME 2514 - COSMETOLOGY INSTRUCTOR II**

A continuation of the fundamentals of instruction of cosmetology students.

Upon completion, students will be able to:

- Demonstrate effective classroom and clinic management
- Implement teaching methodologies
- Develop lesson plans

**Grade Basis:** L

**Credit hours:** 5.0

**Lecture hours:** 32.0

**Lab hours:** 144.0

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## **DANC 2303 - DANCE APPRECIATION I**

Survey of primitive, classical, and contemporary dance and its interrelationship with cultural developments and other art forms. Meets NCTC Core Curriculum Requirement

**Grade Basis:** L

**Credit hours:** 3.0

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## **DFTG 1305 - TECHNICAL DRAFTING**

Introduction to the principles of drafting to include terminology and fundamentals, including size and shape descriptions, projection methods, geometric construction, sections, and auxiliary views. Lab fees apply

Upon completion, students will be able to:

- Create technical sketches, geometric constructions, orthographic projections, pictorial/sectional views, dimension drawings, and apply lettering techniques

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 32.0

**Lab hours:** 32.0

---

## **DFTG 1309 - BASIC COMPUTER-AIDED DRAFTING**

An introduction to computer-aided drafting. Emphasis is placed on setup; creating and modifying geometry, storing and retrieving predefined shapes, placing, rotating, and scaling objects, adding text and dimensions, using layers, coordinate systems, and plot/print to scale. Lab fees apply

Upon completion, students will be able to:

- Identify terminology and basic functions used with CAD software
- Use CAD hardware and software to create, organize, display, and plot/print working drawings



- Use file management techniques

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 32.0

**Lab hours:** 32.0

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## **DFTG 1317 - ARCHITECTURAL DRAFTING-RESIDENTIAL**

Architectural drafting procedures, practices, terms, and symbols. Preparation of detailed working drawings for residential structures. Emphasis on light frame construction methods. Lab fees apply

Upon completion, students will be able to:

- Utilize architectural terms, symbols, residential construction materials, and processes to produce a set of residential construction drawings including site plan, floor plan, elevations, wall sections, schedules, details, and foundation plan using reference materials.

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 32.0

**Lab hours:** 32.0

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## **DFTG 1333 - MECHANICAL DRAFTING**

Study of mechanical drawings using dimensioning and tolerances, sectioning techniques, orthographic projection, and pictorial drawings. Lab fees apply

Upon completion, students will be able to:

- Develop a set of working drawings including assembly, detail, and pictorial

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 32.0

**Lab hours:** 32.0

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## **DFTG 1358 - ELECTRICAL & ELECTRONICS DRAFTING**

Electrical and electronic drawings stressing modern representation used for block diagrams, schematic diagrams, logic diagrams, wiring/assembly drawings, printed circuit board layouts, motor control diagrams, power distribution diagrams, and electrical one-line diagrams. Lab fees apply

Upon completion, students will be able to:

- Layout components and symbols, both electronic and electrical
- Apply basic math and the theory of electricity
- Utilize component identification including schematics, block, wiring, and logic
- Perform diagram construction and drafting

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 32.0

**Lab hours:** 32.0

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## **DFTG 1391 - SPECIAL TOPICS IN DRAFTING & DESIGN TECHNOLOGY**

Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course was designed to be repeated multiple times to improve student proficiency. Lab fees apply

Upon completion, students will be able to:

- Learning outcomes & objectives are determined by local occupational need and business and industry trends

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 32.0

**Lab hours:** 32.0

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## **DFTG 2300 - INTERMEDIATE ARCHITECTURAL DRAFTING - RESIDENTIAL**

Continued application of principles and practices used in residential construction. Lab fees apply

Upon completion, students will be able to:

- Define the principles of design and implementation of advanced residential construction
- Incorporate site and environmental considerations in planning a residential development
- Select materials
- Apply codes and standards in the creation of construction drawings
- Write specifications

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 32.0

**Lab hours:** 32.0

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## **DFTG 2302 - MACHINE DRAFTING**

Production of detail and assembly drawings of machines, threads, gears, utilizing tolerances, limit dimensioning, and surface finishes. Lab fees apply

Upon completion, students will be able to:

- Interpret terms used in tolerancing
- Identify dimensions of two mating parts
- Draw spur and/or bevel gears
- Draw details and assemblies
- Identify interference and clearance fits
- Identify types of threads forms
- Interpret thread notes

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 32.0

**Lab hours:** 32.0

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## **DFTG 2306 - MACHINE DESIGN**

Theory and practice of design. Projects in problem-solving, including press fit, bolted and welded joints, and transmission components. Lab fees apply

Upon completion, students will be able to:

- Utilize the steps used in the design process, terminology, mechanical processes to produce drawings

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 32.0

**Lab hours:** 32.0

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## **DFTG 2317 - DESCRIPTIVE GEOMETRY**

Graphical solutions to problems involving points, lines, and planes in space. Lab fees apply

Upon completion, students will be able to:

- Describe spatial relationships
- Use sequential thinking

- Create views necessary to show object's true size and shape/development using points, lines, and planes in space

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 32.0

**Lab hours:** 32.0

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## **DFTG 2319 - INTERMEDIATE COMPUTER-AIDED DRAFTING**

A continuation of practices and techniques used in basic computer-aided drafting including the development and use of prototype drawings, construction of pictorial drawings, extracting data, and basics of 3D. Lab fees apply

Upon completion, students will be able to:

- Produce 2D and 3D drawings and pictorial drawings
- Use external referencing of multiple drawings to construct a composite drawing
- Import and extract data utilizing attributes

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 32.0

**Lab hours:** 32.0

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## **DFTG 2323 - PIPE DRAFTING**

A study of pipe fittings, symbols, specifications and their applications to a piping process system. Creation of symbols and their usage in flow diagrams, plans, elevations, and isometrics. Lab fees apply

Upon completion, students will be able to:

- Create drawings of foundations, structural supports, and process equipment
- Identify symbols and research specifications
- Generate a bill of material list
- Use charts and standards
- Generate isometric drawings
- Calculate measurements for pipe fittings

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 32.0

**Lab hours:** 32.0

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## **DFTG 2328 - ARCHITECTURAL DRAFTING - COMMERCIAL**

Architectural drafting procedures, practices, governing codes, terms and symbols, including the preparation of detailed working drawings for a commercial building, with emphasis on commercial construction methods. Lab fees apply

Upon completion, students will be able to:

- Apply commercial construction materials and processes
- Produce a set of commercial construction drawings including a site plan, floor plans, reflected ceiling plan, sections, elevations, schedules, and details

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 32.0

**Lab hours:** 32.0

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## **DFTG 2330 - CIVIL DRAFTING**

An in-depth study of drafting methods and principles used in civil engineering.

Upon completion, students will be able to:

- Interpret field notes
- Develop documents for a civil project
- Analyze and layout drainage and utilities infrastructure
- Perform related calculations

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 32.0

**Lab hours:** 32.0

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## **DFTG 2332 - ADVANCED COMPUTER-AIDED DRAFTING**

Application of advanced CAD techniques. Lab fees apply

Upon completion, students will be able to:

- Use a customized CAD system to create documents and/or solid models
- Use OLE with external software

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 32.0

**Lab hours:** 32.0

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## **DFTG 2338 - FINAL PROJECT - ADVANCED DRAFTING**

A drafting course in which students participate in a comprehensive project from conception to conclusion. Lab fees apply This course is the program capstone course and should be taken the last semester of the program.

Upon completion, students will be able to:

- Conceptualize, design and present a complete project in a prescribed discipline
- Integrate problem solving and related technologies to identify solutions
- Use discipline specific industry standards, and produce documentation

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 32.0

**Lab hours:** 32.0

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## **DFTG 2340 - SOLID MODELING & DESIGN**

A computer-aided modeling course. Development of three-dimensional drawings and models from engineering sketches and orthographic drawings and utilization of three-dimensional models in design work. Lab fees apply

Upon completion, students will be able to:

- Create three-dimensional solid model objects
- Generate pictorial and orthographic drawings

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 32.0

**Lab hours:** 32.0

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## **DFTG 2358 - ADVANCED MACHINE DESIGN**

Design process skills for the production of complete design package, including jig and fixture design, extrusion dies, and injection mold design. Lab fees apply

Upon completion, students will be able to:

- Analyze design problems and prepare solutions to complete a set of drawings

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 32.0

**Lab hours:** 32.0

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## **DRAM 1120 - THEATER PRACTICUM I**

Practicum in theater open to all students with emphasis on technique and procedures with experience gained in play productions.

**Grade Basis:** L

**Credit hours:** 1.0

**Lecture hours:** 48.0

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## **DRAM 1121 - THEATER PRACTICUM II**

Continuation of DRAM1120. Practicum in theater open to all students with emphasis on technique and procedures with experience gained in play productions.

**Grade Basis:** L

**Credit hours:** 1.0

**Lecture hours:** 48.0

**Prerequisites:**

- [DRAM 1120](#) - THEATER PRACTICUM I
- 

## **DRAM 1310 - INTRODUCTION TO THEATER**

Survey of theater including its history, dramatic works, stage techniques, production procedures, and relation to other art forms. Participation in productions may be required. Meets NCTC Core Curriculum Requirement

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 48.0

---

## **DRAM 1330 - STAGECRAFT I**

Study and application of the methods and components of theatrical production which may include one or more of the following: theater facilities, scenery construction and painting, properties, lighting, costume, makeup, sound, and theatrical management. Meets NCTC Core Curriculum Requirement

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 48.0

---

## **DRAM 1351 - ACTING I**

An introduction to the fundamental principles and tools of acting as used in auditions, rehearsals, and performances. This may include ensemble performing, character and

script analysis, and basic theater terminology. This exploration will emphasize the development of the actor's instrument: voice, body and imagination.

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 48.0

---

## **DRAM 1352 - ACTING II**

Exploration and further training within the basic principles and tools of acting, including an emphasis on critical analysis of oneself and others. The tools include ensemble performing, character and script analysis, and basic theater terminology. This will continue the exploration of the development of the actor's instrument: voice, body and imagination.

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 48.0

**Prerequisites:**

- [DRAM 1351](#) - ACTING I
- 

## **DRAM 2120 - THEATER PRACTICUM III**

Continuation of DRAM1120 and DRAM1121. Practicum in theater open to all students with emphasis on technique and procedures with experience gained in play productions.

**Grade Basis:** L

**Credit hours:** 1.0

**Lecture hours:** 48.0

**Prerequisites:**

- [DRAM 1120](#) - THEATER PRACTICUM I
  - [DRAM 1121](#) - THEATER PRACTICUM II
- 

## **DRAM 2121 - THEATER PRACTICUM IV**

Continuation of DRAM1120, DRAM1121 and DRAM2120. Practicum in theater open to all students with emphasis on technique and procedures with experience gained in play productions.

**Grade Basis:** L

**Credit hours:** 1.0

**Lecture hours:** 48.0

**Prerequisites:**



- [DRAM 1120](#) - THEATER PRACTICUM I
  - [DRAM 1121](#) - THEATER PRACTICUM II
  - [DRAM 2120](#) - THEATER PRACTICUM III
- 

## **DRAM 2331 - STAGECRAFT II**

Continued study of DRAM1330 and the application of the methods and components of theatrical production which may include one or more of the following: theater facilities, scenery construction, and painting, properties, lighting, costume, makeup, sound and theatrical management.

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 48.0

**Prerequisites:**

- [DRAM 1330](#) - STAGECRAFT I
- 

## **DRAM 2366 - INTRODUCTION TO CINEMA**

Survey and analyze cinema including history, film techniques, production procedures, selected motion pictures, and cinema's impact on and reflection of society. Meets NCTC Core Curriculum Requirement

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 48.0

---

## **ECON 2301 - PRINCIPLES OF MACROECONOMICS**

An analysis of the economy as a whole including measurement and determination of Aggregate Demand and Aggregate Supply, national income, inflation, and unemployment. Other topics include international trade, economic growth, business cycles, and fiscal policy and monetary policy. Meets NCTC Core Curriculum Requirement

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 48.0

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## **ECON 2302 - PRINCIPLES OF MICROECONOMICS**

Analysis of the behavior of individual economic agents, including consumer behavior and demand, producer behavior and supply, price and output decisions by firms under

various market structures, factor markets, market failures, and international trade.  
Meets NCTC Core Curriculum Requirement

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 48.0

---

## **EDUC 1300 - LEARNING FRAMEWORK**

A study of research and theory in the psychology of learning, cognition, and motivation, factors that impact learning, and application of learning strategies. Theoretical models of strategic learning, cognition, and motivation serve as the conceptual basis for the introduction of the college-level student academic strategies. Students use assessment instruments (e.g. learning inventories) to help them identify their own strengths and weaknesses as strategic learners. Students are ultimately expected to integrate and apply the learning skills discussed across their own academic programs and become effective and efficient learners. Students developing these skills should be able to continually draw from the theoretical models they have learned. Cross-listed as PSYC 1300 Meets NCTC Core Curriculum Requirement

**Grade Basis:** L

**Credit hours:** 3.0

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## **EDUC 1301 - INTRODUCTION TO THE TEACHING PROFESSION**

An enriched, integrated pre-service course and content experience that: Provides active recruitment and institutional support of students interested in a teaching career, especially in high need fields Provides students with opportunities to participate in early field observations at all levels of P-12 schools with varied and diverse students populations Provides students with support from college and school faculty for the purpose of introduction to and analysis of the culture of schooling and classrooms Course content is aligned as applicable with State Board for Educator Certification Pedagogy and Professional Responsibilities standards Course must include a minimum of 16 contact hours of field experience in P-12 classrooms.

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 48.0

**Lab hours:** 16.0

---

## **EDUC 2301 - INTRODUCTION SPECIAL POPULATIONS**

An enriched, integrated pre-service course and content experience that provides an overview of schooling and classrooms from the perspectives of language, gender, socioeconomic status, ethnic and academic diversity, and equity with an emphasis on factors that facilitate learning. The course provides students with opportunities to participate in early field observations of P- 12 special populations and should be aligned

as applicable with State Board for Educator Certification Pedagogy and Professional Responsibilities standards. Must include a minimum of 16 contact hours of field experience in P-12 classrooms with special populations.

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 48.0

**Lab hours:** 16.0

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## **EECT 1300 - TECHNICAL CUSTOMER SERVICE**

General principles of customer service within a technical environment. Topics include internal/external customer relationships, time-management, best practices, and verbal and non-verbal communications skills.

Upon completion, students will be able to:

- Discuss internal and external customer relationships
- Respond to customer questions and complaints in a polite and thorough manner
- Update customers on work progress to maintain customer satisfaction and public relations
- Communicate technical information in a clear, precise and logical manner
- Identify verbal and non-verbal communications skills

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 48.0

---

## **ELPT 1319 - FUNDAMENTALS OF ELECTRICITY I**

An introduction to basic direct current (DC) theory including electron theory and direct current applications. Lab fees apply

Upon completion, students will be able to:

- Explain atomic structure and basic electrical values such as voltage, current, resistance, and power
- Calculate electrical values for series, parallel, and combination circuits
- Calculate voltage drop based on conductor length, type of material, and size
- Summarize the principles of magnetism; and utilize electrical measuring instruments

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 32.0

**Lab hours:** 32.0

---

## **ELPT 1325 - NATIONAL ELECTRICAL CODE I**

An introductory study of the National Electric Code (NEC) for those employed in fields requiring knowledge of the Code. Emphasis on wiring design, protection, methods, and materials; equipment for general use; and basic calculations.

Upon completion, students will be able to:

- Locate and interpret the sections in the NEC that pertain to electrical installations
- Calculate the size of conductors, boxes, raceways, and overcurrent protective devices for branch circuits supplying electrical equipment
- Calculate conductors, over-current protection, and service equipment as applied to building services
- Compute the size of branch circuits, feeders, and equipment for motors

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 48.0

---

## **ELPT 1341 - MOTOR CONTROL**

Operating principles of solid-state and conventional controls along with their practical applications. Includes braking, jogging, plugging, safety interlocks, wiring, and schematic diagram interpretations. Lab fees apply

Upon completion, students will be able to:

- Identify practical applications of jogging and plugging
- Describe the types of motor braking and their operating principles
- Explain different starting methods for large motors
- Demonstrate proper troubleshooting methods on circuits using wiring and schematic diagrams

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 32.0

**Lab hours:** 32.0

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## **ELPT 2305 - MOTORS & TRANSFORMERS**

Operation of single- and three-phase motors and transformers. Includes transformer banking, power factor correction, and protective devices. Lab fees apply

Upon completion, students will be able to:

- Match the type of single-phase motor with its principles of operation
- Compare the operating characteristics of the three types of three-phase motors

- Explain the advantages of Wye and Delta connections in motor and transit applications
- Size over-current, short circuit, and ground fault protective devices
- Utilize nameplate information

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 32.0

**Lab hours:** 32.0

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## **ELPT 2319 - PROGRAMMABLE LOGIC CONTROLLERS I**

Fundamental concepts of programmable logic controllers, principles of operation, and numbering systems as applied to electrical controls. Lab fees apply

Upon completion, students will be able to:

- Identify and describe digital logic circuits and explain numbering systems
- Explain the operation of programmable logic controllers
- Convert ladder diagrams into programs
- Incorporate timers and counters utilizing programmable logic controllers
- Execute and evaluate programs

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 32.0

**Lab hours:** 32.0

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## **EMSP 1160 - CLINICAL - EMERGENCY MEDICAL TECHNICIAN/ TECHNOLOGY**

A method of instruction providing detailed education, training and work-based experience, and direct patient/client care, generally at a clinical site. Specific detailed learning objectives are developed for each course by the faculty. On-site clinical instruction, supervision, evaluation, and placement are the responsibility of the college faculty. Clinical experiences are unpaid external learning experiences. Course may be repeated if topics and learning outcomes vary.

**Grade Basis:** L

**Credit hours:** 1.0

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## **EMSP 1338 - INTRODUCTION TO ADVANCED PRACTICE**

Lab fees apply

Upon completion, students will be able to:

- Understand the roles and responsibilities of a paramedic within the EMS system
- Apply the basic concepts of development, pathophysiology and pharmacology to assessment and management of emergency patients
- Properly administer medications
- Communicate effectively with patients
- Understand the medical, legal, and ethical issues relating to EMS practice as well as the issues impacting the well being of the paramedic

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 32.0

**Lab hours:** 32.0

---

### **EMSP 1355 - TRAUMA MANAGEMENT**

A detailed study of the knowledge and skills necessary to reach competence in the assessment and management of patients with traumatic injuries. Lab fees apply

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 32.0

**Lab hours:** 32.0

---

### **EMSP 1356 - PATIENT ASSESSMENT & AIRWAY MANAGEMENT**

A detailed study of the knowledge and skills required to reach competence in performing patient assessment and airway management. Lab fees apply

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 32.0

**Lab hours:** 32.0

---

### **EMSP 1501 - EMERGENCY MEDICAL TECHNICIAN**

Introduction to the level of Emergency Medical Technician (EMT) - Basic. Includes all the skills necessary to provide emergency medical care at a basic life support level with an ambulance service or other specialized services. Lab fees apply

**Grade Basis:** L

**Credit hours:** 5.0

**Lecture hours:** 32.0

**Lab hours:** 96.0

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## **EMSP 2206 - EMERGENCY PHARMACOLOGY**

Utilization of medications in treating emergency situations.

**Grade Basis:** L

**Credit hours:** 2.0

**Lecture hours:** 32.0

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## **EMSP 2261 - CLINICAL I - EMERGENCY MEDICAL TECHNICIAN/ PARAMEDIC**

A method of instruction providing detailed education, training and work-based experience, and direct patient/client care, generally at a clinical site. Specific detailed learning objectives are developed for each course by the faculty. On-site clinical instruction, supervision, evaluation, and placement are the responsibility of the college faculty. Clinical experiences are unpaid external learning experiences. Course may be repeated if topics and learning outcomes vary.

**Grade Basis:** L

**Credit hours:** 2.0

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## **EMSP 2262 - CLINICAL II - EMERGENCY MEDICAL TECHNICIAN/ PARAMEDIC**

A method of instruction providing detailed education, training and work-based experience, and direct patient/client care, generally at a clinical site. Specific detailed learning objectives are developed for each course by the faculty. On-site clinical instruction, supervision, evaluation, and placement is the responsibility of the college faculty. Clinical experiences are unpaid external learning experiences. Course may be repeated if topics and learning outcomes vary.

**Grade Basis:** L

**Credit hours:** 2.0

---

## **EMSP 2305 - EMS OPERATIONS**

Knowledge and skills to safely manage multi-casualty incidents and rescue situations, utilize air medical resources, identify hazardous materials, and other specialized incidents.

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 64.0

---

## **EMSP 2338 - EMERGENCY MEDICAL OPERATIONS**

A detailed study of the knowledge and skills necessary to reach competence to safely manage the scene of an emergency. Lab fees apply

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 16.0

**Lab hours:** 32.0

---

## **EMSP 2352 - EMERGENCY MEDICAL SERVICES RESEARCH**

Primary and/or secondary research in current and emerging issues in EMS. Basic research principles, scientific inquiry, and interpretation of professional literature are emphasized. Students will demonstrate computer competencies during this course. Students will be required to present research data utilizing the internet. Data presentation shall include, but not be limited to PowerPoint, Excel or other Windows platforms.

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 48.0

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## **EMSP 2434 - MEDICAL EMERGENCIES**

A detailed study of the knowledge and skills necessary to reach competence in the assessment and management of patients with medical emergencies. Lab fees apply

**Grade Basis:** L

**Credit hours:** 4.0

**Lecture hours:** 64.0

**Lab hours:** 32.0

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## **EMSP 2544 - CARDIOLOGY**

A detailed study of the knowledge and skills necessary to reach competence in the assessment and management of patients with cardiac emergencies.

**Grade Basis:** L

**Credit hours:** 5.0

**Lecture hours:** 64.0

**Lab hours:** 32.0

---



## **EMSP 2553 - EMERGENCY MEDICAL SERVICES CERTIFICATION FOR THE REGISTERED NURSE, PHYSICIAN'S ASSISTANT, REGISTERED RESPIRATORY THERAPIST & LICENSED NURSE PRACTITIONER**

Preparation of the R.N., R.R.T., L.P.N., or P.A. (Licensed to Practice in Texas) for Emergency Medical Services (EMS) certification. In addition to completing this course, students must also successfully complete an EMS internship. Students that meet all the listed requirements are eligible to apply for certification as an Emergency Medical Technician-Paramedic.

**Grade Basis:** L

**Credit hours:** 5.0

**Lecture hours:** 64.0

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## **EMSP 2563 - CLINICAL - EMT-P INTERNSHIP**

A method of instruction providing detailed education, training and work-based experience, and direct patient/client care, generally at a clinical site. Specific detailed learning objectives are developed for each course by the faculty. On-site clinical instruction, supervision, evaluation, and placement are the responsibility of the college faculty. Clinical experiences are unpaid external learning experiences. Course may be repeated if topics and learning outcomes vary.

**Grade Basis:** L

**Credit hours:** 5.0

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## **ENGL 0300 - FUNDAMENTALS OF ENGLISH I**

In this course, students will learn to write clear, well-developed paragraphs. Students will also learn to identify and correct major sentence errors, including fragments, comma splices, and run-ons. Other topics include subject-verb agreement, pronoun usage, and basic punctuation. This course does not count toward graduation at NCTC.

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 48.0

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## **ENGL 0305 - FUNDAMENTALS OF ENGLISH II**

In this course, students will learn to compose unified, well-developed essays with an introduction, a body, and a conclusion. The thesis statement and topic sentences will be emphasized. Students will also review and practice the basic grammar skills taught in ENGL 0300 and then move to more advanced topics, including modifiers and parallelism. This course does not count toward graduation at NCTC.

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 48.0

---

## **ENGL 1301 - COMPOSITION I**

Intensive study of and practice in writing processes, from invention and researching to drafting, revising, and editing, both individually and collaboratively. Emphasis on effective rhetorical choices, including audience, purpose, arrangement, and style. Focus on writing the academic essay as a vehicle for learning, communicating, and critical analysis. Meets NCTC Core Curriculum Requirement

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 48.0

---

## **ENGL 1302 - COMPOSITION II**

Intensive study of and practice in the strategies and techniques for developing research-based expository and persuasive texts. Emphasis on effective and ethical rhetorical inquiry, including primary and secondary research methods; critical reading of verbal, visual, and multimedia texts; systematic evaluation, synthesis, and documentation of information sources; and critical thinking about evidence and conclusions. Meets NCTC Core Curriculum Requirement

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 48.0

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## **ENGL 2307 - CREATIVE WRITING**

Practical experience in the techniques of imaginative writing. May include fiction, nonfiction, poetry, screenwriting, or drama.

**Grade Basis:** L

**Credit hours:** 3.0

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## **ENGL 2311 - TECHNICAL & BUSINESS WRITING**

Intensive study of and practice in professional settings. Focus on the types of documents necessary to make decisions and take action on the job, such as proposals, reports, instructions, policies and procedures, e-mail messages, letters, and descriptions of products and services. Practice individual and collaborative processes involved in the creation of ethical and efficient documents. Meets NCTC Core Curriculum Requirement

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 48.0

---

## **ENGL 2322 - BRITISH LITERATURE I**

A survey of the development of British literature from the Anglo-Saxon period to the Eighteenth Century. Students will study works of prose, poetry, drama, and fiction in relation to their historical, linguistic, and cultural contexts. Texts will be selected from a diverse group of authors and traditions. Meets NCTC Core Curriculum Requirement

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 48.0

---

## **ENGL 2323 - BRITISH LITERATURE II**

A survey of the development British literature from the Romantic period to the present. Students will study works of prose, poetry, drama, and fiction in relation to their historical and cultural contexts. Texts will be selected from a diverse group of authors and traditions. Meets NCTC Core Curriculum Requirement

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 48.0

---

## **ENGL 2327 - AMERICAN LITERATURE I**

A survey of American literature from the period of exploration and settlement through the Civil War. Students will study works of prose, poetry, drama, and fiction in relation to their historical and cultural contexts. Texts will be selected from among a diverse group of authors for what they reflect and reveal about the evolving American experience and character. Meets NCTC Core Curriculum Requirement

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 48.0

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## **ENGL 2328 - AMERICAN LITERATURE II**

A survey of American literature from the Civil War to the present. Students will study works of prose, poetry, drama, and fiction in relation to their historical and cultural contexts. Texts will be selected from among a diverse group of authors for what they reflect and reveal about the evolving American experience and character. Meets NCTC Core Curriculum Requirement

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 48.0

---

## **ENGL 2332 - WORLD LITERATURE I**

A study of world literature from the ancient world through the sixteenth century. Students will study works of prose, poetry, drama, and fiction in relation to their historical and cultural contexts. Texts will be selected from a diverse group of authors and traditions. Meets NCTC Core Curriculum Requirement

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 48.0

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## **ENGL 2333 - WORLD LITERATURE II**

A survey of world literature from the seventeenth century to the present. Students will study works of prose, poetry, drama, and fiction in relation to their historical and cultural contexts. Texts will be selected from a diverse group of authors and traditions. Meets NCTC Core Curriculum Requirement

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 48.0

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## **FIRS 1103 - FIREFIGHTER AGILITY & FITNESS PREPARATION**

Physical ability testing methods. Rigorous training in skills and techniques needed in typical fire department physical ability tests.

**Grade Basis:** L

**Credit hours:** 1.0

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## **FIRS 1301 - FIREFIGHTER CERTIFICATION I**

One in a series of courses in basic preparation for a new firefighter. Should be taken in conjunction with Firefighter Certification III, IV, V, and VI to satisfy the Texas Commission on Fire Protection (TCFP) curriculum for Basic Structural Fire Suppression, Course #100. This course may be offered only by institutions certified as a training facility by the Texas Commission on Fire Protection (TCFP).

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 80.0

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### **FIRS 1313 - FIREFIGHTER CERTIFICATION III**

One in a series of courses in basic preparation for a new firefighter. Should be taken in conjunction with Firefighter Certification I, IV, V, and VI to satisfy the Texas Commission on Fire Protection (TCFP) curriculum for Basic Structural Fire Suppression, Course #100. This course may be offered only by institutions certified as a training facility by the Texas Commission on Fire Protection (TCFP).

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 80.0

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### **FIRS 1319 - FIREFIGHTER CERTIFICATION IV**

One in a series of courses in basic preparation for a new firefighter. Should be taken in conjunction with Firefighter Certification II, II, IV, V, VI, and VII to satisfy the Texas Commission on Fire Protection (TCFP) curriculum for Basic Structural Fire Suppression, Course #100. This course may be offered only by institutions certified as a training facility by the Texas Commission on Fire Protection (TCFP).

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 96.0

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### **FIRS 1323 - FIREFIGHTER CERTIFICATION V**

One in a series of courses in basic preparation for a new firefighter. Should be taken in conjunction with Firefighter Certification II, II, IV, V, VI, and VII to satisfy the Texas Commission on Fire Protection (TCFP) curriculum for Basic Structural Fire Suppression, Course #100. This course may be offered only by institutions certified as a training facility by the Texas Commission on Fire Protection (TCFP).

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 96.0

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### **FIRS 1329 - FIREFIGHTER CERTIFICATION VI**

One in a series of courses in basic preparation for a new firefighter. Should be taken in conjunction with Firefighter Certification II, II, IV, V, VI, and VII to satisfy the Texas Commission on Fire Protection (TCFP) curriculum for Basic Structural Fire Suppression, Course #100. This course may be offered only by institutions certified as a training facility by the Texas Commission on Fire Protection (TCFP).

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 80.0

### **FIRS 1333 - FIREFIGHTER CERTIFICATION VII**

One in a series of courses in basic preparation for a new firefighter. Should be taken in conjunction with Firefighter Certification II, III, IV, V, VI, and VII to satisfy the Texas Commission on Fire Protection (TCFP) curriculum for Basic Structural Fire Suppression, Course #100. This course may be offered only by institutions certified as a training facility by the Texas Commission on Fire Protection (TCFP).

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 64.0

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### **FIRS 1407 - FIREFIGHTER CERTIFICATION II**

One in a series of courses in basic preparation for a new firefighter. Should be taken in conjunction with Firefighter Certification II, II, IV, V, VI, and VII to satisfy the Texas Commission on Fire Protection (TCFP) curriculum for Basic Structural Fire Suppression, Course #100. This course may be offered only by institutions certified as a training facility by the Texas Commission on Fire Protection (TCFP).

**Grade Basis:** L

**Credit hours:** 4.0

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### **FIRT 1301 - FUNDAMENTALS OF FIRE PROTECTION**

Orientation to the fire service, career opportunities, and related fields.

**Grade Basis:** L

**Credit hours:** 3.0

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### **FIRT 1307 - FIRE PREVENTION CODES & INSPECTIONS**

Examination of building codes and requirements, construction types, and building materials. Includes walls, floorings, foundations, and various roof types and the associated dangers of each. This course meets Fire and Emergency Services Higher Education(FESHE) Model Curriculum core requirements.

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 64.0

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## **FIRT 1309 - FIRE ADMINISTRATION I**

Introduction to the organization and management of a fire department and the relationship of government agencies to the fire service. Emphasis on fire service leadership from the perspective of the company officer.

**Grade Basis:** L

**Credit hours:** 3.0

---

## **FIRT 1315 - HAZARDOUS MATERIAL I**

The chemical characteristics and behavior of various materials. Storage, transportation, handling hazardous emergency situations, and the most effective methods of hazard mitigation.

**Grade Basis:** L

**Credit hours:** 3.0

---

## **FIRT 1319 - FIREFIGHTER HEALTH & SAFETY**

Course Description: Firefighter occupational safety and health in emergency and non-emergency situations. This course meets Fire and Emergency Services Higher Education (FESHE) Model Curriculum core requirements.

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 96.0

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## **FIRT 1329 - BUILDING CODES & CONSTRUCTION**

Local building and fire prevention codes. Fire prevention inspections, practices, and procedures. This course meets Fire and Emergency Services Higher Education (FESHE) Model Curriculum core requirements.

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 80.0

---

## **FIRT 1333 - FIRE CHEMISTRY**

Chemical nature and properties of compounds as related to the fire service. Fundamental laws of chemistry, states of matter, gas laws, chemical bonding, and thermodynamics. This course meets Fire and Emergency Services Higher Education (FESHE) Model Curriculum core requirements.

**Grade Basis:** L

**Credit hours:** 3.0

## **FIRT 1338 - FIRE PROTECTION SYSTEMS**

Design and operation of fire detection and alarm systems, heat and smoke control systems, special protection and sprinkler systems, water supply for fire protection, and portable fire extinguishers. This course meets Fire and Emergency Services Higher Education (FESHE) Model Curriculum core requirements.

**Grade Basis:** L

**Credit hours:** 3.0

---

## **FIRT 2188 - INTERNSHIP-FIRE PROTECTION & SAFETY TECHNOLOGY**

A work-based learning experience that enables the student to apply specialized occupational theory, skills and concepts. A learning plan is developed by the College and the employer. This may be a paid or unpaid experience.

**Grade Basis:** L

---

## **FIRT 2309 - FIREFIGHTING STRATEGIES & TACTICS**

Analysis of the nature of fire problems and selection of initial strategies and tactics including an in-depth study of efficient and effective use of staffing and equipment to mitigate the emergency.

**Grade Basis:** L

**Credit hours:** 3.0

---

## **FMKT 1301 - FLORAL DESIGN**

Principles and elements of floral art with an emphasis on commercial design. Topics include basic design styles and color harmonies, identification, use, and care of processing of cut flowers and foliage, mechanical aids and containers, personal flowers, holiday designs, and plant identification and care. History of floral art in society. Lab fees apply

Upon completion, students will be able to:

- Apply principles and elements of design
- Identify floral design styles
- Identify cut flowers and foliage
- Explain the care and processing methods for extended vase life
- Select containers and mechanical aids
- Create basic floral arrangements

**Grade Basis:** L



**Credit hours:** 3.0

**Lecture hours:** 32.0

**Lab hours:** 32.0

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## **FMKT 2331 - ADVANCED FLORAL DESIGN**

An in-depth coverage of advanced floral design practices for the retail floral industry. Topics include contemporary floral arrangement styles and trends. Lab fees apply

Upon completion, students will be able to:

- Create contemporary floral designs
- Identify specialty flowers and foliage used in retail flower shops
- Determine care and processing techniques
- Select mechanical aids
- Calculate price by various methods

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 32.0

**Lab hours:** 32.0

**Prerequisites:**

- [FMKT 1301](#) - FLORAL DESIGN
- 

## **ENGL 2341 - FORMS OF LITERATURE**

The study of one or more literary genres including, but not limited to, poetry, fiction, drama, and film.

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 48.0

**Prerequisites:**

- [ENGL 1301](#) - COMPOSITION I
- 

## **FREN 1411 - BEGINNING FRENCH I**

Emphasis on the development of elementary listening, speaking, reading, and writing skills applied to present situations and events relevant to students' lives and to the understanding of French-speaking communities. Lab fees apply

**Grade Basis:** L

**Credit hours:** 4.0

**Lecture hours:** 48.0

**Lab hours:** 32.0

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## **FREN 1412 - BEGINNING FRENCH II**

Continuation of FREN 1411 with emphasis on elementary listening, speaking, reading and writing skills. Includes basic vocabulary, grammatical structures, and culture. Lab fees apply

**Grade Basis:** L

**Credit hours:** 4.0

**Lecture hours:** 48.0

**Lab hours:** 32.0

---

## **FREN 2311 - INTERMEDIATE FRENCH I**

Review and application of skills in listening comprehension, speaking, reading, and writing. Emphasizes conversation, vocabulary acquisition, reading, composition, and culture.

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 48.0

---

## **FREN 2312 - INTERMEDIATE FRENCH II**

Review and application of skills in listening comprehension, speaking, reading, and writing. Emphasizes conversation, vocabulary acquisition, reading, composition, and culture.

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 48.0

---

## **PSTR 1301 - FUNDAMENTALS OF BAKING**

Fundamentals of baking including dough, quick breads, pies, cakes, cookies, and tarts. Instruction in flours, fillings, and ingredients. Topics include baking terminology, tool and equipment use, formula conversions, functions of ingredients, and the evaluation of baked products. Lab fees apply

Upon completion, students will be able to:

- Identify and explain baking terms, ingredients, equipment, and tools
- Scale and measure ingredients
- Convert and cost recipes
- Operate baking equipment and tools

- Prepare yeast products, quick breads, pies, tarts, cookies, various cakes, and icings
- Demonstrate fundamental decorating techniques
- Demonstrate fundamental decorating techniques
- Produce commercially acceptable baked products

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 32.0

**Lab hours:** 64.0

---

## **GAME 1303 - INTRODUCTION TO GAME DESIGN & DEVELOPMENT**

Introduction to electronic game development and game development careers. Includes examination of history and philosophy of games, the game production process, employee factors for success in the field, and current issues and practices in the game development industry.

Upon completion, students will be able to:

- Describe the history and evolution of video and computer games and game genres
- Identify the phases and processes involved in developing a computer game
- Design a simple computer game from initial concept to final design document
- Describe current trends in the game industry with regards to hiring practices, working conditions, etc

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 32.0

**Lab hours:** 32.0

---

## **GAME 1306 - DESIGN AND CREATION OF GAMES**

Introduction to game and simulation development. Includes analysis of existing applications and creation of a game using an existing game engine. In-depth coverage of the essential elements of game design. Also covers an overview of cultural history of electronic games, survey of the major innovators, and examination of the trends and taboos that motivate game design. Lab fees apply

Upon completion, students will be able to:

- Summarize the evolution of the electronic game industry
- Explain essential game and simulation elements
- Evaluate the strengths and limitations of game and simulation systems
- Identify programmatic and graphical elements of a development system
- Develop a concept document and simple game

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 32.0

**Lab hours:** 32.0

---

## **GAME 1309 - INTRODUCTION TO ANIMATION PROGRAMMING**

Mathematical elements and algorithms involved in basic animation. Includes generating graphics, viewing 3D environments such as visible line detection and 3D surfaces, image processing techniques, and special effects. Lab fees apply

Upon completion, students will be able to:

- Develop programs that apply the basic character animation techniques, build and pose animated characters, and implement proper timing within animations

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 32.0

**Lab hours:** 32.0

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## **GAME 1328 - VIDEO GAME DESIGN**

Characters, environments, architecture, static objects, user interface, and storyboards for games. Emphasizes applying 2D design concepts. Lab fees apply

Upon completion, students will be able to:

- Solve design problems
- Demonstrate refinement and enhancement of preliminary design concepts
- Demonstrate techniques for communicating complex design criteria and inspiration to artists and non-artists

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 32.0

**Lab hours:** 32.0

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## **GAME 1343 - GAME AND SIMULATION PROGRAMMING I**

Game and simulation programming. Includes advanced pointer manipulation techniques and pointer applications, points and vectors, sound, and graphics. Lab fees apply

Upon completion, students will be able to:

- Perform game and simulation programming
- Use advanced pointer manipulation techniques and pointer applications, points and vectors, sound, and graphics

**Grade Basis:** L  
**Credit hours:** 3.0  
**Lecture hours:** 32.0  
**Lab hours:** 32.0

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## **GAME 2308 - PORTFOLIO FOR GAME DEVELOPMENT**

Design and management of an industry standard portfolio. Includes techniques in self-promotion, resume writing, portfolio distribution systems, and interviewing.

Upon completion, students will be able to:

- Design a professional portfolio for various delivery systems
- Create resume, business card, web page, demo reel, and hardcopy

**Grade Basis:** L  
**Credit hours:** 3.0

### **Restrictions:**

- Department Chair approval required unless student is in last semester of their Application Development degree
- 

## **GAME 2342 - GAME DEVELOPMENT USING C++**

Skill development in C++ programming for games and simulations. Examines real-work C++ development issues.

Upon completion, students will be able to:

- Utilize standard game libraries
- Examine interfaces, exceptions, file access, and random numbers
- Create basic game or simulation frameworks building upon C++ knowledge

**Grade Basis:** L  
**Credit hours:** 3.0  
**Lecture hours:** 32.0  
**Lab hours:** 32.0

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## **GEOL 1401 - EARTH SCIENCE FOR NON-MAJORS I**

Survey of geology, meteorology, oceanography, and astronomy. This laboratory-based course accompanies GEOL 1301, Earth Sciences I. Activities will cover methods used to collect and analyze data in geology, meteorology, oceanography, and astronomy.

Lab fees apply

**Grade Basis:** L  
**Credit hours:** 4.0

**Lecture hours:** 48.0

**Lab hours:** 48.0

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## **GEOL 1402 - EARTH SCIENCES FOR NON-MAJORS II**

Extension of the study of geology, astronomy, meteorology and oceanography, focusing on natural resources, hazards and climate variability. This laboratory-based course accompanies GEOL 1302, Earth Sciences II. Activities will focus on methods used to collect and analyze data related to natural resources, hazards and climate variability. Lab fees apply

**Grade Basis:** L

**Credit hours:** 4.0

**Lecture hours:** 48.0

**Lab hours:** 48.0

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## **GOVT 2305 - FEDERAL GOVERNMENT - FEDERAL CONSTITUTION & TOPICS**

Origin and development of the U.S. Constitution, structure and powers of the national government including the legislative, executive, and judicial branches, federalism, political participation, the national election process, public policy, civil liberties and civil rights. Meets NCTC Core Curriculum Requirement

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 48.0

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## **GOVT 2306 - TEXAS GOVERNMENT - TEXAS CONSTITUTION & TOPICS**

Origin and development of the Texas constitution, structure and powers of state and local government, federalism and inter-governmental relations, political participation, the election process, public policy, and the political culture of Texas. Meets Core Curriculum Requirement

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 48.0

---

## **HALT 1303 - HERBACEOUS PLANTS**

A study of herbaceous plant material. Topics include practices and procedures used in the identification, growth, propagation, maintenance, and utilization of herbaceous plants in the horticulture industry. Lab fees apply

Upon completion, students will be able to:

- Identify herbaceous plants at various growth stages
- Explain methods used to propagate herbaceous plants
- Describe the cultural requirements for care and use of herbaceous plants

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 32.0

**Lab hours:** 32.0

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## **HALT 1309 - INTERIOR PLANTS**

Instruction in the identification and classification of the plants used in home and commercial interior landscapes. Topics include design characteristics for interiorscapes and environmental requirements of the plants. Lab fees apply

Upon completion, students will be able to:

- Identify interior plants
- Select care methods for specific plants
- Identify production methods of interior plants

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 32.0

**Lab hours:** 32.0

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## **HALT 1325 - LANDSCAPE PLANT MATERIAL**

Study of the identification, characteristics, cultural requirements, and landscape uses of native and adapted plants. Lab fees apply

Upon completion, students will be able to:

- Identify plants
- Select plants for various landscape situations
- List characteristics of plants
- Describe cultural requirements of plants

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 32.0

**Lab hours:** 32.0

---

## **HALT 1331 - WOODY PLANT MATERIALS**

Study of woody plant materials used in the horticulture industry. Topics include identification, characteristics, adaptation, cultural requirements, pest and disease problems, and use in the landscape. Lab fees apply

Upon completion, students will be able to:

- Identify woody plants in various growth stages
- Describe morphological, anatomical, or other botanical features
- Explain cultural requirements of woody plants

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 32.0

**Lab hours:** 32.0

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## **HALT 1333 - LANDSCAPE IRRIGATION**

Coverage of irrigation systems including equipment, design, performance, and maintenance. Topics include residential and small business applications, troubleshooting, repair, and technological advances in irrigation systems. Lab fees apply

Upon completion, students will be able to:

- Describe the basic installation techniques used to install an irrigation system
- Discuss the separation of zones for turf areas, shrubs, ground covers, and other plant groups
- Prepare a design for an irrigation system

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 32.0

**Lab hours:** 32.0

---

## **HALT 1353 - LANDSCAPE COMPUTER DESIGN**

A course in computer-aided landscape design. Emphasis on the application of design concepts and techniques using software. Lab fees apply

Upon completion, students will be able to:

- Design landscape plans using computer software programs
- Print a report of all hardscape and softscape materials used in the design

**Grade Basis:** L

**Credit hours:** 3.0



**Lecture hours:** 32.0

**Lab hours:** 32.0

**Prerequisites:**

- [HALT 1422](#) - LANDSCAPE DESIGN
- 

## **HALT 1372 - NATURALISTIC HORTICULTURE**

An organic approach to plant production, pest management, soil fertility, and plant health. Emphasis on sustainability, xeriscaping and landscaping using native plants as well as creating wildlife landscapes. Lab fees apply

Upon completion, students will be able to:

- Demonstrate and apply sustainable horticulture techniques and principles
- Explain the benefits of biodiversity in the garden
- Produce and maintain healthy soils

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 32.0

**Lab hours:** 32.0

---

## **HALT 1422 - LANDSCAPE DESIGN**

A study of the principles and elements of landscape design. Topics include client interview, site analysis, plan view, scale, plant selection, basic drawing and drafting skills, and plan preparation. Lab fees apply

Upon completion, students will be able to:

- Demonstrate procedures utilized in the development of a landscape plan
- Develop a landscape design
- Perform a site analysis and incorporate the information into the final design

**Grade Basis:** L

**Credit hours:** 4.0

**Lecture hours:** 48.0

**Lab hours:** 32.0

---

## **HALT 2280 - COOPERATIVE EDUCATION**

Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.

Upon completion, students will be able to:

- Apply the theory, concepts, and skills involving specialized materials, tools, equipment, procedures, regulations, laws, and interactions within and among political, economic, environmental, social, and legal systems associated with the occupation and the business/industry
- Demonstrate legal and ethical behavior, safety practices, interpersonal and teamwork skills, and appropriate written and verbal communication skills using the terminology of the occupation and the business/industry

**Grade Basis:** L

**Credit hours:** 2.0

**Lecture hours:** 16.0

**Lab hours:** 160.0

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## **HALT 2302 - GREENHOUSE CROP PRODUCTION**

Production of crops within the greenhouse environment. Topics include growing techniques, environmental control, crop rotation, scheduling, preparation for sale, and marketing. Lab fees apply

Upon completion, students will be able to:

- Produce crops within a greenhouse
- Explain various cultural requirements for greenhouse crops
- Implement marketing and sales
- Modify crop growth and development

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 32.0

**Lab hours:** 32.0

---

## **HALT 2307 - HORTICULTURAL FOOD CROPS**

A study of commercial and home cultivated food crops including various vegetables, fruits, and nuts. Topics address planting, maintenance, harvest, and storage of the various crops. Lab fees apply

Upon completion, students will be able to:

- Demonstrate the ability to plan, design, and plant a vegetable garden or small fruit orchard and properly cultivate, fertilize, water, and harvest the garden or orchard
- Discuss various types of gardens and their applications in both commercial and residential settings

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 32.0

**Lab hours:** 32.0

---

## **HALT 2308 - GREENHOUSE MANAGEMENT**

Fundamentals of greenhouse construction and operation. Topics include architectural styles, construction materials, environmental systems and controls, growing media, fertilizers, post-harvest handling, marketing, and business management. Lab fees apply

Upon completion, students will be able to:

- Compare and select architectural styles and materials for greenhouse construction
- Calculate heating, cooling, and light requirements and select appropriate equipment
- Determine cultural and business methods necessary for crop production

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 32.0

**Lab hours:** 32.0

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## **HALT 2321 - SMALL FARMING**

Instruction in small farming techniques with emphasis on horticulture science including comprehensive and profitable guidelines. Topics include herbs, fruits, nut, and vegetable crops. Lab fees apply

Upon completion, students will be able to:

- Identify major physical and biological factors that affect crops
- Utilize innovative production techniques for a small farming operation
- Demonstrate creative marketing techniques for small farming operations
- Design productive and profitable small farming operations

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 32.0

**Lab hours:** 32.0

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## **HART 1256 - EPA RECOVERY CERTIFICATION**

Certification training for HVAC refrigerant recovery, recycle, and reclaim. Instruction will provide a review of EPA guidelines for refrigerant recovery and recycling during the installation, service, and repair of all HVAC and refrigeration systems.

Upon completion, students will be able to:

- Define refrigerant recovery, recycle, and reclaim terms
- Explain refrigerant recovery, recycle, and reclaim procedures
- Analyze refrigerant recovery, recycle, and reclaim operations
- Identify Type I, Type II, and Type III appliances
- Examine and utilize Section 608 of the Clean Air Act of 1990 Refrigerant, Recovery, Recycle, and Reclaim

**Grade Basis:** L

**Credit hours:** 2.0

**Lecture hours:** 32.0

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## **HART 1301 - BASIC ELECTRICITY FOR HVAC**

Principles of electricity as required by HVAC, including proper use of test equipment, electrical circuits, and component theory and operation. Lab fees apply

Upon completion, students will be able to:

- Demonstrate knowledge of basic principles of electricity, electrical current, circuitry, and air conditioning devices
- Apply Ohm's law to electrical calculations
- Perform electrical continuity, voltage, and current tests with appropriate meters
- Demonstrate electrical safety

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 32.0

**Lab hours:** 32.0

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## **HART 1307 - REFRIGERATION PRINCIPLES**

An introduction to the refrigeration cycle, heat transfer theory, temperature/pressure relationship, refrigerant handling, refrigeration components, and safety. Lab fees apply

Upon completion, students will be able to:

- Identify refrigeration components
- Explain operation of the basic refrigeration cycle and heat transfer
- Demonstrate proper application and/or use of tools, test equipment, and safety procedures

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 32.0

**Lab hours:** 32.0

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## **HART 1341 - RESIDENTIAL AIR CONDITIONING**

A study of components, applications, and installation of mechanical air conditioning systems including operating conditions, troubleshooting, repair, and charging of air conditioning systems. Lab fees apply

Upon completion, students will be able to:

- Identify various types of system applications
- Perform charging, recovery, and evacuation procedures of an installed system
- Perform component and part diagnostics and replacement
- Perform system maintenance

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 32.0

**Lab hours:** 32.0

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## **HART 2301 - AIR CONDITIONING & REFRIGERATION CODES**

HVAC standards and concepts with emphasis on the understanding, and documentation of the codes and regulations required for the state mechanical contractors license and local codes.

Upon completion, students will be able to:

- Demonstrate the ability to locate and identify information in code books and reference materials applicable to installation procedures governed by Texas Department of Licensing and Regulation (TDLR)

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 48.0

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## **HART 2342 - COMMERCIAL REFRIGERATION**

Theory and practical application in the maintenance of commercial refrigeration; medium, and low temperature applications and ice machines. Lab fees apply

Upon completion, students will be able to:

- Explain and apply medium and low temperature systems operation
- Explain and apply ice machine and packaged refrigeration system operation
- Explain application and conversion procedures of refrigerants related to specific systems

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 32.0

**Lab hours:** 64.0

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## **HART 2358 - TESTING, ADJUSTING & BALANCING HVAC SYSTEMS**

A study in the process of checking and adjusting all the building environmental systems to produce the design objectives. Emphasis on efficiency and energy savings. Lab fees apply

Upon completion, students will be able to:

- Interpret HVAC design specifications and plans
- Measure air flow, water flow, and system pressure with instruments
- Perform calculations for fan and pump laws including psychometric
- Adjust and align mechanical equipment
- Diagnose malfunctioning equipment and create a punch list
- Test air quality, humidity, noise, and temperature

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 32.0

**Lab hours:** 32.0

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## **HART 2380 - COOPERATIVE EDUCATION**

Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines learning with work experience. Includes lecture component.

Upon completion, students will be able to:

- Apply the theory, concepts, and skills involving specialized materials, tools, equipment, procedures, regulations, laws, and interactions within and among political, economic, environmental, social, and legal systems associated with the occupation and the business/industry
- Demonstrate legal and ethical behavior, safety practices, interpersonal and teamwork skills, and appropriate written and verbal communication skills using the terminology of the occupation and the business/industry

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 16.0

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## **HART 2445 - RESIDENTIAL AIR CONDITIONING SYSTEMS DESIGN**

Study of the properties of air and results of cooling, heating, humidifying or dehumidifying; heat gain and heat loss calculations including equipment selection and balancing the air system. Lab fees apply

Upon completion, students will be able to:

- Calculate heat loss and heat gain
- Size heating and cooling equipment to the structure
- Read and interpret detailed HVAC design plans
- Perform a load calculation using industry standards
- Design a complete air distribution system including ventilatins requirements and indoor air quality

**Grade Basis:** L

**Credit hours:** 4.0

**Lecture hours:** 32.0

**Lab hours:** 64.0

---

## **HIST 1301 - UNITED STATES HISTORY I - UP TO 1865**

A survey of the social, political, economic, cultural, and intellectual history of the United States from the pre-Columbian era to the Civil War/Reconstruction period. United States History I includes the study of pre-Columbian, colonial, revolutionary, early national, slavery and sectionalism, and the Civil War/Reconstruction eras. Themes that may be addressed in United States History I include: American settlement and diversity, American culture, religion, civil and human rights, technological change, economic change, immigration and migration, and creation of the federal government. Meets NCTC Core Curriculum Requirement

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 48.0

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## **HIST 1302 - UNITED STATES HISTORY II - FROM 1865**

A survey of the social, political, economic, cultural, and intellectual history of the United States from the Civil War and Reconstruction era to the present. United States History II examines industrialization, immigration, world wars, the Great Depression, Cold War and post-Cold War eras. Themes that may be addressed in the United States History II include American culture, religion, civil and human rights, technological change, economic change, immigration and migration, urbanization and suburbanization, the expansion of the federal government, and the study of U.S. foreign policy. Meets NCTC Core Curriculum Requirement

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 48.0

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## **HIST 2301 - TEXAS HISTORY**

A survey of the political, social, economic, cultural, and intellectual history of Texas from the pre-Columbian era to the present. Themes that may be addressed in Texas History include: Spanish colonization and Spanish Texas, Mexican Texas, the Republic of Texas, statehood and secession, oil, industrialization, and urbanization, civil rights, and modern Texas. Meets NCTC Core Curriculum Requirement

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 48.0

---

## **HIST 2321 - WORLD CIVILIZATIONS I**

A survey of the social, political, economic, cultural, religious, and intellectual history of the world from emergence of human cultures through the 15th century. The course examines major cultural regions of the world in Africa, the Americas, Asia, Europe, and Oceania and their global interactions over time. Themes include the emergence of early societies, the rise of civilizations, the development of political and legal systems, religion and philosophy, economic systems and trans-regional networks of exchange. The course emphasizes the development, interaction and impact of global exchange. Meets NCTC Core Curriculum Requirement

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 48.0

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## **HIST 2322 - WORLD CIVILIZATIONS II**

A survey of the social, political, economic, cultural, religious, and intellectual history of the world from the 15th century to the present. The course examines major cultural regions of the world in Africa, the Americas, Asia, Europe, and Oceania and their global interactions over time. Themes include maritime exploration and transoceanic empires, nation/state formation and industrialization, imperialism, global conflicts and resolutions, and global economic integration. The course emphasizes the development, interaction and impact of global exchange. Meets NCTC Core Curriculum Requirement

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 48.0

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## **HITT 1205 - MEDICAL TERMINOLOGY**

Study of medical terms through word origin and structure. Introduction to abbreviations and symbols, surgical and diagnostic procedures, and medical specialties.

**Grade Basis:** L

**Credit hours:** 2.0

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## **SRGT HITT 1205 - MEDICAL TERMINOLOGY**

Study of the basic structure of medical words including prefixes, suffixes, roots, combining forms, plurals, pronunciation, spelling, and the definitions of medical terms. Emphasis is on building a professional vocabulary required for employment in the allied health care field.

**Grade Basis:** L

**Credit hours:** 2.0

**Lecture hours:** 2.0

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## **HORT 1401 - HORTICULTURE**

Structure, growth, and development of horticultural plants. Examination of environmental effects, basic principles of reproduction, production methods ranging from outdoor to controlled climates, nutrition, and pest management. Lab fees apply

Upon completion, students will be able to:

- Identify the various horticultural industries and their roles in our society
- Investigate methods of environmental manipulation (e.g. greenhouse controls, frost management methods, hot caps)
- Apply scientific reasoning to investigate questions and utilize scientific and horticultural tools to collect and analyze data and demonstrate methods
- Use critical thinking and scientific problem - solving to make informed decisions
- Communicate effectively the results of scientific investigations
- Describe the fundamentals of plant science
- Assess the interactions of soils, water, and fertility in plant science
- Contrast the methods of plant reproduction and propagation
- Explain the impacts of production methods and technologies on plant science
- Contrast methods of pest management in plant science

**Grade Basis:** L

**Credit hours:** 4.0

**Lecture hours:** 48.0

**Lab hours:** 32.0

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## **HPRS 1201 - INTRODUCTION TO HEALTH PROFESSIONS**

An overview of roles of various members of the health care system, education requirements, and issues affecting the delivery of health care.

**Grade Basis:** L

**Credit hours:** 2.0

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## **HPRS 1304 - BASIC SKILLS I**

Study of the concepts that serve as the foundation for health profession courses, including client care and safety issues, basic client monitoring, and health documentation methods.

**Grade Basis:** L

**Credit hours:** 3.0

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## **HPRS 1391 - SPECIAL TOPICS - INSTRUMENTS I**

The primary focus of this course is the anesthesia machine. However, all ancillary equipment, including but not limited to gas cylinders, hospital supply lines, ventilators, and absorbers will also be covered. The setup, calibration, operation, basic troubleshooting, maintenance and safety checks for each is taught.

**Grade Basis:** L

**Credit hours:** 3.0

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## **HPRS 1392 - SPECIAL TOPICS - INSTRUMENTS II**

This course is a continuation of Anesthesia Technology Instrumentation I and expands upon the scope of anesthesia instrumentation. Various pieces of instrumentation such as cell savers, patient warmers, fluid warmers, ACT machines, pulse oximeters will be discussed.

**Grade Basis:** L

**Credit hours:** 3.0

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## **HPRS 1563 - CLINICAL I**

A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills and concepts. Direct supervision is provided by the clinical professional.

**Grade Basis:** L

**Credit hours:** 5.0

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## **HPRS 2300 - PHARMACOLOGY**

Categorize the classification of drugs, calculate drug dosages, and identify the therapeutic use, routes of administration, indicates contraindications, and adverse effects.

**Grade Basis:** L

**Credit hours:** 3.0

---

## **HPRS 2310 - BASIC SKILLS II**

Builds on previously acquired knowledge and skills relevant to the professional development of the student. Lecture and simulated laboratory experiences prepare the student to perform patient care utilizing critical thinking and advanced clinical skills.

**Grade Basis:** L

**Credit hours:** 3.0

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## **HPRS 2331 - HEALTH PROFESSIONS MANAGEMENT**

Exploration and application of management concepts necessary for effective health profession operations.

**Grade Basis:** L

**Credit hours:** 3.0

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## **HPRS 2563 - CLINICAL II**

A health-related work based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional.

**Grade Basis:** L

**Credit hours:** 5.0

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## **HRPO 2301 - HUMAN RESOURCES MANAGEMENT**

Behavioral and legal approaches to the management of human resources in organizations.

Upon completion, students will be able to:

- Explain the development of human resources management
- Explain current methods of job analysis, recruitment, selection, training/development, performance management, promotion, and separation
- Describe management's ethical, social, and legal responsibilities
- Explain methods of compensation and benefits planning

- Describe the role of strategic human resources planning

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 48.0

---

## **HRPO 2307 - ORGANIZATIONAL BEHAVIOR**

The analysis and application of organizational theory, group dynamics, motivation theory, leadership concepts and the integration of interdisciplinary concepts from the behavioral sciences.

Upon completion, students will be able to:

- Explain organizational theory as it relates to management practices, employee relations, and structure of the organization to fits its environment and operation
- Analyze leadership styles and determine their effectiveness in employee situations
- Identify methods in resolving organizational problems
- Describe the impact of corporate culture on employee behavior
- Analyze team dynamics, team building strategies, and cultural diversity

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 48.0

---

## **HUMA 1301 - INTRODUCTION TO THE HUMANITIES I**

This stand-alone course is an interdisciplinary survey of cultures focusing on the philosophical and aesthetic factors in human values with an emphasis on the historical development of the individual and society and the need to recreate. Meets NCTC Core Curriculum Requirement

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 48.0

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## **HYDR 1345 - HYDRAULICS & PNEUMATICS**

Discussion of the fundamentals of hydraulics and pneumatics, components of each system, and the operations, maintenance, and analysis of each system. Lab fees apply

Upon completion, students will be able to:

- Demonstrate the operation of basic hydraulic and pneumatic systems including associated instruments
- Interpret schematics
- Troubleshoot systems

- Design a schematic drawing of a working system

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 32.0

**Lab hours:** 32.0

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## **IBUS 1305 - INTRODUCTION TO INTERNATIONAL BUSINESS & TRADE**

The techniques for entering the international marketplace. Emphasis on the impact and dynamics of sociocultural, demographic, economic, technological, and political-legal factors in the foreign trade environment. Topics include patterns of world trade, internationalization of the firm, and operating procedures of the multinational enterprise.

Upon completion, students will be able to:

- Explain terms used in the international business environment
- Discuss internal and external factors influencing the conduct of international business

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 48.0

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## **IMED 1316 - WEB DESIGN I**

Instruction in web page design and related graphic design issues including mark-up languages and browser issues. Lab fees apply

Upon completion, students will be able to:

- Identify how the Internet functions with specific attention to the World Wide Web and file transfer
- Apply design techniques in the creation and optimization of graphics and other embedded elements
- Demonstrate the use of World Wide Web Consortium (W3C) formatting and layout standards
- Design, create, test, and maintain a web site

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 32.0

**Lab hours:** 32.0

---

## **IMED 1345 - INTERACTIVE DIGITAL MEDIA**

Exploration of the use of graphics and sound to create interactive multimedia applications and/or animations using industry standard authoring software. Lab fees apply

Upon completion, students will be able to:

- Develop an interactive digital media presentation integrating different types of media
- Design a navigation scheme
- Demonstrate animation techniques

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 32.0

**Lab hours:** 32.0

**Prerequisites:**

- [ITSE 2321](#) - OBJECT-ORIENTED PROGRAMMING
- 

## **INEW 2334 - ADVANCED WEB PROGRAMMING**

Web programming using industry-standard languages and data stores.

Upon completion, students will be able to:

- Design, code, and implement a dynamic website
- Develop connectivity between data store and website

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 32.0

**Lab hours:** 32.0

**Prerequisites:**

- [ITSE 2321](#) - OBJECT-ORIENTED PROGRAMMING
- 

## **INMT 1305 - INTRODUCTION TO INDUSTRIAL MAINTENANCE**

Basic mechanical skills and repair techniques common to most fields of industrial maintenance. Topics include precision measuring instruments and general safety rules common in industry, including lock-out/tag-out. Lab fees apply

Upon completion, students will be able to:

- Identify various types of fasteners common to industrial maintenance

- Utilize various hand and power tools
- Utilize precision measuring instruments
- Demonstrate proper lock-out/tag-out procedures

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 32.0

**Lab hours:** 32.0

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## **INMT 2303 - PUMPS, COMPRESSORS & MECHANICAL DRIVES**

A study of the theory and operations of various types of pumps and compressors. Topics include mechanical power transmission systems including gears, v-belts, and chain drives. Lab fees apply

Upon completion, students will be able to:

- Identify the principles involved in the operation of centrifugal and positive displacement pumps and compressors
- Explain the function of various components in pumps and compressors, disassemble and reassemble pumps, compressors and mechanical drives, and troubleshoot pumps, compressors and mechanical drives

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 32.0

**Lab hours:** 32.0

---

## **INMT 2345 - INDUSTRIAL TROUBLESHOOTING**

An advanced study of the techniques used in troubleshooting various types of industrial equipment to include mechanical, electrical, hydraulic, and pneumatic systems and their control devices. Emphasis will be placed on the use of schematics and diagrams in conjunction with proper troubleshooting procedures. Lab fees apply

Upon completion, students will be able to:

- Demonstrate various troubleshooting techniques
- Troubleshoot hydraulic, pneumatic, electrical mechanical drive systems using schematics and diagrams

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 32.0

**Lab hours:** 32.0

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## **INMT 2380 - COOPERATIVE EDUCATION - MANUFACTURING TECHNOLOGY**

Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.

Upon completion, students will be able to:

- Apply the theory, concepts, and skills involving specialized materials, tools, equipment, procedures, regulations, laws, and interactions within and among political, economic, environmental, social, and legal systems associated with the occupation and the business/industry
- Demonstrate legal and ethical behavior, safety practices, interpersonal and teamwork skills, and appropriate written and verbal communication skills using the terminology of the occupation and the business/industry

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 16.0

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## **INRW 0305 - INTEGRATED READING AND WRITING**

Integration of critical reading and academic writing skills. Successful completion of this course if taught at the upper (exit) level fulfills TSI requirements for reading and/or writing.

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 48.0

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## **FDNS 1301 - INTRODUCTION TO FOODS**

A study of the composition of food and the chemical and biological changes that occur in storage and processing. Includes preparation techniques and selection principles.

Lab fees apply

Upon completion, students will be able to:

- Explain esthetic values applied to food preparation, acid/base characteristics, use of heat in cookery, protein properties, composition of milk, egg, cheese, meat and fish, and properties of starch foods
- Describe what makes a solution
- Define carbohydrates, lipids, objective food analysis
- List standards of fruit/vegetable selection



- Demonstrate approved measuring techniques, microwave cookery, and cooking principles for cereal, pasta, starch, plant protein, fruit, vegetables, cheese, poultry, fish, meat and sauces
- Explain and demonstrate principles of various dough products, quick and yeast breads, and cooking with fat

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 32.0

**Lab hours:** 32.0

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## **ITCC 1414 - CCNA 1: INTRODUCTION TO NETWORKS**

This course covers networking architecture, structure, and functions; introduces the principles and structure of IP addressing and the fundamentals of Ethernet concepts, media, and operations to provide a foundation for the curriculum. Lab fees apply  
Certification Agency: Cisco

Upon completion, students will be able to:

- Build simple LANs
- Perform basic configuration on routers and switches
- Implement IP addressing schemes

**Grade Basis:** L

**Credit hours:** 4.0

**Lecture hours:** 48.0

**Lab hours:** 32.0

---

## **ITCC 1440 - CCNA 2: ROUTING AND SWITCHING ESSENTIALS**

Describes the architecture, components, and basic operation of routers and explains the basic principles of routing and routing protocols. It also provides an in-depth understanding of how switches operate and are implemented in the LAN environment for small and large networks. Lab fees apply  
Certification Agency: Cisco

Upon completion, students will be able to:

- Configure and maintain routers and switches
- Resolve common issues with routing protocols, virtual LANs, and inter-VLAN routing in both IPv4 and IPv6 networks

**Grade Basis:** L

**Credit hours:** 4.0

**Lecture hours:** 48.0

**Lab hours:** 32.0

**Prerequisites:**

- [ITCC 1414](#) - CCNA 1: INTRODUCTION TO NETWORKS
- 

## **ITCC 2412 - CCNA 3: SCALING NETWORKS**

CCNA R&S: Scaling Networks (ScaN) covers the architecture, components, and operations of routers and switches in larger and more complex networks. Students learn how to configure routers and switches using advanced protocols. Lab fees apply  
Certification Agency: Cisco

Upon completion, students will be able to:

- Configure advanced routing and switching
- Resolve common issues with OSPF, EIGRP, and STP in IP networks
- Implement a WLAN in a small-to-medium network

**Grade Basis:** L

**Credit hours:** 4.0

**Lecture hours:** 48.0

**Lab hours:** 32.0

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## **ITCC 2413 - CCNA 4: CONNECTING NETWORKS**

WAN technologies and network services required by converged applications in a complex network; enables students to understand the selection criteria of network devices and WAN technologies to meet network requirements. Lab fees apply  
Certification Agency: Cisco

Upon completion, students will be able to:

- Configure and troubleshoot network devices
- Resolve common issues with data link protocols
- Resolve common issues with OSPF, EIGRP, and STP in both IPv4 and IPv6 networks
- Implement virtual private network (VPN) operations in a complex network
- Implement security best practices

**Grade Basis:** L

**Credit hours:** 4.0

**Lecture hours:** 48.0

**Lab hours:** 32.0

**Prerequisites:**

- [ITCC 2412](#) - CCNA 3: SCALING NETWORKS
-

## **ITNW 1308 - IMPLEMENTING AND SUPPORTING CLIENT SYSTEMS**

The fundamentals of managing and configuring network clients. Lab fees apply

Upon completion, students will be able to:

- Install and configure network clients
- Setup users, groups, policies, and profiles
- Configure hardware components and applications
- Setup and maintain logon security and security for files and printers
- Configure and optimize clients in multiple environments

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 32.0

**Lab hours:** 32.0

**Prerequisites:**

- [ITNW 1313](#) - COMPUTER VIRTUALIZATION
- 

## **ITNW 1313 - COMPUTER VIRTUALIZATION**

Implement and support virtualization of clients of servers in a networked computing environment. This course explores installation, configuration, and management of computer virtualization workstation and servers. Lab fees apply

Upon completion, students will be able to:

- Install and configure virtual machine managers
- Create and network virtual machines and set priorities for accessing resources
- Move and clone virtual machines
- Ensure high availability for applications within virtual machines

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 32.0

**Lab hours:** 32.0

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## **ITNW 1335 - INFORMATION STORAGE AND MANAGEMENT**

An introduction to data storage-related technologies. Topics include data storage for cloud, Big Data, mobile, social media, and software-defined data centers. Provides a strong understanding of storage technologies and prepares students for advanced concepts, technologies, and processes. 32 lecture hours + 32 laboratory hours Lab fees apply

Upon completion, students will be able to:

- Differentiate storage architectures and key data center elements
- Explain the components of storage infrastructure including subsystems, RAID and intelligent storage systems
- Demonstrate network technologies used in storage systems
- Outline the benefits and components of Storage Area Networks (SANs)
- Adapt contingency plans for backup, replication and archiving
- Evaluate information security requirements and recommend solutions
- List SAN management issues and requirements

**Grade Basis:** L

**Credit hours:** 3.0

**Prerequisites:**

- [ITSE 1346](#) - DATABASE THEORY AND DESIGN
- 

## **ITNW 1353 - SUPPORTING NETWORK SERVER INFRASTRUCTURE**

Installing, configuring, managing, and supporting a network infrastructure. Lab fees apply

Upon completion, students will be able to:

- Install and configure DHCP, DNS, remote access, network security using public key infrastructure
- Integrate network services
- Deploy operating systems using remote installation services

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 32.0

**Lab hours:** 32.0

**Prerequisites:**

- [ITCC 1414](#) - CCNA 1: INTRODUCTION TO NETWORKS
  - [ITNW 1308](#) - IMPLEMENTING AND SUPPORTING CLIENT SYSTEMS
  - [ITNW 1358](#) - NETWORK+
- 

## **ITNW 1354 - IMPLEMENTING AND SUPPORTING SERVER ENVIRONMENT**

Implement, administer, and troubleshoot information systems that incorporate servers in a networked computing environment. Lab fees apply

Upon completion, students will be able to:

- Configure peripherals and devices

- Set up servers
- Configure directory replication
- Manage licensing
- Create and manage system policies and profiles
- Administer remote servers and disk resources
- Create and share resources
- Implement fault-tolerance
- Configure servers for interoperability
- Install and configure Remote Access Service (RAS)
- Identify and monitor performance bottlenecks and resolve configuration problems

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 32.0

**Lab hours:** 32.0

**Prerequisites:**

- [ITCC 1414](#) - CCNA 1: INTRODUCTION TO NETWORKS
- [ITNW 1353](#) - SUPPORTING NETWORK SERVER INFRASTRUCTURE
- [ITNW 1358](#) - NETWORK+

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## **ITNW 1358 - NETWORK+**

Identify and define terminology, hardware, and software components of computer networks, utilize equipment, protocols, and topologies to differentiate between various network systems, demonstrate skills in installing network hardware, software, and cable; troubleshoot network connectivity, configure network protocol, and install and configure network client software. Lab fees apply

Upon completion, students will be able to:

- Identify and define terminology, hardware, and software components of computer networks
- Utilize equipment, protocols, and topologies to differentiate between various network systems
- Demonstrate skills in installing network hardware, software, and cable
- Troubleshoot network connectivity
- Configure network protocol
- Install and configure network client software

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 32.0

**Lab hours:** 32.0

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## **ITNW 2280 - COOPERATIVE EDUCATION - COMPUTER SYSTEMS NETWORKING**

Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.

Upon completion, students will be able to:

- Apply the theory, concepts, and skills involving specialized materials, tools, equipment, procedures, regulations, laws, and interactions within and among political, economic, environmental, social, and legal systems associated with the occupation and the business/industry
- Demonstrate legal and ethical behavior, safety practices, interpersonal and teamwork skills, and appropriate written and verbal communication skills using the terminology of the occupation and the business/industry

**Grade Basis:** L

**Credit hours:** 2.0

**Lecture hours:** 16.0

**Restrictions:**

- Departmental Chair approval required unless student is in last semester of the Networking Degree.

---

## **ITSC 1316 - LINUX INSTALLATION AND CONFIGURATION**

Introduction to Linux operating system. Includes Linux installation, basic administration, utilities and commands, upgrading, networking, security, and application installation. Emphasizes hands-on setup, administration, and management of Linux.

Upon completion, students will be able to:

- Install, administer, and manage a Linux system
- Demonstrate proficiency with Linux utilities, commands, and applications
- Identify and resolve security-based issues
- Integrate a Linux system into an existing network

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 32.0

**Lab hours:** 32.0

---

## **ITSC 1325 - PERSONAL COMPUTER HARDWARE**

A study of current personal computer hardware including assembly, upgrading, setup, configuration, and troubleshooting. Lab fees apply

Upon completion, students will be able to:

- Assemble, setup, and upgrade personal computer systems
- Diagnose and isolate faulty components
- Optimize system performance
- Install and connect peripherals

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 32.0

**Lab hours:** 32.0

---

## **ITSE 1302 - COMPUTER PROGRAMMING**

An introduction to computer programming including design, development, testing, implementation, and documentation. Lab fees apply

Upon completion, students will be able to:

- Design, write, test, and document computer programs

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 32.0

**Lab hours:** 32.0

**Prerequisites:**

- [ITSE 1303](#) - INTRODUCTION TO MySQL
  - [ITSE 2321](#) - OBJECT-ORIENTED PROGRAMMING
- 

## **ITSE 1303 - INTRODUCTION TO MySQL**

Introduction to fundamentals of SQL and relational databases. Lab fees apply

Upon completion, students will be able to:

- Identify database terminology and concepts
- Plan, define, and design a database
- Design and generate tables
- Devise and process queries
- Install and start the MySQL server
- Troubleshoot syntax

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 32.0

**Lab hours:** 32.0

**Prerequisites:**

- [ITSE 2321](#) - OBJECT-ORIENTED PROGRAMMING
  - [ITSW 1307](#) - INTRODUCTION TO DATABASE
- 

## **ITSE 1311 - BEGINNING WEB PROGRAMMING**

Skills development in web programming including mark-up and scripting languages.

Upon completion, students will be able to:

- Demonstrate the use of markup and scripting languages
- Create interactive web pages

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 32.0

**Lab hours:** 32.0

---

## **ITSE 1333 - MOBILE APPLICATIONS DEVELOPMENT**

An overview of different mobile platforms and their development environments. Lab fees apply

Upon completion, students will be able to:

- Design, write, and test small interactive programs for mobile platforms

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 32.0

**Lab hours:** 32.0

---

## **ITSE 1345 - INTRODUCTION TO ORACLE SQL**

An introduction to the design and creation of relational databases using Oracle. Topics include storing, retrieving, updating, and displaying data using Structured Query Language (SQL). Lab fees apply

Upon completion, students will be able to:

- Write Structured Query Language (SQL) statements using Oracle
- Select and sort data



- Produce reports with SQL
- Create and manage tables which include constraints
- Create Views and other database objects

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 32.0

**Lab hours:** 32.0

**Prerequisites:**

- [ITSE 2321](#) - OBJECT-ORIENTED PROGRAMMING
- 

## **ITSE 1346 - DATABASE THEORY AND DESIGN**

Introduction to the analysis and utilization of data requirements and organization into normalized tables using the four normal forms of database design. Lab fees apply

Upon completion, students will be able to:

- Organize data into normalized tables by applying the four normal forms of database design
- Create Entity-Relationship models and diagrams to graphically represent their database design
- Design database tables with One-to-Many and Many-to-Many relationships
- Create tables using the SQL "create" and "insert" statements
- Retrieve data from tables using SQL "select" statement
- Maintain data in tables using the SQL "update" and "delete" statements
- Implement stored procedures, triggers, and constraints using SQL statements

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 32.0

**Lab hours:** 32.0

---

## **ITSE 2302 - INTERMEDIATE WEB PROGRAMMING**

Techniques for Web development. Includes server-side and client-side scripting. Lab fees apply

Upon completion, students will be able to:

- Create and use client-side and server-side scripts to design and implement dynamic websites

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 32.0

**Lab hours:** 32.0

**Prerequisites:**

- [IMED 1316](#) - WEB DESIGN I
- 

## **ITSE 2310 - iOS APPLICATION PROGRAMMING**

Course explores developing applications for iOS devices. Will include Objective-C programming, use of the iOS SDK environment, and current programming issues in the iOS environment. Lab fees apply

Upon completion, students will be able to:

- Implement the procedures to become a registered Apple iOS developer
- Design interfaces for iOS applications
- Produce concept documentation
- Create iOS in native SDK
- Execute deployment procedures for various iOS devices

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 32.0

**Lab hours:** 32.0

---

## **ITSE 2317 - JAVA PROGRAMMING**

Introduction to object-oriented Java programming including the fundamental syntax and semantics of Java for applications and web applets. Lab fees apply

Upon completion, students will be able to:

- Design and write documented Java applications and applets

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 32.0

**Lab hours:** 32.0

**Prerequisites:**

- [ITSY 2300](#) - OPERATING SYSTEM SECURITY
- 

## **ITSE 2321 - OBJECT-ORIENTED PROGRAMMING**

Introduction to object-oriented programming. Emphasis on the fundamentals of design with classes, including development, testing, implementation, and documentation. Includes object-oriented programming techniques, classes, and objects.

Upon completion, students will be able to:

- Develop executable programs
- Create appropriate documentation
- Create programs using classes and objects using object-oriented programming techniques

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 32.0

**Lab hours:** 32.0

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## **ITSE 2333 - IMPLEMENTING A DATABASE ON MICROSOFT SQL SERVER**

Skills development in the implementation of a database solution using Microsoft SQL Server client/server database management system. Lab fees apply

Upon completion, students will be able to:

- Describe the elements of Microsoft SQL Server and its operational environments
- Describe the elements of the Transact-SQL language
- Demonstrate and configure the data storage architecture of SQL server
- Write, maintain, and tune advanced queries
- Manage locking options and transactions to ensure data concurrency and recoverability
- Create views of data
- Design and create stored procedures
- Design and create triggers
- Use distributed data

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 32.0

**Lab hours:** 32.0

**Prerequisites:**

- [ITSE 1303](#) - INTRODUCTION TO MySQL
- 

## **ITSE 2343 - ADVANCED MOBILE PROGRAMMING**

Programming for mobile devices including file access methods, data structures, modular programming, program testing and documentation. Lab fees apply

Upon completion, students will be able to:

- Design, write, and document mobile programs

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 32.0

**Lab hours:** 32.0

**Prerequisites:**

- [ITSE 1333](#) - MOBILE APPLICATIONS DEVELOPMENT
  - [ITSE 2321](#) - OBJECT-ORIENTED PROGRAMMING
- 

## **ITSE 2354 - ADVANCED ORACLE PL/SQL**

A continuation of Oracle SQL. Topics include hierarchical queries, set based queries, correlated subqueries, scripting, and scripting generation. Lab fees apply

Upon completion, students will be able to:

- Retrieve data including SET operators, correlated subqueries, and hierarchical queries
- Write SQL scripts that execute remote procedure calls
- Create a package to group together variables, cursors, exceptions, procedures, and functions
- Invoke a package constraint

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 32.0

**Lab hours:** 32.0

**Prerequisites:**

- [ITSE 1345](#) - INTRODUCTION TO ORACLE SQL
- 

## **ITSE 2356 - ORACLE DATABASE ADMINISTRATION I**

Fundamentals of the tasks and functions required of a database administrator using Oracle. Lab fees apply

Upon completion, students will be able to:

- Create an operational database using Oracle
- Create, delete, and modify associated files, table spaces, segments, extents, and blocks
- Start up and shut down an Oracle instance and database
- Add, delete, and modify users, privileges, and resources
- Demonstrate use of National Language and Support (NLS) features

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 32.0

**Lab hours:** 32.0

**Prerequisites:**

- [ITSE 2354](#) - ADVANCED ORACLE PL/SQL
  - [ITSW 2337](#) - ADVANCED DATABASE
- 

## **ITSE 2358 - ORACLE DATABASE ADMINISTRATION II**

A continuation of Oracle Database Administration I. Topics include the recovery procedures, logical backups, standby database capabilities, and performance tuning of the Oracle Server. Common performance problems and the use of diagnostic tools to troubleshoot and optimize throughout will be discussed. Lab fees apply

Upon completion, students will be able to:

- List the Oracle backup and recovery components
- Formulate a backup and recovery strategy
- Practice backup and recovery operations
- Use Oracle tools to diagnose performance problems
- Optimize and troubleshoot Oracle database performance

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 32.0

**Lab hours:** 32.0

**Prerequisites:**

- [ITSE 2356](#) - ORACLE DATABASE ADMINISTRATION I
- 

## **ITSE 2380 - COOPERATIVE EDUCATION - COMPUTER PROGRAMMER**

Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and employer, the student combines classroom learning with work experience. Includes a lecture component.

Upon completion, students will be able to:

- Apply the theory, concepts, and skills involving specialized materials, tools, equipment, procedures, regulations, laws, and interactions within and among political, economic, environmental, social, and legal systems associated with the occupation and the business/industry

- Demonstrate legal and ethical behavior, safety practices, interpersonal and teamwork skills, and appropriate written and verbal communication skills using the terminology of the occupation and the business/industry

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 16.0

**Restrictions:**

- Departmental Chair approval required unless student is in last semester of the Computer Information Degree.
- 

## **ITSW 1307 - INTRODUCTION TO DATABASE**

Introduction to database theory and the practical applications of a database. 32 lecture hours + 32 laboratory hours Lab fees apply

Upon completion, students will be able to:

- Identify database terminology and concepts
- Plan, define, and design a database
- Design and generate tables, forms, and reports
- Devise and process queries

**Grade Basis:** L

**Credit hours:** 3.0

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## **ITSW 2337 - ADVANCED DATABASE**

Advanced concepts of database design and functionality. Lab fees apply

Upon completion, students will be able to:

- Explain relational database theory
- Collect and distribute data
- Analyze data
- Perform complex queries, data validation and table relationships

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 32.0

**Lab hours:** 32.0

**Prerequisites:**

- [ITSE 1346](#) - DATABASE THEORY AND DESIGN
  - [ITSW 1307](#) - INTRODUCTION TO DATABASE
-

## ITSY 1342 - INFORMATION TECHNOLOGY SECURITY

Instruction in security for network hardware, software, and data, including physical security, backup procedures, relevant tools, encryption, and protection from viruses.

Lab fees apply

Upon completion, students will be able to:

- National Institute of Standards and Technology (NIST) Guidelines and other best practices
- Develop backup procedures to provide for data security
- Use network operating system features to implement network security
- Identify computer and network threats and vulnerabilities and methods to prevent their effects
- Use tools to enhance network security
- Use encryption techniques to protect network data

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 32.0

**Lab hours:** 32.0

**Prerequisites:**

- [ITNW 1358](#) - NETWORK+
- 

## ITSY 2300 - OPERATING SYSTEM SECURITY

Safeguard computer operating systems by demonstrating server support skills and designing and implementing a security system. Identify security threats and monitor network security implementations. Use best practices to configure operating systems to industry security standards.

Upon completion, students will be able to:

- Identify network security risks, security design, and monitoring solutions
- Identify sources of computer threats, evaluate potential practices, tools, and technologies to protect individual network systems
- Establish and sustain an operating system security plan utilizing systems and application security tools
- Implement procedures to secure and monitor audit logs and set system administrator alerts
- Develop an organizational operating system security plan that provides for periodic reviews of security policies, procedures, authorized users list, and software update patches

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 32.0

**Lab hours:** 32.0

**Prerequisites:**

- [ITSY 1342](#) - INFORMATION TECHNOLOGY SECURITY
- 

## **ITSY 2301 - FIREWALL AND NETWORK SECURITY**

Identify elements of firewall design, types of security threats and responses to security attacks. Use Best Practices to design, implement, and monitor a network security plan. Examine security incident postmortem reporting and ongoing network security activities. Lab fees apply

Upon completion, students will be able to:

- Demonstrate system security skills through firewall implementation and testing
- Use system tools, practices, and relevant technologies to implement a security plan
- Evaluate practices, tools, and technologies to identify security breaches, sources of attacks, and protect mission critical systems
- Establish an appropriate level of security based on an analysis of security logs
- Use relevant tools to secure a network, respond to and follow up on various types of attacks

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 32.0

**Lab hours:** 32.0

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## **ITSY 2330 - INTRUSION DETECTION**

Computer information systems security monitoring, intrusion detection, and crisis management. Includes alarm management, signature configuration, sensor configuration, and troubleshooting components. Emphasizes identifying, resolving, and documenting network crises and activating the response team. Lab fees apply

Upon completion, students will be able to:

- Build IDS sensors and attach them to the network (hardware and software)
- Install and manage a secure communication link between all sensors and the monitor
- Install and manage event database(s)
- Analyze an event and trends
- Install, manage, and interpret syslog servers and system logs
- Identify legal and policy issues associated with system and network monitoring
- Deploy, implement, and test IDS security plan

**Grade Basis:** L

**Credit hours:** 3.0



**Lecture hours:** 32.0

**Lab hours:** 32.0

**Prerequisites:**

- [ITSY 2300](#) - OPERATING SYSTEM SECURITY
  - [ITSY 2301](#) - FIREWALL AND NETWORK SECURITY
- 

## **ITSY 2342 - INCIDENT RESPONSE AND HANDLING**

In-depth coverage of incident response and incident handling, including identifying courses of attacks and security breaches, analyzing security logs; recovering the system to normal, performing postmortem analysis, and implementing and modifying security measures. Lab fees apply

Upon completion, students will be able to:

- Identify sources of attacks
- Restore the system to normal operation
- Identify and prevent security threats
- Perform a postmortem analysis
- Identify computer investigation issues
- Identify the roles and responsibility of the incident response team

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 32.0

**Lab hours:** 32.0

**Prerequisites:**

- [ITSY 2301](#) - FIREWALL AND NETWORK SECURITY
- 

## **ITSY 2343 - COMPUTER SYSTEM FORENSICS**

In-depth study of system forensics including methodologies used for analysis of computer security breaches. Gather and evaluate evidence to perform postmortem analysis of a security breach. Lab fees apply

Upon completion, students will be able to:

- Identify computer investigation issues
- Identify legal issues associated with computer investigations
- Collect and document evidence
- Evaluate network traffic, and evaluate recovered remnant or residual data

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 32.0

**Lab hours:** 32.0

**Prerequisites:**

- [ITSY 2300](#) - OPERATING SYSTEM SECURITY
- 

## **ITSY 2382 - COOPERATIVE EDUCATION-COMPUTER & INFORMATION SYSTEM SECURITY**

Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.

Upon completion, students will be able to:

- Apply the theory, concepts, and skills involving specialized materials, tools, equipment, procedures, regulations, laws, and interactions within and among political, economic, environmental, social, and legal systems associated with the occupation and the business/industry
- Demonstrate legal and ethical behavior, safety practices, interpersonal and teamwork skills, and appropriate written and verbal communication skills using the terminology of the occupation and the business/industry

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 16.0

**Restrictions:**

- Departmental Chair approval required unless student is in last semester of the Cyber Security Degree.
- 

## **ITSY 2445 - NETWORK DEFENSE AND COUNTERMEASURES**

This is a practical application and comprehensive course that includes the planning, design, and construction of a complex network that will sustain an attack, document events, and mitigate the effects of the attack. Lab fees apply

Upon completion, students will be able to:

- Assemble network defense tools
- Identify network traffic to determine differences between authorized and unauthorized activity on a network
- Respond to a breach in security through the use of countermeasures designed to minimize the impact of the breach on the network
- Document network events

- Present an analysis of network breach and plan for remediation

**Grade Basis:** L

**Credit hours:** 4.0

**Lecture hours:** 48.0

**Lab hours:** 32.0

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## **MATH 0303 - PRE-ALGEBRA**

This introductory course includes a general overview of basic arithmetic: fractions, decimals, and percent. Other topics include algebraic concepts, integers, solving equations, linear equations, graphing and polynomials. Simple geometric concepts are also discussed. This course is designed for those students with little or no algebra background. This course does not count toward graduation at NCTC.

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 48.0

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## **MATH 0305 - BEGINNING ALGEBRA**

This course includes basic algebraic concepts and notations, algebraic expressions and equations, factoring polynomials and graphing. Some algebra is required. This course does not count toward graduation at NCTC.

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 48.0

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## **MATH 0310 - INTERMEDIATE ALGEBRA**

A study of relations and functions, inequalities, algebraic expressions and equations (absolute value, polynomial, radical, rational), with a special emphasis on linear and quadratic expressions and equations.

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 48.0

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## **MATH 1314 - COLLEGE ALGEBRA (for Science & Engineering Majors)**

In-depth study and applications of polynomial, rational, radical, exponential and logarithmic functions, and systems of equations using matrices. Additional topics such as sequences, series, probability, and conics may be included. Meets NCTC Core Curriculum Requirement

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 48.0

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## **MATH 1316 - PLANE TRIGONOMETRY**

In-depth study and applications of trigonometry including definitions, identities, inverse functions, solutions of equations, graphing, and solving triangles. Additional topics such as vectors, polar coordinates and parametric equations may be included. Meets NCTC Core Curriculum Requirement

**Grade Basis:** L

**Credit hours:** 3.0

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## **MATH 1324 - MATHEMATICS FOR BUSINESS & SOCIAL SCIENCES**

The application of common algebraic functions, including polynomial, exponential, logarithmic, and rational, to problems in business, economics, and the social sciences are addressed. The applications include mathematics of finance, including simple and compound interest and annuities; systems of linear equations; matrices; linear programming; and probability, including expected value. Meets NCTC Core Curriculum Requirement

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 48.0

**Restrictions:**

- Must meet TSI College Readiness Standard for Mathematics
- 

## **MATH 1325 - CALCULUS FOR BUSINESS & SOCIAL SCIENCES**

This course is the basic study of limits and continuity, differentiation, optimization, and graphing, and integration of elementary functions, with emphasis on applications in business, economics, and social sciences. This course is not a substitute for MATH 2413 Calculus I. Meets NCTC Core Curriculum Requirement

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 48.0

**Prerequisites:**

- [MATH 1314](#) - COLLEGE ALGEBRA (for Science & Engineering Majors)
  - [MATH 1324](#) - MATHEMATICS FOR BUSINESS & SOCIAL SCIENCES
-

## **MATH 1332 - CONTEMPORARY MATHEMATICS I**

General mathematics course, intended for Non STEM (Science, Technology, Engineering, and Mathematics) majors. Topics include introductory treatments of sets and logic, financial mathematics, probability and statistics with appropriate applications. Number sense, proportional reasoning, estimation, technology, and communication should be embedded throughout the course. Additional topics may be covered. Meets NCTC Core Curriculum Requirements

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 48.0

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## **MATH 1342 - ELEMENTARY STATISTICAL METHODS**

Collection, analysis, presentation and interpretation of data, and probability. Analysis includes descriptive statistics, correlation and regression, confidence intervals and hypothesis testing. Use of appropriate technology is recommended. Meets NCTC Core Curriculum Requirement

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 48.0

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## **MATH 1350 - MATHEMATICS FOR TEACHERS I**

This course is intended to build or reinforce a foundation in fundamental mathematics concepts and skills. It includes the conceptual development of the following: sets, functions, numeration systems, number theory, and properties of the various number systems with an emphasis on problem solving and critical thinking.

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 48.0

**Prerequisites:**

- [MATH 1314](#) - COLLEGE ALGEBRA (for Science & Engineering Majors)
- 

## **MATH 1351 - MATHEMATICS FOR TEACHERS II**

This course is intended to build or reinforce a foundation in fundamental mathematics concepts and skills. It includes the concepts of geometry, measurement, probability, and statistics with an emphasis on problem solving and critical thinking.

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 48.0

**Prerequisites:**

- [MATH 1314](#) - COLLEGE ALGEBRA (for Science & Engineering Majors)
- 

**MATH 2318 - LINEAR ALGEBRA**

Introduces and provides models for application of the concepts of vector algebra. Topics include finite dimensional vector spaces and their geometric significance, representing and solving systems of linear equations using multiple methods including Gaussian elimination and matrix inversion, matrices, determinants, linear transformations, quadratic forms, eigenvalues and eigenvector, and applications in science and engineering.

**Grade Basis:** L

**Credit hours:** 3.0

**Prerequisites:**

- [MATH 2414](#) - CALCULUS II
- 

**MATH 2320 - DIFFERENTIAL EQUATIONS**

Ordinary differential equations, including linear equations, systems of equations, equations with variable coefficients, existence and uniqueness of solutions, series solutions, singular points, transform methods, boundary value problems, and application of differential equations to real-world problems.

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 64.0

**Prerequisites:**

- [MATH 2414](#) - CALCULUS II
- 

**MATH 2412 - PRE-CALCULUS MATH**

In-depth combined study of algebra, trigonometry, and other topics for calculus readiness. Meets NCTC Core Curriculum Requirement

**Grade Basis:** L

**Credit hours:** 4.0

**Lecture hours:** 80.0

---

## **MATH 2413 - CALCULUS I**

Limits and continuity; the Fundamental Theorem of Calculus; definition of the derivative of a function and techniques of differentiation, applications of the derivative to maximizing or minimizing a function, the chain rule, mean value theorem, and rate of change problems, curve sketching, definite and indefinite integration of algebraic, trigonometric, and transcendental functions, with an application to calculation of areas. Meets NCTC Core Curriculum Requirement.

**Grade Basis:** L

**Credit hours:** 4.0

**Lecture hours:** 64.0

**Prerequisites:**

- [MATH 2412](#) - PRE-CALCULUS MATH
- 

## **MATH 2414 - CALCULUS II**

Differentiation and integration of transcendental functions; parametric equations and polar coordinates, techniques of integration, sequences and series, improper integrals.

**Grade Basis:** L

**Credit hours:** 4.0

**Lecture hours:** 64.0

**Prerequisites:**

- [MATH 2413](#) - CALCULUS I
- 

## **MATH 2415 - CALCULUS III**

Advanced topics in calculus, including vectors and vector-valued functions, partial differentiation, Lagrange multipliers, multiple integrals, and Jacobians, and application of the line integral including Green's Theorem, the Divergence Theorem, and Stokes' Theorem.

**Grade Basis:** L

**Credit hours:** 4.0

**Lecture hours:** 64.0

**Prerequisites:**

- [MATH 2414](#) - CALCULUS II
- 

## **MCHN 1302 - PRINT READING FOR MACHINING TRADES**

A study of blueprints for machining trades with emphasis on machine drawings.

Upon completion, students will be able to:

- Identify the elements of machine drawings; interpret dimensions, tolerances, and geometric aspects of blueprints
- Explain Geometric Dimensioning and Tolerancing (GD&T) symbols and their meanings

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 48.0

---

## **MCHN 1320 - PRECISION TOOLS & MEASUREMENT**

An introduction to the modern science of dimensional metrology. Emphasis on the identification, selection, and application of various types of precision instruments associated with the machining trade. Practice of basic layout and piece part measurements while using standard measuring tools. Lab fees apply

Upon completion, students will be able to:

- Describe common methods of measurement conversion
- Determine the degree of precision measurement required
- Identify various types of precision instruments and their applications
- List maintenance procedures on various types of measuring instruments
- Interpret and confirm blueprint requirements
- Convert between English and metric units
- Compute total tolerances of parts
- Calibrate various types of precision measuring instruments to a standard
- Select and use precision measurement tools

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 32.0

**Lab hours:** 32.0

---

## **MCHN 1343 - MACHINE SHOP MATHEMATICS**

Designed to prepare the student with technical, applied mathematics that will be necessary in future machine shop-related courses.

Upon completion, students will be able to:

- Identify conversion methods of numbering systems
- Convert fractions to decimals and back
- Use formulas to solve measurement problems

**Grade Basis:** L

**Credit hours:** 3.0



**Lecture hours:** 48.0

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## **MCHN 1438 - BASIC MACHINE SHOP I**

A course that introduces the student to machining fundamentals. The student begins by using basic machine tools including the lathe, milling machine, drill press, power saw, and bench grinder. Machine terminology, theory, math, part layout, and bench work using common measuring tools included. Emphasis is placed on shop safety, housekeeping, and preventative maintenance. Lab fees apply

Upon completion, students will be able to:

- Demonstrate set-up and use of the lathe, milling machine, drill press, power saw, and bench grinder applying good housekeeping, proper safety, and preventative maintenance
- Use precision instruments to perform bench work including part layout, drilling, reaming, taping, press fitting, location of hole centers and surfaces
- Set up power saws for cutoff operation
- Demonstrate tooling maintenance, and hazardous material handling
- Perform preventative maintenance
- Interpret blueprints

**Grade Basis:** L

**Credit hours:** 4.0

**Lecture hours:** 32.0

**Lab hours:** 64.0

---

## **MCHN 2303 - FUNDAMENTALS OF COMPUTER NUMERICAL CONTROLLED (CNC) MACHINE CONTROLS**

Programming and operation of Computer Numerical Controlled (CNC) machine shop equipment. Lab fees apply

Upon completion, students will be able to:

- Demonstrate operations of CNC machine controls
- Compare and contrast the differences between conventional and CNC machines
- Utilize CNC machine applications for machining operations

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 32.0

**Lab hours:** 64.0

---

## **MCHN 2380 - COOPERATIVE EDUCATION - MACHINE TOOL TECHNOLOGY/MACHINIST**

Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.

Upon completion, students will be able to:

- Apply the theory, concepts, and skills involving specialized materials, tools, equipment, procedures, regulations, laws, and interactions within and among political, economic, environmental, social, and legal systems associated with the occupation and the business/industry
- Demonstrate legal and ethical behavior, safety practices, interpersonal and teamwork skills, and appropriate written and verbal communication skills using the terminology of the occupation and the business/industry

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 16.0

---

## **MCHN 2434 - OPERATION OF CNC MACHINING CENTERS**

A study of CNC operations with an emphasis on vertical machining centers. Lab fees apply

Upon completion, students will be able to:

- Set up and operate CNC machining centers
- Set machine and tool offsets for machining operations
- Edit the program as required

**Grade Basis:** L

**Credit hours:** 4.0

**Lecture hours:** 32.0

**Lab hours:** 64.0

---

## **MCHN 2435 - ADVANCED CNC MACHINING**

The study of advanced CNC operation with an emphasis on programming and operations of machining and turning centers. Lab fees apply

Upon completion, students will be able to:

- Set up and operate CNC machining centers and CNC turning centers
- Select proper tooling with correct speeds and feeds
- Produce a part to specific tolerances

**Grade Basis:** L

**Credit hours:** 4.0

**Lecture hours:** 32.0

**Lab hours:** 64.0

---

## **METL 1301 - INTRODUCTION TO METALLURGY**

A study of refining, mechanical, and physical properties of ferrous and non-ferrous materials including the theory of alloys, heat treatment, and testing.

Upon completion, students will be able to:

- Define the physical and mechanical properties of ferrous and non-ferrous metals
- Describe the steel making process
- Name and describe methods of destructive and nondestructive testing
- Explain the effects of hot working, cold working, welding, machining, and heat treating on metal properties
- Perform tests to pinpoint failures
- Define metallurgical terms and processes
- Recognize defects and their causes

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 48.0

---

## **ENGL 2351 - MEXICAN AMERICAN LITERATURE**

A survey of Mexican-American/Chicano/a literature including fiction, non-fiction, poetry, and drama.

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 48.0

**Prerequisites:**

- [ENGL 1301](#) - COMPOSITION I
- 

## **MRKG 1301 - CUSTOMER RELATIONSHIP MANAGEMENT**

General principles of customer relationship management including skills, knowledge, attitudes, and behaviors.

Upon completion, students will be able to:

- Examine internal and external customer relationship management (CRM) strategies

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 48.0

---

## **MRKG 1311 - PRINCIPLES OF MARKETING**

Introduction to the marketing mix functions and process. Includes identification of consumer and organizational needs and explanation of environmental issues.

Upon completion, students will be able to:

- Identify the marketing mix components in relation to market segmentation
- Explain the environmental factors which influence consumer and organizational decision-making processes
- Outline a marketing plan

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 48.0

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## **MUAP 1176 - APPLIED VOICE**

Individual instruction in voice, instrument, composition, or conducting. Lab fees apply

**Grade Basis:** L

**Credit hours:** 1.0

**Lab hours:** 8.0

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## **MUAP 1273 - APPLIED STRINGS**

Individual instruction in voice, instrument, composition, or conducting. Lab fees apply

**Grade Basis:** L

**Credit hours:** 2.0

**Lab hours:** 16.0

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## **MUAP 1274 - APPLIED PIANO**

Individual instruction in voice, instrument, composition, or conducting. Lab fees apply

**Grade Basis:** L

**Credit hours:** 2.0

**Lab hours:** 16.0

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## **MUAP 1277 - APPLIED BRASS**

Individual instruction in voice, instrument, composition, or conducting. Lab fees apply

**Grade Basis:** L  
**Credit hours:** 2.0  
**Lab hours:** 16.0

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## **MUAP 1278 - APPLIED PERCUSSION**

Individual instruction in voice, instrument, composition, or conducting. Lab fees apply

**Grade Basis:** L  
**Credit hours:** 2.0  
**Lab hours:** 16.0

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## **MUAP 1279 - APPLIED WOODWINDS**

Individual instruction in voice, instrument, composition, or conducting. Lab fees apply

**Grade Basis:** L  
**Credit hours:** 2.0  
**Lab hours:** 16.0

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## **MUAP 1272 - APPLIED GUITAR**

Individual instruction in voice, instrument, composition, or conducting. Lab fees apply

**Grade Basis:** L  
**Credit hours:** 2.0  
**Lab hours:** 16.0

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## **MUEN 1125 - JAZZ BAND**

May be repeated for credit. Consisting of 16-21 instrumentalists, the band performs both traditional and contemporary jazz literature. A number of performances occur on and off campus including some travel. Open to all students.

**Grade Basis:** L  
**Credit hours:** 1.0  
**Lab hours:** 48.0

**Restrictions:**

- Audition required.
-

## **MUEN 1131 - WIND ENSEMBLE**

May be repeated for credit. Study and performance of a wide range of wind instrument repertoire (woodwind, brass, and percussion) from the Renaissance through the Twentieth Century. Open to all students. Lab fees apply

**Grade Basis:** L

**Credit hours:** 1.0

**Lab hours:** 48.0

**Restrictions:**

- Audition required.
- 

## **MUEN 1135 - GUITAR ENSEMBLE**

May be repeated for credit. Study and performance of a wide range of guitar repertoire from the Renaissance through the Twentieth Century. Open to all students.

**Grade Basis:** L

**Credit hours:** 1.0

**Lecture hours:** 48.0

**Restrictions:**

- Audition required.
- 

## **MUEN 1138 - STRINGS ENSEMBLE**

May be repeated for credit. Study and performance of a wide range of string instrument repertoire including the double bass, violin, viola, cello from Renaissance through the 20th Century. Open to all students. Lab fees apply

**Grade Basis:** L

**Credit hours:** 1.0

**Lab hours:** 48.0

**Restrictions:**

- Audition required.
- 

## **MUEN 1151 - COLLEGE ENSEMBLE**

May be repeated for credit. Entrance by audition only from College Singers. This group will perform in connection with public relations activities and recruitment for the College. Travel in the service area will be required. Lab fees apply

**Grade Basis:** L

**Credit hours:** 1.0

**Lab hours:** 48.0

**Restrictions:**

- Must be a member of MUEN 1154 College Singers

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## **MUEN 1154 - COLLEGE SINGERS**

May be repeated for credit. Entrance by audition only. Study and performance of a broad range of music from Renaissance motets and madrigals to pop and show. This group will be involved in public relations activities for the college. Lab fees apply

**Grade Basis:** L

**Credit hours:** 1.0

**Lab hours:** 48.0

---

## **MUSI 1116 - SIGHT SINGING & EAR TRAINING I**

Singing tonal music in treble and bass clefs, and aural study of elements of music, such as scales, intervals and chords, and dictation of basic rhythm, melody, and diatonic harmony.

**Grade Basis:** L

**Credit hours:** 1.0

**Lecture hours:** 32.0

---

## **MUSI 1117 - SIGHT SINGING & EAR TRAINING II**

Singing tonal music in various clefs, continued aural study of the elements of music, and dictation of intermediate rhythm, melody, and diatonic harmony.

**Grade Basis:** L

**Credit hours:** 1.0

**Lecture hours:** 32.0

**Prerequisites:**

- [MUSI 1116](#) - SIGHT SINGING & EAR TRAINING I
- 

## **MUSI 1181 - BEGINNING CLASS PIANO**

Beginning class instruction in the fundamentals of keyboard technique.

**Grade Basis:** L

**Credit hours:** 1.0

**Lecture hours:** 32.0

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## **MUSI 1182 - ADVANCED CLASS PIANO**

Advanced beginning class instruction in the fundamentals of keyboard technique.

**Grade Basis:** L

**Credit hours:** 1.0

**Lecture hours:** 32.0

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## **MUSI 1192 - BEGINNING CLASS GUITAR**

Class instruction in fundamental guitar playing, including technique, music-reading, fretboard theory, melodic and harmonic realizations.

**Grade Basis:** L

**Credit hours:** 1.0

**Lecture hours:** 32.0

---

## **MUSI 1301 - FUNDAMENTALS OF MUSIC I**

Introduction to the basic elements of music theory for non-music majors: scales, intervals, keys, triads, elementary ear training, keyboard harmony, notation, meter, and rhythm. Does not apply to a music major degree.

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 48.0

---

## **MUSI 1306 - MUSIC APPRECIATION**

Understanding music through the study of cultural periods, major composers, and musical elements. Illustrated with audio recordings and live performances. Course does not apply to a music major degree. Meets NCTC Core Curriculum Requirement

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 48.0

---

## **MUSI 1310 - AMERICAN MUSIC**

General survey of various styles of music in America. Topics may include jazz, ragtime, folk, rock, and contemporary art music. Meets NCTC Core Curriculum Requirement

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 48.0

---



## **MUSI 1311 - MUSIC THEORY I**

The study of analysis and writing of tonal melody and diatonic harmony, including fundamental music concepts, scales, intervals, chords, 7th chords, and early four-part writing. Analysis of small compositional forms.

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 48.0

---

## **MUSI 1312 - MUSIC THEORY II**

Continuation of MUSI 1311. The study of analysis and writing of tonal melody and diatonic harmony, including all diatonic chords and seventh chords in root position and inversions, non-chord tones, and functional harmony. Introduction to more complex topics, such as modulation, may occur. Optional correlated study at the keyboard.

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 48.0

**Prerequisites:**

- [MUSI 1311](#) - MUSIC THEORY I
- 

## **MUSI 2116 - SIGHT SINGING & EAR TRAINING III**

Singing more difficult tonal music in various clefs, aural study including dictation of more complex rhythm, melody, chromatic harmony, and extended tertian structures.

**Grade Basis:** L

**Credit hours:** 1.0

**Lecture hours:** 32.0

**Prerequisites:**

- [MUSI 1116](#) - SIGHT SINGING & EAR TRAINING I
  - [MUSI 1117](#) - SIGHT SINGING & EAR TRAINING II
- 

## **MUSI 2117 - SIGHT SINGING & EAR TRAINING IV**

Singing advanced tonal music and introduction of modal and post-tonal melodies. Aural study including dictation of advanced rhythm, melody, and harmony.

**Grade Basis:** L

**Credit hours:** 1.0

**Lecture hours:** 32.0

**Prerequisites:**

- [MUSI 1116](#) - SIGHT SINGING & EAR TRAINING I
  - [MUSI 1117](#) - SIGHT SINGING & EAR TRAINING II
  - [MUSI 2116](#) - SIGHT SINGING & EAR TRAINING III
- 

### **MUSI 2311 - MUSIC THEORY III**

Advanced harmony voice leading, score analysis and writing of more advanced tonal harmony including chromaticism and extended-tertian structures. Optional correlated study at the keyboard.

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 48.0

**Prerequisites:**

- [MUSI 1311](#) - MUSIC THEORY I
  - [MUSI 1312](#) - MUSIC THEORY II
- 

### **MUSI 2312 - MUSIC THEORY IV**

Continuation of MUSI 2311. Continuation of advanced chromaticism and survey of analytical and compositional procedures in post-tonal music. Optional correlated study at the keyboard.

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 48.0

**Prerequisites:**

- [MUSI 1311](#) - MUSIC THEORY I
  - [MUSI 1312](#) - MUSIC THEORY II
  - [MUSI 2311](#) - MUSIC THEORY III
- 

### **NCBM 0100 or 01XX - NON-COURSE BASED OPTION FOR MATHEMATICS**

This course is a developmental education intervention and supports topics in MATH 1332 or MATH 1342. Course may include basic study skills such as note-taking, time management, learning styles, math anxiety, and test-taking strategies. Must be taken concurrently with a MATH 1332 or MATH 1342 course. NCBM 0100 indicates an intervention paired with any section of MATH1332 or 1342. An NCBM course specifically tied to a MATH 1332 or 1342 course will be indicated by the last two digits (e.g., MATH 1332 + NCBM 0132). This course does not count toward graduation at NCTC.

**Grade Basis:** P  
**Credit hours:** 1.0  
**Lab hours:** 16.0

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## **NCBM 0205 - DEVELOPMENTAL MATHEMATICS - BASE INTERVENTION**

This course is a BASE developmental education intervention and supports topics in mathematics such as fractions, integers, decimals, percentages, algebraic concepts, solving equations, and polynomials. This course is designed for students with little algebraic background and will be paired with MATH 0305. Course may include basic study skills such as note-taking, time management, learning styles, math anxiety, and test-taking strategies. This course does not count toward graduation at NCTC.

**Grade Basis:** P  
**Lecture hours:** 32.0

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## **NCTC 1001 - FIRST YEAR EXPERIENCE**

The First Year Experience Course is a one credit, 4 week course designed to provide students with the tools needed to persist and succeed at North Central Texas College. Topics covered in the course include: learning styles, study techniques, note-taking, test-taking, personal wellness and finance, time management, career and educational planning, and interpersonal skill development. First time college students, excluding dual credit, are required to pass NCTC 1001. Students that have successfully completed 9 hours of dual credit courses on campus, are not required to enroll. The course does not satisfy requirements for any degree plan at NCTC, has no prerequisites, and is non-transferable.

**Grade Basis:** L  
**Credit hours:** 1.0

---

## **OSHT 1320 - ENERGY INDUSTRIAL SAFETY**

An overview for industrial workers of state/federal regulations and guidelines which require industrial safety training. Topics include the 29 C.F.R. 1910, 1926 and National Fire Protection Association (NFPA) 70E standards such as confined space entry, emergency action, lock out/tag out, arc flash, and other work related subjects.

Upon completion, students will be able to:

- Describe the basic components of safety, health, and environmental systems as defined by the Occupational Safety and Health Administration
- Describe Hazardous Waste Operator (HAZWOPER) standards
- Locate Material Safety Data Sheets (MSDS) and interpret the data
- Select and don Personal Protective Equipment (PPE)
- Perform lock out and tag out procedures

- Complete a confined space and hot work permit
- Select and employ fall protection equipment
- Fill out a Job Hazard Analysis (JHA)

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 48.0

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## **PTRT 2359 - PETROLEUM COMPUTER APPLICATIONS**

Computer applications used in the petroleum industry. Includes the automation of open and closed loop systems. Lab fees apply

Upon completion, students will be able to:

- Describe the different computer systems used to monitor and control petroleum processes
- Troubleshoot components and operating systems of modern process control

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 32.0

**Lab hours:** 32.0

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## **PHED 1108 - BOWLING I**

This course is designed to introduce the student to basic bowling skills, etiquette, safety procedures, and scoring.

**Grade Basis:** L

**Credit hours:** 1.0

**Lecture hours:** 48.0

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## **PHED 1109 - BOWLING II**

This course is designed to introduce the student to basic bowling skills, etiquette, safety procedures, and scoring.

**Grade Basis:** L

**Credit hours:** 1.0

**Lecture hours:** 48.0

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## **PHED 1110 - GOLF I**

This course is designed to introduce the student to basic golf skills, etiquette, safety procedures, and swing.

**Grade Basis:** L  
**Credit hours:** 1.0  
**Lecture hours:** 48.0

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## **PHED 1111 - GOLF II**

This course is designed to introduce the student to basic golf skills, etiquette, safety procedures, and swing.

**Grade Basis:** L  
**Credit hours:** 1.0  
**Lecture hours:** 48.0

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## **PHED 1114 - VARSITY SPORTS I**

This course is designed to support the institutional mission to provide competitive athletic opportunities for student/athletes to pursue academic success, physical and emotional well-being and social development.

**Grade Basis:** L  
**Credit hours:** 1.0  
**Lecture hours:** 48.0

**Restrictions:**

- Varsity athletes only.
- 

## **PHED 1115 - VARSITY SPORTS II**

This course is designed to support the institutional mission to provide competitive athletic opportunities for student/athletes to pursue academic success, physical and emotional well-being and social development.

**Grade Basis:** L  
**Credit hours:** 1.0  
**Lecture hours:** 48.0

**Restrictions:**

- Varsity athletes only.
- 

## **PHED 1116 - VARSITY CONDITIONING I**

This course is designed to support the institutional mission to provide competitive athletic opportunities for student/athletes to pursue academic success, physical and emotional well-being and social development.

**Grade Basis:** L

**Credit hours:** 1.0

**Lecture hours:** 48.0

**Restrictions:**

- Varsity athletes only.
- 

## **PHED 1117 - VARSITY CONDITIONING II**

This course is designed to support the institutional mission to provide competitive athletic opportunities for student/athletes to pursue academic success, physical and emotional well-being and social development.

**Grade Basis:** L

**Credit hours:** 1.0

**Lecture hours:** 48.0

**Restrictions:**

- Varsity athletes only.
- 

## **PHED 1118 - JOGGING/WALKING I**

This course is designed to improve or maintains the student's cardiovascular endurance and knowledge of cardiovascular fitness such as heart rates, body mass index and body fat percentage according to the student's age, gender, height and weight.

**Grade Basis:** L

**Credit hours:** 1.0

**Lecture hours:** 48.0

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## **PHED 1119 - JOGGING/WALKING II**

This course is designed to improve or maintain the student's cardiovascular endurance and knowledge of cardiovascular fitness such as heart rates, body mass index and body fat percentage according to the student's age, gender, height and weight.

**Grade Basis:** L

**Credit hours:** 1.0

**Lecture hours:** 48.0

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## **PHED 1120 - AEROBIC WORKOUT I**

This course is designed to improve the student's maximum muscular and cardiovascular endurance.

**Grade Basis:** L  
**Credit hours:** 1.0  
**Lecture hours:** 48.0

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## **PHED 1121 - AEROBIC WORKOUT II**

This course is designed to improve the student's maximum muscular and cardiovascular endurance.

**Grade Basis:** L  
**Credit hours:** 1.0  
**Lecture hours:** 48.0

---

## **PHED 1124 - WEIGHT TRAINING I/JOGGING**

This course is designed to improve the student's muscular strength, endurance, and cardiovascular endurance and introduce the student to the basic muscular groups.

**Grade Basis:** L  
**Credit hours:** 1.0  
**Lecture hours:** 48.0

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## **PHED 1125 - WEIGHT TRAINING II/JOGGING**

This course is designed to improve the student's muscular strength, endurance, and cardiovascular endurance and introduce the student to the basic muscular groups.

**Grade Basis:** L  
**Credit hours:** 1.0  
**Lecture hours:** 48.0

---

## **PHED 1126 - MARTIAL ARTS I**

This course is designed to instill confidence and abilities in the student for both physical and mental challenges. This course will also cover conditioning and self defense techniques.

**Grade Basis:** L  
**Credit hours:** 1.0  
**Lecture hours:** 48.0

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## **PHED 1127 - MARTIAL ARTS II**

This course is designed to instill confidence and abilities in the student for both physical and mental challenges. This course will also cover conditioning and self defense techniques.

**Grade Basis:** L  
**Credit hours:** 1.0  
**Lecture hours:** 48.0

---

## **PHED 1134 - BASKETBALL I**

This course is designed to teach the student the rules, skills, and fundamentals necessary to play the game and is designed to improve the student's physical fitness.

**Grade Basis:** L  
**Credit hours:** 1.0  
**Lecture hours:** 48.0

---

## **PHED 1135 - BASKETBALL II**

This course is designed to teach the student the rules, skills, and fundamentals necessary to play the game and is designed to improve the student's physical fitness.

**Grade Basis:** L  
**Credit hours:** 1.0  
**Lecture hours:** 48.0

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## **PHED 1140 - CARDIO FITNESS I**

This course is designed to improve the student's maximum muscular and cardio vascular endurance through a variety of exercises and help teach the basics of the muscles used during physical activity in cardio and weight lifting and making healthy food choices and how they all work together for overall cardio fitness.

**Grade Basis:** L  
**Credit hours:** 1.0  
**Lecture hours:** 48.0

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## **PHED 1141 - CARDIO FITNESS II**

This course is designed to improve the student's maximum muscular and cardio vascular endurance through a variety of exercises and help teach the basics of the muscles used during physical activity in cardio and weight lifting and making healthy food choices and how they all work together for overall cardio fitness.

**Grade Basis:** L  
**Credit hours:** 1.0  
**Lecture hours:** 48.0

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## **PHED 1146 - YOGA I**

This course is designed to improve the student's body flexibility, muscular strength and endurance, breath capacity, posture, balance and concentration.

**Grade Basis:** L

**Credit hours:** 1.0

**Lecture hours:** 48.0

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## **PHED 1147 - YOGA II**

This course is designed to improve the student's body flexibility, muscular strength and endurance, breath capacity, posture, balance and concentration.

**Grade Basis:** L

**Credit hours:** 1.0

**Lecture hours:** 48.0

---

## **PHED 1148 - PILATES I**

This course is designed to improve the student's knowledge of the basic principles of biomechanical body awareness, breath capacity, muscular endurance and stamina in accordance to the Pilates Principles.

**Grade Basis:** L

**Credit hours:** 1.0

**Lecture hours:** 48.0

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## **PHED 1149 - PILATES II**

This course is designed to improve the student's knowledge of the basic principles of biomechanical body awareness, breath capacity, muscular endurance and stamina in accordance to the Pilates Principles.

**Grade Basis:** L

**Credit hours:** 1.0

**Lecture hours:** 48.0

---

## **PHED 1301 - INTRODUCTION TO PHYSICAL FITNESS & SPORT**

Orientation to the field of physical fitness and sport. Includes the study and practice of activities and principles that promote physical fitness.

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 48.0

---

## **PHED 1308 - SPORTS OFFICIATING**

Instruction in rules, interpretation, and mechanics of officiating selected sports.

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 48.0

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## **PHED 1321 - COACHING, SPORTS & ATHLETICS**

Study of the history, theories, philosophies, rules, and terminology of competitive sports. Includes coaching techniques.

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 48.0

---

## **PHED 1338 - CONCEPTS OF PHYSICAL FITNESS**

Concepts and use of selected physiological variable of fitness, individual testing and consultation, and the organization of sports and fitness programs.

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 48.0

---

## **PHED 2101 - RACQUETBALL**

This course is designed to instruct the student in rules, terminology, court dimensions and the playing of singles, doubles, cut-throat, and tournament formatting.

**Grade Basis:** L

**Lecture hours:** 48.0

---

## **PHED 2356 - CARE & PREVENTION OF ATHLETIC INJURIES**

Prevention and care of athletic injuries with emphasis on qualities of a good athletic trainer, avoiding accidents and injuries, recognizing signs and symptoms of specific sports injuries and conditions, immediate and long-term care of injuries, and administration procedures in athletic training.

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 48.0

---

## **PHIL 1301 - INTRODUCTION TO PHILOSOPHY**

A study of major issues in philosophy and/or the work of major philosophical figures in philosophy. Topics in philosophy may include theories of reality, theories of knowledge, theories of value, and their practical applications. Meets NCTC Core Curriculum Requirement

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 48.0

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## **PHIL 2303 - INTRODUCTION TO FORMAL LOGIC**

The purpose of the course is to introduce the student symbolic logic, including syllogisms, propositional and predicate logic, and logical proofs in a system of rules.

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 48.0

---

## **PHIL 2306 - INTRODUCTION TO ETHICS**

The systematic evaluation of classical and/or contemporary ethical theories concerning the good life, human conduct in society, morals, and standards of value. Meets NCTC Core Curriculum Requirement

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 48.0

---

## **PHYS 1401 - COLLEGE PHYSICS I**

Fundamental principles of physics, using algebra and trigonometry; the principles and applications of classical mechanics and thermodynamics, including harmonic motion, mechanical waves and sound, physical systems, Newton's Laws of Motion, and gravitation and other fundamental forces with emphasis on problem solving. Lab fees apply Meets NCTC Core Curriculum Requirement

**Grade Basis:** L

**Credit hours:** 4.0

**Lecture hours:** 48.0

**Lab hours:** 48.0

**Prerequisites:**

- [MATH 1314](#) - COLLEGE ALGEBRA (for Science & Engineering Majors)
- [MATH 1316](#) - PLANE TRIGONOMETRY
- [MATH 2412](#) - PRE-CALCULUS MATH

## **PHYS 1402 - COLLEGE PHYSICS II**

Fundamental principles of physics, using algebra and trigonometry; the principles and applications of electricity and magnetism, including circuits, electrostatics, electromagnetism, waves, sound, light, optics, and modern physics topics; with emphasis on problem solving. Lab fees apply Meets NCTC Core Curriculum Requirement

**Grade Basis:** L

**Credit hours:** 4.0

**Lecture hours:** 48.0

**Lab hours:** 48.0

**Prerequisites:**

- [PHYS 1401](#) - COLLEGE PHYSICS I
- 

## **PHYS 1415 - PHYSICAL SCIENCE**

Physics Science course is designed for non-science majors. Surveys topics from physics, chemistry, geology, astronomy, and meteorology. Lab fees apply Meets NCTC Core Curriculum Requirement

**Grade Basis:** L

**Credit hours:** 4.0

**Lecture hours:** 48.0

**Lab hours:** 48.0

---

## **PHYS 2425 - UNIVERSITY PHYSICS I**

Fundamental principles of physics, using calculus, for science, computer science, and engineering majors; the principles and applications of classical mechanics, including harmonic motion, physical systems and thermodynamics; and emphasis on problem solving. Basic laboratory experiments supporting theoretical principles involving the principles and applications of classical mechanics, including harmonic motion and physical systems; experimental design, data collection and analysis, and preparation of laboratory reports. Meets NCTC Core Curriculum Requirement

**Grade Basis:** L

**Credit hours:** 4.0

**Lecture hours:** 48.0

**Lab hours:** 48.0

**Prerequisites:**

- [MATH 2413](#) - CALCULUS I
-

## PHYS 2426 - UNIVERSITY PHYSICS II

A continuation of PHYS2425. Principles of physics for science, computer science, and engineering majors, using calculus, involving the principles of electricity and magnetism, including circuits, electromagnetism, waves, sound, light, and optics. Laboratory experiments supporting theoretical principles presented in the lecture involving the principles of electricity and magnetism, including circuits, electromagnetism, waves, sound, light and optics, experimental design, data collection and analysis, and preparation of laboratory reports. Lab fees apply Meets NCTC Core Curriculum Requirement

**Grade Basis:** L

**Credit hours:** 4.0

**Lecture hours:** 48.0

**Lab hours:** 48.0

**Prerequisites:**

- [MATH 2414](#) - CALCULUS II
- [PHYS 2425](#) - UNIVERSITY PHYSICS I

---

## POFI 1349 - SPREADSHEETS

Skill development in concepts, procedures, and application of spreadsheets. This course is designed to be repeated multiple times to improve student proficiency. Lab fees apply

Upon completion, students will be able to:

- Identify spreadsheet terminology and concepts
- Calculate data using formulas and functions
- Create and modify workbooks
- Insert graphics
- Generate charts and reports
- Create and use special functions

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 32.0

**Lab hours:** 32.0

---

## POFI 2301 - WORD PROCESSING

Word processing software focusing on business applications. This course is designed to be repeated multiple times to improve student proficiency. Lab fees apply

Upon completion, students will be able to:

- Apply basic and advanced formatting skills and special functions to produce documents

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 32.0

**Lab hours:** 32.0

---

## **POFI 2331 - DESKTOP PUBLISHING**

In-depth coverage of desktop publishing terminology, text editing, and use of design principles. Emphasis on layout techniques, graphics, multiple page displays, and business applications. The course is designed to be repeated multiple times to improve student proficiency. Lab fees apply

Upon completion, students will be able to:

- Define desktop publishing terminology
- Manipulate text and graphics to create a balanced and focused layout
- Create fliers, brochures, and multiple page documents

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 32.0

**Lab hours:** 32.0

---

## **POFT 1220 - JOB SEARCH SKILLS**

Skills to seek and obtain employment in business and industry. Lab fees apply

Upon completion, students will be able to:

- Assess career aptitudes
- Describe job search procedures
- Prepare employment documents
- Create a professional portfolio

**Grade Basis:** L

**Credit hours:** 2.0

**Lecture hours:** 32.0

**Lab hours:** 16.0

---

## **POFT 1309 - ADMINISTRATIVE OFFICE PROCEDURES I**

Study of current office procedures, duties, and responsibilities applicable to an office environment.

Upon completion, students will be able to:

- Develop time management techniques
- Demonstrate communication skills
- Identify the basic skills of an office professional

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 48.0

---

## **POFT 1319 - RECORDS & INFORMATION MANAGEMENT I**

Introduction to basic records information management systems including manual and electronic filing.

Upon completion, students will be able to:

- Identify the stages in the life cycle of a record
- File and retrieve records using filing systems
- Differentiate between manual and electronic filing

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 48.0

---

## **POFT 1325 - BUSINESS MATH USING TECHNOLOGY**

Skill development in business math problem-solving using electronic technology.

Upon completion, students will be able to:

- Solve business math application problems using technology

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 48.0

---

## **POFT 1328 - BUSINESS PRESENTATIONS**

Skill development in planning and conducting business presentations on an individual and/or group basis including communication and media skills. This course is designed to be repeated multiple times to improve student proficiency. Lab fees apply

Upon completion, students will be able to:

- Deliver business presentations
- Develop visual aids using presentation software
- Analyze audiences

- Use active listening and feedback skills

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 32.0

**Lab hours:** 32.0

---

## **POFT 1329 - BEGINNING KEYBOARDING**

Skill development in keyboarding techniques. Emphasis on development of acceptable speed and accuracy levels and formatting basic documents.

Upon completion, students will be able to:

- Demonstrate keyboarding techniques
- Apply proofreading and editing skills
- Create basic business documents

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 48.0

---

## **POFT 1331 - NUMERIC KEYPAD APPLICATIONS**

Skill development in the operation of numeric keypad. Emphasis on the development of skills in using electronic calculators and other office machines. Lab fees apply

Upon completion, students will be able to:

- Demonstrate competency in the operation of a numeric keypad
- Develop speed and accuracy

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 32.0

**Lab hours:** 32.0

---

## **POFT 2312 - BUSINESS CORRESPONDENCE & COMMUNICATION**

Development of writing and presentation skills to produce effective business communications.

Upon completion, students will be able to:

- Create effective business documents
- Evaluate business documents
- Apply ethical communication practices



**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 48.0

---

## **POFT 2331 - ADMINISTRATIVE PROJECT SOLUTIONS**

Advanced concepts of project management and office procedures integrating software applications, critical thinking, and problem-solving skills. Lab fees apply

Upon completion, students will be able to:

- Manage business projects using technology, critical thinking, and problem-solving skills

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 32.0

**Lab hours:** 32.0

---

## **POFT 2380 - COOPERATIVE EDUCATION - ADMINISTRATIVE ASSISTANT & SECRETARIAL SCIENCE, GENERAL**

Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.

Upon completion, students will be able to:

- As outlined in the learning plan, apply the theory, concepts, and skills involving specialized materials, tools, equipment, procedures, regulations, laws, and interactions within and among political, economic, environmental, social, and legal systems associated with the occupation and the business/industry
- Demonstrate legal and ethical behavior, safety practices, interpersonal and teamwork skills, and appropriate written and verbal communication skills using the terminology of the occupation and the business/industry

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 16.0

---

## **PSYC 1300 - LEARNING FRAMEWORK**

A study of the research and theory in the psychology of learning, cognition, and motivation, factors that impact learning, and application of learning strategies. Theoretical models of strategic learning, cognition, and motivation serve as the

conceptual basis for the introduction of the college-level student academic strategies. Students use assessment instruments (e.g. learning inventories) to help them identify their own strengths and weaknesses as strategic learners. Students are ultimately expected to integrate and apply the learning skills discussed across their own academic programs and become effective and efficient learners. Students developing these skills should be able to continually draw from the theoretical models they have learned. This course is cross-listed as EDUC 1300. The student may register for either EDUC 1300 or PSYC 1300 but may receive credit for only one of the two.

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 48.0

---

## **PSYC 2301 - GENERAL PSYCHOLOGY**

General Psychology is a survey of the major psychological topics, theories, and approaches to the scientific study of behavior and mental processes. Meets NCTC Core Curriculum Requirement

Upon completion, students will be able to:

- Identify various research methods and their characteristics used in the scientific study of psychology
- Describe the historical influences and early schools of thought that shaped the field of psychology
- Describe some of the prominent perspectives and approaches used in the study of psychology
- Use terminology unique to the study of psychology
- Describe accepted approaches and standards in psychological assessment and evaluation
- Identify factors in physiological and psychological processes involved in human behavior

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 48.0

---

## **PSYC 2306 - HUMAN SEXUALITY**

This course will provide an overview of the broad field of human sexuality. Topics will be covered from various perspectives - biological, sociological, anthropological, etc., but will focus primarily on the psychological perspective. The goal is for each student to learn factual, scientifically-based information that will provoke thought and contribute to his/her own decision-making on sexual issues outside of the classroom.

Upon completion, students will be able to:

- Identify various research methods and their characteristics used in the scientific study of psychology
- Describe the historical influences and early schools of thought that shaped the field of psychology
- Describe some of the prominent perspectives and approaches used in the study of psychology
- Use terminology unique to the study of psychology
- Describe accepted approaches and standards in psychological assessment and evaluation
- Identify factors in physiological and psychological processes involved in human behavior

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 48.0

---

## **PSYC 2314 - LIFESPAN GROWTH & DEVELOPMENT**

Lifespan Growth and Development is a study of social, emotional, cognitive and physical factors and influences of a developing human from conception to death. Meets NCTC Core Curriculum Requirement

Upon completion, students will be able to:

- Describe the stages of the developing person at different periods of the life span from birth to death
- Discuss the social, political, economic, and cultural forces that affect the development process of the individual
- Identify factors of responsible personal behavior with regard to issues such as sexual activity, substance abuse, marriage and parenting
- Explain the biosocial, cognitive, and psychological inclusions throughout the lifespan as an ongoing set of processes involving both continuity and change
- Describe the different development perspectives of the major theories of development (i.e. cognitive, learning, humanistic and psychodynamic)
- Identify examples of some of the cultural and ethnic differences that influence development throughout the lifespan
- Discuss the various causes or reasons for disturbances in the developmental process

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 48.0

---

## **PSYC 2315 - PSYCHOLOGY OF ADJUSTMENT**

Study of the processes involved in adjustment of individuals to their personal and social environments.

**Grade Basis:** L  
**Credit hours:** 3.0  
**Lecture hours:** 48.0

---

## **PSYC 2319 - SOCIAL PSYCHOLOGY**

Study of individual behavior within the social environment. May include topics such as the socio-psychological process, attitude formation and change, interpersonal relations, and group processes.

**Grade Basis:** L  
**Credit hours:** 3.0  
**Lecture hours:** 48.0

---

## **PTRT 1301 - INTRODUCTION TO PETROLEUM INDUSTRY**

An introduction to the various aspects of petroleum industry including equipment, systems, instrumentation, operations, and the various scientific principles. Addresses a variety of petroleum technologies: exploration, drilling, production, transportation, marketing, and chemical processing industries.

Upon completion, students will be able to:

- Identify the concepts of exploration, production, refining, marketing, and transportation
- Describe the terms and phrases associated with the petroleum industry

**Grade Basis:** L  
**Credit hours:** 3.0  
**Lecture hours:** 48.0

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## **PTRT 1303 - DRILLING**

A study of practices and procedures that are involved in drilling operations. Topics on rig equipment, casing design, fishing, and proper procedures to successfully drill a well are discussed.

Upon completion, students will be able to:

- Describe fundamentals operations in the drilling industry
- Identify the five major systems and equipment of a drilling rig
- Describe specific down-hole problems; and explain solutions

**Grade Basis:** L  
**Credit hours:** 3.0  
**Lecture hours:** 48.0

---

## **PTRT 1307 - RECOVERY & PRODUCTION METHODS**

Petroleum recovery and production methods.

Upon completion, students will be able to:

- Describe natural reservoir drive mechanisms, and artificial lift methods
- Identify the components of surface systems, identify factors used to select and describe basic life and recovery methods

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 32.0

**Lab hours:** 32.0

---

## **PTRT 1313 - INDUSTRIAL SAFETY**

An overview for petroleum and manufacturing workers of state/federal regulations and guidelines which require industrial safety training. Topics include the 29 C.F.R. 1910, 1926 standards.

Upon completion, students will be able to:

- Describe the basic components of safety, health, and environmental systems as applied to oil and gas operations

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 32.0

**Lab hours:** 32.0

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## **PTRT 1317 - NATURAL GAS PROCESSING I**

An overview of natural gas processing operations. Topics include fundamentals of gas processing, the scientific principles and how they apply to the process, processing equipment, and procedures. Lab fees apply

Upon completion, students will be able to:

- Describe the basic components of processing equipment
- Explain various gas plant operational procedures

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 32.0

**Lab hours:** 32.0

---

## **PTRT 1321 - OIL FIELD HYDRAULICS**

Presents hydraulics applicable to drilling, completion, and production. Includes calculating and evaluating the characteristics of the flowing and static fluids in various tubular and annular systems. Lab fees apply

Upon completion, students will be able to:

- Calculate and determine the pressure loss inside a tubular system
- Discuss the advantages and disadvantages of the different hydraulic systems used in oil field applications

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 32.0

**Lab hours:** 32.0

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## **PTRT 1324 - PETROLEUM INSTRUMENTATION**

Study of instruments, instrument systems, terminology, process variables, and control loops as used in a petroleum environment. Lab fees apply

Upon completion, students will be able to:

- Describe the oil field instrumentation
- Identify the basic instruments used with temperature, pressure, level, flow, and analytical field applications
- Describe the basic components of a control loop

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 32.0

**Lab hours:** 32.0

---

## **PTRT 1391 - SPECIAL TOPICS IN PETROLEUM-SCADA**

Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course was designed to be repeated multiple times to improve student proficiency. Learning outcomes/objectives are determined by local occupational need and business and industry trends.

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 48.0

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## **PTRT 2323 - NATURAL GAS PRODUCTION**

An overview of the aspects of natural gas and oil production including various aspects of hydrocarbon production, processing equipment, and gas compression/transportation systems. Lab fees apply

Upon completion, students will be able to:

- Describe gas well and casing head testing and metering systems
- Calculate gas volumes
- Describe the basic principles of hydrocarbon production
- Identify the basic components of field processing equipment

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 32.0

**Lab hours:** 32.0

---

## **PTRT 2331 - WELL COMPLETIONS**

Drilling and wellbore analysis data to develop a well completion plan. Lab fees apply

Upon completion, students will be able to:

- Analyze production and completion data
- Develop a plan of action for completing a well

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 32.0

**Lab hours:** 32.0

---

## **PTRT 2380 - COOPERATIVE EDUCATION - PETROLEUM TECHNOLOGY/TECHNICIAN**

Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.

Upon completion, students will be able to:

- Apply the theory, concepts, and skills involving specialized materials, tools, equipment, procedures, regulations, laws, and interactions within and among political, economic, environmental, social, and legal systems associated with the occupation and the business/industry

- Demonstrate legal and ethical behavior, safety practices, interpersonal and teamwork skills, and appropriate written and verbal communication skills using the terminology of the occupation and the business/industry

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 16.0

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## **RADR 1160 - CLINICAL I**

A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional.

**Grade Basis:** L

**Credit hours:** 1.0

---

## **RADR 1201 - INTRODUCTION TO RADIOGRAPHY**

An overview of the historical development of radiography, basic radiation protection, an introduction to medical terminology, ethical and legal issues for health care professionals, and an orientation to the program and the health care system.

**Grade Basis:** L

**Credit hours:** 2.0

**Lecture hours:** 32.0

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## **RADR 1166 - PRACTICUM I**

Practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student.

**Grade Basis:** L

**Credit hours:** 1.0

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## **RADR 1267 - PRACTICUM II**

Practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student.

**Grade Basis:** L

**Credit hours:** 2.0

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## **RADR 1303 - PATIENT CARE**

An introduction in patient assessment, infection control procedures, emergency and safety procedures, communication and patient interaction skills, and basic pharmacology. Lab fees apply

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 32.0

**Lab hours:** 32.0

---

## **RADR 1313 - PRINCIPLES OF RADIOGRAPHIC IMAGING I**

Radiographic image quality and the effects of exposure variables.

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 48.0

---

## **RADR 1411 - BASIC RADIOGRAPHIC PROCEDURES**

An introduction to radiographic positioning terminology, the proper manipulation of equipment, positioning and alignment of the anatomical structure and equipment, and evaluation of images for proper demonstration of basic anatomy. Lab fees apply

**Grade Basis:** L

**Credit hours:** 4.0

**Lecture hours:** 48.0

**Lab hours:** 64.0

---

## **RADR 2205 - PRINCIPLES OF IMAGING II**

A continuation of the study of radiographic imaging technique formulation, image quality assurance, and the synthesis of all variables in image production.

**Grade Basis:** L

**Credit hours:** 2.0

**Lecture hours:** 48.0

---

## **RADR 2209 - RADIOGRAPHIC IMAGING EQUIPMENT**

A study of the equipment and physics of x-ray production, basic x-ray circuits, and the relationship of equipment components to the imaging process.

**Grade Basis:** L

**Credit hours:** 2.0

**Lecture hours:** 48.0

## **RADR 2217 - RADIOGRAPHIC PATHOLOGY**

A presentation of the disease process and common diseases and their appearance on medical images.

**Grade Basis:** L

**Credit hours:** 2.0

**Lecture hours:** 32.0

---

## **RADR 2401 - INTERMEDIATE RADIOGRAPHY PROCEDURES**

A continuation of study of the proper manipulation of radiographic equipment, positioning and alignment of the anatomical structure and equipment, and evaluation of images for proper demonstration of anatomy. Lab fees apply

**Grade Basis:** L

**Credit hours:** 4.0

**Lecture hours:** 32.0

**Lab hours:** 64.0

---

## **RADR 2313 - RADIATION BIOLOGY & PROTECTION**

A study of the effects of radiation exposure on biological systems, typical medical exposure levels, methods for measuring and monitoring radiation, and methods for protecting personnel and patients from excessive exposure.

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 48.0

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## **RADR 2333 - ADVANCED MEDICAL IMAGING**

An exploration of specialized imaging modalities.

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 48.0

---

## **RADR 2335 - RADIOLOGIC TECH SEMINAR**

A capstone course focusing on the synthesis of professional knowledge, skills, and attitudes in preparation for professional employment and lifelong learning.

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 48.0

### **RADR 2466 - PRACTICUM III**

Practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student.

**Grade Basis:** L

**Credit hours:** 4.0

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### **RADR 2267 - PRACTICUM IV**

Practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student.

**Grade Basis:** L

**Credit hours:** 2.0

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### **RBPT 1300 - FUNDAMENTALS OF RESIDENTIAL BUILDING SCIENCE**

A study of the house as a complex interrelated system of people, building technologies, and the environment. Emphasizes residential building techniques and how they affect the needs for energy, water, and materials while providing a safe, healthy, and comfortable home. Lab fees apply

Upon completion, students will be able to:

- Discuss the whole house approach to home construction using basic strategies to build energy-efficient, safe, and healthy homes with a variety of materials
- Explain the movement in different climates of heat, moisture, and air through the building enclosure
- Identify methods homeowners and building professionals use to contribute to the construction of resource-efficient, safe, healthy, and comfortable homes while minimizing the impact on the environment

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 32.0

**Lab hours:** 32.0

---

### **READ 0300 - READING TECHNIQUES I**

A course designed to enable college students to become more aware of themselves as readers and to develop strategies and skills to meet the demands of college reading. Emphasis is placed on comprehension. Specific strategies covered include vocabulary development, active reading strategies, outlining skills including identifying the main idea, supporting details and patterns of organizations. This course does not count toward graduation of NCTC.

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 48.0

---

## **READ 0305 - READING TECHNIQUES II**

A course intended to continue the improvement of reading skills with particular emphasis on critical and analytical reading strategies. The course begins with a review of active reading strategies for informational texts and ends with an emphasis on critical reading of persuasive texts. Critical reading skills covered include identifying an author's purpose, tone, bias, and logic. This course does not count toward graduation at NCTC.

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 48.0

---

## **RNSG 1162 - TRANSITION CLINICAL I**

A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional.

**Grade Basis:** L

**Credit hours:** 1.0

**Lecture hours:** 48.0

---

## **RNSG 1163 - CLINICAL - PSYCHIATRIC NURSING**

A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Emphasis is on nursing skills essential for the care of patients along the mental health and mental illness continuum.

**Grade Basis:** L

**Credit hours:** 1.0

---

## **RNSG 1219 - INTEGRATED NURSING SKILLS I**

Study of the concepts and principles necessary to perform basic nursing skills for care of diverse patients across the life span; demonstrate competence in the performance of nursing procedures. Content includes knowledge, judgment, skills, and professional values within a legal and ethical framework. Lab fees apply

**Grade Basis:** L

**Credit hours:** 2.0

**Lecture hours:** 16.0

**Lab hours:** 48.0

---

## **RNSG 1229 - INTEGRATED NURSING SKILLS II**

Study of the concepts and principles necessary to perform intermediate or advanced nursing skills for care of patients across the lifespan. Content includes knowledge, judgment, skills, and professional values within a legal/ethical framework. This course lends itself to an integrated approach.

**Grade Basis:** L

**Credit hours:** 2.0

**Lecture hours:** 16.0

**Lab hours:** 32.0

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## **RNSG 1261 - CLINICAL NURSING I**

A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional.

**Grade Basis:** L

**Credit hours:** 2.0

---

## **RNSG 1300 - HEALTH ASSESSMENT ACROSS THE LIFESPAN**

Development of skills and techniques required for a comprehensive nursing health assessment of patients across the lifespan: pediatric, adult, and geriatric. Includes assessment of patients' health promotion and maintenance, illness and injury prevention and restoration, and application of the nursing process within a legal/ethical framework. Lab fees apply

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 16.0

**Lab hours:** 48.0

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## **RNSG 1423 - INTRODUCTION TO PROFESSIONAL NURSING FOR INTEGRATED PROGRAMS**

Introduction to the profession of nursing including the roles of the professional nurse as provider of patient-centered care, patient safety advocate, member of health care team, and member of the profession with emphasis on health promotion and primary disease prevention across the life span, essential components of the nursing health assessment, identification of deviations from expected health patterns, the application of a systematic, problem-solving process to provide basic nursing care to diverse patients

across the lifespan, and applicable competencies in knowledge, judgment, skills, and professional values within a legal and ethical framework.

**Grade Basis:** L

**Credit hours:** 4.0

**Lecture hours:** 48.0

**Lab hours:** 16.0

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## **RNSG 1462 - CLINICAL NURSING II**

A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional.

**Grade Basis:** L

**Credit hours:** 4.0

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## **RNSG 2161 - TRANSITION CLINICAL III**

A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional.

**Grade Basis:** L

**Credit hours:** 1.0

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## **RNSG 2162 - TRANSITION CLINICAL II**

A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional.

**Grade Basis:** L

**Credit hours:** 1.0

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## **RNSG 2404 - INTEGRATED CARE OF THE PATIENT WITH COMMON HEALTH CARE NEEDS**

Application of a systematic problem-solving process, critical thinking skills and concepts to provide nursing care to diverse patients and families across the life span with common health care needs including, but not limited to, common childhood/adolescent diseases, uncomplicated perinatal care, mental health concepts, perioperative care, frequently occurring adult health problems and health issues related to aging. Emphasis on secondary disease prevention and collaboration with members of the interdisciplinary health care team. Content includes roles of the professional nurse and

applicable competencies in knowledge, judgment, skills, and professional values within a legal/ethical framework. Lab fees apply

**Grade Basis:** L

**Credit hours:** 4.0

**Lecture hours:** 64.0

**Lab hours:** 32.0

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## **RNSG 2414 - INTEGRATED CARE OF THE PATIENT WITH COMPLEX HEALTH CARE NEEDS**

Application of a systematic problem solving process, critical thinking skills and concepts to provide comprehensive nursing care to diverse patients and families across the life span with complex health care needs including, but not limited to, complex childhood/adolescent diseases, complicated perinatal care, acute mental illness, complex perioperative care, serious adult health problems and health issues related to aging. Emphasis on tertiary disease prevention, health maintenance/restoration and collaboration with members of the multidisciplinary health care team. Content includes the roles of the professional nurse and applicable competencies in knowledge, judgment, skills, and professional values within a legal/ethical framework. Lab fees apply

**Grade Basis:** L

**Credit hours:** 4.0

**Lecture hours:** 64.0

**Lab hours:** 32.0

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## **RNSG 2435 - INTEGRATED PATIENT CARE MANAGEMENT**

Application of independent nursing interventions to care for diverse patients and families throughout the life span whose health care needs may be difficult to predict. Emphasis on collaborative clinical reasoning, nursing leadership skills, and patient management. Content includes the significance of professional development, trends in nursing and health care, and applicable knowledge, judgment, skills, and professional values within a legal/ethical framework.

**Grade Basis:** L

**Credit hours:** 4.0

**Lecture hours:** 64.0

**Lab hours:** 32.0

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## **RNSG 2461 - CLINICAL NURSING III**

A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional.

**Grade Basis:** L  
**Credit hours:** 4.0

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## **RNSG 2462 - CLINICAL NURSING IV**

A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional.

**Grade Basis:** L  
**Credit hours:** 4.0

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## **CHEF 1305 - SANITATION AND SAFETY**

A study of personal cleanliness, sanitary practices in food preparation, causes, investigation, control of illness caused by food contamination (Hazard Analysis Critical Control Points), and work place safety standards.

Upon completion, students will be able to:

- Identify causes of and prevention procedures for food-borne illness, intoxication, and infection
- Discuss personal hygiene and safe food handling procedures
- Describe food storage and refrigeration techniques
- Explain sanitation of dishes, equipment, and kitchens including cleaning material, garbage, and refuse disposal
- Discuss Occupational Safety and Health Administration (OSHA) requirements and workplace safety programs

**Grade Basis:** L  
**Credit hours:** 3.0  
**Lecture hours:** 48.0

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## **ITSY 2359 - SECURITY ASSESSMENT & AUDITING**

Comprehensive experience for the security curriculum. Synthesizes technical material covered in prior courses to monitor, audit, analyze, and revise computer and network security systems that ensure appropriate levels of protection are in place to assure regulatory compliance. Lab fees apply

Upon completion, students will be able to:

- Appraise security plan to ensure appropriate level of protection
- Assess network security design
- Audit network system based on security design
- Use relevant tools to assure security requirements
- Review security policies and procedures on a regular basis



**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 32.0

**Lab hours:** 32.0

**Prerequisites:**

- [ITSY 1342](#) - INFORMATION TECHNOLOGY SECURITY
- 

## **SOCI 1301 - INTRODUCTION TO SOCIOLOGY**

The scientific study of human society, including ways in which groups, social institutions, and individuals affect each other. Causes of social stability and social change are explored through the application of various theoretical perspectives, key concepts, and related research methods of sociology. Analysis of social issues in their institutional context may include topics such as social stratification, gender, race/ethnicity, and deviance. Meets NCTC Core Curriculum Requirement

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 48.0

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## **SOCI 1306 - SOCIAL PROBLEMS**

Application of sociological principles and theoretical perspectives to major social problems in contemporary society such as inequality, crime and violence, substance abuse, environmental issues, deviance, or family problems. Meets NCTC Core Curriculum Requirement

Upon completion, students will be able to:

- Describe how the sociological imagination can be used to explain the emergence and implications of contemporary social problems
- Explain the nature of social problems from at least one sociological perspective, e.g., critical, functional, interpretive, etc.
- Identify multidimensional aspects of social problems including the global, political, economic, and cultural dimensions of social problems
- Discuss how “solutions” to social problems are often contentious due to diverse values in society
- Describe how the proposed “solutions” to a social problem, including social policies, may bring rise to other social problems

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 48.0

---

## **SOCI 2301 - MARRIAGE & THE FAMILY**

Sociological and theoretical analysis of the structures and functions of the family, the varied cultural patterns of the American family, and the relationships that exist among the individuals within the family, as well as the relationships that exist between the family and other institutions in society.

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 48.0

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## **SOCI 2319 - MINORITY STUDIES**

This course studies minority-majority group relations, addressing their historical, cultural, social, economic, and institutional development in the United States. Both sociological and social psychological levels of analysis will be employed to discuss issues including experiences of minority groups within the context of their cultural heritage and tradition, as well as that of the dominant culture. Core concepts to be examined include (but are not limited to) social inequality, dominance/subordination, prejudice, and discrimination. Particular minority groups discussed may include those based on poverty, race/ethnicity, gender, sexual orientation, age, disability, or religion.

Upon completion, students will be able to:

- Explain how the concept of social inequality pertains to minority group status defined in terms of identities that may include social class, race/ethnicity, gender, sexual orientation, age, disability, or religion
- Differentiate between important concepts and theories of prejudice and discrimination including the effects of prejudice and discrimination on the everyday lives of minority group members in the context of social institutions
- Analyze the history of culture, experiences of inequality, and current life opportunities of various minority groups in the United States with contrasting reference to other countries
- Analyze minority group interactions in the United States focusing on immigration and migration patterns, assimilation processes, and adjustments to American life

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 48.0

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## **SOCI 2326 - SOCIAL PSYCHOLOGY**

Study of individual behavior within the social environment. May include topics such as the socio-psychological process, attitude formation and change, interpersonal relations, and group processes. Cross-listed as PSYC 2319

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 48.0

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### **SPAN 1411 - BEGINNING SPANISH I**

Basic Spanish language skills in listening, speaking, reading, and writing within a cultural framework. Students will acquire the vocabulary and grammatical structures necessary to communicate and comprehend at the beginner level. Lab fees apply

**Grade Basis:** L

**Credit hours:** 4.0

**Lecture hours:** 48.0

**Lab hours:** 32.0

---

### **SPAN 1412 - BEGINNING SPANISH II**

Continued development of basic Spanish language skills in listening, speaking, reading, and writing within a cultural framework. Students acquire the vocabulary and grammatical structures necessary to communicate and comprehend at the high beginner to low intermediate level. Lab fees apply

**Grade Basis:** L

**Credit hours:** 4.0

**Lecture hours:** 48.0

**Lab hours:** 32.0

---

### **SPAN 2311 - INTERMEDIATE SPANISH I**

The consolidation of skills acquired at the introductory level. Further development of proficiency in listening, speaking, reading and writing. Emphasis on comprehension, appreciation, and interpretation of the cultures of the Spanish-speaking world. Meets NCTC Core Curriculum Requirement

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 48.0

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### **SPAN 2312 - INTERMEDIATE SPANISH II**

The consolidation of skills acquired at the introductory level. Further development of proficiency in listening, speaking, reading and writing. Emphasis on comprehension, appreciation, and interpretation of the cultures of the Spanish-speaking world.

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 48.0

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## **SPCH 1315 - PUBLIC SPEAKING**

Application of communication theory and practice to the public speaking context, with emphasis on audience analysis, speaker delivery, ethics of communication, cultural diversity, and speech organizational techniques to develop students' speaking abilities, as well as ability to effectively evaluate oral presentations. Meets NCTC Core Curriculum Requirement

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 48.0

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## **SPCH 1318 - INTERPERSONAL COMMUNICATION**

Application of communication theory to interpersonal relationship development, maintenance, and termination in relationship contexts including friendships, romantic partners, families, and relationships with co-workers and supervisors. Meets NCTC Core Curriculum Requirement

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 48.0

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## **SPCH 1321 - BUSINESS & PROFESSIONAL COMMUNICATION**

Study and application of communication within the business and professional context. Special emphasis will be given to communication competencies in presentations, dyads, teams and technologically mediated formats. Meets NCTC Core Curriculum Requirement

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 48.0

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## **SRGT 1261 - CLINICAL - SURGICAL/OPERATING ROOM TECHNICIAN - INTRODUCTORY**

A basic type of health professions work-based instruction that helps students synthesize new knowledge, apply previous knowledge, or gain experience managing the workflow. Practical experience is simultaneously related to theory. Close and/or direct supervision is provided by the clinical professional, faculty or preceptor, generally in a clinical setting. Clinical education is an unpaid learning experience.

**Grade Basis:** L

**Credit hours:** 2.0

---

## **SRGT 1441 - SURGICAL PROCEDURES I**

Introduction to surgical pathology and its relationship to surgical procedures. Emphasis on surgical procedures related to the general, OB/GYN, genitourinary, and orthopedic surgical specialities incorporating instruments, equipment, and supplies required for safe patient care. Lab fees apply

**Grade Basis:** L

**Credit hours:** 4.0

**Lecture hours:** 48.0

**Lab hours:** 32.0

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## **SRGT 1442 - SURGICAL PROCEDURES II**

Introduction to surgical pathology and its relationship to surgical procedures. Emphasis on surgical procedures related to the thoracic, peripheral vascular, plastic/reconstructive, EENT, cardiac, and neurological surgical specialities incorporating instruments, equipment, and supplies required for safe patient care. Lab fees apply

**Grade Basis:** L

**Credit hours:** 4.0

**Lecture hours:** 48.0

**Lab hours:** 32.0

---

## **SRGT 1505 - INTRODUCTION TO SURGICAL TECHNOLOGY**

Orientation to surgical technology theory, surgical pharmacology and anesthesia technological sciences, and patient care concepts. Lab fees apply

**Grade Basis:** L

**Credit hours:** 5.0

**Lecture hours:** 64.0

**Lab hours:** 32.0

---

## **SRGT 1509 - FUNDAMENTALS OF PERIOPERATIVE CONCEPTS & TECHNIQUES**

In-depth coverage of perioperative concepts such as aseptic principles and practices, infectious processes, wound healing, and creation and maintenance of the sterile field. Lab fees apply

**Grade Basis:** L

**Credit hours:** 5.0

**Lecture hours:** 64.0

**Lab hours:** 32.0

---

## **SRGT 1661 - CLINICAL - SURGICAL/OPERATING ROOM TECHNICIAN - INTERMEDIATE**

An intermediate type of health professions work-based instruction that helps students synthesize new knowledge, apply previous knowledge, or gain experience managing the workflow. Practical experience is simultaneously related to theory. Close and/or direct supervision is provided by the clinical professional (faculty or preceptor), generally in a clinical setting. Clinical education is an unpaid learning experience.

**Grade Basis:** L

**Credit hours:** 6.0

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## **SRGT 1662 - CLINICAL - SURGICAL/OPERATING ROOM TECHNICIAN - ADVANCED**

An advanced type of health professions work-based instruction that helps students synthesize new knowledge, apply previous knowledge, or gain experience managing the workflow. Practical experience is simultaneously related to theory. Close and/or direct supervision is provided by the clinical professional (faculty or preceptor), generally in a clinical setting. Clinical education is an unpaid learning experience.

**Grade Basis:** L

**Credit hours:** 6.0

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## **TECA 1303 - FAMILY, SCHOOL & COMMUNITY**

A study of the child, family, community, and schools, including parent education and involvement, family and community lifestyles, child abuse, and current family life issues. Course content must be aligned as applicable with State Board for Educator Certification Pedagogy and Professional Responsibilities standards and coincide with the National Association for the Education of Young Children position statement related to developmentally appropriate practices for children from birth through age eight. Requires students to participate in field experiences with children from infancy through age 12 in a variety of settings with varied and diverse populations. The course includes a minimum of 16 hours of field experiences.

**Grade Basis:** L

**Credit hours:** 3.0

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## **TECA 1311 - EDUCATING YOUNG CHILDREN**

An introduction to the education of the young child, including developmentally appropriate practices and programs, theoretical and historical perspectives, ethical and professional responsibilities, and current issues. Course content must be aligned as applicable with State Board for Educator Certification Pedagogy and Professional Responsibilities standards and coincide with the National Association for the Education

of Young Children position statement related to developmentally appropriate practices for children from birth through age eight. Requires students to participate in field experiences with children from infancy through age 12 in a variety of settings with varied and diverse populations and the course includes a minimum of 16 hours of field experiences.

**Grade Basis:** L

**Credit hours:** 3.0

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## **TECA 1318 - WELLNESS OF THE YOUNG CHILD**

A study of the factors that impact the well-being of the young child including healthy behavior, food, nutrition, fitness, and safety practices. Focuses on local and national standards and legal implications of relevant policies and regulations. Course content must be aligned as applicable with State Board for Educator Certification Pedagogy and Professional Responsibilities standards and coincide with the National Association for the Education of Young Children position statement related to developmentally appropriate practices for children from birth to age eight. Requires students to participate in field experiences with children from infancy through age 12 in a variety of settings with varied and diverse populations. Course includes a minimum of 16 hours of field experiences.

**Grade Basis:** L

**Credit hours:** 3.0

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## **TECA 1354 - CHILD GROWTH & DEVELOPMENT**

A study of the physical, emotional, social, and cognitive factors impacting growth and development of children through adolescence.

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 48.0

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## **TECM 1301 - INDUSTRIAL MATHEMATICS**

Math skills applicable to industrial occupations. Includes fraction and decimal manipulation, measurement, percentage, and problem solving techniques for equations and ratio/proportion applications.

Upon completion, students will be able to:

- Convert between decimals and fractions
- Use measuring tools
- Calculate ratios and proportions in a technical application
- Transpose linear equations to solve for unknowns

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 48.0

---

## **RNSG 1327 - TRANSITION TO PROFESSIONAL NURSING**

Content includes health promotion, expanded assessment, analysis of data, critical thinking skills and systematic problem solving process, pharmacology, interdisciplinary teamwork, communication, and applicable competencies in knowledge, judgment, skills, and professional values within a legal/ethical framework throughout the lifespan.

**Grade Basis:** L

**Credit hours:** 3.0

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## **VNSG 1219 - PROFESSIONAL DEVELOPMENT**

Study of the importance of professional growth. Topics include the role of the LVN in the multidisciplinary healthcare team, professional organizations, continuing education, delegating authority, resume writing, and job interviewing.

**Grade Basis:** L

**Credit hours:** 2.0

**Lecture hours:** 32.0

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## **VNSG 1227 - ESSENTIALS OF MEDICATION ADMINISTRATION**

General principles of medication administration including determination of dosage, preparation, safe administration, and documentation of multiple forms of drugs. Instruction includes various systems of measurement.

**Grade Basis:** L

**Credit hours:** 2.0

**Lecture hours:** 32.0

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## **VNSG 1230 - MATERNAL - NEONATAL NURSING**

Utilization of the nursing process in the assessment and management of the childbearing family. Emphasis on the bio-psycho-socio-cultural needs of the family during the phases of pregnancy, childbirth, and the neonatal period including abnormal conditions.

**Grade Basis:** L

**Credit hours:** 2.0

**Lecture hours:** 32.0

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## **VNSG 1234 - PEDIATRICS**

Study of childhood diseases and childcare from infancy through adolescence. Focus on the care of the well and the ill child utilizing the nursing process.

**Grade Basis:** L

**Credit hours:** 2.0

**Lecture hours:** 32.0

---

## **VNSG 1323 - BASIC NURSING SKILLS**

Mastery of entry level nursing skills and competencies for a variety of health care settings. Utilization of the nursing process as the foundation for all nursing interventions. Related aspects of nutrition, pharmacology, and medical terminology included. Lab fees apply

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 80.0

**Lab hours:** 32.0

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## **VNSG 1331 - PHARMACOLOGY**

Fundamentals of medications and their diagnostic, therapeutic, and curative effects. Includes nursing interventions associated with the various pharmacotherapeutic agents.

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 48.0

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## **VNSG 1360 - CLINICAL I**

This course provides clinical experience in fundamental nursing skills. The nursing process is applied to provide individualized care designed to meet a client's particular needs. The geriatric client is the focus of care.

**Grade Basis:** L

**Credit hours:** 3.0

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## **VNSG 1363 - CLINICAL II - SPRING ADMISSION**

This course is offered in the summer semester for the January admission class. It provides a continuation of Clinical I with the emphasis on utilizing the nursing process in providing individualized care of the client in all stages of development. The principles of safety in medication administration and other care are closely monitored.

**Grade Basis:** L

**Credit hours:** 3.0

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### **VNSG 1400 - NURSING IN HEALTH & ILLNESS I**

Introduction to general principles of growth and development, primary health care needs of the client across the life span, and therapeutic nursing interventions.

**Grade Basis:** L

**Credit hours:** 4.0

**Lecture hours:** 80.0

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### **VNSG 1420 - ANATOMY & PHYSIOLOGY FOR ALLIED HEALTH**

Introduction to the normal structure and function of the body, including an understanding of body systems in maintaining homeostasis. Principles of microbiology also included.

**Grade Basis:** L

**Credit hours:** 4.0

**Lecture hours:** 64.0

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### **VNSG 1463 - CLINICAL II - FALL ADMISSION**

This course is offered in the spring semester for the August admission class. It provides a continuation of Clinical I with the emphasis on utilizing the nursing process in providing individualized care of the client in all stages of development. The principles of safety in medication administration and other care are closely monitored.

**Grade Basis:** L

**Credit hours:** 4.0

---

### **VNSG 1509 - NURSING IN HEALTH & ILLNESS II**

Introduction to common health problems requiring medical and surgical interventions.

**Grade Basis:** L

**Credit hours:** 5.0

**Lecture hours:** 80.0

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### **VNSG 2360 - CLINICAL III - FALL ADMISSION**

This course is offered in the summer semester for the August admission class. It assists the student in the continued development of their knowledge and skill in the role and functions of the vocational nurse. It provides learning experiences in the clinical setting focusing on further refinement of the nursing process in caring for clients exhibiting health-illness continuum through the life span.

**Grade Basis:** L  
**Credit hours:** 3.0

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### **VNSG 2460 - CLINICAL III - SPRING ADMISSION**

This course is offered in the fall semester for the January admission class. It assists the student in the continued development of their knowledge and skill in the role and functions of the vocational nurse. It provides learning experiences in the clinical setting focusing on further refinement of the nursing process in caring for clients exhibiting health-illness continuum through the life span.

**Grade Basis:** L  
**Credit hours:** 4.0

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### **VNSG 2510 - NURSING IN HEALTH & ILLNESS III**

Continuation of Nursing in Health and Illness II. Further study of common medical-surgical health problems of the client.

**Grade Basis:** L  
**Credit hours:** 5.0  
**Lecture hours:** 80.0

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### **WLDG 1323 - WELDING SAFETY, TOOLS & EQUIPMENT**

An introduction to welding equipment and safety practices, including OSHA standards for industry. Note: WLDG 1323 applies to the Petroleum Technology program or may be taken as a stand alone course. It is not a part of the Welding Certificate or AAS Degree. Lab fees apply

Upon completion, students will be able to:

- Apply welding safety practices, OSHA and the Hazardous Communications Act, and DS
- List hazards associated with welding equipment and processes
- Use and maintain tools and equipment
- Identify hazards associated with gases, fluxes, electrodes and equipment
- Explain different welding processes and their operation

**Grade Basis:** L  
**Credit hours:** 3.0  
**Lecture hours:** 32.0  
**Lab hours:** 32.0

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## **WLDG 1407 - INTRODUCTION TO WELDING USING MULTIPLE PROCESSES**

Basic welding techniques using some of the following processes: Oxy-fuel welding (OFW) and cutting, shielded metal arc welding (SMAW), gas metal arc welding (GMAW), and gas tungsten arc welding (GTAW). Lab fees apply

Upon completion, students will be able to:

- Demonstrate machine set-up and complete welds and cutting operations
- Demonstrate basic shop safety
- Identify types of electrodes used in welding processes
- Identify various welding and cutting standards
- Demonstrate proper joint preparation techniques

**Grade Basis:** L

**Credit hours:** 4.0

**Lecture hours:** 32.0

**Lab hours:** 96.0

---

## **WLDG 1413 - INTRODUCTION TO BLUEPRINT READING FOR WELDERS**

A study of industrial blueprints. Emphasis placed on terminology, symbols, graphic description, and welding processes. Includes systems of measurement and industry standards. Also includes interpretation of plans and drawings used by industry to facilitate field application and production.

Upon completion, students will be able to:

- Define terms and abbreviations; and identify and explain object views, lines, and dimensions
- Identify, explain, and interpret weld symbols
- Identify structural shapes
- Demonstrate the proper use of measuring devices
- Read and interpret blueprints
- Read welding detail drawings
- Calculate dimensions and material

**Grade Basis:** L

**Credit hours:** 4.0

**Lecture hours:** 64.0

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## **WLDG 1427 - WELDING CODES**

An in-depth study of welding codes and their development in accordance with structural standards, welding processes, destructive and nondestructive test methods.

Upon completion, students will be able to:

- Categorize major codes
- Identify welding procedures
- Identify welding and NDT symbols
- List responsibilities of inspectors
- Evaluate post-weld heat treatments and destructive testing
- List alloys and phases of metals
- State the effects of heating and cooling
- Apply pre-weld, in-process, and shop inspection standards
- Develop welding procedures
- Calculate preheat and post-weld heat treatments
- Identify NDT test methods and welding discontinuities

**Grade Basis:** L

**Credit hours:** 4.0

**Lecture hours:** 64.0

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## **WLDG 1428 - INTRODUCTION TO SHIELDED METAL ARC WELDING (SMAW)**

An introduction to the shielded metal arc welding process. Emphasis placed on power sources, electrode selection, oxy-fuel cutting, and various joint designs. Instruction provided in SMAW fillet welds in various positions. Lab fees apply

Upon completion, students will be able to:

- Select electrodes and amperage settings for various thicknesses of materials and welding positions
- Define principles of arc welding
- Explain electrode classifications
- Perform SMAW operations in various positions using selected electrodes and different joint designs

**Grade Basis:** L

**Credit hours:** 4.0

**Lecture hours:** 48.0

**Lab hours:** 32.0

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## **WLDG 1435 - INTRODUCTION TO PIPE WELDING**

An introduction to welding of pipe using the shielded metal arc welding process (SMAW), including electrode selection, equipment setup, and safe shop practices. Emphasis on weld positions 1G and 2G using various electrodes. Lab fees apply

Upon completion, students will be able to:

- Describe equipment and required pipe preparation and perform 1G and 2G welds using various electrodes

**Grade Basis:** L

**Credit hours:** 4.0

**Lecture hours:** 32.0

**Lab hours:** 64.0

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## **WLDG 1457 - INTERMEDIATE SHIELDED METAL ARC WELDING (SMAW)**

A study of the production of various fillets and groove welds. Preparation of specimens for testing in various positions. Lab fees apply

Upon completion, students will be able to:

- Identify principles of arc welding
- Describe arc welding operations of fillet and groove joints
- Explain heat treatments of low alloy steels
- Explain weld size and profiles
- Prepare test plates
- Perform fillet welds in the overhead position
- Perform air carbon arc weld removal
- Perform bevel groove welds with backing plates in various positions
- Demonstrate use of tools and equipment

**Grade Basis:** L

**Credit hours:** 4.0

**Lecture hours:** 32.0

**Lab hours:** 32.0

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## **WLDG 2352 - ADVANCED FLUX CORED ARC WELDING**

Advanced concepts of flux cored arc welding of structural and fabricated steel products. Skill development in multi-pass fillet and v-groove welding. Lab fees apply

Upon completion, students will be able to:

- Perform safety inspections of equipment and accessories
- Perform multi-pass fillet and v-groove welds in various positions

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 48.0

**Lab hours:** 32.0

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## **WLDG 2380 - COOPERATIVE EDUCATION - WELDING TECHNOLOGY**

Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience.

Upon completion, students will be able to:

- Apply the theory, concepts, and skills involving specialized materials, tools, equipment, procedures, regulations, laws, and interactions within and among political, economic, environmental, social, and legal systems associated with the occupation and the business/industry
- Demonstrate legal and ethical behavior, safety practices, interpersonal and teamwork skills, and appropriate written and verbal communication skills using the terminology of the occupation and the business/industry

**Grade Basis:** L

**Credit hours:** 3.0

**Lecture hours:** 16.0

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## **WLDG 2413 - INTERMEDIATE WELDING USE MULTIPLE PROCESSES**

Instruction using layout tools and blueprint reading with demonstration and guided practices with some of the following welding processes: oxy-fuel gas cutting and welding, shield metal arc welding (SMAW), gas metal arc welding (GMAW), flux-cored arc welding (FCAW), gas tungsten arc welding (GTAW), or any other approved welding process. Lab fees apply

Upon completion, students will be able to:

- Identify proper safety equipment and tools and identify and select the proper welding process for a given application
- Demonstrate skills training using more than one approved welding process
- Demonstrate ability to analyze situations and make decisions using skills as taught concerning safety and electrode selections
- Select the most economic and practical welding process for the given task

**Grade Basis:** L

**Credit hours:** 4.0

**Lecture hours:** 32.0

**Lab hours:** 96.0

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## **WLDG 2447 - ADVANCED GAS METAL ARC WELDING (GMAW)**

Advanced topics in Gas Metal Arc Welding (GMAW). Includes welding in various positions. Lab fees apply

Upon completion, students will be able to:

- Demonstrate proficiency in various welding positions
- Describe safety rules and equipment use
- Describe the effects of welding parameters in GMAW
- Weld various joint designs and diagnose welding problems and perform visual inspection

**Grade Basis:** L

**Credit hours:** 4.0

**Lecture hours:** 32.0

**Lab hours:** 64.0

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