

AMBITION



TO ACTION

2017-18 COURSE CATALOG

PROGRAMS AND COURSES AT ST. LOUIS COMMUNITY COLLEGE



stlcc.edu

TABLE OF CONTENTS

Welcome	4
General Information	5
About St. Louis Community College	6
Accreditation and Approval	7
Admission	8
Calendar	11
Community Programs	12
Fees and Refunds	13
Financial Aid	16
Policies & Procedures	17
Enrollment and Attendance	17
Health and Safety	18
Program Information	19
Student Records	20
Student Success	22
Signed Articulation Agreements	27
St. Louis Community College Foundation	29
College Programs	30
General Transfer Studies, Associate in Arts	32
Accounting, Associate of Applied Science	34
Accounting, Certificate of Proficiency	34
Addictions Study, Certificate of Specialization	34
Art Education, Associate in Fine Arts	35
Associate of Arts in Teaching	36
Automotive Technology, Associate in Applied Science	36
Automotive Technology, Certificate of Proficiency	37
Automotive Technology, Certificate of Specialization	37
Aviation Maintenance - Airframe, Certificate of Proficiency	37
Aviation Maintenance - Power Plant, Certificate of Proficiency	37
Baking and Pastry Arts, Associate in Applied Science	37
Biomedical Electronics Technology, Certificate of Specialization	38
Biotechnology, Associate in Applied Science	38
Biotechnology, Certificate of Specialization	39
Building Inspection and Code Enforcement Technology, Associate in Applied Science	39
Building Inspection and Code Enforcement Technology, Certificate of Proficiency	39
Building Inspection and Code Enforcement Technology: Housing Inspection Option, Certificate of Proficiency	40
Business Administration, Associate in Applied Science	40
Business Administration, Certificate of Proficiency	41

Business Administration, Certificate of Specialization	41
Chemical Technology, Certificate of Proficiency	41
Cisco Networking Academy: CCNA, Certificate of Specialization	41
Civil Engineering Technology, Associate in Applied Science	42
Clinical Laboratory Technology (Medical Laboratory Technician), Associate in Applied Science	42
Computer Accounting Technology, Certificate of Specialization	43
Computer Aided Design (CAD), Certificate of Specialization	43
Computer Applications, Certificate of Specialization	43
Computer Integrated Manufacturing, Associate in Applied Science	44
Computer Science, Associate in Science	44
Construction Management Technology, Associate in Applied Science	44
Construction Office Management, Certificate of Specialization	45
Criminal Justice: Corrections Option, Associate in Applied Science	45
Criminal Justice: Corrections Option, Certificate of Proficiency	45
Criminal Justice: Law Enforcement Option, Associate in Applied Science	45
Criminal Justice: Law Enforcement Option, Certificate of Proficiency	45
Culinary Arts, Associate in Applied Science	45
Cybersecurity, Associate in Applied Science	46
Cybersecurity, Certificate of Proficiency	46
Database Developer, Certificate of Proficiency	47
Deaf Communication Studies: American Sign Language, Certificate of Specialization	47
Deaf Communication Studies: Interpreter Education, Associate in Applied Science	47
Dental Assisting, Certificate of Proficiency	48
Dental Hygiene, Associate in Applied Science	48
Diagnostic Medical Sonography, Certificate of Proficiency	49
Diesel Technology, Associate in Applied Science	50
Diesel Technology, Certificate of Proficiency	51
Diesel Technology, Certificate of Specialization	51
Dietetic Technology: Nutrition Care, Associate in Applied Science	51
Digital Media--Digital Photography, Certificate of Specialization	52
Digital Media--Interactive and Graphic Design, Certificate of Specialization	52
Digital Media--Video Editing and Animation, Certificate of Specialization	52
Early Care and Education - Developmental Disabilities, Associate in Applied Science	52
Early Care and Education, Associate in Applied Science	53
Early Care and Education, Certificate of Proficiency	53
Electrical/Electronic Engineering Technology, Associate in Applied Science	54

Emergency Medical Technology, Certificate of Specialization	54	Precision Machining Technology, Certificate of Specialization	75
Engineering Science, Associate in Science	54	Radiologic Technology, Associate in Applied Science	75
Event Planning, Certificate of Specialization	55	Respiratory Care, Associate in Applied Science	76
Fire Protection Technology, Associate in Applied Science	56	Robotics and Automation, Certificate of Specialization	77
Fire Protection Technology, Certificate of Proficiency	56	Skilled Trades Industrial Occupations Technology, Associate in Applied Science	77
Food and Beverage Management, Certificate of Specialization	56	Skilled Trades Industrial Occupations Technology, Certificate of Specialization	77
Funeral Directing, Certificate of Specialization	57	Software Developer, Associate in Applied Science	78
Funeral Service Education, Associate in Applied Science	57	Surgical Technology, Certificate of Proficiency	78
General Fine Arts, Associate in Fine Arts	58	Telecommunications Engineering Technology: Basic Electronics, Certificate of Specialization	79
Graphic Communications, Associate in Applied Science	58	Travel and Tourism, Certificate of Specialization	79
Graphic Communications, Associate in Fine Arts	60	Web Developer, Certificate of Specialization	79
Health Information Technology, Associate in Applied Science	60	General Education Requirements	81
Horticulture, Associate in Applied Science	61	Course Descriptions	85
Horticulture, Certificate of Proficiency	62	Courses A-Z	87
Hospitality and Tourism, Associate in Applied Science	62	Accounting (ACC)	87
Hotel Management, Certificate of Specialization	63	Anthropology (ANT)	88
Human Services, Associate in Applied Science	63	Arabic (ARA)	88
IT Help Desk/End User Support, Certificate of Specialization	64	Architectural Technology (ARC)	88
Information Reporting Technology: Judicial, Associate in Applied Science	64	Art (ART)	89
Information Reporting Technology: Judicial, Certificate of Proficiency	64	Art (AT)	93
Interior Design, Associate in Applied Science	64	Automotive Technology (AUT)	97
Interior Design Professional, Certificate of Specialization	65	Aviation Technology (AVI)	97
Kitchen and Bath Design, Certificate of Proficiency	65	Baking and Pastry (BAP)	99
Landscape Design, Certificate of Proficiency	66	Biology (BIO)	100
Legal Studies for the Paralegal, Associate in Applied Science	66	Biomedical Engineering Tech (BE)	102
Legal Studies for the Paralegal, Certificate of Proficiency	67	Building Inspection Technology (BIC)	102
Life Science Laboratory Assistant, Certificate of Specialization	67	Business Administration (BUS)	103
Maintenance Mechanic, Certificate of Specialization	67	Business Law (BLW)	103
Mass Communications, Associate in Applied Science	68	Chemistry (CHM)	103
Mechanical Engineering Technology, Associate in Applied Science	68	Chinese (CHI)	104
Medical Billing and Coding, Certificate of Proficiency	69	Civil Engineering Technology (CE)	104
Network Engineering, Associate in Applied Science	70	Clinical Laboratory Technology (CLT)	105
Network Engineering, Certificate of Proficiency	70	College Orientation (COL)	106
Network Security, Certificate of Proficiency	71	Communications (COM)	106
Nursing, Associate in Applied Science	71	Criminal Justice (CRJ)	107
Occupational Therapy Assistant, Associate in Applied Science	72	Culinary Arts (CUL)	108
Office Information Systems, Associate in Applied Science	72	Deaf Communication Studies (DCS)	109
Paramedic Technology, Associate in Applied Science	73	Dental Assisting (DA)	111
Photography, Associate in Fine Arts	73	Dental Hygiene (DHY)	112
Physical Therapist Assistant, Associate in Applied Science	74	Diagnostic Medical Sonography (DMS)	114

Diesel Technology (DIE)	116
Dietetic Technology (DIT)	117
Early Care and Education (ECE)	118
Economics (ECO)	119
Education (EDU)	119
Electrical/Electronic Egr Tech (EE)	120
Emergency Medical Technology (EMT)	121
Engineering Graphics (EGR)	121
Engineering Science (ESC)	122
English (ENG)	122
Finance (FIN)	125
Fire Protection (FIR)	125
French (FRE)	127
Funeral Directing (FD)	127
Funeral Service Education (FSE)	127
General Education (GEN)	128
General Engineering (GE)	128
Geography (GEG)	129
Geology (GEO)	129
German (GER)	130
Global Education (GLE)	130
Health Information Technology (HIT)	130
History (HST)	132
Horticulture (HRT)	133
Hospitality and Tourism (HTM)	134
Human Services (HMS)	135
Humanities (HUM)	136
Information Reporting Technlgy (IRT)	137
Information Systems (IS)	137
Information Technology (IT)	141
Interdisciplinary Studies (IDS)	143
International Business (IB)	144
Italian (ITL)	144
Japanese (JPN)	144
Legal Studies (LGL)	145
Library & Information Studies (LIB)	146
Management (MGT)	146
Marketing (MKT)	146
Mass Communications (MCM)	146
Mathematics (MTH)	148
Mechanical Engineering Tech (ME)	150
Music (MUS)	153

Nursing (NUR)	154
Occupational Therapy Assistant (OTA)	155
Paramedic Technology (PAR)	156
Personal Development (PRD)	156
Philosophy (PHL)	157
Physical Education (PE)	158
Physical Education (PED)	160
Physical Science (PSI)	161
Physical Therapist Assistant (PTA)	161
Physics (PHY)	162
Political Science (PSC)	162
Psychology (PSY)	162
Quality Control (QC)	163
Radiologic Technology (XRT)	164
Reading (RDG)	165
Respiratory Therapy (RTH)	165
Russian (RUS)	166
Skilled Trades (SKT)	167
Smart Start (STR)	169
Sociology (SOC)	169
Spanish (SPA)	170
Surgical Technology (ST)	170
Theatre (THT)	171
Women's Studies (WMS)	172
Personnel	173

WELCOME

Chancellor's welcome:

Welcome to St. Louis Community College.

Thank you for making St. Louis Community College your college of choice. At STLCC, we strive to provide you with a quality education at a price you can afford. From campuses that span the St. Louis region, to dedicated faculty who make it their life mission to educate and better the lives of their students, St. Louis Community College is a true asset to our community.

Whether you are a first-time college student, working adult who needs new job skills, or lifelong learner, we have a place for you. We offer eight college transfer options and over 90 career programs. In fact, we are the region's largest resource for college transfer, career development, and workforce training.

Most importantly, STLCC allows you to learn at your own pace – and your own place. You can earn a degree or certificate on your own timeline by attending classes either full- or part-time. And on top of multiple campuses, we also offer online and hybrid courses so you can take classes at a location that's convenient for you.

We also strive to offer a friendly, student-centered learning environment. Our classes are smaller in size and offered at times that fit your busy schedule, including evenings and weekends. Our dedicated faculty and support staff go the extra mile to help you succeed, whether you need tutoring, advising, help with financial aid, or assistance with personal problems.

But we are more than just a learning institution. At St. Louis Community College, we offer hundreds of extracurricular activities, service learning and student government opportunities, clubs and organizations, honor societies, student publications, art shows, concerts, plays, and intercollegiate athletics.

Thank you again for choosing St. Louis Community College. I am certain that our quality educators, small class sizes, flexible scheduling, and affordable tuition will offer you the very best opportunity to expand your mind – and change your life.

Sincerely,

- Jeff L. Pittman, Ph.D.
- Chancellor

St. Louis Community College Board of Trustees

- Libby Fitzgerald, M.A., Subdistrict 4
- Rodney Gee, M.A., District-wide
- Doris Graham, Ph.D., Subdistrict 1
- Craig H. Larson, Ed.D., Subdistrict 4
- Kevin M. Martin, Ed.D., Subdistrict 1
- Joan McGivney, M.P.P., Subdistrict 3
- Pam Ross, Subdistrict 2

GENERAL INFORMATION

About this Catalog

The St. Louis Community College 2017/18 catalog contains information on entering the college, choosing a program, getting the most out of the collegiate experience, and moving toward a career or advanced study.

Courses listed in the transfer and career programs sections may not be offered every semester. A class schedule that lists courses currently being offered and a description of each course is available at stlcc.edu/schedule (http://classes.stlcc.edu/ClassSchedule/Term_Courses.asp).

The information in this catalog is current as of March 2017. The college may at any time change policies and procedures outlined in this catalog. For information on policy changes, refer to the Board of Trustees Policy Manual (http://www.stlcc.edu/Document_Library/Board_Policy.pdf). The manual is also available in the campus libraries.

The information in this catalog is not a substitute for Board policies.

This catalog is available in alternate forms. Contact a campus Access office for more information.

Mission Statement

St. Louis Community College expands minds and changes lives every day by offering high-quality educational experiences leading to degrees, certificates, employment, university transfer, and life-long learning.

Notice of Non-Discrimination

St. Louis Community College is committed to non-discrimination and equal opportunities in its admissions, educational programs, activities, and employment regardless of race, color, creed, religion, sex, sexual orientation, national origin, ancestry, age, disability, genetic information, or status as a disabled or Vietnam-era veteran and shall take action necessary to ensure non-discrimination. Sexual harassment, including sexual violence, is also prohibited. For information or concerns related to discrimination or sexual harassment, contact Mary Zabriskie, Director, Student Conduct/Title IX, at 314-539-5345.

If you are a person with a documented disability and need accommodations to attend classes, please fill out the Access Office application at stlcc.edu/access (<http://catalog.stlcc.edu/general-information/www.stlcc.edu/access>) at least six weeks prior to the beginning of the semester.

Academic Integrity Statement

St. Louis Community College recognizes that the core value of academic integrity is essential to all activities of an academic community and provides the cornerstone for teaching and learning. It is characterized by upholding the foundational principles of honesty, equity, mutual responsibility, respect, and personal integrity. Advancing the principles of academic integrity is essential because doing so enhances academic discourse, the quality of academic work, institutional operations, and the assessment of educational goals.

Observing academic integrity involves:

- Maintaining the standards of the college's degrees, certificates, and awards to preserve the academic credibility and reputation of the college.
- Communicating expectations, best practices, and procedures in order to promote the principles of academic integrity and ensure compliance.
- Providing environments, instruction, and access to the resources necessary for maintaining integrity in learning.
- Taking responsibility and personal accountability for the merit and authenticity of one's work.
- Giving proper acknowledgement and attribution to those who directly contribute to a project or whose work is used in the completion of a project.
- Recognizing what compromises academic integrity, whether intentional or unintentional (plagiarism, cheating, uncivil behavior, etc.).
- It is the shared duty of the faculty, students, and staff of the college to understand, abide by and endorse academic integrity.

About St. Louis Community College

St. Louis Community College offers a challenging learning environment that points students in directions that lead to success.

Since voters in St. Louis City and County established the college in 1962, STLCC has been enriching lives and contributing to the economic development of the metropolitan area. The college has a \$2 billion overall financial impact on the St. Louis region annually.

Each year, nearly 80,000 students enroll in college transfer and career programs; job skill, personal development, and college preparatory classes; and customized programs sponsored by employers. Associate degrees in Applied Science, Arts, Fine Arts, Science, and Teaching are offered, as well as certificates of proficiency and specialization. The college's Workforce Solutions Group also serves the local business community through assessment, counseling, consulting, and training services.

Learning is geographically accessible through four campuses: Florissant Valley in North County, Forest Park in the city's central corridor, Meramec to the southwest, and to the far west, Wildwood; two education centers in south St. Louis County and North St. Louis; numerous business, industrial, and neighborhood sites throughout the metropolitan area; and online and hybrid courses via the Internet.

Governed by a board of six elected trustees and supported by local taxes, state funds, and student fees, the college has a total operating budget of \$160.7 million. Accreditation is through the Higher Learning Commission of the North Central Association of Colleges and Schools. St. Louis Community College focuses its resources on helping students find the right academic and career pathways.

Through its alumni and community partnerships, the college is helping St. Louis become the best place to live and work in the 21st century.

Economic Value

St. Louis Community College is your best financial investment now – and a great investment for your future. Student fees at STLCC are among the lowest in the area.

A large portion of instructional costs is financed by tax revenue; therefore, you pay less for a high-quality academic experience. And graduates of STLCC are the region's best economic investment.

- Research shows that for every \$1 invested in their STLCC education, students receive a return on that investment of more than \$5.10 in higher future income over their working careers.
- From a taxpayer perspective, every \$1 of state or local tax money invested in STLCC returns \$2.40.
- STLCC's annual impact on St. Louis is \$2 billion or approximately 1.9 percent of the total St. Louis area economy.
- Higher earnings of STLCC students (and associated increases in state income) expanded the tax base in Missouri by about \$233 million in fiscal year 2013-14 from \$107 million in support.
- It is estimated that the St. Louis area economy annually receives a net of \$178 million in added labor and non-labor income due to STLCC operations.
- Compared to someone with only a high school diploma, associate degree graduates earn \$466,400 more over the course of a working lifetime.

Source:
Economic Modeling Specialists, Inc., 2015

Accreditation and Approval

Accreditation

St. Louis Community College is accredited by the

Higher Learning Commission (<https://hlcommission.org>) (HLC)
230 South LaSalle St., Suite 7-500
Chicago, IL 60604
800-621-7440

In addition to institutional accreditation by the HLC, the programs listed below have been accredited or approved by recognized accrediting bodies.

Collegewide

All college degree programs are approved by the Missouri Department of Higher Education (MDHE).

The St. Louis Community College Nursing Departments at the Florissant Valley and Forest Park campuses are fully approved and the Meramec campus is accredited with condition by the Missouri State Board of Nursing (<http://pr.mo.gov/nursing.asp>).

The St. Louis Community College District Nursing Program is accredited by

Accreditation Commission for Education in Nursing (<http://www.acenursing.org>) (ACEN)
3343 Peachtree NE, Suite 850
Atlanta, GA 30326
404-975-5000

Florissant Valley

Art

National Association of Schools of Art and Design

Child Development Center

Missouri Accreditation for Early Childhood Programs

Missouri Department of Health and Senior Services

National Association for the Education of Young Children (NAEYC)

Dietetic Technology

Accreditation Council for Education in Nutrition and Dietetics (ACEND)

Academy of Nutrition and Dietetics

Electrical/Electronic Engineering Technology

Engineering Technology Commission of the Accreditation Board for Engineering and Technology (<http://www.abet.org>) (ABET)

Graphic Communications

National Association of Schools of Arts and Design

Mechanical Engineering Technology

Engineering Technology Commission of the Accreditation Board for Engineering and Technology (<http://www.abet.org>) (ABET)

Photography

National Association of Schools of Art and Design

Forest Park

Automotive Technology

National Automotive Technicians Education Foundation (NATEF)

Baking and Pastry Arts

American Culinary Federation

Clinical Laboratory Technology

National Accrediting Agency for Clinical Laboratory Sciences (NAACLS)

Culinary Arts

American Culinary Federation

Dental Assisting

Commission of Dental Accreditation American Dental Association (CODA)
Missouri Dental Board

Dental Hygiene

Commission of Dental Accreditation American Dental Association (CODA)

Missouri Dental Board

Diagnostic Medical Sonography

Commission on Accreditation of Allied Health Education Programs (CAAHEP)

Emergency Medical Services

Missouri Bureau of Emergency Medical Services

The Emergency Medical Service Paramedic Program is accredited by the Commission on Accreditation of Allied Health Education Programs upon the recommendation of the Committee on Accreditation of Educational Programs for the Emergency Medical Services Professions (CoAEMSP)

Funeral Service Education

American Board of Funeral Service Education (ABFSE)

Health Information Technology

Commission on Accreditation for Health Informatics and Information Management Education (CAHIIM)

Medical Billing and Coding

American Health Information Management Association

Radiologic Technology

Joint Review Committee on Education in Radiologic Technology (JRCERT)

Respiratory Care

Commission on Accreditation for Respiratory Care (CoARC)

Surgical Technology

Commission on Accreditation of Allied Health Education Programs (CAAHEP)

Meramec

Art

National Association of Schools of Art and Design

Interior Design

National Association of Schools of Art and Design

Kitchen and Bath

National Association of Schools of Art and Design
National Kitchen and Bath Association (NKBA)

Occupational Therapy Assistant

Accreditation Council for Occupational Therapy Education

Physical Therapist Assistant

Commission on Accreditation of Physical Therapy Education

Admission

Open Admission Policy

St. Louis Community College (STLCC) has an open admission policy in keeping with its original purpose to provide quality, low-cost education to area residents. Although admission to the college is not based on minimum academic qualifications, certain programs have required standards for admission and retention.

The college reserves the right to guide enrollment on the basis of placement tests, pre-enrollment interviews, physical examinations (if required for a specific program), previous achievement and other criteria.

For programs requiring reading competency, English writing and/or mathematics courses, a battery of assessment tests is required for placement. Students not meeting standards for admission into certain courses or programs may enroll in courses designed to help them qualify.

Before registering for courses, students must be admitted to the college. Admission applications are accepted starting in August for the next spring term; September for the next fall term; and December for the next summer term. Applications may be completed and submitted online or in person at any campus kiosk. Visit [stlcc.edu/app](http://www.stlcc.edu/app) (http://www.stlcc.edu/Admissions/Apply_to_STLCC/Index.html) or <http://catalog.stlcc.edu/general-information/admission/www.stlcc.edu/apply> for more information.

Selective Admission Programs

Standards of admission and retention have been established for certain programs and courses to make sure students have the necessary aptitude and background for success. Students applying for a program with selective admission criteria may be required to take additional tests for admission purposes and/or meet certain requirements to continue in the program. Contact the department, a counselor or an advisor for program specific information.

Admission Classifications

Applicants for St. Louis Community College may apply as either degree-seeking or non-degree-seeking.

Degree-Seeking Applicants

Degree-seeking students are full- or part-time students who are seeking a degree or certificate from STLCC. As a degree-seeking student you may:

- Apply for financial aid, Veterans benefits or A+ program.
- Apply for a selective admission program.
- Apply as an international student with F-1 student visa status.
- Participate in intercollegiate athletics.

To apply as a degree-seeking student, you must submit an application for admission. Official transcripts from high school and/or colleges attended must be sent directly from that institution to the office of the Registrar via mail or sent electronically using an approved secure vendor. If applicable, submit the GED or HiSET test scores. Students with 15 or more credit hours of transferable college credit need not send a high school transcript unless requested by the Enrollment Services office. You must also complete the college's placement test or provide documentation to waive assessment.

Non-Degree-Seeking Applicants

Non-degree-seeking applicants are typically interested in selected courses and not a particular program of study. A student taking a course for the

summer with the intent of transferring the credit to their home institution should enroll as a Non-Degree-seeking Visiting student. You must submit an application for admission and complete the college's placement test, or provide documentation to waive assessment.

Non-Traditional Applicants

Applicants for admission who have completed an educational course of study that is not accredited by a state board of education or by one of the accredited agencies listed in the International Registry of Accredited Schools are eligible for admission as a non-degree-seeking student provided they are at least 17 years of age.

To apply as a degree-seeking student you must provide official high school transcripts from an accredited high school or passing GED or HiSET test scores.

Under extenuating circumstances, applicants who do not meet the above criteria may be considered for admission by the administrator responsible for admissions.

Students who do not meet the required admission guidelines may apply as a non-high school graduate. See related section below.

Non-High School Graduates

Students who have not graduated from high school are eligible for admission as a non-degree-seeking student provided they are at least 17 years of age. Non High School graduates who submit a Degree-seeking application cannot pursue a program of study.

To apply as a degree-seeking student you must provide official high school transcripts from an accredited high school or passing GED or HiSET test scores.

Under extenuating circumstances, applicants who do not meet the above criteria may be considered for admission by the administrator responsible for admissions.

Dual Enrollment

High school juniors and seniors may attend classes through the Dual Enrollment program which provides students an opportunity to take courses not offered in their high school or to continue a course series beyond the level offered in high school. Eligible students may earn college credit hours before the time they would normally begin college. Students must follow all college policies and procedures, and fulfill the following requirements:

- Complete the dual enrollment application.
- Obtain required signatures from parent/guardian and authorized school official.
- Have achieved a cumulative high school GPA of 2.0 or higher.
- Submit copy of high school transcript to the Registrar's office.
- Meet the college's requirements for entry into the course. Students must meet assessment requirements or provide appropriate ACT/SAT scores to waive testing.
- Student is responsible for all fees by the payment deadline.
- Apply to the Access office for disability-related accommodations and services if applicable. Documentation of disability that meets the college's requirements will be required. It should be noted that the requirements for and the types of accommodation at the postsecondary level are based on the Americans with Disabilities Act and Section 504, and are often significantly different from the Individuals with Disabilities Education Act. For more information, see Access Office (p.).

Dual Credit

High school juniors and seniors may receive college credit for specified classes at high schools participating in the college's dual credit program. Dual credit students must follow all college policies and procedures, and fulfill the following requirements:

- Complete the dual credit application.
- Have a cumulative high school GPA of 2.5 or higher for Juniors and Seniors, and a 3.0 or higher for Sophomores.
- Obtain required signatures from parent/guardian and authorized school official, submit the Dual Credit Consent Form.
- Submit copy of high school transcript to the Registrar's office.
- Meet the college's requirements for entry into the course. Students must meet assessment requirements or provide appropriate ACT/SAT scores to waive testing.
- Pay the applicable maintenance fee, the technology fee, the student activity fee, and other mandatory course fees.
- Apply to the Access office for disability-related accommodations and services if applicable. Documentation of disability that meets the college's requirements will be required. It should be noted that the requirements for and the types of accommodation at the postsecondary level are based on the Americans with Disabilities Act and Section 504, and are often significantly different from the Individuals with Disabilities Education Act. For more information, see Access Office (p.).

International Applicants

International students, unless admitted under a contract or agreement establishing alternative requirements, must fulfill the following requirements for admission:

1. Complete the requirements for admission as a degree-seeking student.
2. Obtain the "International Student" information packet from the campus Enrollment Services office or review online (http://www.stlcc.edu/Admissions/Apply_to_STLCC/International_Student_Information.html).
3. Complete the equivalent of a 12-year elementary and secondary school program. An equivalent to the U.S. B average or better is required for courses taken at the secondary school level.
4. Submit official transcripts from secondary (high school) and higher education institutions. Transcripts from U.S. high schools, colleges, or universities should be sent directly from that institution to the office of the Registrar. *Transcripts must be certified and translated into English, contain descriptive titles of courses studied, contain final grades in each course, and provide an explanation of the grading system.* Students may contact World Education Services (www.wes.org) for assistance in translating a transcript.
5. Have all admission requirements and required documents on file 60 days before the start of classes if prospective students are still residing outside of the United States. Prospective students presently attending a college or high school in the United States must submit all materials 30 days before the start of classes.
6. Score 500 or above on the written TOEFL (Test of English as a Foreign Language) or 61 on the Internet-based TOEFL. The applicant must have taken the test within the last two years.
7. Submit a grade average of 3.0 on all course work completed at English language centers or for intensive English courses completed at other colleges or universities if prospective students are already in the United States. Students in regular academic programs at all other accredited institutions must have earned a cumulative grade point average of 2.0.
8. Submit a financial statement which certifies that they have adequate funds to carry them under normal conditions through their course of study

without the need for local financial assistance. This form must be notarized and completed within the last four months.

9. Provide proof of a health insurance plan for the term in which you are applying. The plan must include repatriation and medical evaluation. Students must submit verification documents to the Enrollment Services office before they can register for classes.

International students on F-1 Visas must comply with the following regulations:

- Complete a minimum of 12 credit hours per semester.
- Maintain a cumulative grade point average of 2.0 or above.
- Complete a certification program in not more than four semesters or an associate degree program in not more than six semesters, excluding summer sessions.
- If such a student completes fewer than 12 credit hours or earns a cumulative grade point average of less than 2.0, he or she will be placed on probation for the next semester of attendance.
- If the student completes fewer than 12 credit hours or earns a grade point average less than 2.0 while on probation, he or she will not be permitted to re-enroll.
- Foreign-born students (both permanent residents and refugees) should have a command of written and spoken English in order to successfully complete college work.

Orientation

New Student Registration Workshops

All first-time-in-college students are required to participate in a New Student Registration Workshop (NSRW). Students interact with advisors to review placement test scores and to discuss course scheduling. They also learn how to use the online registration system.

New Student Orientation

Following registration, all first-time-in-college students will participate in a New Student Orientation (NSO). Students will be oriented to classroom locations, college resources and expectations for college students. They will learn how to access and use the student email accounts, Blackboard and Banner Self-Service.

Re-Admission

Former students who have not attended St. Louis Community College for a semester may reapply as a re-entry student. If seeking a degree or certificate, transcripts of all college work not currently on file at STLCC must be sent directly to the Registrar's office.

Files for students who have not attended within five years will be destroyed. Transcribed grades earned at STLCC are retained. Students may be required to resubmit high school records, transcripts from other colleges and universities or other documents that may have been destroyed.

Change of Status

Students who wish to change from non-degree-seeking to degree-seeking should submit a Program/Major Change Form, available within Enrollment Services. Official transcripts from high school and/or college attended must be mailed to the Registrar's office. If applicable, submit the GED or HiSET test scores. Students with 15 or more credit hours of transferable college credit need not send a high school transcript unless requested by the Enrollment Services office. See Admission Classifications (http://www.stlcc.edu/Admissions/Apply_to_STLCC/Application_Types.html).

Individuals who have not successfully completed entry-level college courses in college composition and mathematics are required to take assessment tests.

Calendar

Academic Calendar 2017-18

Please note that there are various start, midterm, withdrawal and finish dates for classes during the semester, depending on the length of the class. Check class schedules for more specific information.

Fall Semester 2017

August

15-18	Service Days
21	Semester classes begin

September

2-4	Labor Day holiday (college closed)
11	First Day of 12-Week Classes

October

14	Midterm
16	Midterm grades due
16	First Day of 2nd 8-Week Classes
17	All College day (no classes)

November

10	Withdrawal deadline ¹
22	Fall Semester Break (no classes)
23-26	Thanksgiving holiday (college closed)

December

10	Last day of semester classes
11-17	Final exams
18	Grades due
21	Official degree conferral date
21	Last day college open until Jan. 2, 2018

Spring Semester 2018

January

2	College opens
8-12	Service days
15	Martin Luther King, Jr. holiday (college closed)
16	Semester begins

February

5	First day of 12-week classes
19	Presidents' Day holiday (college closed)

March

9	Midterm
12	Midterm grades due
12-18	Spring break (no classes)
13	Spring Staff Development Day (selected offices closed)
16-18	Spring holiday (college closed)
19	First day of 2nd 8-week classes

April

13	Withdrawal deadline ¹
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May

6	Last day of semester classes
7-13	Final exams
14	Grades due
17	Official degree conferral date
20	Commencement (tentative)

Summer Session 2018

May

15	First day of 3-week Classes
28	Memorial Day holiday (college closed)

June

3	Grades due for 3-week classes
4	First day of summer classes

July

4	Independence Day holiday (college closed)
29	Last day of summer term
30	Grades due for summer term classes

August

2	Official degree conferral date
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¹ Full-term classes only.

Community Programs

Project Lead the Way

St. Louis Community College is the post-secondary support partner for the St. Louis area, and provides leadership and support to area schools, and works with local business and industry partners. Through Project Lead the Way, students in high school can earn credit hours at the College in biological and engineering technology.

Project Lead the Way students also are required to take rigorous academic courses while in high school that better prepare them for college-level coursework. For additional information on Project Lead the Way credit or other Project Lead the Way activities, contact Brett Richardson at 314-539-5047 (<http://catalog.stlcc.edu/general-information/community-programs/tel:3145395047>).

Workforce Solutions Group

The Workforce Solutions Group of St. Louis Community College leverages education for growth in the knowledge economy by offering programs and services designed to advance people, businesses and communities. The Workforce Solutions Group accomplishes this through its operating units which include Corporate Services, Continuing Education and Community Services.

The Workforce Solutions Group and all of its operating units are centrally located at the Corporate College, a state of the art facility solely dedicated to corporate education and professional development. To learn more visit us online at stlcc.edu/workforce (<http://www.stlcc.edu/workforce>) or on Twitter: @STLCCworkforce (<http://www.twitter.com/STLCCworkforce>).

Advancing People

Continuing Education

Continuing Education (CE) advances people by enrolling 40,000 individuals annually in professional development or personal enrichment courses. More than 40 percent of individuals complete professional development training including CEUs toward a license or certification, while 60 percent seek personal enrichment opportunities.

Each year, CE offers more than 3,000 courses at various locations throughout the greater St. Louis region including campuses, extension centers and community partner locations. CE also offers a menu of educational opportunities online. To learn more visit CE online at stlcc.edu/ce (<http://www.stlcc.edu/ce>) or on Twitter: @STLCCce (<http://www.twitter.com/STLCCce>).

Advancing Businesses

Corporate Services

Corporate Services offers a comprehensive group of workforce solutions both locally and globally. The unit is one of the largest providers of training and consulting services in the St. Louis metro area, advancing more than 10,000 employees representing 100 regional companies on an annual basis in a wide range of training topics.

As a member of Global Corporate College's consortium of colleges, the unit is also able to offer enterprise-wide solutions for organizations with a national/international footprint. In addition, Corporate Services coordinates the onsite services available at the Corporate College through the Testing and Assessment Center, WorkKeys Solution Center and Meeting/Event Services. Visit stlcc.edu/corporate (<http://www.stlcc.edu/corporate>) to learn more.

Advancing Communities

Community Services

Community Services advances local communities by partnering with employers, community organizations, education and government to create job training opportunities for residents and a talent pipeline for employers.

Community Services also delivers an array of accelerated training programs providing marketable job skills, usually in less than one semester as well as reaching out to underserved communities through our location in the Metropolitan Education and Training (MET) Center, a collaborative neighborhood training and support center. Visit stlcc.edu/community-services (<http://www.stlcc.edu/community-services>) to learn more.

Fees and Refunds

Residency Status

Because much of the support for St. Louis Community College comes from state funds and local taxes, students who live within the service area of the college pay a small part of the cost of their education. The service area includes St. Louis City, St. Louis County and portions of Franklin and Jefferson counties which are part of the Meramec Valley R-3 School District and the Rockwood R-6 School District. Students may be required to submit an affidavit showing residency.

A resident student is defined as follows:

1. An unemancipated minor student who has not attained the age of 21 and is under the care, custody or support of the individual or individuals having legal custody of the student and who live in the district.
2. An emancipated minor student who has not attained the age of 21 and who is not under the care, custody and support of an individual or individuals having legal custody, but lives in the district.
3. An adult student who has attained the age of 21 and who has established residency within the St. Louis Community College district.
4. A non-immigrant unemancipated minor alien student, holding a visa type B, F, H (except H-1B), J, M, O-2, P or Q and who is a legal dependent of an individual(s) who holds permanent alien status or who holds a visa in a category other than those specified above and who lives within the district.
5. A non-immigrant alien holding a visa in a category other than those specified above will be assessed in-district fees if he/she has established residency within the district.

Burden of Proof

The burden of proof to establish eligibility for resident status rests completely with the student. The factual criteria used to determine resident status is as follows:

- Missouri voter or automobile registration
- Missouri domicile lease/deed
- Missouri driver's license with current address
- Missouri personal property tax receipt
- Marriage license and any of the above documentation identifying district residence of spouse
- Paycheck from employer with employee's home address as part of check information
- Proof of checking account with home address on checks
- Utility bill showing home address

Refer all questions concerning residency to the Enrollment Services office.

Fees

Student fees are one of the three primary sources of operating funding for St. Louis Community College. State funds, appropriated by the Missouri legislature and approved by the governor contribute some 28 percent. Another 39 percent of total revenue comes from local property owners who pay taxes within the college's taxing district. Student fees account for 29 percent of the funds for the college's operating budget. The other four percent comes from other miscellaneous sources.

Electronic Billing Notification

Students normally pay fees in full when registering. The college sends monthly electronic billing notifications to students with a balance due throughout each term, to their my.stlcc.edu email account.

The college accepts cash, checks, MasterCard, Visa, American Express and Discover for payments made at the Cashier's office. Checks will be processed as automated clearing house (ACH) network debit. In addition, the college accepts online payments when using the credit cards mentioned above or ACH payments using checking or saving account information. Check with the Cashier's office concerning fee payment.

The college reserves the right to charge a transaction fee if other special services are required. The college has a \$25 bad check processing fee.

In Case of Outstanding Debt

Students must have no outstanding debt with St. Louis Community College in order to register for credit or continuing education classes or program, engage any new services, or receive a transcript. Debt for maintenance fees incurred through returned checks, failed payment plans or failed financial aid may cause the student to be dropped from classes and refunded in accordance with the college's published refund guidelines.

If a student is not paid in full or signed up for the payment plan, a financial hold will be placed against the student's record until this debt has been cleared.

Classes may be dropped if financial arrangements have not been made prior to the payment due date.

Fees for Seniors

Residents of the college service area, who are 60 years and older, may enroll for half the usual fees. Missouri residents ages 65 years and older, may enroll on an audit (no credit), space available basis in any credit course for a \$15 non-refundable registration fee.

For a current schedule of maintenance fees, visit stlcc.edu/fees (http://www.stlcc.edu/Admissions/Tuition_and_Ways_to_Pay/Index.html) or contact a campus Enrollment Services office, or cashier's office.

Additional Fees

Course Fees: Students enrolling in courses that require special equipment, field trips, insurance, etc., will be charged additional fees. These are outlined in course information.

Fees for International Students

Maintenance fees for international students residing in the United States on non-immigrant visas will be assessed according to their visa category and their residency. Those on permanent resident visa will be charged district fee rates based upon appropriate documentation. Contact the Enrollment Services office.

Payment Plan ¹

The college offers an automatic payment plan for fall and spring semester maintenance fees (tuition) which is available for a \$21 fee per semester. This plan is not a loan program, but a service that automatically deducts maintenance fees from a bank account or credit card. There is no interest or finance charge assessed, and there is no credit check. Flexible payment options are available—the sooner students sign up, the more months they have to pay. Enrolling online is simple, secure and easy. Go to stlcc.edu/paymentplan (http://www.stlcc.edu/Admissions/Tuition_and_Ways_to_Pay/e-Cashier.html) for more information.

¹ Details of the payment plan are subject to change. For the latest information, go to [stlcc.edu/paymentplan](http://www.stlcc.edu/paymentplan) (http://www.stlcc.edu/Admissions/Tuition_and_Ways_to_Pay/e-Cashier.html).

Medical/Job Related Withdrawals

If a student withdraws from all classes for medical or job-related reasons, he/she may receive a pro-rated refund when acceptable evidence of the necessity to withdraw (verified by a physician/employer) is presented. An instruction sheet detailing the procedure is available from the Enrollment Services office.

Active Duty Military Service

A refund for classes in progress will be issued to students forced to withdraw as a result of being called to active duty military service.

It is the responsibility of the student to complete withdrawal procedures and submit a copy of military orders.

For more information on withdrawals and the latest on policy changes concerning Veterans, see [stlcc.edu/veterans](http://www.stlcc.edu/Admissions/Get_Started/Information_for_Veterans/Index.html) (http://www.stlcc.edu/Admissions/Get_Started/Information_for_Veterans/Index.html).

Refunds

Students withdrawing from a course prior to or during the early part of the semester will be eligible for a refund of fees based on the following schedule.

After the 50 percent refund period, no refunds will be given.

Length of Course	80% Refund Before the End of the	50% Refund Before the End of the
16 week session ¹	2nd week of session	3rd week of session
15 week session	1st week of session	3rd week of session
14 week session	1st week of session	3rd week of session
13 week session	1st week of session	3rd week of session
12 week session	1st week of session	3rd week of session
11 week session	1st week of session	2nd week of session
10 week session	1st week of session	2nd week of session
9 week session	1st week of session	2nd week of session
8 week session	4th day of session	2nd week of session
7 week session	3rd day of session	1st week of session
6 week session	3rd day of session	1st week of session
5 week session	2nd day of session	1st week of session
4 week session	2nd day of session	1st week of session
3 week session	1st day of session	3rd day of session
2 week session	1st day of session	2nd day of session
1 week session	1st day of session	None

¹ For 16-week course, 100 percent of the course fee will be refunded during the first week of class designated as the official drop/add period.

Federal Financial Aid (Title IV) Recipients

Refunds

Refunds to all Title IV recipients who withdraw during an enrollment period for which they have been charged will be identified and processed to comply with federal regulations.

Title IV of the Federal Higher Education Act (HEA) requires that students who receive federal grants (Federal Pell Grant, Federal Supplemental Educational

Opportunity Grant) and federal loans repay some of their federal financial aid if they do not attend class through 60 percent of the term. Most students who do not attend at least one class through the 60 percent point of the term will owe some of their Title IV aid back to the U.S. Department of Education.

Please refer to the following website for more information about the return of unearned Title IV funds as required by HEA Title IV law and regulations: [stlcc.edu/apply](http://catalog.stlcc.edu/general-information/fees-refunds/%20http://www.stlcc.edu/Admissions/Get_Started/Enrollment_Overview) (http://catalog.stlcc.edu/general-information/fees-refunds/%20http://www.stlcc.edu/Admissions/Get_Started/Enrollment_Overview).

Unearned Funds

When the Federal Higher Education Act (HEA) of 1965 was amended in 1998, a new concept was established with regard to HEA Title IV student financial aid programs. The new concept is that students earn their Title IV federal financial aid; if they do not stay enrolled long enough to earn all of their aid, then some of the aid has to be returned to the HEA Title IV programs as unearned Title IV aid. Colleges are required to implement the return of unearned Title IV funds policy.

HEA Title IV financial aid programs include Federal Pell Grant, Federal Supplemental Education Opportunity Grant (FSEOG), Federal Work-Study (FWS), and Federal Stafford Loans. Federal Work-Study earnings are NOT affected by HEA Title IV law and regulations concerning the return of unearned federal financial aid. Only grants and loans are impacted by the new policy.

Students who want to withdraw from a course(s) should withdraw from the course(s) by using the appropriate form that is submitted to the Enrollment Services office. The return of unearned Title IV funds policy will impact only those students who withdraw from all of their courses before 60 percent of the semester is completed. The policy will affect those students who do not withdraw from their course(s) but simply cease to attend classes. Pursuant to federal guidelines, the college will determine a last date of attendance for those students.

Unearned HEA Title IV funds are returned to the Title IV programs based on a federally mandated formula. Under this formula, colleges are obligated to return unearned funds used for institutional charges and students are obligated to return unearned funds beyond the institutional charges.

When College Returns Unearned Funds

When a college has to return unearned Title IV funds from institutional charges, the money is returned to programs in the following order: Unsubsidized Federal Stafford Loans, Federal PLUS Loans, Federal Pell Grants, Federal SEOG, other Title IV assistance. The Access Missouri Assistance Program (Missouri state grant) potentially falls in the category of other Title IV assistance, since state grant programs receive some of their funds through HEA Title IV.

When Student Returns Unearned Funds

When a student has to return unearned Title IV funds that he/she received beyond the institutional charges, the money is returned to the programs in the following order: Unsubsidized Federal Stafford Loans, Federal PLUS Loans, Federal Pell Grants (multiplied by 50 percent), Federal SEOG (multiplied by 50 percent), other Title IV assistance (multiplied by 50 percent for grants). Note that student's responsibility for repayment of unearned Title IV money is reduced by one-half.

Unearned Funds from Federal Loan

If a student owes unearned Title IV funds from a federal loan, the money is returned (repaid) in accordance with the terms and conditions of the promissory note.

Unearned Funds from Federal Grant

If a student owes unearned Title IV funds from a federal grant, the college must notify the student within 30 days of determining the student's withdrawal. The student retains eligibility for Title IV funds from an initial 45-day period, during which one of the following should happen:

1. Student repays unearned Title IV grant money in full, or
2. The student makes satisfactory arrangements with the U.S. Department of Education (USDE) to repay the unearned Title IV grant money. If the student does not take one of these two steps, he/she loses eligibility for HEA Title IV funds.

The institutional charges (maintenance fees) incurred by the student are considered to be paid by HEA Title IV funds for the purpose of the formula, even if the institutional charges were directly paid by a source other than Title IV funds. USDE give colleges the option of billing students for unearned HEA Title IV funds that the school has to repay as part of the institutional charges.

Example of Unearned Funds Formula

The following is an example of the HEA Title IV return of unearned funds formula supplied by USDE:

A student withdrew from all courses with 40 percent of the days in the semester completed. The student paid \$1,000 in institutional charges (maintenance fees). This student received \$3,000 in HEA Title IV aid - \$1,000 in a loan and \$2,000 in grants. The student earned \$1,200 of the of the Title IV aid (40 percent times \$3,000). The unearned Title IV aid is \$1,800 (\$3,000 minus \$1,200).

Because only 40 percent of the HEA Title IV aid is earned, the college has to return \$600 of the \$1,000 paid in institutional charges to Title IV programs (\$1,000 minus \$400). Since loans are prioritized for return of unearned funds, the \$600 is paid to the student's federal loan.

The student now owes \$1,200 in unearned Title IV funds, the difference between the \$1,800 total of unearned Title IV funds and the \$600 that the school has paid back from institutional charges. Because loans are prioritized for the return of funds, \$400 is paid to the federal loan by the school for unearned institutional charges.

The remaining \$800 in unearned Title IV aid (the \$1,800 minus the \$600 in unearned institutional charges paid to the loan and the \$400 in unearned aid to the student paid to the loan) is owed to the federal grants. Because the student's liability for return of unearned Title IV aid to grants is reduced by 50 percent, the student owes \$400 to the federal grant program.

Financial Aid

St. Louis Community College provides a comprehensive financial aid program funded by federal, state and private agencies. Aid awards fall into four categories:

1. Grants
2. Scholarships
3. Loans
4. Work

Although superior ability and talent are recognized through the college's and other scholarship programs, most aid is awarded on the basis of financial need.

It is not within the scope of this catalog to explain all of the financial aid programs available. More information explaining the programs is available, along with an application, at stlcc.edu/financialaid (http://www.stlcc.edu/Admissions/Financial_Aid).

Apply Early for Aid

Need help paying for college? If so, you are encouraged to complete the Free Application for Student Financial Aid (FAFSA) as soon as possible after Jan. 1 once you've filed your income taxes.

Visit fafsa.gov (<http://catalog.stlcc.edu/general-information/financial-aid/fafsa.gov>) to apply for financial aid and a personal identification number (PIN). Be sure to use the STLCC school code 002469 when filling out the online FAFSA.

Remember, you must be admitted to STLCC with degree-seeking status to receive financial aid. This includes submitting transcripts from high school, GED, and/or all colleges previously attended, and completing placement test requirements. Submit official college transcripts to the Registrar's Office.

After completing your FAFSA, check the status of your financial aid application at stlcc.edu/selfservice (<http://catalog.stlcc.edu/general-information/financial-aid/stlcc.edu/selfservice>). Information about financial aid, scholarships, federal grants, loans, work study and Missouri state programs is available at stlcc.edu/financialaid (<http://catalog.stlcc.edu/general-information/financial-aid/stlcc.edu/financialaid>).

Maintain Satisfactory Grades

Students are expected to maintain satisfactory grades to remain eligible for aid. A 2.0 cumulative grade point average is required. See "Satisfactory Academic Progress." Grades of F, W, I, PR and U are not acceptable toward meeting these requirements.

At the end of each session, progress is assessed. Students who do not meet the requirements will be placed on financial warning the next session of enrollment. During the financial warning session, financial aid eligibility may be continued. Failure to meet the criteria during the financial warning semester will result in suspension and termination from Title IV aid. Students, who fail, withdraw or receive an Incomplete for all classes in which they enroll will not be eligible for financial aid the next semester of enrollment.

Students may appeal termination of financial aid by writing a letter of appeal and submitting to the campus Financial Aid office. Students must document any extenuating circumstances that prevented them from maintaining the required standards.

Veterans and Other Aid

Detailed information about services for veterans is available from the veteran's services representative in the Enrollment Services office.

Students may be eligible for financial aid from agencies such as Department of Mental Health, Department of Vocational Rehabilitation and Rehabilitation Services for the Blind. Students must make their own arrangements for such aid.

A+ Program

Under grants made available through the Missouri A+ Schools Program, qualified graduates of participating high schools are eligible for scholarship grants to St. Louis Community College. Students must fulfill A+ Program requirements at the high school before applying for grants. Students should contact high school counselors for eligibility requirements. Information also available at: stlcc.edu/Aplus (<http://www.stlcc.edu/Aplus>).

Policies & Procedures

Student Rights and Responsibilities

Students are expected to assume responsibility for their actions; to know and obey federal, state and local laws; and to know and obey the rules and regulations of the college. For more information on Student Rights and Responsibilities, the Academic Appeals process, the Grievance/Disciplinary Appeals process, the Suspension Appeals process and the Grievance Process for Persons with Disabilities, go to [stlcc.edu/need2know](http://www.stlcc.edu/need2know) (<http://www.stlcc.edu/need2know>).

Consumer Information

St. Louis Community College is required by the Higher Education Amendments of 1998, Public Law 105-244, to provide information regarding several consumer-education related topics. Those topics include: general information about St. Louis Community College, financial aid information for St. Louis Community College, St. Louis Community College's Completion/Graduation/Transfer Rates Report, Campus Crime Statistics (Clery Act Report), Drug and Alcohol Abuse Program Report, Equity in Athletics (Title IX) Report and Intercollegiate Athletics Annual Revenue/Expenditures (Title IX) Report.

For more information on consumer topics, go to [stlcc.edu/need2know](http://www.stlcc.edu/need2know) (<http://www.stlcc.edu/need2know>).

Enrollment and Attendance

Credit/Course Load

The unit of credit is the semester hour. Normally, one credit may be earned in a lecture course which meets for one hour each week during a semester. In a laboratory course, one credit usually is granted for two to three hours in a lab each week during the semester.

Course load is the total number of credit hours spent in class each week during a semester. Students enrolled in at least 12 credit hours are classified as full-time and normally carry a course load of 12 to 18 credit hours. Students intending to register for more than 18 credit hours must obtain approval from the campus Counseling office, or an academic advisor.

Student ID Cards

All students enrolled in credit courses are required to activate a STLCC OneCard. Photos can be taken in the Campus Life office at Florissant Valley, Forest Park and Meramec, or the Information Desk at Wildwood, South County Education and University Center, and Harrison Education Center. This card is the college's student identification card and can be used as a disbursement card for payments/refunds to student accounts. Students are required to select a refund preference to receive any credit due. The card is also required for checking out library books and other materials; for use of the game room, recreational facilities, and learning labs; attending student activities and sporting events; and for personal check approval. Students will be charged \$20 for a replacement card.

Class Preparation

On average, at least two hours of outside study and preparation are needed for each hour of regular classroom work. Students enrolled for 15 credit hours, therefore, should budget a minimum of 30 clock hours per week for study outside class and laboratory meetings.

Final Examinations

A final examination or other culminating experience is usually required for completion of a course and for a passing grade. Absences from the final examination and the privilege of a make-up examination must be approved by the instructor.

Grade Reports

The Registrar's office maintains records of academic performance for all currently enrolled students. Grades indicating performance following mid-semester may be obtained directly through the instructor in accordance with the regulations contained in the Family Educational Rights and Privacy Act of 1974. These grades are an assessment of academic progress, but are not recorded as part of the permanent record. Mid-semester grades are not reported for any session. Final grades become part of students' permanent records.

Student Grades

Students may view their final grades and print an unofficial transcript by visiting [stlcc.edu/selfservice](http://www.stlcc.edu/selfservice) (<http://www.stlcc.edu/selfservice>) and logging in to their student account.

Repeating Courses

When students repeat a course, the latest grade earned will be used in calculating grade point average. However, all enrollments and grades earned will appear on the transcript. Students must have authorization from a counselor or advisor before a third enrollment in the same course.

Some transfer schools will recalculate grade point averages for admissions purposes and include all grades earned.

Attendance and Withdrawal

Students are expected to attend classes. Excessive absences, as determined by the instructor, may result in a failing grade. Attendance requirements should be outlined during the first class meeting.

At the end of the second week of classes (first week for summer session), students who have registered and paid for a class but are reported by the instructor as never attended will be withdrawn. Classes less than a full semester in length may have different administrative withdrawal dates. The class will be shown on the transcript with a grade of W, and students may be eligible for a refund of a portion of fees. After this period the instructor cannot withdraw students from class. It is always the student's responsibility to initiate a withdrawal.

Students deciding to withdraw from a class are encouraged to talk to the instructor first. To formally withdraw, students must submit official forms to the Enrollment Services office. To receive a grade of W for the course, the withdrawal process must be completed prior to the end of the college's 12th week of classes. Late-start and short-term courses have different withdrawal deadlines. Contact the Enrollment Services office for appropriate dates.

Prolonged Absence from College

Following an absence from the college of 10 consecutive calendar years, former St. Louis Community College students may apply for a one-time recalculation of grade point average with academic forgiveness. Students must apply during their first semester of reenrollment after the 10-year absence. All coursework below "C" will be removed from the GPA calculation. Coursework removed from GPA calculation cannot be used to meet degree requirements.

All courses will remain on the transcript.

Grading System and Grade Point Average

The following grading symbols and points are used:

Grading Symbols	Grade Points	Explanation
A	4	superior
B	3	above average
C	2	average
D	1	passing, below average ¹
F	0	failure

¹ The grade of D may be considered unsatisfactory for progress in some programs.

Only grades earned at St. Louis Community College are included in the calculation of grade point averages for degrees and certificates.

The Following Symbols Also May Appear on Students' Transcripts

R—Credit—This signifies that credit has been earned by examination or prior learning assessment.

T—Audit—This is an enrollment status that signifies no intent to earn credit. It carries no implication concerning class attendance or skill accomplishment. The same fees and requirements as regular class members are expected. Students may change from audit to credit status or credit to audit status only during the period in which the 50 percent refund policy is in effect.

¹**S—Satisfactory**—A symbol indicating the award of credit. The earned credits count toward graduation, but are not used in grade point average calculations.

¹**U—Unsatisfactory**—A symbol indicating the award of no credit and no grade points.

I—Incomplete—This normally indicates students have completed a major portion of the work in a class and, for reasons approved by the instructor, are prevented from completing the amount of coursework required during the regular college term. Students must complete the coursework in the time frame established by the instructor, up to one calendar year, in order for the "I" to be changed to a letter grade. Student and instructor must enter into a written agreement describing the work to be completed, the grading criteria, and the time frame for completion. Upon satisfactory completion of all work by the student, the instructor will initiate an appropriate grade change.

After one year, if all requirements are not met, the "I" will change to a permanent grade of "F" on the student's academic record. With the consent of the instructor, the one-year limit may be extended by the instructor, the department chair or dean. The written agreement must be given to the department chair, who, if an instructor leaves the employ of St. Louis Community College, will assure evaluation of any work that might be completed.

PR—Progress Re-enroll—Students who make progress in a course, but do not complete the predetermined minimum amount of course work may, at the discretion of the instructor, be given a PR. This symbol represents no credits earned and carries no grade point value. Students are permitted to take the course again, but must pay tuition a second time.

W—Withdrawal—A transcript notation that reflects withdrawal.

NG—No Grade—This is a temporary indication that the instructor has not assigned a grade.

¹ Grades of S or U can be awarded only in courses approved for this purpose under guidelines developed by the college.

Health and Safety

Text Alerts

You can receive important and urgent "alert" messages from St. Louis Community College through the STLCCAlert Twitter account. You do not need a Twitter account to sign up for this alert. Messages and notifications will be sent by SMS to your cell phone.

It's simple to sign up – simply text "Follow STLCCAlert" to 40404 from your mobile phone. Messages tweeted through this account will be received as a text message on your phone. Your mobile plan's text message rates will apply. Or, you may scan the QR code with your Smart Phone to activate your STLCC Alert Twitter account.

Closing Procedures

The decision to cancel classes, delay the start time of classes, or close a campus due to weather or other emergency situations lies with college administration. Upon this decision, closings will be announced on the following stations:

- KMOX (1120 AM);
- KMOX-TV, Channel 4;
- KSDK-TV, Channel 5; and
- KTVI-TV, Channel 2.

This information is also available on [stlcc.edu](http://www.stlcc.edu) (<http://www.stlcc.edu>). See Text Alerts in this section for more information on receiving urgent messages from STLCC.

Title IX: Sexual Misconduct

St. Louis Community College is committed to providing an academic and work environment that is free from sexual misconduct. The College's policies and response to incidences of sexual misconduct are meant to comply with Title VII, Title IX, and the Violence Against Women Act (VAWA), as well as the Department of Education's Office of Civil Rights' Dear Colleague Letters from 2011 and 2014. In accordance with this guidance, STLCC is committed to the following:

- Designating a Title IX Coordinator;
- Publishing a notice of non-discrimination;
- Taking immediate, appropriate action to investigate or otherwise determine what occurred once the College knows or reasonably should have known about possible Sexual Misconduct;
- Providing a procedure to resolve complaints of Sexual Misconduct that:
 - Provides both the person making the complaint ("Complainant") and the person accused of having engaged in Sexual Misconduct ("Respondent") with an equal opportunity to present witnesses and other evidence;
 - Uses the preponderance of evidence standard (i.e., more likely than not that a violation of College policy occurred) in determining whether a violation of Policy occurred;
 - Provides both the Complainant and Respondent equal access to appeal; and

- Notifies both the Complainant and Respondent of the outcome of the procedures in accordance with applicable law;
- Training the staff and faculty that will implement these procedures on behalf of the College;
- Taking prompt, effective steps to end Sexual Misconduct, prevent its recurrence, and address its effects, regardless of whether or not the alleged Sexual Misconduct is the subject of a criminal investigation; and
- Providing resources as well as accommodations and interim measures, when appropriate, to individuals who report Sexual Misconduct.

More information about the policy and a list of Title IX team members is available at stlcc.edu/need2know (<http://www.stlcc.edu/need2know>).

Firearms on College Property

No person (except for licensed police officers) shall possess or carry any firearm, visible or concealed, on college property (including college buildings and grounds – leased or owned by the college – college athletic fields and parking lots) or in any college vehicle or at college sponsored events on or off college property.

Tobacco Free Policy

The college is committed to providing an environment that is safe and healthy. Use of tobacco products, illegal substances, and all forms of electronic smoking devices is prohibited on all college property and in all college vehicles. There will be no designated smoking areas within the property boundary. Violators may receive disciplinary action.

Drug Abuse Prevention Information

St. Louis Community College is committed to providing a positive and healthy environment for students and employees. As citizens, students are subjected to the rules of accountability imposed by federal, state and local laws. The criminal penalties for violations may include fines, restitution, imprisonment, loss of driving privileges and other sanctions. Students of St. Louis Community College assume the obligation to conduct themselves in a manner compatible with the college's function as an educational institution. Therefore, the use of, being under the influence of, possession of, or distribution of alcoholic beverages or illegal drugs on campus or at any college-sponsored function will result in disciplinary action.

Students found to have violated their obligations as described above will be subject to the following sanctions: censure, disciplinary probation, restitution, compensatory service, suspension and/or dismissal.

For more information, go to stlcc.edu/need2know (<http://www.stlcc.edu/need2know>).

Unattended Children

Students are not permitted to bring children to class, nor should children be left unattended in the halls, offices, library, student center or outside on campus property. The college reserves the right to protect the safety and welfare of unattended children. If students leave children unattended, the college will institute appropriate disciplinary action.

Program Information

Degrees and Certificates Offered

The college offers five associate degrees, the certificate of proficiency and the certificate of specialization. Most of the college's degrees and certificates are designed to be taken on a full- or part-time basis. Degrees can be completed in two years of full-time attendance. Certificates usually can be completed

in one or two semesters. However, since most students attend classes part time, degrees and certificates can take longer to complete. (See "Degree and Certificate Time Limits.")

- The **associate in arts degree** is designed for students who plan to transfer to another college and work toward a bachelor's degree.
- The **associate of arts in teaching degree** is designed for students who plan to transfer to another college and work toward a bachelor's degree in teacher education.
- The **associate in fine arts degree** is offered jointly with the University of Missouri-St. Louis and is designed for students who plan to transfer to UM-St. Louis and earn a bachelor of fine arts degree.
- The **associate in applied science degree** helps students develop practical and theoretical skills that prepare them for entry-level jobs.
- The **associate in science degree** is designed to transfer to a particular institution in a specialized area.
- The **certificate of proficiency** is for persons whose intended job does not require an associate degree. It also is for persons who wish additional information/skills in a particular subject area.
- The **certificate of specialization** is for persons who desire information/skills in a specific area usually related to a current job.

Change of Program

Students can change programs by filing a form available from the Enrollment Services office.

In some cases, the student may request academic records be re-evaluated to establish a new cumulative grade point average. Any grades below a D for courses taken at the college will not be included in the new cumulative grade point average. Other courses will be accepted if they fulfill degree requirements in the new program. Coursework removed from GPA calculations cannot be used to meet degree requirements.

All courses will remain on the transcript.

Requirements for Graduation

Requirements for an associate degree are as follows:

1. Status as a degree-seeking student.
2. Satisfactory completion of one of the programs listed in this catalog.
3. Completion of a minimum of 60 credit hours. Fifteen credit hours of transferable credit applicable to the associate degree must be completed at St. Louis Community College.
 - a. A maximum of four credit hours from courses numbered below :100 may apply as unspecified electives toward the associate degree. Credit hours below :100 may not be applied as electives defined by discipline, such as "science-mathematics elective" or "humanities-communications elective."
 - b. A maximum of nine credit hours in special problems courses may apply as unspecified electives toward the associate degree. Special Problems courses may not be applied as electives defined by disciplines such as "science-mathematics elective" or "humanities-communications elective."
4. A cumulative grade point average of 2.0 (C) or higher. Credits from previously-attended colleges are not computed in the average.
5. Missouri Requirement: The course requirements in federal and state constitutions and American history and institutions must be met by the satisfactory completion of one of the following courses:

HST 102	United States History from 1865 to the Present	3
HST 105	United States in the Twentieth Century	3
HST 107	The African American Experience, 1619 to the Present	3
HST 137	African American History through Reconstruction	3
HST 138	African American History from Reconstruction to the Present	3
HST 206	Women in United States History	3
PSC 101	Introduction to American Politics	3
PSC 103	State and Local Politics	3
PSC 205	Constitutional Issues	3

7. College policy requires students who apply for a degree to participate in an appropriate outcomes assessment prior to degree being awarded. (See Exit Assessment.)

Requirements for certificates of proficiency and specialization are as follows:

1. Degree-seeking student status
2. A cumulative grade point average of 2.0 (C) or higher
3. Two-thirds of all credit hours required for certificates must be completed at St. Louis Community College

Note: Completion of graduation requirements does not mean professional certification or registration or approval to sit for board or licensing examinations.

Second Associate Degree

Persons who wish to receive a second associate degree must earn 15 additional credit hours and complete all academic requirements for the additional program.

Application for Graduation

Students preparing to graduate with a degree or certificate must file a graduation application with the Enrollment Services office no later than March 1 for spring, June 20 for summer and Oct. 1 for fall. Students who wish to change from non-degree-seeking to degree-seeking should complete all admission requirements for a degree-seeking student. (See "Change of Status.")

Degree date reflects the term of application for graduation. All degree requirements must be completed within two weeks of the official graduation date. Any exceptions must be approved by the chief campus academic officer. Students who do not complete degree requirements within the two-week period will need to reapply for graduation in the following term or later, depending on when all requirements for graduation have been met.

Degree and Certificate Time Limits

Students are expected to complete degree and certificate requirements within six years of the date the program of study was declared.

Students failing to meet the original time limit must meet the degree and certificate requirements of any catalog in effect within six years of the semester and year of application for graduation.

Former STLCC students returning to the college may not continue the original program of study if the program was deactivated prior to their re-entry.

Honors

Transcripts and diplomas of graduates who have earned cumulative grade point averages of 3.5 or higher will be designated With Academic Honors.

Transcripts and diplomas of graduates who have earned cumulative grade point averages of 4.0 will be designated With Highest Academic Honors.

Full-time students who are enrolled in at least 12 credit hours and who earn current grade point averages of 3.5 or higher will be designated Dean's List for that semester.

Part-time students will be designated Dean's List at the accumulation of each increment of 12 credit hours with a grade point average of 3.5 or higher.

Satisfactory Academic Progress

All students are expected to make satisfactory academic progress.

1. Good Standing—Cumulative 2.0 GPA after completing at least six credit hours.
2. Academic Probation—Less than a cumulative 2.0 GPA after completing at least six credit hours.
3. Academic Probation/Restricted Probation/Suspension—Students on academic probation will not be allowed to self-advise. Once placed on probation, a student must achieve a cumulative GPA of 2.0 in the next academic term in which he or she is enrolled, or be placed on restricted probation. Students on restricted probation must sign a contract with the Counseling office stipulating conditions for remaining enrolled at the college. Students on restricted probation have two terms in which to raise their GPA to 2.0. Those that fail to do so will be suspended from the college for one academic year.

Student Records

Transfer Credit

To be eligible for acceptance of previously-earned credit, students must be currently enrolled at St. Louis Community College as a regular student (seeking a degree or certificate) with a declared program of study.

Students should have official transcripts mailed to the Registrar's office and request an evaluation of previously earned credits.

Transcripts from other postsecondary institutions and military service will be evaluated. Credits in which passing grades have to be earned will be accepted and counted in transfer as they fulfill STLCC's program and degree requirements. Transfer credits will be evaluated for degree and prerequisite requirements in the same manner as credits earned at St. Louis Community College.

A transfer student may invoke the college's transfer appeals process to challenge institutional decisions on the acceptance of credits from regionally accredited Missouri public colleges and universities or those that have been advanced to candidacy status by the Higher Learning Commission of the North Central Association.

Accepted transfer credits will be included in the cumulative hours credit at STLCC. Grades earned at other institutions are not recorded and are not made part of the cumulative grade point average at STLCC.

Transcript Services

Official transcripts of grades and credit hours earned at the college are issued only by the Registrar's office at this location and address:

Registrar's Office
St. Louis Community College
300 S. Broadway
St. Louis, MO 63102-2800
314-539-5159 (<http://catalog.stlcc.edu/general-information/policies/student-records/tel:3145395159>)
stlcc.edu/transcript (<http://www.stlcc.edu/transcript>)

Transcripts may be requested by completing a transcript request form at stlcc.edu/transcript (<http://www.stlcc.edu/transcript>).

A \$5 fee is required for each transcript. Transcripts will not be processed for students with outstanding financial obligations at the college, such as library, parking fines, outstanding loans or financial aid debt.

Students with access to Banner Self-Service may view grades and print unofficial transcripts by going to stlcc.edu/selfservice (<http://www.stlcc.edu/selfservice>) to log in to their information.

Unofficial free transcripts are available through a campus advising office. Students are advised to purchase a copy of an official student transcript for their records and for making copies as needed.

Transfer to Another School

Admission regulations for transfer students vary among receiving colleges and universities. Therefore, students planning to transfer credits to another college or university should contact the college or university prior to enrollment. Although the acceptance of credit is at the discretion of the transfer school, STLCC does have articulation agreements that can facilitate transfer. Generally, college transfer program courses will satisfy various department, elective and degree requirements at receiving schools. Although career programs and courses are designed primarily to support transition to work, some courses and programs are accepted by other colleges and universities. Students in career programs who plan to transfer should check with the receiving school to learn more about what will transfer.

Students completing STLCC's Missouri General Education requirements will receive certification on their transcripts. This certification satisfies all general education requirements of Missouri public colleges and universities except the University of Missouri-Columbia. The University of Missouri-Columbia will accept the General Education block if the Associate in Arts degree has been completed.

The following Missouri colleges are signatories of the General Education agreement:

Missouri Two-Year Institutions

Crowder College
East Central College
Jefferson College
Metropolitan Community College
Mineral Area College
Moberly Area Community College
North Central Missouri College
Ozarks Technical Community College
St. Charles Community College
St. Louis Community College
State Fair Community College

Three Rivers Community College

Missouri Four-Year Institutions

Culver-Stockton College
Harris-Stowe State University
Lincoln University
Missouri Southern State University
Missouri State University
Missouri Western State University
Missouri University of Science and Technology
Northwestern Missouri State University
Truman State University
University of Central Missouri
University of Missouri-Kansas City
University of Missouri-St. Louis

National Student Clearinghouse Services

The college has contracted with the National Student Clearinghouse to provide services to third parties and to students. Third parties can obtain degree verification, verification of attendance and current enrollment information at www.studentclearinghouse.org/ (<http://www.studentclearinghouse.org/>). Choose the Degree and Enrollment Verifiers tab at the top of the page.

Students with access to Banner Self-Service can print enrollment verification certificates to send to health insurers, housing providers or other organizations requiring proof of enrollment. They can also check loan information, view enrollment history and view enrollment verifications provided to third parties.

Credit for Prior Learning

St. Louis Community College participates in several programs designed to evaluate educational experiences obtained through nontraditional college programs. These programs are designed to assist the college and the student to equate previously acquired knowledge in terms of college credit. Students should be advised that different colleges use different policies on the acceptance of Credit for Prior Learning. St. Louis Community College cannot guarantee the transferability of prior learning credit that has been awarded by another institution. Credit is recorded on the student's transcript and identified with "R" instead of a grade. Students are encouraged to consult with an academic advisor regarding the use of Credit for Prior Learning in their educational planning.

College Level Examination Program (CLEP)

The College Level Examination Program (CLEP) is designed to evaluate your college-level learning, no matter how or where the learning took place. CLEP examinations, designed by the College Entrance Exam Board, are divided into two types, general and subject. St. Louis Community College will grant credit for subject exams. When the exam is similar in content to a course offered by St. Louis Community College, credit will be equated to a specific course. When no course equivalent exists at St. Louis Community College, credit may be granted as elective hours in the same field as the examination. Students who have college credit should note that credit will not be given for CLEP exams if the student has college credit for the equivalent course.

Advanced Placement (AP)

Students who have successfully completed college-level courses while still in high school may be eligible for credit or placement if they make satisfactory scores on the Advanced Placement Examination sponsored by the College Board. Participating high schools administer AP exams at the end of the course. Students interested in college credit or advanced placement should have the

test scores sent to the Registrar's office. College credit is granted for students earning a minimum score of three on the exam.

Departmental Examinations

A student who has acquired subject matter knowledge taught in a particular course—by reading, job training, etc.—may petition to receive credit in a course by attempting an examination. The student should discuss with the appropriate department chairperson whether he/she is properly prepared to take the exam. The chairperson can refuse permission to a student he/she feels is insufficiently prepared. Tutoring is not provided, nor is passing the exam guaranteed. The exam is graded on a pass-fail basis and no letter grade is given. The student's transcript shows the grade symbol "R"—credit by examination. Students planning to transfer should know that some institutions do not accept credit by examination. Students who are considering St. Louis Community College departmental examinations may initiate this procedure by completing an Application for Departmental Proficiency Examination. Contact the department chair or appropriate faculty person for applications.

Industry Credentials

Students who have received training through alternative methods should provide a copy of a certificate of completed training, a lesson plan or training content (if available), dates of attendance, and/or other information showing what was taught. Evidence of evaluation may also be required (e.g., proficiency exam scores). Credit will only be awarded to training that has been completed within the last five years.

Military Educational and Training Credit

Military educational and training credit can be transcribed through the Community College of the Air Force (CCAF), the Army/American Council on Education Registry Transcript System (AARTS) and the Sailor/Marine American Council on Education Registry Transcript (SMART). Credit will be awarded based on the nature of the credits transcription, credit recommendations for military training schools, or ACE occupational credit recommendations.

Portfolio Evaluation

Students may request awarded credit for a course that does not have an established method for granting Credit for Prior Learning. In such instances, the student may submit a portfolio of work for review by a faculty member or department chair, as appropriate. The student will meet with the chair to complete Approval of Alternative Credit for Prior Learning, providing an outline of the requirements for the student.

Confidentiality of Student Records

The Family Educational Rights and Privacy Act (FERPA) affords eligible students certain rights with respect to their education records. (An eligible student under FERPA is a student who is 18 years of age or older or who attends a postsecondary institution.) These rights include:

1. The right to inspect and review the student's education records within 45 days after the day St. Louis Community College ("college") receives a request for access. The appropriate department and school official shall make arrangements for access to these records and notify the student of the time and place where the records may be inspected. If the records are not maintained by the school official to whom the request was submitted, that official shall advise the student of the correct official to whom the request should be addressed. This is a list of official records and their locations: Advisement (Advising); Counseling (Counseling); Disciplinary (Student Affairs); Enrollment Records (Enrollment Services); Financial Aid (Financial Aid); Placement (Career and Employment Services); Medical (Student Affairs); Security (College Police); Photo Identification Card (Campus Life).
2. The right to request the amendment of the student's education records that the student believes is inaccurate, misleading, or otherwise in violation of the student's privacy rights under FERPA. For those students wishing to question the accuracy or appropriateness of their records, a form requesting a challenge is available in the Enrollment Services office. This written request should identify the part of the record the student wants changed, and specify why it should be changed. The form should be filed with the Vice President for Student Affairs. If the college decides not to amend the record as requested, the student shall be notified in writing, and an appeal of the decision may be made by the student to the Student Appellate Hearing Committee.
3. The right to provide written consent before the college discloses personally identifiable information from the student's education records, except to the extent that FERPA authorizes disclosure without consent. The college discloses directory information without the student's consent and includes the following: name, currently admitted and currently enrolled, class level, full- or part-time enrollment, division, program of study, dates of enrollment, degrees received, height and weight for members of athletic teams, awards received, honors and college issued email addresses. Requests to withhold release of directory information should be made online through Self-Service Banner and should be received on the first day of each term during which the student wishes the withholding to be effective.

In addition, the college discloses education records without a student's prior written consent under the FERPA exception for disclosure to school officials with legitimate educational interests. A school official is a person employed by the college in an administrative, supervisory, academic, research, or support staff position (including law enforcement personnel) and a person serving on the board of trustees; or a student serving on an official committee, such as a disciplinary or appellate committee. A school official also may include a volunteer or contractor outside of the college who performs an institutional service or function for which the school would otherwise use its own employees and who is under the direct control of the school with respect to the use and maintenance of personally identifiable information from education records, such as an attorney, auditor, or collection agent or a student volunteering to assist another school official in performing his or her tasks. A school official has a legitimate educational interest if the official needs to review an education record in order to fulfill his or her professional responsibilities at the college.
4. The right to file a complaint with the U.S. Department of Education concerning alleged failures by the college to comply with the requirements of FERPA. The name and address of the office that administers FERPA is:

Family Policy Compliance Office
U.S. Department of Education
400 Maryland Avenue, SW
Washington, D.C. 20202-8520

For more information about records and information that may or may not be disclosed and other information regarding the confidentiality of student records, please see Administrative Procedure G.11 ([stlcc.edu/Admin-Procedures](http://www.stlcc.edu/Admin-Procedures)) (<http://www.stlcc.edu/Admin-Procedures>)).

Student Success

Academic Advising

Academic advisors are available to assist students by providing information about college policies and procedures, programs of study, and course requirements. For students planning to transfer, an advisor can help clarify

transfer requirements and suggest appropriate coursework; however, the responsibility for course selection and meeting degree and transfer requirements rests with each student.

Access Office, Disability Support Services

The college offers support services for students who have documented disabilities of a temporary or permanent nature. The Access Office provides the following services:

- Coordination of classroom and testing accommodations and support services.
- Individual advising and academic counseling.
- Consultation with faculty and staff members regarding student accommodation needs.
- Liaison with community professionals and agencies.

To qualify for services, students must contact the Access Office at the campus of enrollment in order to complete the Access Office Application for Services and schedule an initial meeting. Accommodations are generally not provided retroactively, so it is important for students to apply for accommodations and provide documentation that supports their requested accommodations early.

This allows the college the necessary time for accommodations to be in place as soon as possible. Students may submit this application and documentation any time during their tenure at the college. However, the college recommends submitting the application at least six weeks prior to the beginning of the semester of attendance so that reasonable accommodations can be made available. For more information, visit [stlcc.edu/Access](http://www.stlcc.edu/Access) (http://www.stlcc.edu/disAbility/Access_Office) or call the Access Office at the campus of your choice.

Assessment

St. Louis Community College collects and uses assessment data to improve student learning, academic achievement, and overall institutional effectiveness. When combined with thoughtful interpretation by faculty and staff, assessment supports the overall decision-making needs of the college and the specific decision-making needs of individual units and programs.

Students often are asked to participate in assessment to provide information they may use in making decisions about their education or careers. Such assessments are “formative”—intended only to provide helpful information—and have nothing to do with students’ grades or other “summative” evaluations. Faculty, staff and administrators regularly assess performance of classes, courses or departments to ensure that their desired outcomes are being achieved. Ultimately, assessment is the means by which St. Louis Community College can guarantee that it is fulfilling its mission: advancing student learning. A mission-based approach to assessment helps the college focus its efforts and keep its promise to the St. Louis community. For more information, visit stlcc.edu/assessment (<http://catalog.stlcc.edu/general-information/policies/student-success/%20http://www.stlcc.edu/Workforce-Solutions/Corporate-Services/Testing-and-Assessment-Center.html>).

Placement Tests

Assessment is required prior to advisement and registration. St. Louis Community College uses a computerized placement test. The placement test gives essential information about prospective students’ academic skills and needs. Test results indicate whether students are college ready or will be required to complete one or more preparatory courses in reading, writing or mathematics.

The test is required of all students unless academic credentials are submitted that qualify students to take such courses without testing.

The college may waive all or part of the entry assessment if students provide written documentation of one of the following:

- A college transcript or grade report documenting successful completion (with a C grade or higher) of reading, writing or mathematics course prerequisites.
- A college degree from an accredited institution.
- An ACT score earned within the last three years:
 - A reading score of 18 or above to waive the reading test.
 - An English score of 18 or above to waive the writing test.
 - A math score of 22 or above to waive the math test.
- An appropriate SAT score earned within the last three years:
 - A critical reading score of 500 or above to waive the reading and writing tests
 - A math score of 580 or above to waive the math test.

If documentation cannot be provided, students will be required to take the appropriate placement tests. Scores will remain valid up to three years from the semester in which the test was taken; thereafter, students will be required to retake the test. Call the Assessment Center (http://www.stlcc.edu/Admissions/Take_a_Placement_Test) for testing schedule, or visit stlcc.edu/assessment-test (http://www.stlcc.edu/Admissions/Take_a_Placement_Test/Testing_Locations_and_Times.html).

If you are a student with a disability and need accommodations for your entry assessment, call the Access office for an appointment prior to testing. You must provide current written documentation of a disability that is based on adult norms from a qualified professional or agency. For more information, contact the campus Access office. Individuals with speech or hearing impairments may call via Relay Missouri by dialing 711.

Assessment at St. Louis Community College occurs at a number of other points and for a number of different reasons:

Exit Assessment

Students completing their associate degrees are required to participate in an exit assessment, typically a nationally-normed standardized test. Such assessments are used to gauge students’ levels of competence in general education. In addition, special assessments may be required depending upon students’ chosen academic or career areas.

Course Assessment

In course assessment, academic faculty and administrators decide which courses to assess and which assessment measures to use. The goal is to gather information which will allow departments to make collegewide changes in courses to increase student learning. These ongoing assessments are necessary to sustain the credibility and transferability of courses and the programs which require them.

Program Assessment

The college offers a number of programs, both academic and career, which are assessed to ensure that they are meeting the standards set both by professionals in the field and various accrediting agencies. Doing so assures students that they are participating in programs whose standards are recognized and accepted by other programs and institutions.

Institutional Assessment

The college assesses its various services and operations on an annual basis. College and student support services are assessed to determine how well they are accomplishing their institutional mission. Various external agencies expect colleges to assess and improve student learning and institutional effectiveness. These agencies include regional accrediting bodies like the Higher Learning Commission, professional accrediting bodies for career programs like nursing as well as government agencies.

Athletics

Districtwide varsity sports offered by the college are baseball, softball, volleyball, men's and women's basketball, and men's and women's soccer. Students attending any STLCC location can participate in districtwide varsity sports.

The college is a member of the National Junior College Athletic Association and the Midwest Community College Athletic Conference.

Banner Self-Service

Students have access to enrollment, financial aid and personal information in Banner Self-Service. Students can also view and print their schedules, pay for classes, and set up e-cashier payment plans. Students can login to Banner Self-Service at stlcc.edu/SelfService/ (<http://www.stlcc.edu/SelfService/>).

Blackboard

Most college courses use the Blackboard learning management system for important course documents and assignments. Blackboard can also be used as a portal for groups, organizations and clubs. Students can login to Blackboard at stlcc.edu/blackboard (<http://www.stlcc.edu/blackboard>). Students are encouraged to become familiar with Blackboard because even traditional face-to-face classes use Blackboard for some activities. Resources to help students learn Blackboard are available on the college's website at stlcc.edu/blackboard/Student-Resources.html (<http://www.stlcc.edu/blackboard/Student-Resources.html>).

Career and Employment Services

Each campus provides services to assist students and alumni with finding full-time, part-time or temporary employment. An online database of employers and job listings is used to provide information about employment opportunities as well as internship and cooperative education programs. Professionals are available to help with producing resumés, improving interviewing skills and developing job search strategies.

Information about hundreds of careers is available at each campus. Decision making, life and career planning, and job search strategies are stressed as a part of career development.

Child Care

The Florissant Valley campus offers child care services for children of students when classes are in session. For more information, go to: stlcc.edu/fv/child_care_center (http://www.stlcc.edu/fv/child_care_center).

Counseling Services

Professional counselors are available to assist students with educational, career and personal concerns. They help students gain a clear understanding of their strengths, identify options and make choices. A variety of interest and personality tests are available to students using counseling services.

CTE Retention Specialists

Career and Technical Education (CTE) Retention Specialists are available to assist district-wide students who are enrolled in a CTE program with transitioning from application to graduation.

Distance Learning

Distance Learning is defined as a formal educational process in which all or some of the instruction occurs when student and instructor utilize technology to achieve the same outcomes as classroom courses (Face-to-Face Learning). Instruction may be asynchronous (learning is student-centered that uses technology outside of the constraints of time) or synchronous (learning is student-centered that uses technology in unison or at the same time). Student learning outcomes are consistent regardless of course delivery method. Students must have reliable access to technology required for the course.

Face-to-Face Courses

A course consisting of instruction and assessment delivered primarily in the classroom setting.

Online Courses

A course consisting of instruction delivered 100% online. Some courses may require students to take assessments in person at a mutually agreed upon proctored site reasonably accessible to the student, and/or participate online at designated times.

Hybrid (Blended) Courses

A course consisting of both online and face-to-face instruction and assessment. Some campus attendance will be required for the successful completion of these courses.

Flexibility Requires Responsibility

Online and hybrid courses offer students flexibility because there are very few or no scheduled class meetings. Students who participate in online and hybrid courses must be self-motivated, independent learners with good to very good computer and internet skills. These courses have deadlines just like traditional classes, and students will need excellent time management skills to succeed.

Students taking online or hybrid courses should have access to a computer with a reliable high-speed internet connection. Online and hybrid courses rely on email for most communication, so students should activate their my.stlcc.edu email account and check it daily. More information about student email activation is available at stlcc.edu/studentemail (<http://www.stlcc.edu/studentemail>). STLCC uses the Blackboard learning management system for online coursework. For Blackboard assistance and tutorials, go to stlcc.edu/blackboard (<http://www.stlcc.edu/blackboard>).

To determine if online classes will be a good fit for you, complete the SmarterMeasure online learning readiness assessment. Log in at <http://stlcc.readi.info>; type in online as the Username and learner as the Password. SmarterMeasure will provide you with information and tools to help you succeed in online courses. If you have questions or need assistance, contact the Online Education Department at 314-539-5037 (<http://catalog.stlcc.edu/general-information/policies/student-success/tel:3145395037>) or online@stlcc.edu.

Learning Labs

Each campus has mathematics, reading, English and other specialized laboratories that offer personal assistance to students to supplement classroom instruction.

These labs provide individual tutorial and remedial help for students enrolled at the college. Students may use the labs on both a walk-in and appointment basis. The labs are designed primarily to help students enrolled in specific courses. They are open to any student on campus needing additional assistance.

Libraries

Instructional Resources (IR) is a service division on each campus dedicated to the support of instruction, facilitation of learning and enhancement of the educational environment. Registered students of the college may use and check out materials from any campus library. Student ID cards serve as library cards and are valid at all campus libraries. Students are encouraged to check with the Reference and Circulation departments for information regarding library services and procedures.

Higher Education Opportunity Act

The Higher Education Opportunity Act of 2008 requires that St. Louis Community College take action to address the unauthorized distribution of copyrighted materials, including music, video and programs. If a student uses college technology resources to perform unauthorized distribution or sharing of such materials, the student will be in violation of college policy as well as subject to criminal and/or civil prosecution for violation of copyright and other federal and state laws.

The college monitors its computer systems to protect against such activity. Outside organizations are also able to trace activity involving copyrighted materials. If a violation is detected by either the college or an outside organization, student access to college technological resources will be immediately disabled. Students will need to communicate with the appropriate administrator before privileges will be reinstated. The student will also be subject to disciplinary action by the college.

The information will also be turned over to the appropriate authorities for possible criminal and/or civil prosecution.

For more information, go to stlcc.edu/need2know (<http://www.stlcc.edu/need2know>).

Honors Program

Admission to the college honors program is based on any of the following criteria: a 3.5 or better GPA in either high school or college based on a 4.0 scale, a score of 1100 or better on the Scholastic Achievement Test (SAT) or a score of 25 or better on the American College Testing Program Assessment (ACT).

Both transfer and career programs offer a variety of ways to earn honors credit, including honors courses and projects and honors contracts within regular courses. Graduates who earn 15 credit hours of honors credit will receive the designation of Honors Program Scholar on their diplomas and transcripts.

For more information, contact the campus honors coordinator.

International Education

St. Louis Community College offers opportunities for students, faculty, staff and the community to study and experience the world through international and intercultural programs, exchanges and activities, and globalized curriculum. The goal is to prepare students and the community for success in a global economy and a world in which the U.S. plays a key role. Detailed information about the international programs, study abroad, student and faculty exchanges, and international collaborations and partnerships can

be obtained by calling 314-539-5350 (<http://catalog.stlcc.edu/general-information/policies/student-success/tel:3145395159>).

Parking on Campus

Parking tags are required on all vehicles using campus parking facilities. Parking tags are available in the Campus Life office at Florissant Valley, Forest Park and Meramec, or the Information Desk at Wildwood, South County Education and University Center, and Harrison Education Center. Parking tags are permanent and are to be kept from one semester to another.

Accessible parking is available for students with physical disabilities who have state parking authorization.

Student Activities

Student activities help individuals develop and expand interests and find ways to contribute talents and skills to the college. Opportunities for leadership development are available through student government, clubs and organizations, honorary societies, student publications, and special interest groups. In addition, the campuses sponsor film series, concerts, plays, discussion groups, lectures, exhibits, performances, social functions and special presentations.

For informal gatherings, the campuses provide facilities such as game rooms, meeting rooms, music and television lounges, study areas and cafeterias.

Student Assistance Program

Crisis assistance and support services are available to all students experiencing a need that may hinder their successful enrollment and continued success in school. Students receiving public assistance, or other benefits, in need of attendance or program progress verification will also receive services from the Student Assistance Program. Services will be tailored to meet the individual needs of each student. Services include helping students locate and access programs and services for child care, domestic violence, energy assistance, healthcare, homelessness, and hunger. Other services include individual advising and academic counseling as well as support services designed to help students problem solve barriers to their education and learn self-advocacy. More information can be found at stlcc.edu/SAP.

Study Help

The college is committed to helping students succeed. Students who are encountering difficulties with academic work should consult their instructor or a counselor. A tutorial program offered through Counseling is available for some courses.

If a problem should arise which can be traced to ineffective study habits, the student should contact the Study Skills Center which exists to provide helpful solutions to study problems. The college also offers students an opportunity to bolster their grasp of fundamental skills, such as reading and math, through learning labs.

Textbooks

Look at the STLCC websites for information about your textbooks.

You can purchase your textbooks in person or online at the STLCC Bookstores two weeks before classes start.

To view and/or purchase your textbooks:

1. Visit stlouiscbookstore.com (<http://www.stlouiscbookstore.com>)
2. Select the bookstore based on the location of your class (including online sections) as listed on your class schedule.

3. Enter department, course and section for specific textbook information.

Note: If you are taking classes at more than one campus, textbooks may need to be ordered separately for each campus.

TRIO

TRIO Student Support Services (SSS) is a federally funded TRIO program designed to improve the retention and graduation rate of first-generation college students, students with disabilities, and/or students with limited income. TRIO SSS students benefit from the use of a variety of program resources and services including: academic advising and workshops, transfer planning, education to improve financial and economic literacy, information in applying for Federal Student Aid, assistance with completing the FAFSA, academic tutoring, mentoring, and more.

Signed Articulation Agreements

Central Methodist University

- Child Development, BA/BS
- Nursing, BSN

Chamberlain College of Nursing

- Nursing, BSN

Fontbonne University

- Business Administration, BS

Goldfarb School of Nursing at Barnes-Jewish College

- Nursing, BSN

Harris-Stowe State University

- Accounting
- Business Administration
 - Adult Pathways to Success Program
 - Entrepreneurship Option
 - Management Option
 - Marketing Option
- Early Childhood Education
- Elementary Teacher Education
- Health Care Management
- Hospitality and Tourism Management
- Information Science and Computer Technology
 - MIS Option
 - Computer Studies Option

Kansas City Art Institute

- AFA/BFA
 - Animation
 - Ceramics
 - Graphic Design
 - Painting
 - Photography
 - Printmaking
 - Sculpture

Lindenwood University

- Biology
- Business Administration with an emphasis in Accounting
- Hospitality Services Management
- Industrial Technology Education
- Mortuary Management

Maryville University

- Accounting
- Accounting Information Systems
- Business Administration
- Healthcare Practice Management, BS
- Organizational Leadership, BA
- Practice Management, BA

- Rehabilitation Services, BS

Missouri Baptist University

- Education: Early Childhood and Elementary Education

Saint Louis University

- Dual Admission Program¹
 - Aerospace Engineering
 - African-American Studies
 - Aviation Management
 - Biomedical Engineering
 - Business Administration
 - Criminology and Criminal Justice
 - Emergency Management
 - Health Information Management
 - Mechanical Engineering
 - Public Health
 - Social Work

School of the Art Institute of Chicago

- General Fine Arts, BFA
- Photography, BFA

Savannah College of Art and Design

- Painting
- Photography
- Printmaking
- Sculpture

Southeast Missouri State University

- Industrial Technology, BS, 2+2

Southern Illinois University-Carbondale

- Architectural Studies, BS

Southern Illinois University-Edwardsville

- Actuarial Sciences, BS
- Applied Mathematics, BS
- Mathematics Education Grades 9-12 Illinois Licensure, BS
- Pure Mathematics, BS
- Statistics, BS

St. Charles Community College

- Paramedic Technology

St. Louis Carpenter's Joint Apprenticeship Committee

- Construction Management Technology, AAS

University of Missouri-Columbia

- Architectural Studies, BS
- Business Administration
- Elementary Education
- Nursing, BSN

University of Missouri-St. Louis

- Art Education, AFA/BFA
- Biochemistry, BS
- Biotechnology, BS
- Drawing
- Dual Admission Program¹
 - AA, AS, AFA, AAT, AAS
 - Human Services
 - Criminal Justice
 - Nursing
- Early Care and Education
- General Fine Arts
- Graphic Design
- Human Services, BSW
- Nursing, BSN
- Painting
- Photography
- Social Work, BS

Washington University in St. Louis - University College in Arts & Sciences

- Bachelor of Science

Webster University

- Biological Sciences, BS
- Business Administration, BS
- Computer Science, BS
- Management, BA
- Dual Admission Program¹: Nursing
- Management, BA
- Nursing, BSN

William Woods University

- Deaf Communication Studies/Interpreter Training

¹ Students who participate in a Dual Admission Program maximize credit transfer, enjoy access to resources at both institutions, and receive advising and support at both institutions. Students who fulfill requirements of a Dual Admission Program and meet certain departmental requirements for specific majors are guaranteed acceptance with full junior status. Separate admission applications are required for both institutions. See an advisor for further details about Dual Admission programs with Saint Louis University, University of Missouri-St. Louis, and Webster University.

St. Louis Community College Foundation

Mission

The St. Louis Community College Foundation solicits private financial support to further the mission of the college.

Purpose

Through the generosity of our community partners, which includes friends, staff, alumni, foundations and corporations, the St. Louis Community College Foundation is able to make a significant difference in the lives of our students by providing affordable, accessible, quality education. Funds raised through the St. Louis Community College Foundation are used for student scholarships and program support.

To make a contribution to the St. Louis Community College Foundation, call 314-539-5472 (<http://catalog.stlcc.edu/general-information/stlcc-foundation/> tel:3145395472) or email foundation@stlcc.edu.

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COLLEGE PROGRAMS

STLCC Programs

St. Louis Community College offers five types of degrees and two types of certificates.

Associate in Arts

St. Louis Community College offers an Associate in Arts degree that is designed to assist students who wish to transfer to four-year institutions to complete bachelor's degrees. Students who plan to transfer should become familiar with program requirements at the destination college or university and share their goals with their St. Louis Community College advisor. Many bachelor degree programs have very specific requirements for the first and second years, and it is the student's responsibility to ensure that courses will apply to the bachelor's degree. Counselors and advisors at each of the campuses are familiar with many four-year institutions and can provide guidance on the selection of courses that will facilitate transferability.

Associate in Fine Arts

St. Louis Community College offers an Associate in Fine Arts degree with four degree options—art education, general fine arts, graphic communications and photography. The Associate in Fine Arts is offered jointly with the University of Missouri-St. Louis and is designed for students planning to transfer to UM-St. Louis and earn the Bachelor of Fine Arts degree. Freshman and sophomore courses take place at Florissant Valley, Forest Park, Meramec and Wildwood and junior- and senior-level courses take place on the UM-St. Louis campus.

University of Missouri-St. Louis accepts all art courses taken at STLCC up to a maximum of 66 credit hours. Students should work with a counselor or advisor to ensure their courses will transfer. UM-St. Louis admission counselors are available at Florissant Valley, Forest Park and Meramec to help students complete their transfer applications.

Associate in Science

The Associate in Science degree is a specialized degree intended for transfer into a pre-professional program. This degree is substantively different from both the Associate in Applied Science and the Associate in Arts degrees. The Associate in Science degree provides an alternative to the Associate of Arts degree for those fields that require specialized coursework in math and science.

Associate of Arts in Teaching

The Associate of Arts in Teaching degree program is a state-approved program that meets the state-approved general education requirements. This program contains a core area of concentration that includes four Teacher Education courses and is consistent with all other Missouri community colleges. This is an effort to promote a more seamless transfer to four-year colleges and universities. This program provides students with the first two years of study toward a bachelor's degree at a four-year college or university. It is governed and accredited by the state of Missouri. In addition, this program meets the mid-preparation benchmarks of the performance standards established for pre-service teachers in the state of Missouri.

Associate in Applied Science

The Associate in Applied Science degree program helps students develop practical and theoretical skills that prepare them for entry-level jobs. These programs can be completed in two years of full-time attendance. However, most students take courses on a part-time basis and take longer to complete

their programs. Many courses are offered both day and evening and some are offered online.

Certificate of Proficiency

The Certificate of Proficiency is designed primarily for students whose intended job does not require an associate degree. It is suitable for persons who want additional information and skills in a particular field. A Certificate of Proficiency usually requires one year of full-time attendance to complete (30 credit hours or more). If courses are taken on a part-time basis, it will take longer to complete a program.

Certificate of Specialization

The Certificate of Specialization is designed primarily for persons who want information and skills in a specific area, often related to a current job. This certificate may allow students to qualify for promotion, obtain certification, or increase future employment opportunities. A Certificate of Specialization requires 12-29 credit hours and can be completed on a full- or part-time basis.

Selective Admission Programs

Standards of admission and retention have been established for certain programs and courses to make sure students have the necessary aptitude and background for success. Students applying for a program with selective admission criteria may be required to take additional tests for admission purposes, and/or meet certain requirements to continue in the program. Contact the department, a counselor or an advisor for program specific information.

Clinical and Field Work

Some degree and certificate programs offered by the college require students to obtain clinical or other field experience as part of their coursework. Students with criminal convictions or illegal drug use may have difficulty progressing in these programs. Healthcare facilities, educational institutions and other field experience settings may mandate that a criminal background check and/or drug screening check (at the student's expense) be conducted prior to placement in a clinical or field setting. Students not passing these checks may be prohibited from participating in the clinical or field experience, thus rendering the student ineligible to satisfactorily meet the course/program requirements. Students should contact an academic advisor or the program coordinator for further details.

Signed Articulation Agreements

Please visit this page (p. 27) for a list of all signed articulation agreements with four-year colleges and universities.

Transfer Programs

Associate in Arts

- General Transfer Studies (p. 32)

Associate in Fine Arts

- Art Education (p. 35)
- General Fine Arts (p. 58)
- Graphic Communications (p. 60)
- Photography (p. 73)

Associate in Science

- Computer Science (p. 44)
- Engineering Science (p. 54)

Associate of Arts in Teaching

- Teaching (p. 36)

Career and Technical Education

Associate in Applied Science

- Accounting (p. 34)
- Automotive Technology (p. 36)
- Baking and Pastry Arts (p. 37)
- Biotechnology (p. 38)
- Building Inspection and Code Enforcement Technology (p. 39)
- Business Administration (p. 40)
- Civil Engineering Technology (p. 42)
- Clinical Laboratory Technology (p. 42)
- Computer Integrated Manufacturing (p. 44)
- Construction Management Technology (p. 44)
- Criminal Justice – Corrections (p. 45)
- Criminal Justice – Law Enforcement (p. 45)
- Culinary Arts (p. 45)
- Cybersecurity (p. 46)
- Deaf Communication Studies: Interpreter Education (p. 47)
- Dental Hygiene (p. 48)
- Diesel Technology (p. 50)
- Dietetic Technology: Nutrition Care (p. 51)
- Early Care and Education (p. 53)
- Early Care and Education: Developmental Disabilities (p. 52)
- Electrical/Electronic Engineering Technology (p. 54)
- Fire Protection Technology (p. 56)
- Funeral Services Education (p. 57)
- Graphic Communications (p. 58)
- Health Information Technology (p. 60)
- Horticulture (p. 61)
- Hospitality and Tourism (p. 62)
- Human Services (p. 63)
- Interior Design (p. 64)
- Legal Studies for the Paralegal (p. 66)
- Mass Communications (p. 68)
- Mechanical Engineering Technology (p. 68)
- Network Engineering (p. 70)
- Nursing (p. 71)

- Occupational Therapy Assistant (p. 72)
- Office Information Systems (p. 72)
- Paramedic Technology (p. 73)
- Physical Therapist Assistant (p. 74)
- Radiologic Technology (p. 75)
- Respiratory Care (p. 76)
- Skilled Trades Industrial Occupations Technology (p. 77)
- Software Developer (p. 78)

Certificate of Proficiency

- Accounting (p. 34)
- Automotive Technology (p. 37)
- Aviation Maintenance: Airframe (p. 37)
- Aviation Maintenance: Power Plant (p. 37)
- Building Inspection and Code Enforcement Technology (p. 39)
- Building Inspection and Code Enforcement Technology: Housing Inspection (p. 40)
- Business Administration (p. 41)
- Criminal Justice: Corrections (p. 45)
- Criminal Justice: Law Enforcement (p. 45)
- Cybersecurity (p. 46)
- Database Developer (p. 47)
- Dental Assisting (p. 48)
- Diagnostic Medical Sonography: Cardiac Sonography (p. 49)
- Diagnostic Medical Sonography: Medical Sonography (p. 49)
- Diagnostic Medical Sonography: Vascular Technology Option (p. 49)
- Diesel Technology (p. 51)
- Early Care and Education (p. 53)
- Fire Protection Technology (p. 56)
- Horticulture (p. 62)
- Kitchen and Bath Design (p. 65)
- Landscape Design (p. 66)
- Legal Studies for the Paralegal (p. 67)
- Medical Billing and Coding (p. 69)
- Network Engineering (p. 70)
- Network Security (p. 71)
- Surgical Technology (p. 78)

Certificate of Specialization

- Addictions Study (p. 34)
- Automotive Technology (p. 37)
- Biomedical Electronics Technology (p. 38)
- Biotechnology (p. 39)
- Business Administration (p. 41)
- Cisco Networking Academy: CCNA (p. 41)
- Computer Accounting Technology (p. 43)
- Computer Aided Design (p. 43)
- Computer Applications (p. 43)
- Construction Office Management (p. 45)
- Deaf Communications Studies: American Sign Language (p. 47)
- Diesel Technology (p. 51)
- Digital Media--Digital Photography (p. 52)
- Digital Media--Interactive and Graphic Design (p. 52)

- Digital Media--Video Editing and Animation (p. 52)
- Emergency Medical Technology (p. 54)
- Event Planning (p. 55)
- Food and Beverage Management (p. 56)
- Funeral Directing (p. 57)
- Hotel Management (p. 63)
- Interior Design Professional, Certificate of Specialization (p. 65)
- IT Help Desk/End User Support (p. 64)
- Life Science Laboratory Assistant (p. 67)
- Maintenance Mechanic (p. 67)
- Precision Machining Technology (p. 75)
- Robotics and Automation (p. 77)
- Skilled Trades Industrial Occupations Technology (p. 77)
- Telecommunications Engineering Technology: Basic Electronics (p. 79)
- Travel and Tourism (p. 79)
- Web Developer (p. 79)

General Transfer Studies, Associate in Arts Degree

Florissant Valley, Forest Park, Meramec, Wildwood and Online

The Associate in Arts degree program provides students with the first two years of study toward a bachelor's degree with a major in almost any area at a four-year college or university. Students completing the Associate in Arts degree requirements will have completed the 42 credit hours of general education for all public colleges and universities in Missouri except the University of Missouri-Columbia. These courses from various general areas become the foundation for advanced study in a number of disciplines.

Students should select their transfer courses carefully and become familiar with the requirements at the institution to which they plan to transfer. Many bachelor degree programs have very specific requirements for the freshman and sophomore years, and it is the transferring student's responsibility to ensure that courses will apply to the bachelor's degree. Students are encouraged to talk to a counselor or advisor to assist in planning a program of study or if they are considering a change in academic plans. Information about the requirements of many transfer institutions is available at [stlcc.edu/transfer](http://www.stlcc.edu/transfer) (<http://www.stlcc.edu/transfer>).

St. Louis Community College's Associate in Arts degree requires 42 credit hours of general education courses (p. 81). These courses provide an opportunity for students to develop skills and knowledge that will enhance their lives far beyond graduation. Students who complete the 42-credit hour block of general education courses will have "Missouri General Education Requirement completed" noted on their transcripts. Students who complete this block will have satisfied all general education at any Missouri public college or university to which they may transfer, except the University of Missouri-Columbia. Students wishing to transfer to UM-C should consult an advisor for specific requirements. Many private institutions also accept the 42-credit hour block to satisfy their general education requirements.

In addition to the 42 credit hours of general education and two credit hours of physical education, students will select 20 credit hours to complete the 64-credit hour Associate in Arts degree. Students should work closely with a counselor or advisor to select courses that are transferable to a degree program at a four-year institution. For students who have clear academic goals these courses may be in a specified academic field, while other students may use these credits to sample a variety of courses to help them determine future

academic plans. Recommended concentrations in Business Administration, Communications, Public Relations/Advertising, Media Communications, Theatre, Film Studies, Life Sciences, Mathematics and Music are described here (p. 32).

Interested in this program? Start the enrollment process by visiting [stlcc.edu/enroll](http://www.stlcc.edu/enroll) (http://www.stlcc.edu/Admissions/Get_Started/Enrollment_Overview).

Program of Study

Code	Title	Credit Hours
General Education ¹		
ENG 101	College Composition I	3
ENG 102	College Composition II	3
COM 101 or COM 107	Oral Communication I Public Speaking	3
MTH xxx	Mathematics Requirement	4
XXX xxx	Social and Behavioral Sciences (including 3 credit hours that satisfy the Missouri constitution requirement)	9
XXX xxx	Humanities and Fine Arts	9
XXX xxx	Life and Physical Sciences (One lab course required)	7
IDS xxx	Interdisciplinary Studies	3
GEN 200	Capstone	1
Physical Education Activity		
Select 2 credit hours		2
Electives		
Elective credits within the Associate in Arts degree allow the student to begin working toward an academic major by selecting courses within a discipline or to continue to explore various subjects at an introductory level. The following concentrations are suggestions to assist students in planning for their bachelor's degree work.		20
Business Administration		
Communications		
Film Studies		
Life Sciences		
Mathematics		
Media Communications		
Music		
Public Relations/Advertising		
Theatre		
Total Credit Hours		64

¹ Students who complete the 42-credit hour general education block will have "Missouri General Education Requirements completed" noted on their transcript. Students must include at least one course that meets Global/Intercultural Requirements.

Business Administration

Students are encouraged to take ECO 151 and ECO 152 to partially satisfy their Social and Behavioral Sciences requirements. Students are encouraged to work closely with their transfer institution to determine which courses are most appropriate for their desired major.

ACC 110	Financial Accounting I	4
ACC 114	Managerial Accounting	3

BUS 104	Introduction to Business Administration	3
BLW 101	Business Law I	3
or BLW 201	Legal Environment of Business	
BUS 201	Elementary Statistics	3
IB 100	International Business	3
IS 103	Information Systems for Business	3
or IS 116	Computer Literacy	
MGT 204	Business Organization and Management	3
MGT 204	Business Organization and Management	3
MKT 203	Principles of Marketing	3

Communications

COM 104	Persuasion	3
COM 107	Public Speaking	3
COM 110	Organizational Communication in a Global Age	3
COM 114	Oral Interpretation of Literature	3
COM 200	Communication Between Cultures	3
COM 201	Interpersonal Communication	3

Film Studies

MCM 101	Introduction to Mass Communications	3
MCM 130	Film Appreciation	3
MCM 115	Acting for the Camera	3
MCM 125	Scriptwriting for Television and Film	3
MCM 131	History of Film	3
MCM 132	Major Themes in Film	3
MCM 134	Filmmaking	3
MCM 209	Black Cinema	3
MCM 215	Major Film Directors	3
MCM 218	Advanced Filmmaking	3
MCM 219	Multimedia Applications	1-3

Life Sciences

BIO 140	Principles of Biology I	4
BIO 141	Principles of Biology II	4
CHM 206	Organic Chemistry Lecture I	3
CHM 207	Organic Chemistry Lecture II	3
CHM 211	Organic Chemistry Lab II	2
PHY 111	College Physics I	4
PHY 112	College Physics II	4

Mathematics

ESC 101	Scientific Computer Programming	3
MTH 220	Analytic Geometry and Calculus II	5
MTH 230	Analytic Geometry and Calculus III	5
MTH 240	Differential Equations	3
MTH 215	Linear Algebra	3

Students are encouraged to select from the following courses to fulfill requirements for Life and Physical Sciences general education: ¹

CHM 105	General Chemistry I	
CHM 106	General Chemistry II	
CHM 206	Organic Chemistry Lecture I	
CHM 207	Organic Chemistry Lecture II	

CHM 210	Organic Chemistry Lab I	
CHM 211	Organic Chemistry Lab II	
PHY 122	Engineering Physics I	
PHY 223	Engineering Physics II	
PHY 224	Engineering Physics III	

¹ Please see most current list of courses accepted for general education credit.

Media Communications

MCM 101	Introduction to Mass Communications	3
MCM 120	Introduction to Broadcasting	3
MCM 110	Journalism I: Writing and Reporting	3
MCM 102	Media Literacy	3
MCM 112	Feature Writing	3
MCM 113	Applied Journalism	3
MCM 121	Television Production	3
MCM 122	Applied Broadcasting	3
MCM 123	Broadcast Journalism	3
MCM 124	Radio Production	3
MCM 125	Scriptwriting for Television and Film	3
MCM 201	Workplace Learning I: Media	3

Music

MUS 101	Music Theory I	4
MUS 102	Music Theory II	4
MUS 121	Class Piano I	2
MUS 122	Class Piano II	2
MUS 201	Music Theory III	4
MUS 202	Music Theory IV	4
MUS 221	Class Piano III	2
MUS 222	Class Piano IV	2
MUS xxx	Band, orchestra, choir, or jazz ensembles	4

Public Relations/Advertising

MCM 101	Introduction to Mass Communications	3
MCM 102	Media Literacy	3
MCM 140	Introduction to Advertising	3
MCM 141	Public Relations	3
MCM 142	Applied Advertising	3
MCM 201	Workplace Learning I: Media	3
MCM 211	Applied Public Relations	3
COM 104	Persuasion	3

Theatre

THT 101	Introduction to Theatre	3
THT 102	Stagecraft	3
THT 106	Theatre Practicum	3
THT 107	Playwriting	3
THT 108	Acting I	3
THT 109	Acting II	3
THT 110	History of Theatre	3
THT 115	Acting for the Camera	3
THT 201	Directing	3

COM 114	Oral Interpretation of Literature	3
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Accounting, Associate of Applied Science

Florissant Valley, Forest Park and Meramec

The degree is designed to provide students with a skill and knowledge background that will enhance an entry into the accounting job market. It is tailored to provide students with a comprehensive foundation in accounting and hands-on experience with computers using commercial accounting software.

Persons planning a career in accounting should have a proficiency in mathematics and be able to analyze, compare and interpret facts and figures quickly. Accuracy and the ability to handle responsibility with limited supervision are important. Courses in computer applications and work experience in the business area are extremely beneficial.

Interested in this program? Start the enrollment process by visiting [stlcc.edu/enroll](http://www.stlcc.edu/enroll) (http://www.stlcc.edu/Admissions/Get_Started/Enrollment_Overview).

Program of Study

Code	Title	
Career General Education		
ENG 100 or ENG 101	Career English College Composition I	3
ENG 103 or ENG 102	Report Writing College Composition II	3
ECO 151	Principles of Macroeconomics	3
ECO 152	Principles of Microeconomics	3
MTH xxx	Mathematics (140 level or higher)	3
BUS 103	Business Mathematics	3
XXX xxx	Missouri State Requirement	3
Physical Education Activity		
Select 2 credit hours		2
Program Requirements		
ACC 100	Applied Accounting	3
ACC 110	Financial Accounting I	4
ACC 114	Managerial Accounting	3
ACC 208	Intermediate Accounting I	3
ACC 213	Survey of Business Taxes	3
BLW 101	Business Law I	3
BUS 104	Introduction to Business Administration	3
Technology Core Courses		
ACC 120	Computer Accounting Applications for Business	3
ACC 122	Computer Accounting Applications - Spreadsheets	3
ACC 124	Computer Accounting Applications - Databases	3
Area of Concentration		
Select one of the following options:		6
Accounting Associate Option:		
Accounting electives		
Tax Emphasis Option:		
Approved tax electives		
Business Electives		

Select two of the following:	6
ACC xxx	
IS xxx	
MGT xxx or MKT xxx	
FIN xxx	
BUS 201	Elementary Statistics
Total Credit Hours	66

Accounting, Certificate of Proficiency

Florissant Valley, Forest Park and Meramec

The accountant's role has changed dramatically with the dominant role of computers. This program is designed to provide students with knowledge and skills to meet the changing needs required in today's job market. A strong foundation in accounting with commercial computer application represents the proficiencies emphasized in this fast-track program. This certificate provides currently employed persons the opportunity to acquire an extensive accounting background; provides necessary skills and proficiencies to attain employment in the accounting field.

Interested in this program? Start the enrollment process by visiting [stlcc.edu/enroll](http://www.stlcc.edu/enroll) (http://www.stlcc.edu/Admissions/Get_Started/Enrollment_Overview).

Code	Title	Credit Hours
Required Courses		
BUS 103	Business Mathematics	3
ACC 100	Applied Accounting	3
ACC 110	Financial Accounting I	4
ACC 114	Managerial Accounting	3
ACC 208	Intermediate Accounting I	3
ACC 213	Survey of Business Taxes	3
BLW 101	Business Law I	3
ACC 120	Computer Accounting Applications for Business	3
ACC 122	Computer Accounting Applications - Spreadsheets	3
ACC 124	Computer Accounting Applications - Databases	3
ACC xxx	Accounting Elective	3
Business Electives		
Select one of the following:		3
ACC xxx		
IS xxx		
BUS xxx		
FIN xxx		
Total Credit Hours		37

Addictions Study, Certificate of Specialization

Florissant Valley, Forest Park and Meramec

This program provides academic preparation for persons working or preparing to work in the field of addiction including alcohol and drug abuse treatment. It will look at commonalities of the various addiction and treatment modalities.

Interested in this program? Start the enrollment process by visiting [stlcc.edu/enroll](http://www.stlcc.edu/enroll) (http://www.stlcc.edu/Admissions/Get_Started/Enrollment_Overview).

Code	Title	Credit Hours
Required Courses		
HMS 100	Introduction to Human Services	3
HMS 101	Human Services: Theories and Skills	3
HMS 205	Crisis Intervention	3
HMS 111	Group Practice in Human Services	3
HMS 201	Workplace Learning I: Human Services	3
HMS 203	Human Services Workplace Learning Seminar I	3
SOC 126	Pharmacology of Addictive Drugs	3
SOC 211	Substance Use, Abuse and Dependence	3
Electives		
Select one of the following:		3
PSY 200	General Psychology	
PSY 205	Human Growth and Development	
PSY 208	Abnormal Psychology	
SOC 204	Family and Society	
Total Credit Hours		27

Art Education, Associate in Fine Arts Degree

Florissant Valley, Forest Park, Meramec and Wildwood

This transfer option is designed to provide students with the first two years of study towards a professional degree in art education. Upon completion of the AFA - Art Education Option, students can successfully transfer to the University of Missouri-St. Louis to earn a bachelor of fine arts degree in art education or to other four-year art schools or colleges to complete the last two years toward a professional art education degree. Students are strongly advised to familiarize themselves with the art education program at the school to which they plan to transfer and work with advisors at St. Louis Community College to plan a program to meet those requirements.

The AFA - Art Education degree is governed and accredited by the state of Missouri and meets the mid-preparation benchmarks of the performance standards established for pre-service teachers in the state of Missouri. Students should work in consultation with both art and education advisors and will complete required courses in general education, art and professional education. Persons interested in this program should possess a strong interest in the visual arts and a desire to teach at the elementary or secondary level. Students are expected to have college level reading, oral and written language proficiencies and display clear, correct, and effective writing and speaking skills.

Students must achieve a minimum cumulative GPA of 2.75. Students transferring to UM-St. Louis with an AFA in Art Education must achieve a passing score on each section of the Missouri General Education Assessment (MoGEA) and completion of the Missouri Educator Profile (MEP). It is recommended that students begin testing for competencies early in their sophomore year. Some four-year transfer institutions may have additional requirements including higher GPA or MoGEA scores. Students are encouraged to work closely with an advisor so they may understand and prepare to meet all entrance requirements.

Students who are planning to transfer to UM-St. Louis should consult with an advisor to learn of the articulation agreement before beginning their coursework toward the STLCC AFA degree. UM-St. Louis offers a Bachelor of Fine Arts degree in Art Education, with K-12 teacher certification, with emphasis electives in painting, drawing, photography or printmaking.

Interested in this program? Start the enrollment process by visiting [stlcc.edu/enroll](http://www.stlcc.edu/enroll) (http://www.stlcc.edu/Admissions/Get_Started/Enrollment_Overview).

Program of Study

Code	Title	Credit Hours
General Education		
ENG 101	College Composition I	3
COM 101	Oral Communication I	3
HST 101	United States History to 1865	3
or HST 102	United States History from 1865 to the Present	
PSY 200	General Psychology	3
PSY 205	Human Growth and Development	3
MTH 160	College Algebra	4
XXX xxx	Science Elective with lab	4
Physical Education Activity		
Select 2 credit hours		2
Professional Education		
EDU 218	Educational Technology	3
EDU 120	Art for Children	3
EDU 210	Teaching Profession with Field Experience	3
EDU 227	Educational Psychology	3
EDU 211	Foundations of Education in a Diverse Society	3
Program Requirements		
ART 101	Art History I	3
ART 102	Art History II	3
ART 107	Design I	2
ART 108	Design II	2
ART 109	Drawing I	3
ART 110	Drawing II	3
ART 111	Figure Drawing I	3
ART 131	Computer Art Studio	3
3-D Art Elective		
ART 113	Ceramics I	3
or ART 116	Sculpture I	
2-D Art Electives		
Select 6 credit hours of the following:		6
ART 112	Figure Drawing II	
ART 114	Painting I	
ART 115	Printmaking I	
ART 133	Graphic Design I	
ART 165	Photography I	
ART 209	Drawing III	
Total Credit Hours		71

Associate of Arts in Teaching Degree Program

Florissant Valley, Forest Park, Meramec and Wildwood

The Associate of Arts in Teaching degree program is a state-approved program that meets the state-approved general education requirements. This program contains a core area of concentration that includes four Teacher Education courses and is consistent with all other Missouri community colleges. This is an effort to promote a more seamless transfer to four-year colleges and universities. This program provides students with the first two years of study toward a bachelor's degree at a four-year college or university. It is governed and accredited by the state of Missouri. In addition, this program meets the mid-preparation benchmarks of the performance standards established for pre-service teachers in the state of Missouri.

Early in their coursework at St. Louis Community College, students should familiarize themselves with education programs at four-year schools and determine which program they plan to pursue after completion of the AAT. In addition, they should work closely with STLCC faculty, counselors, and advisors to enable them to make a smooth transfer to the school of their choice. The maximum number of credit hours in teacher education which are allowed in transfer may vary among the transfer institutions. **Students are discouraged from self advising.**

An Associate of Arts in Teaching (AAT) degree requires:

- a cumulative G.P.A. of 2.75
- a passing score on each section of the Missouri General Education Assessment (MoGEA)
- Completion of the Missouri Educator Profile (MEP)

Students should also be aware of the following information: cumulative GPA and MoGEA score admission requirements at some four-year transfer institutions may exceed the minimum state requirements. Students will be required to pass a criminal background check and a child abuse check to participate in school observation experiences. Any individual who has been convicted of a felony may not be licensed to teach in the state of Missouri. Students considering this degree should have college level reading as demonstrated on the college placement test or should have completed developmental reading and/or writing coursework prior to entering the Teacher Education core courses. Students are expected to have college level oral and written proficiencies and display clear, correct and effective writing and speaking skills.

Interested in this program? Start the enrollment process by visiting [stlcc.edu/enroll](http://www.stlcc.edu/enroll) (http://www.stlcc.edu/Admissions/Get_Started/Enrollment_Overview).

Program of Study

Code	Title	Credit Hours
General Education		
Foundation Courses		
ENG 101	College Composition I	3
ENG 102	College Composition II	3
MTH xxx	Mathematics Requirement	4
COM 101 or COM 107	Oral Communication I Public Speaking	3
XXX xxx	Social & Behavioral Sciences	9
Recommendations for Certification		

HST 101 or HST 102	United States History to 1865 ¹ United States History from 1865 to the Present	
PSY 200	General Psychology (prerequisite for EDU 227)	
PSY 203 or PSY 205 or PSY 214	Child Psychology Human Growth and Development Adolescent Psychology	
XXX xxx	Humanities and Fine Arts ²	9
XXX xxx	Life and Physical Sciences ³	7-8
IDS xxx	Interdisciplinary Studies	3
GEN 200	Capstone	1
Physical Education		
Select 2 credit hours		2
Program Requirements		
EDU 210	Teaching Profession with Field Experience	3
EDU 211	Foundations of Education in a Diverse Society	3
EDU 218	Educational Technology	3
EDU 227	Educational Psychology	3
Electives		
Select 7-8 credit hours of Recommended Electives: ⁴		7-8
EDU 120	Art for Children	
EDU 219	Education of Exceptional Learners	
EDU 226	Children's Literature	
PSC 101	Introduction to American Politics	
ECO 140	Introduction to Economics	
MTH 165	Structures of Mathematical Systems I	
MTH 166	Structures of Mathematical Systems II	
Total Credit Hours		63-65

- ¹ Courses (HST 101 and HST 102) meet Missouri State Requirement
- ² Non-studio art or music class recommended for Elementary Certification
- ³ One lab course required for Secondary Certification; two lab courses required for Elementary certification
- ⁴ Electives may be selected from education electives, content areas or any other courses. They should be carefully selected with the help of an advisor to meet degree requirements, prerequisites, preparation for the MoGEA, and planned level and area of teacher preparation. Students seeking elementary certification can choose to complete an approved economics course, an approved geography course or additional education courses. Students seeking secondary certification should select courses required for their specific area of certification in coordination with their transfer institution.

Note: Students must select at least one 3 credit hour course designated as Global/Intercultural

Automotive Technology, Associate in Applied Science

This program is currently going through a revision. Please see an advisor for more information.

Automotive Technology, Certificate of Proficiency

This program is currently going through a revision. Please see an advisor for more information.

Automotive Technology, Certificate of Specialization

This program is currently going through a revision. Please see an advisor for more information.

Aviation Maintenance - Airframe, Certificate of Proficiency

Gateway STEM High School

This program prepares students for employment in aircraft maintenance and repair. This FAA approved curriculum is offered in cooperation with the St. Louis Public School System and prepares students for both the General and Airframe licensing exams from the Federal Aviation Administration. Licensed airframe mechanics are employed by airlines, manufacturers, repair stations and general aviation companies.

This program provides instruction and intensive hands-on training and is located at the Gateway STEM High School.

Interested in this program? Start the enrollment process by visiting [stlcc.edu/enroll](http://www.stlcc.edu/enroll) (http://www.stlcc.edu/Admissions/Get_Started/Enrollment_Overview).

Code	Title	Credit Hours
Technical Area		
AVI 101	General Mechanics, Drawings and Safety	2
AVI 102	Basic Electricity for Aviation Technicians	2
AVI 103	Structural Materials and Corrosion Control	2
AVI 104	Federal Regulations and Ground Operations	2
AVI 105	Basic Physics for Aviation	2
AVI 106	Quantitative Applications	2
AVI 121	Aircraft Non-metallic Structures and Finishes	2
AVI 122	Aviation Welding	2
AVI 123	Airframe Fuel Systems and Fire Detection	1
AVI 124	Aircraft Metallic Structures	4
AVI 125	Aircraft Fluid and Pneumatic Power Systems	2
AVI 126	Rigging, Inspection, Cabin Environment, Ice and Rain	3
AVI 127	Communication/Navigation Systems	3
AVI 128	Aircraft Electrical Systems	4
Entrance Requirements		
A minimum score on the math placement test or successful completion of MTH 030 (or higher) with a C or better. Students are required to submit to a background check prior to admission.		
Total Credit Hours		33

Aviation Maintenance - Power Plant, Certificate of Proficiency

Gateway STEM High School

This program prepares students for employment in aircraft maintenance and repair. This FAA approved curriculum is offered in cooperation with the St. Louis Public School System and prepares students for both the General and Power Plant licensing exams from the Federal Aviation Administration. Licensed power plant mechanics are employed by airlines, manufacturers, repair stations and general aviation companies.

This program provides instruction and intensive hands-on training and is located at the Gateway STEM High School.

Interested in this program? Start the enrollment process by visiting [stlcc.edu/enroll](http://www.stlcc.edu/enroll) (http://www.stlcc.edu/Admissions/Get_Started/Enrollment_Overview).

Code	Title	Credit Hours
Technical Area		
AVI 101	General Mechanics, Drawings and Safety	2
AVI 102	Basic Electricity for Aviation Technicians	2
AVI 103	Structural Materials and Corrosion Control	2
AVI 104	Federal Regulations and Ground Operations	2
AVI 105	Basic Physics for Aviation	2
AVI 106	Quantitative Applications	2
AVI 131	Power Plant Electrical Systems	1
AVI 132	Ignition and Starting Systems	2
AVI 133	Airflow, Exhaust, Lubrication and Engine Instruments	3
AVI 134	Reciprocating Engines	4
AVI 135	Propeller Systems	3
AVI 136	Power Plant Fuel and Fire Protection Systems	3
AVI 137	Turbine Engines	4
AVI 138	Power Plant Inspections	1
Entrance Requirements		
A minimum score on the math placement test or successful completion of MTH 030 (or higher) with a C or better. Students are required to submit to a background check prior to admission.		
Total Credit Hours		33

Baking and Pastry Arts, Associate in Applied Science

Forest Park

The AAS in Hospitality Studies: Baking and Pastry Arts will allow students to gain the necessary theoretical and practical knowledge to become a successful pastry professional. Concepts of baking theory and nutrition; breads, rolls, and bakeries; production pastry techniques; and cake production and decoration will lay the foundation for essential pastry-related skills. Advanced classes in artisan and decorative bread; ice cream and frozen desserts; chocolates and pralines; contemporary plated desserts; and showpieces and confectionary art will allow specialized training in specific areas of concentration for the aspiring pastry chef. The final course, Baking and Pastry Arts Capstone, will give the student a real-world simulation of what to expect upon graduation.

Interested in this program? Start the enrollment process by visiting [stlcc.edu/enroll](http://www.stlcc.edu/enroll) (http://www.stlcc.edu/Admissions/Get_Started/Enrollment_Overview).

Program of Study

Code	Title	Credit Hours
Career General Education		
ENG 101	College Composition I	3
COM 101 or COM 107	Oral Communication I Public Speaking	3
MTH 108	Elementary Applied Mathematics (or Higher Level Mathematics)	3
XXX xxx	Natural Science or Mathematics	3
XXX xxx	Social Science	3
XXX xxx	Missouri State Requirement	3
Physical Education Activity		
Select 2 credit hours		2
Program Requirements		
HTM 100	Introduction to the Hospitality Industry	3
CUL 101	Safety and Sanitation	1
HTM 120	Supervision and Leadership in the Hospitality Industry	3
HTM 210	Hospitality Financial Planning and Cost Control	3
HTM 125	Nutrition for the Culinarian	3
HTM 200	Procurement in the Hospitality Industry	3
HTM 105	Professionalism in the Hospitality Industry	1
Baking and Pastry Arts Courses		
BAP 101	Introduction to Baking Theory	3
BAP 105	Breads, Rolls, and Bakeries	3
BAP 110	Production Pastry Techniques	3
BAP 115	Cake Production and Decoration	3
CUL 150	Culinary Essentials for the Pastry Arts	3
BAP 201	Artisan and Decorative Bread	2
BAP 205	Ice Cream and Frozen Desserts	2
BAP 210	Chocolate Candies and Showpieces	2
BAP 215	Plated Desserts	2
BAP 220	Sugar Candies and Showpieces	2
BAP 260	Baking and Pastry Arts Capstone	3
Total Credit Hours		65

Biomedical Electronics Technology, Certificate of Specialization

Florissant Valley

This program provides students with skills necessary to enter the field of Biomedical Electronics service and support as Biomedical Electronics Technicians (BMET). Students will learn human anatomy, electrical and electronic concepts associated with medical electronics and devices, basic science behind instruments, and troubleshooting techniques.

This program also serves as exam preparation for Certification for the Biomedical Equipment Technician (BMET) of the International Certification Commission for Clinical Engineering and Biomedical Technology (ICC).

An individual who has been convicted of a felony may not be qualified for employment as a BMET in healthcare.

Students with an electronic education and an Associate degree or equivalent training or a B.S. degree, may take EE 133 Electrical/Electronic Refresher in place of taking the series of EE 130, EE 131, and EE 132.

Interested in this program? Start the enrollment process by visiting [stlcc.edu/enroll](http://www.stlcc.edu/Admissions/Get_Started/Enrollment_Overview) (http://www.stlcc.edu/Admissions/Get_Started/Enrollment_Overview).

Code	Title	Credit Hours
Program Requirements		
EE 130 & EE 131	Electric Circuits I and Electric Circuits II	8
EE 132	Electronic Devices	5
BE 153	Workplace Learning: Biomedical Engineering Technology	4
BE 254	Biomedical Applications	5
Life Science Requirement		
Select at least one of the following (Human Biology is preferred):		3-4
BIO 109	Human Biology	
BIO 111	Introductory Biology I	
BIO 207	Anatomy and Physiology I	
Total Credit Hours		24-25

Biotechnology, Associate in Applied Science

Florissant Valley

Biotechnology is applied biology of cells and their products. The biotechnology classes in this program provide the knowledge and skills to work in a life science research laboratory, in molecular-cellular quality control, in bioprocessing and in other life science industry settings.

Fundamentals of Chemistry I or high school chemistry with a grade of A or B within the past three years is required for entry into this program.

Interested in this program? Start the enrollment process by visiting [stlcc.edu/enroll](http://www.stlcc.edu/Admissions/Get_Started/Enrollment_Overview) (http://www.stlcc.edu/Admissions/Get_Started/Enrollment_Overview).

Program of Study

Code	Title	Credit Hours
General Education		
ENG 101	College Composition I	3
MTH 160	College Algebra	4
COM 101	Oral Communication I	3
CHM 105	General Chemistry I	5
XXX xxx	Missouri State Requirement	3
XXX xxx	Social Science Elective	3
Physical Education Activity		
Select 2 credit hours		2
Program Requirements		
BIO 104	Basic Laboratory Methods for Biotechnology	3
BIO 140	Principles of Biology I	4
BIO 152	Quantitative Methods in Biotechnology	2
BIO 218	Microbiology for Biotechnology	4
BIO 219	Biotechnology I	5
BIO 220	Biotechnology II	5

BIO 221	Workplace Learning: Biotechnology	3
BIO 225	Genetics	5
BIO 226	Advanced Topics in Biotechnology (two sections required)	3
BIO 226	Advanced Topics in Biotechnology (two sections required)	3
CHM 106	General Chemistry II	5
GE 101	Technical Computer Applications	3
PHL 109	Bio-Medical Ethics	3
Total Credit Hours		71

Biotechnology, Certificate of Specialization

Florissant Valley

Biotechnology is applied biology of cells and their products. The biotechnology classes in this program provide introductory knowledge and skills in life science industry settings.

Interested in this program? Start the enrollment process by visiting [stlcc.edu/enroll](http://www.stlcc.edu/enroll) (http://www.stlcc.edu/Admissions/Get_Started/Enrollment_Overview).

Code	Title	Credit Hours
BIO 104	Basic Laboratory Methods for Biotechnology	3
BIO 219	Biotechnology I	5
BIO 220	Biotechnology II	5
BIO 226	Advanced Topics in Biotechnology (two sections required)	3
BIO 226	Advanced Topics in Biotechnology (two sections required)	3
Total Credit Hours		19

Building Inspection and Code Enforcement Technology, Associate in Applied Science

Florissant Valley

This program provides in-service training for current building inspectors and code enforcement officials and prepares students for entry-level employment. Students will learn to approve architectural plans and specifications, award work permits and to inspect new construction as it progresses. They will become knowledgeable in inspection techniques, soils, architectural materials, plumbing and electrical systems, heating and ventilation systems, and municipal fire safety regulations.

Persons interested in this program should be mechanically inclined, honest, able to work with and pursue small details, able to read and interpret technical documents and construction drawings and specifications.

Interested in this program? Start the enrollment process by visiting [stlcc.edu/enroll](http://www.stlcc.edu/enroll) (http://www.stlcc.edu/Admissions/Get_Started/Enrollment_Overview).

Program of Study

Code	Title	Credit Hours
Career General Education		

ENG 101	College Composition I	3
ENG 103	Report Writing	3
COM 101	Oral Communication I	3
CHM 114	Industrial Chemistry	3
MTH 124	Technical Mathematics I	3
PSI 101	Physical Science	3
XXX xxx	Missouri State Requirement	3
SOC 101	Introduction to Sociology	3
Physical Education Activity		
Select 2 credit hours		2
Program Requirements		
BIC 101	Basic Building Inspection Techniques	3
BIC 103	Building Codes and Ordinances	3
BIC 200	Plumbing and Mechanical Inspection	4
BIC 201	Electrical Inspection	2
BIC 202	Administration of Building Regulations	3
BIC 203	Plan Review I (Non-Structural)	3
BIC 204	Plan Review II (Structural)	3
BIC 205		3
CE 116	Construction Blueprint Reading	3
FIR 105	Inspection and Fire Prevention	3
FIR 210	Architectural Structural Representation-Materials	3
ME 135	Mechanics - Statics	3
ME 243	Strength of Materials	3
MGT 204	Business Organization and Management	3
Total Credit Hours		68

Building Inspection and Code Enforcement Technology, Certificate of Proficiency

Florissant Valley

This program provides in-service training for current building inspectors and code enforcement officials and prepares students for entry-level employment. Students will learn to approve architectural plans and specifications, award work permits and to inspect new construction as it progresses. They will become knowledgeable in inspection techniques, soils, architectural materials, plumbing and electrical systems, heating and ventilation systems, and municipal fire safety regulations.

Persons interested in this program should be mechanically inclined, honest, able to work with and pursue small details, able to read and interpret technical documents and construction drawings and specifications.

Interested in this program? Start the enrollment process by visiting [stlcc.edu/enroll](http://www.stlcc.edu/enroll) (http://www.stlcc.edu/Admissions/Get_Started/Enrollment_Overview).

Code	Title	Credit Hours
XXX xxx	Building Inspection, or Fire Protection or Mechanical Engineering Electives from AAS degrees	23
XXX xxx	Approved Electives from AAS degree	9
Total Credit Hours		32

Building Inspection and Code Enforcement Technology: Housing Inspection Option, Certificate of Proficiency

This program is no longer accepting new students. Please see an advisor for more information.

Business Administration, Associate in Applied Science

Florissant Valley, Forest Park, Meramec and Wildwood

This program is designed for students who seek immediate employment in entry-level managerial, marketing or finance positions in a variety of organizations or for employees who want to enhance their skills for career advancement. The focus is on a balanced curriculum of general education courses, and fundamentals in business subjects including accounting, finance, economics, management and marketing.

Graduates of the program are qualified for first-line positions in business and industry and not-for-profit, educational and governmental organizations. Typical positions might include group leaders, office managers, administrative assistants, customer service representatives, personal bankers, sales representatives and sales or management trainees.

Interested in this program? Start the enrollment process by visiting [stlcc.edu/enroll](http://www.stlcc.edu/enroll) (http://www.stlcc.edu/Admissions/Get_Started/Enrollment_Overview).

Program of Study

Code	Title	Credit Hours
Career General Education		
ENG 100 or ENG 101	Career English College Composition I	3
COM 101 or COM 107	Oral Communication I Public Speaking	3
MTH 140	Intermediate Algebra (or higher) ¹	3
XXX xxx	Missouri State Requirement	3
XXX xxx	Social and Behavioral Sciences Elective	3
XXX xxx	Life and Physical Sciences Elective	3-4
Physical Education Activity		
Select two credit hours		2
Required Courses		
BUS 104	Introduction to Business Administration	3
ECO 151	Principles of Macroeconomics	3
ECO 152	Principles of Microeconomics	3
ACC 100	Applied Accounting	3
ACC 110	Financial Accounting I	4
ACC 114	Managerial Accounting	3
BLW 101 or BLW 201	Business Law I Legal Environment of Business	3
IS 123	Introduction to Windows	1
IS 116 or IS 151	Computer Literacy Computer Applications in Business	3-4
Area of Concentration		

Select one area of concentration from the following:		12
Marketing		
Management		
Finance		
General Business		
Electives		
Select six credit hours of the following: ²		6
ACC 120	Computer Accounting Applications for Business	
ACC 122	Computer Accounting Applications - Spreadsheets	
BUS 101	Small Business Management	
IS 129	HTML	
MGT 201		
MCM 140	Introduction to Advertising	
MCM 141	Public Relations	
PSY 200	General Psychology	
PHL 112	Business Ethics	
Electives may be selected from areas of concentration (3-6 credit hours)		
Total Credit Hours		64-66

¹ Except MTH 165 and MTH 166

² If a course has been taken to satisfy the career general education requirements or area of concentration, it cannot be used to satisfy elective credits.

Concentrations

Marketing

Code	Title	Credit Hours
IB 100	International Business	3
MKT 203	Principles of Marketing	3
COM 104	Persuasion	3
MKT 104	Principles of Selling	3
Total Credit Hours		12

Management

Code	Title	Credit Hours
MGT 101 or IB 100	Introduction to Supervision International Business	3
MGT 106	Human Resources Management	3
MGT 120	Managerial Leadership	3
MGT 204	Business Organization and Management	3
Total Credit Hours		12

Finance

Code	Title	Credit Hours
FIN 100	Personal Finance	3
FIN 201	Fundamentals of Finance	3
FIN 101	Please see an advisor for course substitution	3
IS 118	Computer Applications-Databases	1
IS 125	Excel for Windows	2
Total Credit Hours		12

General Business

Code	Title	Credit Hours
IB 100	International Business	3
MKT 203	Principles of Marketing	3
MGT 204	Business Organization and Management	3
FIN 201	Fundamentals of Finance	3
Total Credit Hours		12

Business Administration, Certificate of Proficiency

Florissant Valley, Forest Park, Meramec, Wildwood and Online

This flexible program is designed to address the educational and occupational needs of several groups of people in the business field. Persons presently employed in business-related areas can upgrade their skills and competencies. People presently employed who possess non-business degrees can enhance their business skills and competencies. They can enroll in short-term, intensive training for job opportunities or they can complete specific undergraduate requirements toward an advanced degree in business. Students will acquire fundamental knowledge and skill in accounting, marketing, management, decision making, economics and statistics.

The ability to communicate effectively verbally and in writing is especially important for persons interested in this program.

Interested in this program? Start the enrollment process by visiting [stlcc.edu/enroll](http://www.stlcc.edu/enroll) (http://www.stlcc.edu/Admissions/Get_Started/Enrollment_Overview).

Code	Title	Credit Hours
ENG 101	College Composition I	3
MTH 160	College Algebra (or higher) ¹	4
ECO 151	Principles of Macroeconomics	3
ECO 152	Principles of Microeconomics	3
ACC 110	Financial Accounting I	4
ACC 114	Managerial Accounting	3
BUS 104	Introduction to Business Administration	3
Select four of the following:		12
BLW 101 or BLW 201	Business Law I Legal Environment of Business	
BUS 201	Elementary Statistics	
IB 100	International Business	
IS 103 or IS 116	Information Systems for Business Computer Literacy	
MKT 203	Principles of Marketing	
MGT 204	Business Organization and Management	
Total Credit Hours		35

¹ Except MTH 165 or MTH 166.

Business Administration, Certificate of Specialization

Florissant Valley, Forest Park, Meramec, Wildwood and Online

This flexible program is designed to address the career and educational needs of those currently employed in business-related areas. Designed to enhance business skills and competencies, this focused program can be used to expand job-related skills and to provide a foundation for advanced study in business.

Interested in this program? Start the enrollment process by visiting [stlcc.edu/enroll](http://www.stlcc.edu/enroll) (http://www.stlcc.edu/Admissions/Get_Started/Enrollment_Overview).

Code	Title	Credit Hours
ACC 100	Applied Accounting	3
BUS 104	Introduction to Business Administration	3
IS 103	Information Systems for Business (or approved Information Systems course)	3
Select one of the following:		3
MTH 108	Elementary Applied Mathematics	
MTH xxx	Approved 100 level mathematics course	
BUS 103	Business Mathematics	
MGT 204	Business Organization and Management	3
MKT 203	Principles of Marketing	3
Total Credit Hours		18

Chemical Technology, Certificate of Proficiency

Florissant Valley

This program is not accepting new students at this time. Please consult an advisor for more information.

Cisco Networking Academy: CCNA, Certificate of Specialization

Forest Park

This program teaches comprehensive networking concepts, from network applications to the protocols and services provided to those applications by the lower layers of the network. Students will progress from basic networking to more complex enterprise and theoretical networking models later in the curriculum. In each course, students will learn technology concepts with the support of interactive media and apply and practice this knowledge through a series of hands-on and simulated activities that reinforce their learning. The courses serve as preparation to take the Cisco Certified Entry Networking Technician (CCENT®) certification exam after completing the first two courses and the Cisco Certified Network Associate (CCNA®) Routing and Switching certification exam after completing all four courses.

Interested in this program? Start the enrollment process by visiting [stlcc.edu/enroll](http://www.stlcc.edu/enroll) (http://www.stlcc.edu/Admissions/Get_Started/Enrollment_Overview).

Code	Title	Credit Hours
IT 101	Cisco Networking Academy I: Introduction to Networks	5
IT 201	Cisco Networking Academy II: Routing and Switching Essentials	5
IT 202	Cisco Networking Academy III: Scaling Networks	5
IT 203	Cisco Networking Academy IV: Connecting Networks	5
Total Credit Hours		20

Civil Engineering Technology, Associate in Applied Science

Florissant Valley

Civil engineering technicians work as part of the project team in the design and construction of roads, dams, airports, bridges, pollution control systems, water and sewage treatment plants, and all types of commercial and industrial buildings. To accomplish that work, the civil technician could be involved in surveying, soil testing, preparation of drawings, basic design, construction inspection, material testing, contract administration, estimating project costs or technical sales. Many positions provide the opportunity to work out of doors.

An interest in practical problem solving and in observing a project from start to finish is important for persons employed in this field. Prior course work in algebra, geometry and drafting would be helpful. If necessary, developmental courses in those subjects are available.

Graduates are qualified for positions as civil and structural design draftsmen, survey instrument operators, construction inspectors, soils technicians and technical sales representatives.

Interested in this program? Start the enrollment process by visiting [stlcc.edu/enroll](http://www.stlcc.edu/enroll) (http://www.stlcc.edu/Admissions/Get_Started/Enrollment_Overview).

Program of Study

Code	Title	
Career General Education		
COM 101	Oral Communication I	3
ENG 101	College Composition I	3
ENG 103 or ENG 102	Report Writing College Composition II	3
MTH 185	Precalculus	5
PHY 111	College Physics I	4
PHY 112	College Physics II	4
XXX xxx	Social Science Elective	3
XXX xxx	Missouri State Requirement	3
Physical Education Activity		
Select 2 credit hours		2
Program Requirements		
GE 101	Technical Computer Applications	3
CE 116	Construction Blueprint Reading	3
EGR 100	Engineering Drawing	3
EGR 133	Introduction to AutoCAD I	2
ME 135	Mechanics - Statics	3
ME 243	Strength of Materials	3
CE 230	Construction Materials and Testing	3
CE 240	Surveying I	3
Electives		
Choose 11 credits from any of the following subjects categories:		11
CE xxx Civil Engineering (0-9 hours)		
ME xxx Mechanical Engineering (0-3 hours)		
EGR xxx Engineering Graphics (0-6 hours)		
ESC xxx Engineering Science (0-6 hours)		
BIC xxx Building Inspection (0-6 hours)		

GE 290	Workplace Learning: General Engineering
Total Credit Hours	64

Clinical Laboratory Technology (Medical Laboratory Technician), Associate in Applied Science

Forest Park

This program prepares students for entry-level positions as clinical laboratory technicians. Through classroom and practical experience in hospital and clinical laboratories, students learn to perform qualitative, quantitative and analytic testing in microbiology, hematology, immunohematology, clinical chemistry, serology, immunology and urinalysis.

Persons interested in this program should have an interest in biology, chemistry and the health sciences and be able to follow precise and detailed instructions.

To graduate, a student must obtain a "C" or better on all science, math courses and all courses in the area of concentration.

Graduates are eligible to take the American Society for Clinical Pathology (ASCP) Board of Certification Examination. Positions are available in hospitals, clinics, doctors' offices, independent laboratories, and public health, research and industrial laboratories.

Credit Hours **Interested in this program?** Start the enrollment process by visiting [stlcc.edu/enroll](http://www.stlcc.edu/enroll) (http://www.stlcc.edu/Admissions/Get_Started/Enrollment_Overview).

Program of Study

Code	Title	Credit Hours
Career General Education		
ENG 101	College Composition I	3
ENG 102 or ENG 103	College Composition II Report Writing	3
XXX xxx	Missouri State Requirement	3
SOC 101 or PSY 200	Introduction to Sociology General Psychology	3
CHM 101	Fundamentals of Chemistry I	5
BIO 207	Anatomy and Physiology I	4
BIO 208	Anatomy and Physiology II	4
MTH 140	Intermediate Algebra	3
Physical Education Activity		
Select 2 credit hours		2
Program Requirements		
CLT 100	Orientation to the Medical Laboratory	1
CLT 101	Medical Microbiology	3
CLT 202	Clinical Practice I	4
CLT 207	Clinical Practice II	4
CLT 110	Urinalysis and Body Fluids	2
CLT 111	Hematology and Coagulation	4
CLT 113	Pathogenic Bacteriology	2
CLT 211	Parasites, Fungi and Intracellular Pathogens	2
CLT 213	Introduction to Clinical Chemistry	2
CLT 217	Clinical Chemistry	5
CLT 215	Immunohematology	4

CLT 219	Professional Skills Seminar	1
CLT 115	Immunology and Serology	2
CLT 120	Clinical Laboratory Skill Development	4
Total Credit Hours		70

Computer Accounting Technology, Certificate of Specialization

Florissant Valley, Forest Park and Meramec

This fast-track certificate is designed for accounting students on the fast-track to the job market or practicing accountants who want to update technology skills.

Interested in this program? Start the enrollment process by visiting [stlcc.edu/enroll](http://www.stlcc.edu/enroll) (http://www.stlcc.edu/Admissions/Get_Started/Enrollment_Overview).

Code	Title	Credit Hours
ACC 110	Financial Accounting I	4
ACC 120	Computer Accounting Applications for Business	3
ACC 122	Computer Accounting Applications - Spreadsheets	3
ACC 124	Computer Accounting Applications - Databases	3
Select 3 credit hours of the following:		3
ACC xxx	Accounting Elective(s) ¹	
IS xxx	Information System Elective(s)	
Total Credit Hours		16

¹ Cannot be ACC 100.

Computer Aided Design (CAD), Certificate of Specialization

Florissant Valley

A CAD operator is able to interpret data from multiple sources, apply traditional drafting skills, utilize operating system software, follow industrial practices and company procedures related to CAD work, and efficiently perform all related tasks to produce final drawings and CAD models.

Interested in this program? Start the enrollment process by visiting [stlcc.edu/enroll](http://www.stlcc.edu/enroll) (http://www.stlcc.edu/Admissions/Get_Started/Enrollment_Overview).

Code	Title	Credit Hours
EGR 100	Engineering Drawing	3
Select one of the following:		3
GE 101	Technical Computer Applications	
GE 121	Principles of Engineering	
ESC 100	Engineering Computer Applications and Design	

CAD Sequence

Select at least one course in each of the following areas for a total of at least 9 credit hours:

2-D CAD	
3-D CAD	
CAD Applications	

Technical Elective

Select course(s) from Engineering and Technology department (prefixes: BE, CE, EE, EGR, ESC, GE, ME, QC).	3
Total Credit Hours	18

CAD Sequence

2-D CAD

Code	Title	Credit Hours
EGR 104	Electronic Drafting	2
EGR 133	Introduction to AutoCAD I	2
EGR 141	Introduction to AutoCAD II	2
EGR 145	Computer Solids Modeling	2

3-D CAD

Code	Title	Credit Hours
EGR 147	Introduction to Engineering Design	3
EGR 145	Computer Solids Modeling	2
EGR 139		2
ME 230	Introduction to 3-D Solid Modeling for Design	4
EGR 148	Solid Modeling with Unigraphics	2
EGR 256	Solid Modeling with CATIA	2

CAD Applications

Code	Title	Credit Hours
ME 230	Introduction to 3-D Solid Modeling for Design	4
EGR 255		3
GE 122	Engineering Design and Development	3

Computer Applications, Certificate of Specialization

Florissant Valley, Forest Park, Meramec and Online

This certificate is designed for individuals who are interested in learning a range of end-user applications for personal computers, including operating systems, word processing, spreadsheets, and databases. It prepares the graduate to employ the functions of personal computers that are generally in use in offices today.

Interested in this program? Start the enrollment process by visiting [stlcc.edu/enroll](http://www.stlcc.edu/enroll) (http://www.stlcc.edu/Admissions/Get_Started/Enrollment_Overview).

Code	Title	Credit Hours
IS 102	Keyboarding and Formatting	3
IS 116	Computer Literacy	3
IS 122	Windows	3
IS 136	Internet Fundamentals	1
IS 151	Computer Applications in Business	4
IS 139	Web Publishing	3
IS 165	Computer Applications-Microsoft Project	1
Total Credit Hours		18

Computer Integrated Manufacturing, Associate in Applied Science

Florissant Valley

This program prepares students for positions in manufacturing. The program is designed to accommodate new students as well as those individuals already working in the field.

Graduates will know how to translate general ideas of the engineer into specific, detailed plans and communicate those plans to other people in the organization. Depending on the electives chosen, students will be prepared for work in automation, facilities maintenance, production operations, quality, technical graphics or other areas of the manufacturing enterprise.

Interested in this program? Start the enrollment process by visiting [stlcc.edu/enroll](http://www.stlcc.edu/enroll) (http://www.stlcc.edu/Admissions/Get_Started/Enrollment_Overview).

Program of Study

Code	Title	Credit Hours
Career General Education		
ENG 101	College Composition I	3
COM 101	Oral Communication I	3
MTH 140	Intermediate Algebra (or higher) ¹	3
XXX xxx	Missouri State Elective	3
XXX xxx	Social Science Elective	3
XXX xxx	Life or Physical Science elective	3
Physical Education Activity		
Select 2 credit hours		2
Program Requirements		
GE 131	Engineering Technology Orientation	1
EGR 100	Engineering Drawing	2-3
or ME 154	Mechanical Blueprint Reading	
EGR 133	Introduction to AutoCAD I	2
GE 101	Technical Computer Applications	3
or GE 121	Principles of Engineering	
ME 133	Production Control	3
ME 151	Manufacturing Processes I	3
or ME 120	Manual Machining I	
ME 152	Manufacturing Processes II	3
or ME 212	Introduction to Computer Numerical Control (CNC) Machining	
ME 249	Materials and Metallurgy	3
QC 212	Quality Tools for Advanced Manufacturing	3
GE 240	Product Design and Fabrication	4
3-D CAD Requirement		
Select one of the following:		2-4
EGR 147	Introduction to Engineering Design	
ME 230	Introduction to 3-D Solid Modeling for Design	
EGR 145	Computer Solids Modeling	
EGR 148	Solid Modeling with Unigraphics	
Fundamentals Course		
Select one of the following:		3

ME 140	Introduction to Robotics	
ME 121	Computer Integrated Manufacturing	
GE 151	Introduction to Aerospace Engineering	
Electives		
Select 11 credit hours of the following elective areas:		11
ME XXX		
EGR XXX		
QC XXX		
GE XXX		
Total Credit Hours		63-66

¹ Except MTH 165 and MTH 166

Computer Science, Associate in Science Degree

This program is currently going through a revision. Please see an advisor for more information.

Construction Management Technology, Associate in Applied Science

Florissant Valley

This program prepares students to work as technicians in the construction industry. Student's acquire theoretical and practical skills in construction phases including planning, estimating, building systems, engineering, sustainable construction methods and construction management. The program is designed to emphasize problem solving and critical thinking. This program was also designed to allow students to focus their studies to match their career goals in the construction industry.

Interested in this program? Start the enrollment process by visiting [stlcc.edu/enroll](http://www.stlcc.edu/enroll) (http://www.stlcc.edu/Admissions/Get_Started/Enrollment_Overview).

Program of Study

Code	Title	Credit Hours
Career General Education		
ENG 101	College Composition I	3
or ENG 100	Career English	
COM 101	Oral Communication I	3
or COM 107	Public Speaking	
MTH 140	Intermediate Algebra	3
MTH 185	Precalculus ¹	5
SOC xxx	Social Science Elective	3
XXX xxx	Missouri State Requirement	3
Physical Education Activity		
Select 2 credit hours		2
Program Requirements		
ACC 100	Applied Accounting	3
GE 131	Engineering Technology Orientation	1
EGR 100	Engineering Drawing	3
GE 101	Technical Computer Applications	3
CE 230	Construction Materials and Testing	3

CE 235	Construction Office Practice	3
ME 135	Mechanics - Statics	3
ME 243	Strength of Materials	3
MGT xxx	Management Elective	3
CE 116	Construction Blueprint Reading	3

Electives

Select 15 credit hours of the following: 15

ACC xxx	Accounting
MGT xxx	Management
CE xxx	Civil Engineering
EGR xxx	Engineering Graphics
ESC xxx	Engineering Science
ARC xxx	Architectural Technology
GE xxx	General Engineering
ME xxx	Mechanical Engineering
MTH 210	Analytic Geometry and Calculus I ¹
GE 290	Workplace Learning: General Engineering

Workplace Experience

Students may substitute up to six credit hours of appropriate and relevant workplace learning experience for technical courses, and/or electives, included in the program. In order for the workplace learning credit to be counted for the degree requirement, the learning experience must be pre-approved by the department, and an appropriate faculty member must supervise the work.

Total Credit Hours 65

¹ Students who are planning to pursue a BS degree in construction after completing the AAS degree should take the MTH 185/MTH 210 sequence.

Construction Office Management, Certificate of Specialization

Florissant Valley

This program was designed to provide students with a solid background in the four areas of concentration relating to the construction industry. These areas are: estimating, scheduling, blueprint reading and management. Students successfully completing this program can seek immediate employment by marketing themselves as individuals qualified to participate in construction bidding and management functions, or can continue on in the Construction Management Technology Program and receive an Associate in Applied Science Degree. The certificate program can be completed either in two-semester by taking regular semester-long courses, or in a (five-month) compressed format by taking one course in each of the five months.

The program of study will consist of 15 credit hours of course work in estimating, scheduling, blueprint reading and management.

Interested in this program? Start the enrollment process by visiting [stlcc.edu/enroll](http://www.stlcc.edu/enroll) (http://www.stlcc.edu/Admissions/Get_Started/Enrollment_Overview).

Code	Title	Credit Hours
CE 116	Construction Blueprint Reading	3
CE 131	Construction Estimating	3
CE 132	Construction Scheduling	3
CE 235	Construction Office Practice	3

GE 101	Technical Computer Applications	3
Total Credit Hours		15

Criminal Justice: Corrections Option, Associate in Applied Science

This program is currently going through a revision. Please see an advisor for more information.

Criminal Justice: Corrections Option, Certificate of Proficiency

This program is currently going through a revision. Please see an advisor for more information.

Criminal Justice: Law Enforcement Option, Associate in Applied Science

This program is currently going through a revision. Please see an advisor for more information.

Criminal Justice: Law Enforcement Option, Certificate of Proficiency

This program is currently going through a revision. Please see an advisor for more information.

Culinary Arts, Associate in Applied Science

Forest Park

The Culinary Arts program is designed to meet current and future needs for training food service and food service managerial persons to assume leadership roles in the industry. The curriculum covers food preparation, production, table service and culinary management. Addressing the business, academic, and technical aspects of the industry, the curriculum offers a wide range of courses, specifically meeting the requirements of the hotels, restaurants and clubs in this field. The program features a heavy emphasis on food preparation from basic to advanced, combined with courses that offer a foundation in the managerial aspects of the industry.

Interested in this program? Start the enrollment process by visiting [stlcc.edu/enroll](http://www.stlcc.edu/enroll) (http://www.stlcc.edu/Admissions/Get_Started/Enrollment_Overview).

Program of Study

Code	Title	Credit Hours
Career General Education		
ENG 101	College Composition I	3
COM 101 or COM 107	Oral Communication I Public Speaking	3
MTH 108	Elementary Applied Mathematics	3

or MTH xxx - Higher		
XXX xxx	Natural Science or Mathematics	3
XXX xxx	Missouri State Requirement	3
XXX xxx	Social Science	3
Physical Education Activity		
Select 2 credit hours		2
Program Requirements		
HTM 100	Introduction to the Hospitality Industry	3
HTM 120	Supervision and Leadership in the Hospitality Industry	3
HTM 210	Hospitality Financial Planning and Cost Control	3
HTM 200	Procurement in the Hospitality Industry	3
HTM 125	Nutrition for the Culinarian	3
HTM 105	Professionalism in the Hospitality Industry	1
CUL 101	Safety and Sanitation	1
Culinary Arts Courses		
CUL 110	Food Preparation Practical I	3
CUL 115	Food Preparation Theory & Practical II	3
CUL 120	Food Preparation Theory & Practical III	3
BAP 150	Bakeshop Basics for Culinarians	3
CUL 201	Garde Manger	3
CUL 205	Global Cuisine	3
CUL 215	American Regional Cuisine	3
CUL 250	Culinary Arts Capstone	6
Total Credit Hours		64

Cybersecurity, Associate in Applied Science

Forest Park

This program provides the foundation courses to prepare IT students to apply for entry level information assurance/security technician/practitioners positions that support planning, implementing, upgrading, and monitoring security measures for the protection of computer networks and information systems. Students, through in-depth theory and extensive hands-on activities, will develop skills to ensure appropriate security controls are in place that will safeguard digital files and vital electronic infrastructure, and will develop skills to respond to computer security breaches and viruses. Includes instruction in computer architecture, programming, and systems analysis; networking; cryptography; security system design; applicable law and regulations; risk assessment and policy analysis; contingency planning; user access issues; investigation techniques; and troubleshooting.

Pre-employment background screening is required for any candidate seeking employment in the cybersecurity field.

To be successful, persons interested in the program should possess a strong foundation in computer hardware/software troubleshooting skills, equivalent to the CompTIA A+ certification.

Interested in this program? Start the enrollment process by visiting [stlcc.edu/enroll](http://www.stlcc.edu/enroll) (http://www.stlcc.edu/Admissions/Get_Started/Enrollment_Overview).

Code	Title	Credit Hours
Career General Education		
ENG 101	College Composition I	3
ENG 102	College Composition II	3

or ENG 103	Report Writing	
MTH 186	Survey of Calculus	4
XXX xxx	Natural Science/Mathematics Elective	3
XXX xxx	Missouri State Requirement	3
XXX xxx	Social Science Elective	3
Physical Education Activity		
Select 2 credit hours		2
Program Requirements		
IT 100	Introduction to Cybersecurity	1
IS 112	Software and Hardware Concepts	3
IS 139	Web Publishing	3
IS 153	C# Programming I	4
or IS 187	Java Programming I	
IS 225	Database Management	4
IS 229	Unix/Linux I	3
IS 237	Fundamentals of Information Assurance/Security	3
IS 265	Web Scripting Technologies	3
IT 101	Cisco Networking Academy I: Introduction to Networks	5
IT 120	Enterprise Security Management	3
IT 121	Secure E-Commerce and E-Government	3
or IS 264	Unix/Linux II	
IT 212	Ethical Hacking	3
IT 214	Systems Security Engineering	3
IT 216	Digital Forensics	3
Total Credit Hours		65

Cybersecurity, Certificate of Proficiency

Forest Park

This program provides the foundation courses to prepare IT students to apply for entry level information assurance/security technician/practitioners positions that support planning, implementing, upgrading, and monitoring security measures for the protection of computer networks and information systems. Students, through in-depth theory and extensive hands-on activities, will develop skills to ensure appropriate security controls are in place that will safeguard digital files and vital electronic infrastructure, and will develop skills to respond to computer security breaches and viruses. Includes instruction in computer architecture, programming, and systems analysis; networking; cryptography; security system design; applicable law and regulations; risk assessment and policy analysis; contingency planning; user access issues; investigation techniques; and troubleshooting.

Pre-employment background screening is required for any candidate seeking employment in the cybersecurity field.

To be successful, persons interested in the program should possess a strong foundation in computer hardware/software troubleshooting skills, equivalent to the CompTIA A+ certification.

Interested in this program? Start the enrollment process by visiting [stlcc.edu/enroll](http://www.stlcc.edu/enroll) (http://www.stlcc.edu/Admissions/Get_Started/Enrollment_Overview).

Code	Title	Credit Hours
MTH 140	Intermediate Algebra	3
IS 112	Software and Hardware Concepts	3

IT 100	Introduction to Cybersecurity	1
IS 139	Web Publishing	3
IS 153	C# Programming I	4
or IS 187	Java Programming I	
IS 225	Database Management	4
IS 229	Unix/Linux I	3
IS 237	Fundamentals of Information Assurance/Security	3
IS 265	Web Scripting Technologies	3
IT 101	Cisco Networking Academy I: Introduction to Networks	5
IT 120	Enterprise Security Management	3
IT 121	Secure E-Commerce and E-Government	3
or IS 264	Unix/Linux II	
IT 212	Ethical Hacking	3
IT 214	Systems Security Engineering	3
IT 216	Digital Forensics	3
Total Credit Hours		47

Database Developer, Certificate of Proficiency

Meramec

The Database Developer Certificate of Proficiency is designed for individuals who are interested in developing skills to qualify for positions as Database Application Developers, Database Analysts, or Database Administrators. The certificate will empower the student with the tools, knowledge, and practical experience needed to design, develop, program, implement and administer a database. The program objectives align with current industry standards. Graduates will be qualified for the high demand positions of developer, analyst, administrator or programmer in the Oracle or Microsoft SQL server environment.

Interested in this program? Start the enrollment process by visiting [stlcc.edu/enroll](http://www.stlcc.edu/enroll) (http://www.stlcc.edu/Admissions/Get_Started/Enrollment_Overview).

Code	Title	Credit Hours
IS 153	C# Programming I	4
or IS 187	Java Programming I	
IS 225	Database Management	4
IS 229	Unix/Linux I	3
IS 240	SQL and Database Development	3
IS 241	Systems Analysis and Design	3
Select one of the following:		3-4
IS 253		
IS 287		
IS 256		
IS 257	Advanced Database Design	3
IS 268	SQL Server Programming	3
or IS 276	Oracle Programming	
Electives		
Select 6-8 credit hours:		6-8
IS 237	Fundamentals of Information Assurance/Security	
IS 273	Oracle Design and Implementation	
IS 275	Advanced C++ Programming	
IS 277	Oracle Applications Programming	

IS 278	Oracle Database Security and Administration
IS 279	Oracle Tuning and Performance
IS 283	C# Programming III
IS 288	Java Programming III
IS 290	C# Frameworks: .NET Web App Framework

Total Credit Hours

32-35

Deaf Communication Studies: American Sign Language, Certificate of Specialization

Florissant Valley

The foundation of the curriculum is American Sign Language (ASL), which is the native, indigenous language of the North American deaf community. We recognize the deaf community as a linguistic and cultural minority that functions distinctly from the American mainstream culture.

Students in this program will learn to recognize and adapt to the variations in language that exist within the deaf and non-deaf communities. Students learn to create equivalency in meaning between English and ASL.

These entry-level language courses are open to all members of the deaf and non-deaf community.

Interested in this program? Start the enrollment process by visiting [stlcc.edu/enroll](http://www.stlcc.edu/enroll) (http://www.stlcc.edu/Admissions/Get_Started/Enrollment_Overview).

Code	Title	Credit Hours
DCS 104	American Sign Language I	5
DCS 105	American Sign Language II	5
DCS 107	Fingerspelling	3
DCS 120	Fingerspelling Lab	1
DCS 111	Theory of American Sign Language	3
DCS 119	Theory of American Sign Language Lab	1
DCS 115	Introduction to Deaf Communications Studies	3
DCS 116	American Sign Language Semantics	3
Total Credit Hours		24

Deaf Communication Studies: Interpreter Education, Associate in Applied Science

Florissant Valley

This two-year American Sign Language interpreter education program provides the instruction and experience needed to interpret between individuals using American Sign Language and English. Focus is on a multi-disciplinary and interdisciplinary approach to interpreting centered around the theory of interpretation. This professional, career program consists of a comprehensive, sequential, and integrated series of courses intended to provide students with the necessary mastery of the theory, techniques and skills required to enter the profession of interpretation.

Students interested in the interpreting profession can expect to expand their worldview, commit to lifelong learning, meet new people and experience diverse situations within large and small group settings.

The foundation of the curriculum is American Sign Language (ASL) which is the native, indigenous language of the North American deaf community. We recognize the deaf community as a linguistic and cultural minority that functions distinctly from the American mainstream culture.

Admission into the program is contingent upon meeting established criteria as defined in the DCS-IEP Advising Checklist.

Graduates of the program will be prepared for entry-level, paraprofessional interpreting positions.

Interested in this program? Start the enrollment process by visiting [stlcc.edu/enroll](http://www.stlcc.edu/enroll) (http://www.stlcc.edu/Admissions/Get_Started/Enrollment_Overview).

Program of Study

Code	Title	
Career General Education		
ENG 101	College Composition I	3
ENG 102	College Composition II	3
MTH xxx	100 level or higher	3
XXX xxx	Missouri State Requirement	3
XXX xxx	Biological/Physical Science	3
Physical Education Activity		
Select 2 credit hours		2
Program Requirements		
DCS 106	American Sign Language III	5
DCS 121	American Sign Language IV	3
DCS 108	Orientation to Interpreting	3
DCS 109	Etymology for Interpreters	3
DCS 110	Deaf Theatre Studies	3
DCS 206	Consecutive Interpreting	3
DCS 207	Simultaneous Interpreting	3
DCS 209	Interpreting/Transliterating Lab	1
DCS 210	Sign to Voice Interpreting	3
DCS 211	Specialized Interpreting	3
DCS 212	Deaf History and Culture	3
DCS 213	Professional Issues and Ethics	3
DCS 214	Interactive Interpreting	3
DCS 216	Educational Interpreting - Classroom Applications	3
DCS 217	Translation Applications of ASL	3
DCS 218	Pre-Workplace Learning	3
DCS 219	Workplace Learning: Deaf Communication Studies	3
Total Credit Hours		68

Dental Assisting, Certificate of Proficiency

Forest Park

This program prepares students to work as members of the dental health care team. Students receive a broad background in all aspects of dentistry through extensive classroom, laboratory and clinical instruction. Major emphasis is placed on gaining proficiency in chairside assisting procedures and expanded functions. Students learn to prepare patients and records for treatment, sterilize and prepare instrument trays, take X-rays and impressions, and prepare restorative materials for dental procedures.

The Missouri Dental Board has approved 19 expanded functions for dental assistants who meet specific certification and training criteria. Competency in one or more expanded functions enlarges the skill mix of the assistant, increases the responsibilities of the assistant and enhances the value of the assistant to the dental health care team. The program will incorporate expanded functions training into the curriculum. Graduates will be certified to perform these functions and can assume expanded roles on the dental health care team as delegated by their employer. These highly skilled professionals will be in great demand.

Persons interested in this program should be comfortable working with people of all ages in close one-to-one relationships. They should have manual dexterity and be attentive to detail. This program has many prerequisites based on professional standards. See an advisor for further information.

Credit Interested in this program? Start the enrollment process by visiting [stlcc.edu/enroll](http://www.stlcc.edu/enroll) (http://www.stlcc.edu/Admissions/Get_Started/Enrollment_Overview).

Code	Title	Credit Hours
COM 101	Oral Communication I	3
DA 143	Chairside Assisting: Operative Dentistry	2
DA 144	Preclinical Practice	1
DA 149	Dental Terminology	1
DA 150	Infection Control in Dentistry	1
DA 151	Fundamentals of Chairside Assisting	2
DA 157	Dental Radiology	2
DA 159	Dental Office Procedures	1
DA 161	Dental Assisting Practicum	2
DA 162	Dental Systems Management	1
DA 164	Clinical Applications I	2
DA 165	Dental Materials	1
DA 166	Dental Lab Procedures	1
DA 167	Dental Radiology II	1
DA 168	Integrated Dental Sciences	2
DA 169	Preventive Dental Health	2
DA 172	Dental Practice Management	1
DA 173	Chairside Assisting: Dental Specialties	2
DA 174	Clinical Applications II	2
DA 175	Dental Assisting Practicum II	2
DA 176	Dental Assisting Practicum III	2
DA 201	Expanded Functions I	1
DA 202	Expanded Functions II	1
DA 203	Expanded Functions III	1
ENG 101	College Composition I	3
Total Credit Hours		40

Dental Hygiene, Associate in Applied Science

Forest Park

This program prepares students to practice dental hygiene under the supervision of a practicing dentist. Through classroom work and laboratory and clinical experience in the on-campus public dental hygiene clinic, students learn to conduct patient assessments, take medical and dental histories, perform diagnostic tests and examinations, instruct patients in preventive dental health practices, perform various dental procedures, and to design and

implement community and school health programs. Persons interested in this program should enjoy working with people from all age groups. An interest in biology and the health sciences is important. Good eye/hand coordination and attention to detail is necessary.

Graduates are qualified for positions as dental hygienists and may serve as clinical practitioners in general or specialty dental practice, or as educators, researchers, administrators, managers, program developers, consultants or dental product sales representatives. Employment is available in the military, health maintenance organizations, community health agencies, private industry, and abroad with the Peace Corps or World Health Organization. This program has many prerequisites based on professional standards. See an advisor for further information.

Dental Hygiene Program Prerequisites

Code	Title	Credit Hours
BIO 207	Anatomy and Physiology I	4
BIO 208	Anatomy and Physiology II	4
CHM 101	Fundamentals of Chemistry I	5

(These prerequisites must be satisfied prior to entry in the program.)

Interested in this program? Start the enrollment process by visiting [stlcc.edu/enroll](http://www.stlcc.edu/enroll) (http://www.stlcc.edu/Admissions/Get_Started/Enrollment_Overview).

Program of Study

Code	Title	Credit Hours
Career General Education		
BIO 203	General Microbiology I	4
COM 101	Oral Communication I	3
ENG 101	College Composition I	3
PSY 200	General Psychology	3
SOC 101	Introduction to Sociology	3
XXX xxx	Missouri State Requirement	3
Physical Education Activity		
Select 2 credit hours		2
Program Requirements		
DHY 120	Concepts of Pre-Clinical Dental Hygiene I	3
DHY 121	Clinical Applications Lab I	1
DHY 125	Periodontics I	2
DHY 126	Dental Radiology I	2
DHY 127	Oral Anatomy	3
DHY 128	Biomedical Sciences for the Dental Hygienist	2
DHY 129	Dental-Medical Emergencies	1
DHY 130	Concepts of Clinical Dental Hygiene II	3
DHY 131	Clinical Applications Lab II	1
DHY 132	Clinical Dental Hygiene II	4
DHY 136	Dental Nutrition and Biochemistry	3
DHY 137	Anatomy and Embryology of the Head and Neck	2
DHY 138	General and Oral Pathology	2
DHY 142	Clinical Dental Hygiene Summer	2
DHY 215	Pain Control	2
DHY 220	Concepts of Clinical Dental Hygiene III	2
DHY 221	Clinical Applications Lab III	1

DHY 222	Clinical Dental Hygiene III	4
DHY 223	Community Public Health	2
DHY 225	Periodontics II	2
DHY 226	Dental Radiology II	1
DHY 228	Dental Pharmacology	2
DHY 230	Transition into Professional Dental Hygiene Practice	2
DHY 232	Clinical Dental Hygiene IV	4
Total Credit Hours		74

Diagnostic Medical Sonography, Certificate of Proficiency

Forest Park

Credit Hours The Diagnostic Medical Sonography program provides a specialty in ultrasound technology for graduates of an associate degree or two-year hospital-based program in another allied health area. Students attend full-time and complete classroom work and clinical education in an affiliated ultrasound department. Students acquire skills in record keeping, reviewing and recording pertinent clinical patient history, performing the sonographic examination, providing for the comforts and needs of the patient during the examination, and recording the anatomic, pathologic and physiologic data for interpretation by the supervising physician.

Thoroughness, accuracy and empathy are traits needed by persons interested in this program. They also should be versatile and able to follow precise and detailed directions.

Credit Hours Graduates are eligible to take the certifying examination of the American Registry of Diagnostic Medical Sonographers in the specialty areas of abdomen and obstetrics-gynecology and adult echocardiography. Positions are available in hospital ultrasound departments, clinics, mobile services and private physicians' offices.

Pre-admissions Entrance Requirements:

- Completion of all program prerequisites prior to submitting an application. Must earn a "C" or higher:
 - Anatomy and Physiology with lab (usually two semester course sequence of at least 8 credit hours)
 - Physics or Physical Science Lecture
 - College Algebra
 - Medical Terminology
 - English Composition
 - Oral Communications
- Cumulative GPA: 3.0
- Cumulative GPA for Math and Sciences: 3.0 (Physics, Anatomy and Physiology, College Algebra)
- Only one repeat of a course prerequisite is allowed over a five year period
- Complete 4 hours of job shadowing
- Complete 120 hours in a patient care setting (can be voluntary service within a hospital or nursing home)
- Math and science prerequisite courses must have been completed within five years of entering the program

Pre-admissions Entrance Requirements:

- Completion of all program prerequisites prior to submitting an application. Must earn a "C" or higher:
 - Anatomy and Physiology with lab (usually two semester course sequence of at least 8 credit hours)

- Physics or Physical Science Lecture
- College Algebra
- Medical Terminology
- English Composition
- Oral Communications

- Cumulative GPA: 3.0
- Cumulative GPA for Math and Sciences: 3.0 (Physics, Anatomy and Physiology, College Algebra)
- Only one repeat of a course prerequisite is allowed over a five year period
- Complete 4 hours of job shadowing
- Complete 120 hours in a patient care setting (can be voluntary service within a hospital or nursing home)
- Math and science prerequisite courses must have been completed within five years of entering the program

Interested in this program? Start the enrollment process by visiting [stlcc.edu/enroll](http://www.stlcc.edu/enroll) (http://www.stlcc.edu/Admissions/Get_Started/Enrollment_Overview).

Program of Study

Code	Title	Credit Hours
Core Curriculum		
DMS 103	Ultrasound Physics and Instrumentation I	2
DMS 104	Ultrasound Physics and Instrumentation II	2
DMS 201	Ultrasound Physics and Instrumentation III	2
Options		
Select one of the following options:		36
	Cardiac Sonography	
	Medical Sonography	
Total Credit Hours		42

Options

Cardiac Sonography

Code	Title	Credit Hours
DMS 127	Introduction to Sonography	3
DMS 112	Cardiac Sonography I	3
DMS 113	Cardiac Sonography Scanning Techniques I	2
DMS 114	Cardiac Sonography Practicum I	2
DMS 115	Cardiac Sonography II	3
DMS 116	Cardiac Sonography Scanning Techniques II	1
DMS 117	Cardiac Sonography Clinical Applications	2
DMS 118	Cardiac Sonography Practicum II	3
DMS 207	Cardiac Sonography III	2
DMS 208	Cardiac Sonography Practicum III	4
DMS 209	Cardiac Sonography IV	4
DMS 126	Introduction to Vascular Sonography	3
DMS 128	Introduction to Vascular Sonography Scanning Techniques	1
DMS 211	Cardiac Sonography Practicum IV	3
Total Credit Hours		36

Medical Sonography

Code	Title	Credit Hours
DMS 127	Introduction to Sonography	3
DMS 105	Medical Sonography I	3
DMS 106	Medical Sonography Scanning Techniques I	2
DMS 107	Medical Sonography Practicum I	2
DMS 108	Medical Sonography II	3
DMS 109	Medical Sonography Scanning Techniques II	1
DMS 110	Medical Sonography Clinical Applications	2
DMS 111	Medical Sonography Practicum II	3
DMS 202	Medical Sonography III	2
DMS 203	Medical Sonography Practicum III	4
DMS 204	Medical Sonography IV	4
DMS 126	Introduction to Vascular Sonography	3
DMS 128	Introduction to Vascular Sonography Scanning Techniques	1
DMS 206	Medical Sonography Practicum IV	3
Total Credit Hours		36

Diesel Technology, Associate in Applied Science

Forest Park

The AAS degree Diesel Technology program is designed to prepare graduates for careers as medium/heavy truck repair technicians. Graduates will be qualified for positions requiring diagnosis and repair of the following truck systems: diesel engines; suspension and steering; brakes; electrical and electronic; preventive maintenance; drive train; and heating, ventilation and air conditioning. Graduates will be competent for entry-level positions in new vehicle dealerships, truck and bus leasing companies, street and highway departments, and metropolitan transit facilities.

Interested in this program? Start the enrollment process by visiting [stlcc.edu/enroll](http://www.stlcc.edu/enroll) (http://www.stlcc.edu/Admissions/Get_Started/Enrollment_Overview).

Program of Study

Code	Title	Credit Hours
Career General Education		
ENG 101	College Composition I	3
MTH 108	Elementary Applied Mathematics	3
SOC 101	Introduction to Sociology	3
BUS 104	Introduction to Business Administration	3
COM 101	Oral Communication I	3
PSI 101	Physical Science	3
XXX xxx	Missouri State Requirement	3
Physical Education Activity		
Select 2 credit hours		2
Program Requirements		
DIE 101	Diesel Engine Operation and Repair	3
DIE 102	Medium/Heavy Truck Suspension and Steering	3
DIE 103	Medium/Heavy Truck Electricity	3
DIE 104	Introduction to Diesel Technology	3
DIE 105	Diesel Fuel Systems	3

DIE 106	Medium/Heavy Truck Brakes	3
DIE 107	Medium/Heavy Truck Electronics	3
DIE 201	Preventive Maintenance Inspection	3
DIE 206	Medium/Heavy Truck Drivetrains	3
DIE 203	Truck Heating, Ventilation and Air Conditioning	3
DIE 204	Service and Parts Management	3
DIE 202	Co-op Work Experience I-Diesel Technology	3
DIE 205	Co-op Work Experience II - Diesel Technology	3
ME 101	Welding Technology	3
Total Credit Hours		65

Diesel Technology, Certificate of Proficiency

Forest Park

Interested in this program? Start the enrollment process by visiting [stlcc.edu/enroll](http://www.stlcc.edu/enroll) (http://www.stlcc.edu/Admissions/Get_Started/Enrollment_Overview).

Code	Title	Credit Hours
Choose one of the following:		
ENG 101	College Composition I	3
or MTH 108	Elementary Applied Mathematics	
or BUS 104	Introduction to Business Administration	

Program Requirements

DIE 101	Diesel Engine Operation and Repair	3
DIE 102	Medium/Heavy Truck Suspension and Steering	3
DIE 103	Medium/Heavy Truck Electricity	3
DIE 104	Introduction to Diesel Technology	3
DIE 105	Diesel Fuel Systems	3
DIE 106	Medium/Heavy Truck Brakes	3
DIE 107	Medium/Heavy Truck Electronics	3
DIE 201	Preventive Maintenance Inspection	3
DIE 202	Co-op Work Experience I-Diesel Technology	3
DIE 203	Truck Heating, Ventilation and Air Conditioning	3
DIE 204	Service and Parts Management	3
DIE 205	Co-op Work Experience II - Diesel Technology	3
DIE 206	Medium/Heavy Truck Drivetrains	3
ME 101	Welding Technology	3
Total Credit Hours		45

Diesel Technology, Certificate of Specialization

Forest Park

Interested in this program? Start the enrollment process by visiting [stlcc.edu/enroll](http://www.stlcc.edu/enroll) (http://www.stlcc.edu/Admissions/Get_Started/Enrollment_Overview).

Code	Title	Credit Hours
Select one of the following:		
ENG 101	College Composition I	3
or MTH 108	Elementary Applied Mathematics	
or BUS 104	Introduction to Business Administration	

Program Requirements

DIE 101	Diesel Engine Operation and Repair	3
DIE 102	Medium/Heavy Truck Suspension and Steering	3
DIE 103	Medium/Heavy Truck Electricity	3
DIE 104	Introduction to Diesel Technology	3
DIE 206	Medium/Heavy Truck Drivetrains	3
Total Credit Hours		18

Dietetic Technology: Nutrition Care, Associate in Applied Science

Florissant Valley

This program includes a variety of courses in food and nutrition sciences, foodservice systems management, communication and education. Students completing the program are eligible to sit for the national registration exam to become credentialed as a Dietetic Technician, Registered (DTR). Dietetic technicians in the nutrition care area work independently or in teams with registered dietitians in hospitals, HMOs, clinics, nursing homes, retirement centers, hospital health care programs and research facilities helping to treat and prevent disease and administering medical nutrition therapy as an important member of health care teams. WIC programs, public health agencies, company health programs, health clubs, weight management clinics and community wellness programs hire dietetic technicians to develop and teach nutrition classes and educate clients about the connection between food, fitness and health.

Interested in this program? Start the enrollment process by visiting [stlcc.edu/enroll](http://www.stlcc.edu/enroll) (http://www.stlcc.edu/Admissions/Get_Started/Enrollment_Overview).

Program of Study

Code	Title	Credit Hours
Career General Education		
ENG 101	College Composition I	3
COM 101	Oral Communication I	3
MTH xxx	Mathematics Elective (MTH 108 or higher)	3-4
BIO/CHM	Biology/Chemistry Elective	4-5
PSY 200	General Psychology	3
XXX xxx	Missouri State Requirement	3
SOC 103	Work and Society	3

Physical Education Activity

Select 2 credit hours	2
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Program Requirements

DIT 108	Food: Preparation and Science Lecture	3
DIT 109	Food: Preparation and Science Lab	2
DIT 115	Principles of Nutrition	3
DIT 104	Clinical Nutrition	3
DIT 214	Nutrition Through the Life Cycle	3
DIT 106	Food Management Practicum	3
DIT 107	Clinical Nutrition Practicum	3
DIT 202	Medical Nutrition Therapy	3
DIT 210	Community Nutrition	3
DIT 209	Community Nutrition Practicum	4

DIT 225	The Cultural Feast: An Introduction to Food and Society	3
Program Elective		
Electives		7
Total Credit Hours		64-66

Digital Media--Digital Photography, Certificate of Specialization

Florissant Valley, Forest Park, and Meramec

This program is a 21-credit-hour program designed to develop and enhance the workplace skills of professionals currently working in the various fields of commercial photography, digital imaging, and photographic technology as well as for students intending to enter those fields. Study includes the use of current computers, scanners, digital cameras, printers, and related hardware and software in a creative context. Instruction emphasizes ways in which traditional photographic visualization and processing can be cultivated and enhanced with advanced computer technology and software while providing students with expertise in the new tools for creating and editing still and moving images.

Interested in this program? Start the enrollment process by visiting [stlcc.edu/enroll](http://www.stlcc.edu/enroll) (http://www.stlcc.edu/Admissions/Get_Started/Enrollment_Overview).

Code	Title	Credit Hours
ART 131	Computer Art Studio	3
ART 165	Photography I	3
ART 172	Digital Photography	3
ART 275	Photo Imaging I: Photoshop	3
AT 100	Hardware Configuration and Troubleshooting: Macintosh/Windows	1
AT 105	Digital Printing	3
ART 265	Artificial Light Photography	3
or AT 106	Motion Media Design	
AT 283	Digital Media Portfolio	2
Total Credit Hours		21

Digital Media--Interactive and Graphic Design, Certificate of Specialization

Meramec

This program is a 23-credit-hour program designed to develop and enhance the workplace skills of professionals currently working in the various fields of interactive, design, and online development as well as for students intending to enter those fields. The program focuses on visual communication and dynamic design while utilizing the most current hardware and software for construction and implementation in online, print, and interactive media.

Interested in this program? Start the enrollment process by visiting [stlcc.edu/enroll](http://www.stlcc.edu/enroll) (http://www.stlcc.edu/Admissions/Get_Started/Enrollment_Overview).

Code	Title	Credit Hours
ART 131	Computer Art Studio	3

ART 107	Design I	2
ART 133	Graphic Design I	3
AT 100	Hardware Configuration and Troubleshooting: Macintosh/Windows	1
AT 135	Web Design I	3
AT 246	Advanced Computer Art Applications	3
ART 134	Graphic Design II	3
AT 143	Web Design II	3
or AT 106	Motion Media Design	
AT 283	Digital Media Portfolio	2
Total Credit Hours		23

Digital Media--Video Editing and Animation, Certificate of Specialization

Meramec

This program is a 23-credit-hour program designed to develop and enhance the workplace skills of professionals currently working in the various fields of video editing, special effects, digital storytelling, and dimensional rendering as well as for students intending to enter those fields. This program focuses on conception, production, and post-production training while utilizing the most current hardware and software for construction and implementation in user-centric and interactive media.

Interested in this program? Start the enrollment process by visiting [stlcc.edu/enroll](http://www.stlcc.edu/enroll) (http://www.stlcc.edu/Admissions/Get_Started/Enrollment_Overview).

Code	Title	Credit Hours
ART 131	Computer Art Studio	3
ART 275	Photo Imaging I: Photoshop	3
ART 111	Figure Drawing I	3
AT 233	Storyboarding/Animatics	2
AT 100	Hardware Configuration and Troubleshooting: Macintosh/Windows	1
AT 146	3D Modeling I: Surface Modeling	3
AT 106	Motion Media Design	3
or ART 280	Final Cut	
AT 234	Fundamentals of Animation	3
AT 283	Digital Media Portfolio	2
Total Credit Hours		23

Early Care and Education - Developmental Disabilities, Associate in Applied Science Degree

This program is currently going through a revision. Please see an advisor for more information.

Early Care and Education, Associate in Applied Science

Florissant Valley, Forest Park and Meramec

The Early Care and Education program offers students a variety of degree options and pathways of study. Students will investigate leading theories of child development and methodologies for curriculum planning and assessment. Through class lectures, observation studies, field work with mentor teachers, service learning, and opportunities for discussion with award winning faculty, students will engage with the best practices designed for the study of early education.

The associate in applied science degree is a two-year program of study with a concentration of coursework in early education, child development, and family studies. Students who complete the AAS degree can find employment as teachers or directors in early childhood settings, including preschool programs, teacher assistants in elementary schools or as parent educators working within the community.

Students must earn at least a "C" in certain courses to be eligible for the associate degree. See an academic advisor or the program coordinator for details.

The Early Care and Education program is aligned with education standards for Associate Degree programs set forth by the National Association for the Education of Young Children. The profession offers opportunities for teaching and working in a wide range of programs and agencies that serve young children and their families. St. Louis Community College prepares students to work with young children from infancy through age eight in a variety of settings such as preschool, day care, Head Start programs, youth development, as teacher assistants in elementary school settings, or for management positions such as program director, or as child and family advocates for community agencies.

Interested in this program? Start the enrollment process by visiting [stlcc.edu/enroll](http://www.stlcc.edu/enroll) (http://www.stlcc.edu/Admissions/Get_Started/Enrollment_Overview).

Program of Study

Code	Title	Credit Hours
Career General Education		
ENG 101	College Composition I	3
MTH 108	Elementary Applied Mathematics (or higher)	3
XXX xxx	Missouri State Requirement	3
XXX xxx	Social Science Elective	3
XXX xxx	Science Elective	3
XXX xxx	Humanities or Communications Elective	3
Physical Education Activity		2
Program Requirements		
ECE 101	Introduction to Early Care and Education	3
ECE 102	Creative Experiences in Early Care and Education	3
ECE 103	Language and Literacy in Early Care and Education	3
ECE 104	Principles of Early Care and Education	3
ECE 105	Child Development Laboratory	3
ECE 124	Child Nutrition, Health and Safety	3
ECE 125	Child Growth and Development I	3
ECE 127	Family and Teacher Interactions	3
ECE 200	Guiding Young Children	3

ECE 201	Math and Science in Early Care and Education	3
ECE 202	Movement and Music in Early Care and Education	3
ECE 203	Early Care and Education Practicum I	3
ECE 205	Child and Society	3
ECE 206	Early Care and Education Practicum II	3
Electives		
Select one of the following:		3
ECE 107	Early Care and Special Education	
ECE 108	Infant, Toddler and Two-Year-Old Children	
ECE 204	Management of Early Care and Education Settings	
ECE 207	Activities for Special Individuals	
ECE 208	Before and After School Care	

Total Credit Hours 65

Early Care and Education, Certificate of Proficiency

Florissant Valley, Forest Park and Meramec

The Certificate of Proficiency is a 30 credit hour program option that can be completed in one year, offering the first step toward an AAS degree. Students choose the CP option for a variety of reasons:

1. as an entry level credential
2. as a credential to validate employment after obtaining a degree in another discipline
3. as a pathway toward the AAS degree

Students who complete the 30 credit hour certificate of proficiency will be able to find employment immediately upon graduation. The Certificate of Proficiency is designed to provide one half of the AAS degree.

Interested in this program? Start the enrollment process by visiting [stlcc.edu/enroll](http://www.stlcc.edu/enroll) (http://www.stlcc.edu/Admissions/Get_Started/Enrollment_Overview).

Code	Title	Credit Hours
ECE 101	Introduction to Early Care and Education	3
ECE 104	Principles of Early Care and Education	3
ECE 105	Child Development Laboratory	3
ECE 124	Child Nutrition, Health and Safety	3
ECE 125	Child Growth and Development I	3
ECE 127	Family and Teacher Interactions	3
ECE 200	Guiding Young Children	3
ENG 101	College Composition I	3
Electives		
Select two of the following:		6
ECE 102	Creative Experiences in Early Care and Education	
ECE 103	Language and Literacy in Early Care and Education	
ECE 107	Early Care and Special Education	
ECE 108	Infant, Toddler and Two-Year-Old Children	
ECE 201	Math and Science in Early Care and Education	
ECE 202	Movement and Music in Early Care and Education	
ECE 204	Management of Early Care and Education Settings	
ECE 208	Before and After School Care	
Total Credit Hours		30

Electrical/Electronic Engineering Technology, Associate in Applied Science

Florissant Valley

This program prepares students to function as technical assistants to scientists and engineers. Through classroom work and practical experience in technology laboratories, students learn to prepare and interpret drawings and diagrams, perform testing procedures and compile technical data.

Persons interested in the program should be mechanically inclined and be able to follow instructions. Prior course work in math and its application with science is beneficial.

Graduates are qualified for electrical/electronic engineering technician positions in industry and research.

This program is accredited by the

Engineering Technology Accreditation Commission of the Accreditation Board for Engineering and Technology (ABET)
415 N. Charles Street
Baltimore, Md. 21202
telephone 410-347-7700 (<http://catalog.stlcc.edu/programs/electrical-electronic-engineering-technology-aas/tel:4103477700>)
ABET.org (<http://www.ABET.org>)

Interested in this program? Start the enrollment process by visiting stlcc.edu/enroll (http://www.stlcc.edu/Admissions/Get_Started/Enrollment_Overview).

Program of Study

Code	Title	Credit Hours
Career General Education		
ENG 101	College Composition I	3
Select one of the following:		3
ENG 102	College Composition II	
ENG 103	Report Writing	
COM 101	Oral Communication I	
XXX xxx	Missouri State Requirement	3
XXX xxx	Social Science Requirement	3
Physical Education Activity		
Select 2 credit hours		2
Math Requirement		
Select one of the following:		5-7
MTH 185	Precalculus	
MTH 160 & MTH 170	College Algebra and Trigonometry	
Science Requirement		
Select one of the following:		4-5
PHY 111	College Physics I	
CHM 101	Fundamentals of Chemistry I	
BIO 111	Introductory Biology I	
BIO 207	Anatomy and Physiology I	
Program Requirements		
GE 131	Engineering Technology Orientation	1
GE 101	Technical Computer Applications	3

EGR 104	Electronic Drafting	2
EE 106	IBM Personal Computer Installation and Repair	1
EE 130	Electric Circuits I	4
EE 131	Electric Circuits II	4
EE 132	Electronic Devices	5
EE 233	Digital Logic	4
Electives		
Select 17 or more credit hours of the following:		17
GE 133	Quantitative Methods in Engineering Technologies	
EE 242	Introduction to Microprocessors	
EE 236	PLC/Programmable Logic Controller	
BE 254	Biomedical Applications	
EE 260	Electronic Project Design and Fabrication	
GE 240	Product Design and Fabrication	
EE 204	Three-Phase Power	
EE 235	Electronic Communications	
ME 210	Robotics Subsystems and Components	
ME 254	Electricity and Controls	
BE 153	Workplace Learning: Biomedical Engineering Technology	
GE 290	Workplace Learning: General Engineering	
Workplace Experience		

Students may substitute up to six credit hours of appropriate and relevant workplace learning experience for technical courses, and/or electives, included in the program. In order for the workplace learning credit to be counted for the degree requirement, the learning experience must be pre-approved by the department, and the appropriate faculty member must supervise the work.

Credit Hours	Total Credit Hours	64-67
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Emergency Medical Technology, Certificate of Specialization

Forest Park

This program is designed for individuals that are interested in a career as an Emergency Medical Technician, preparing them for an entry-level position in Emergency Medical Services (EMS). Since many EMS services are components of fire departments, it is also important for those pursuing a career as a fire fighter.

Interested in this program? Start the enrollment process by visiting stlcc.edu/enroll (http://www.stlcc.edu/Admissions/Get_Started/Enrollment_Overview).

Code	Title	Credit Hours
EMT 121	Emergency Care, Principles, and Techniques	9
EMT 122	EMT Internship	6
EMT 119	EMT Emergency Medical Skills	1
Total Credit Hours		16

Engineering Science, Associate in Science Degree

Florissant Valley and Meramec

This program provides students with the first two years of study toward a Bachelor of Science degree at a four-year college or university. Students take fundamental courses common to most engineering disciplines and continue their studies in specialized areas (such as electrical, mechanical, civil, chemical, aerospace and nuclear) during the remaining years at four-year colleges or universities.

STLCC works with the Missouri University of Science and Technology, University of Missouri-Columbia, Washington University, Southern Illinois University-Edwardsville, UM-St. Louis/Washington University Joint Engineering Program, Parks College of St. Louis University and Rensselaer Polytechnic Institute to facilitate the transferability of specific courses. For the most current information on transferability, please consult an academic advisor, the Engineering Department or the transfer institution's website. This program is designed to provide the necessary flexibility to meet the technical and general education requirements indicated in the receiving institution's transfer guidelines.

Interested in this program? Start the enrollment process by visiting stlcc.edu/enroll (http://www.stlcc.edu/Admissions/Get_Started/Enrollment_Overview).

Program of Study

Code	Title	Credit Hours
General Education		
ENG 101	College Composition I	3
ENG 102	College Composition II	3
or ENG 103	Report Writing	
MTH 210	Analytic Geometry and Calculus I	5
CHM 105	General Chemistry I	5
PHY 122	Engineering Physics I	5
XXX xxx	Social Science Requirement	3
XXX xxx	Missouri State Requirement	3
Physical Education Activity		
Select 2 credit hours		2
Program Requirements		
ESC 100	Engineering Computer Applications and Design	3
ESC 101	Scientific Computer Programming	3
ESC 200	Engineering Circuits I	4
ESC 203	Engineering Mechanics I	3
MTH 220	Analytic Geometry and Calculus II	5
MTH 230	Analytic Geometry and Calculus III	5
MTH 240	Differential Equations	3
PHY 223	Engineering Physics II	5
Engineering Electives		
Choose one course from the following list based on the engineering field to be pursued and the recommendation of the college to which transfer is expected:		3-4
ESC 201	Engineering Circuits II	
ESC 204	Engineering Mechanics II	
ESC 205	Mechanics of Materials	
ESC 207	Engineering Thermodynamics	
Technical and General Education Electives		

Completion of the AS degree in Engineering Science requires an additional 6-7 six to seven credit hours selected from any of the courses listed in the following three areas. Elective courses should be selected based on the engineering field to be pursued, and the recommendation of the college to which transfer is expected.

Engineering and Related Electives	
EGR 100	Engineering Drawing
ESC 201	Engineering Circuits II
ESC 204	Engineering Mechanics II
ESC 205	Mechanics of Materials
ESC 206	Strength of Materials Lab
ESC 207	Engineering Thermodynamics
ME 151	Manufacturing Processes I ¹
ME 249	Materials and Metallurgy ¹
CE 240	Surveying I ¹
IS 256	C++ Programming
Science and Mathematics Electives	
BIO 117	Conservation and Ecology ¹
CHM 106	General Chemistry II
CHM 206 & CHM 210	Organic Chemistry Lecture I and Organic Chemistry Lab I
CHM 207 & CHM 211	Organic Chemistry Lecture II and Organic Chemistry Lab II
GEO 111	Physical Geology ¹
MTH 215	Linear Algebra
PHY 224	Engineering Physics III
Recommended General Education Electives ²	
ART 133	Graphic Design I
COM 101	Oral Communication I
ECO 151	Principles of Macroeconomics
HST 119	The Modern World
HUM 112	Creative Thinking
PHL 111	Environmental Ethics
PSC 201	International Relations
PSY 200	General Psychology
PSY 206	Introduction to Social Psychology
SOC 101	Introduction to Sociology
SOC 202	Social Problems

Total Credit Hours 69-71

¹ Check with transfer institution to determine course acceptability.

² Substitutions may be made with permission from an advisor.

Event Planning, Certificate of Specialization

Forest Park

This program provides the student an overview into the many sectors of the meeting and event planning industry. The program provides the student with the required skills and knowledge to form a solid foundation to join the event planning industry in an entry-level position. Areas of career opportunity for students completing this certificate include administrative position that are involved in event planning, hotel positions, attractions, venues, country clubs,

sporting arenas, casinos, experiential marketing, live events, mobile marketing, volunteerism and catering companies that all have entry-level positions.

Interested in this program? Start the enrollment process by visiting [stlcc.edu/enroll](http://www.stlcc.edu/enroll) (http://www.stlcc.edu/Admissions/Get_Started/Enrollment_Overview).

Code	Title	Credit Hours
Core Courses		
HTM 100	Introduction to the Hospitality Industry	3
HTM 105	Professionalism in the Hospitality Industry	1
HTM 110	Negotiations in the Hospitality Industry	2
HTM 205	Legal Aspects of Hospitality	3
ACC 100	Applied Accounting	3
Focus Courses		
HTM 245	Event Planning I	3
HTM 250	Event Planning II	3
HTM 255	Event Planning III	3
Total Credit Hours		21

Fire Protection Technology, Associate in Applied Science

Forest Park and Online

This program is designed to train a person wanting to be a firefighter and upgrade the skills of persons currently employed in the field. Students receive a thorough knowledge of effective fire fighting techniques and the ability to use equipment appropriate to extinguish all types of fires. They become familiar with inspection techniques, municipal safety codes and ordinances, insurance regulations, alarm systems, hydraulics and structures.

All courses are taught identically on two successive evenings to accommodate rotating schedules of working firefighters. Required liberal arts courses may be taken day or evening, but are offered on a rotating basis in the evenings only as listed in the long-range schedule available from the department.

Persons interested in this program should be mechanically inclined and have good coordination and vision. Stamina and agility are also important. Firefighters should have a willingness to serve the public, be capable of exerting maximum effort under discouraging conditions, be persistent and tenacious, and be able to work on a team and to improvise in problem solving.

Interested in this program? Start the enrollment process by visiting [stlcc.edu/enroll](http://www.stlcc.edu/enroll) (http://www.stlcc.edu/Admissions/Get_Started/Enrollment_Overview).

Program of Study

Code	Title	Credit Hours
Career General Education		
ENG 101	College Composition I	3
ENG 103	Report Writing	3
COM 101	Oral Communication I	3
MTH 124	Technical Mathematics I	3
CHM 114	Industrial Chemistry	3
XXX xxx	Missouri State Requirement	3
SOC 101	Introduction to Sociology	3
Physical Education Activity		
Select 2 credit hours		2

Program Requirements

FIR 111	Fire Fighter I	4
FIR 112	Fire Fighter II	4
FIR 100	Fire Department Apparatus	2
FIR 102	Fire Characteristics	3
FIR 103	Fire Service Management and Administration	3
FIR 105	Inspection and Fire Prevention	3
FIR 106	Teaching Techniques for Fire Department Personnel	3
FIR 110	Basic Fire Protection and Alarm Systems	3
FIR 202	Fire Investigation	3
FIR 204	Fire Fighting Tactics and Strategy	3
FIR 205		3
FIR 207	Codes and Ordinances	3
FIR 208	Hazardous Materials	3
FIR 210	Architectural Structural Representation-Materials	3
IS 103	Information Systems for Business	3-4
or IS 151	Computer Applications in Business	
Total Credit Hours		69-70

Fire Protection Technology, Certificate of Proficiency

Forest Park

This program is designed to upgrade the skills of persons currently employed in the field. Students receive a thorough knowledge of effective fire fighting techniques and the ability to use equipment appropriate to extinguish all types of fires. They become familiar with inspection techniques, municipal safety codes and ordinances, insurance regulations, alarm systems, hydraulics and structures.

Interested in this program? Start the enrollment process by visiting [stlcc.edu/enroll](http://www.stlcc.edu/enroll) (http://www.stlcc.edu/Admissions/Get_Started/Enrollment_Overview).

Code	Title	Credit Hours
FIR xxx	Approved Fire Protection Courses	18
MTH 124	Technical Mathematics I	3
PSI 101	Physical Science	3
or CHM 114	Industrial Chemistry	
XXX xxx	Approved electives from AAS (3)	9
Total Credit Hours		33

Food and Beverage Management, Certificate of Specialization

Forest Park

This course of study is designed for students seeking entry-level positions in the restaurant or hotel industry in the area of food & beverage management. The program provides the student with the required skills and knowledge to form a solid foundation to join the food & beverage industry. Areas of career opportunity for students completing this certificate include restaurant operations, hotel food & beverage operations, catering operations.

Interested in this program? Start the enrollment process by visiting [stlcc.edu/enroll](http://www.stlcc.edu/enroll) (http://www.stlcc.edu/Admissions/Get_Started/Enrollment_Overview).

Code	Title	Credit Hours	PSY 200	General Psychology	3
Core Courses			IS 116	Computer Literacy	3
HTM 100	Introduction to the Hospitality Industry	3	FSE 101	History and Sociology of Funeral Service	3
HTM 105	Professionalism in the Hospitality Industry	1	FSE 102	Dynamics of Grief Management	3
HTM 115	Hospitality Customer Service and Guest Relations	3	FSE 106	Mortuary Law and Ethics	3
HTM 120	Supervision and Leadership in the Hospitality Industry	3	FSE 107	Funeral Service Merchandising	2
HTM 205	Legal Aspects of Hospitality	3	FSE 201	Funeral Home Management	2
Focus Courses			FSE 103	Funeral Directing	2
CUL 101	Safety and Sanitation	1	Total Credit Hours		27
HTM 200	Procurement in the Hospitality Industry	3			
HTM 210	Hospitality Financial Planning and Cost Control	3			
HTM 230	Bar and Beverage Management	3			
HTM 240	Workplace Learning: Hospitality	2			
Total Credit Hours		25			

Funeral Directing, Certificate of Specialization

Forest Park and Online

This program prepares the student for licensure as a funeral director and entry-level employment in a Missouri funeral establishment, as well as other states with similar licensing regulations. Funeral Directing courses are available to students who have been admitted to the Funeral Directing Program and/or have departmental approval. The Funeral Directing curriculum consists of two semesters of courses that are offered in the evening at the Forest Park campus as well as Distance Learning via the College's Internet Web site. The Certificate focuses solely on funeral directing, with no courses in embalming. It is a nontechnical certificate, geared toward the business and public relations aspects of operating a funeral home.

Funeral directors use counseling skills to assist families in coping with grief, adjusting to new situations, and making appropriate funeral arrangements. The successful funeral director possesses emotional stability, the desire to serve others, and good physical health to withstand the irregular working hours and the obvious stresses of the job. Good grooming habits are essential, as the funeral director must reflect the high standards of care the families will receive at the funeral home. Prior coursework in public speaking, accounting, and business would be helpful for students interested in this program. This academic program is designed to meet specific state or professional needs. It is not accredited by the American Board of Funeral Service Education. Students graduating from this program are not eligible to take the National Board Examination or any state board examination for which graduation from an ABFSE accredited program is required.

The Funeral Directing program has been approved by the Missouri State Board of Embalmers and Funeral Directors, and it is the only such certificate program offered in this state. In addition, the program fulfills the educational requirement for licensure as a funeral director in Missouri, and graduates are eligible to sit for the state licensing examinations. This also applies to other states with similar licensing regulations.

Interested in this program? Start the enrollment process by visiting [stlcc.edu/enroll](http://www.stlcc.edu/enroll) (http://www.stlcc.edu/Admissions/Get_Started/Enrollment_Overview).

Code	Title	Credit Hours	ENG 100	Career English	3
ACC 100	Applied Accounting	3	or ENG 101	College Composition I	
COM 101	Oral Communication I	3	COM 101	Oral Communication I	3
			BIO 103	Problems in Anatomy	3
			XXX xxx	Missouri State Requirement	3

Funeral Service Education, Associate in Applied Science

Forest Park

The Associate of Applied Science degree in Funeral Service Education at St. Louis Community College at Forest Park is accredited by:

American Board of Funeral Service Education (ABFSE)
 992 Mantua Pike, Suite 108
 Woodbury Heights, NJ 08097
 telephone 816-233-3747 (<http://catalog.stlcc.edu/programs/funeral-service-education-aas/tel:8162333747>)
www.abfse.org (<http://www.abfse.org>)

Please check the college website stlcc.edu/programs/Funeral_Service_Education (http://www.stlcc.edu/programs/Funeral_Service_Education) for student learning outcomes and additional updates and information regarding the accreditation status of the program.

National Board Examination scores, graduation rates and employment rates for this and other ABFSE accredited programs are available at www.abfse.org (<http://www.abfse.org>). To request a printed copy of this program's scores and rates, go to the Funeral Service Education program office, Forest Park campus, Room E-411, or by email at dcoughran@stlcc.edu, or by telephone, 314-644-9327 (<http://catalog.stlcc.edu/programs/funeral-service-education-aas/tel:3146449327>).

Prerequisites: Prior to applying for admission to the Funeral Service Education program, the student must submit a program application, three professional character references, a written personal narrative and complete a minimum of 40 hours of documented job shadowing which has been completed and verified under the direct supervision of a licensed funeral director and embalmer, and which must also occur an unaffiliated and licensed funeral service establishment. In addition, the student is required to meet with the program director and/or other Funeral Service Education faculty for a personal interview.

Interested in this program? Start the enrollment process by visiting stlcc.edu/enroll (http://www.stlcc.edu/Admissions/Get_Started/Enrollment_Overview).

Program of Study

Code	Title	Credit Hours
Career General Education		
ENG 100	Career English	3
or ENG 101	College Composition I	
COM 101	Oral Communication I	3
BIO 103	Problems in Anatomy	3
XXX xxx	Missouri State Requirement	3

PSY 200	General Psychology	3
IS 116	Computer Literacy	3
MTH 108	Elementary Applied Mathematics	3
BIO 111	Introductory Biology I	4
Physical Education Activity		
Select 2 credit hours		2
Program Requirements		
ACC 100	Applied Accounting	3
FSE 101	History and Sociology of Funeral Service	3
FSE 103	Funeral Directing	2
FSE 107	Funeral Service Merchandising	2
FSE 104	Funeral Directing Practicum	2
FSE 106	Mortuary Law and Ethics	3
FSE 105	Funeral Directing Practicum II	2
FSE 102	Dynamics of Grief Management	3
FSE 201	Funeral Home Management	2
FSE 202	Embalming I	2
FSE 203	Embalming Practicum I	2
FSE 204	Embalming II	2
FSE 205	Embalming Practicum II	2
FSE 207	Microbiology and Pathology for Funeral Service	3
FSE 206	Restorative Art	4
FSE 208	Funeral Service Seminar	2
Total Credit Hours		66

General Fine Arts, Associate in Fine Arts Degree

Florissant Valley, Forest Park, Meramec and Wildwood

This program is designed for students planning to transfer to four-year art schools and colleges to earn a bachelor of fine arts degree. Students may experience both two- and three-dimensional artwork through courses in painting, figure drawing, ceramics, sculpture, printmaking and design, and other studio and imaging disciplines. Persons interested in this program should possess a strong interest in the visual world and a desire to produce work using traditional as well as non-traditional techniques.

Interested in this program? Start the enrollment process by visiting [stlcc.edu/enroll](http://www.stlcc.edu/enroll) (http://www.stlcc.edu/Admissions/Get_Started/Enrollment_Overview).

Program of Study

Code	Title	Credit Hours
General Education		
ENG 101	College Composition I	3
ENG 102	College Composition II	3
XXX xxx	Missouri State Requirement	3
XXX xxx	Social Science Elective	3
Select one of the following:		3-4
MTH 140	Intermediate Algebra (140 level or higher)	
Science Elective		
ART 101	Art History I	3
ART 102	Art History II	3

XXX xxx	Science Elective	3
Physical Education Activity		
Select 2 credit hours		2
Program Requirements		
ART 107	Design I	2
ART 108	Design II	2
ART 109	Drawing I	3
ART 110	Drawing II	3
ART 111	Figure Drawing I	3
ART 112	Figure Drawing II	3
ART 207	Design III	2
ART 208	Design IV	2
ART 211	Figure Drawing III	3
ART 209	Drawing III	3
ART 210	Advanced Drawing	3
Electives		
Select 12-13 credit hours of the following:		12-13
ART 131	Computer Art Studio	
ART 138	Drawing for Graphics	
ART 113	Ceramics I	
ART 213	Ceramics II	
AT 213	Advanced Ceramics	
ART 165	Photography I	
ART 166	Photography II	
AT 279	Alternative Photographic Processes	
ART 172	Digital Photography	
ART 275	Photo Imaging I: Photoshop	
AT 108	Computer Painting and Drawing: Corel Painter	
AT 175	Video Art I	
AT 275	Video Art II	
ART 116	Sculpture I	
ART 216	Sculpture II	
AT 227	3-D Studio	
AT 201	Mixed Media	
ART 114	Painting I	
ART 214	Painting II	
AT 229	Advanced Painting Projects	
AT 121	Watercolor I	
AT 221	Watercolor II	
ART 115	Printmaking I	
ART 215	Printmaking II	
AT 215	Advanced Printmaking	
AT 210	Drawing Problems	
Total Credit Hours		67-69

Graphic Communications, Associate in Applied Science

Florissant Valley, Forest Park and Meramec

Students gain graphic design fundamentals using basic graphic design materials to learn such skills as lettering, drawing for graphics layout, advertising design, illustration and computer graphics.

Graduates of the graphics communications program will have the creative and conceptual skills necessary to, and be ready for, entry-level employment and beyond in a variety of visual communication settings. Skill areas are applicable to graphic designers, illustrators, computer artists, layout artists, animators, display artists, cartoonists, package designers, production artists and artists working in digital forms of visual communication.

Interested in this program? Start the enrollment process by visiting [stlcc.edu/enroll](http://www.stlcc.edu/enroll) (http://www.stlcc.edu/Admissions/Get_Started/Enrollment_Overview).

Program of Study

Code	Title	Credit Hours
Career General Education		
ENG 101	College Composition I	3
ENG 102	College Composition II	3
or COM 101	Oral Communication I	
or COM 107	Public Speaking	
AT 242	History of Graphic Communications	3
XXX xxx	Missouri State Requirement	3
XXX xxx	Science/Mathematics Requirement	6
Physical Education Activity		
Select 2 credit hours		2
Program Requirements		
ART 109	Drawing I	3
ART 107	Design I	2
ART 108	Design II	2
AT 106	Motion Media Design	3
ART 111	Figure Drawing I	3
ART 131	Computer Art Studio	3
ART 133	Graphic Design I	3
ART 134	Graphic Design II	3
ART 135	Graphic Production	2
ART 138	Drawing for Graphics	2
ART 236	Typography	2
ART 245	Portfolio Design and Professional Practices	2
Focus Area		
Select one focus area from the following:		14-15
Graphic and Interactive Design		
Illustration and animation design		
Total Credit Hours		64-65

Focus Areas

Graphic and Interactive Design

Code	Title	Credit Hours
ART 233	Graphic Design III	3
ART 234	Graphic Design IV	3
AT 135	Web Design I	3
AT 143	Web Design II	3

Approved Electives (see list)	3
Total Credit Hours	15

Illustration and Animation Design

Code	Title	Credit Hours
ART 112	Figure Drawing II	3
AT 233	Storyboarding/Animatics	2
or Approved Elective (see list)		
ART 239	Illustration I	3
AT 234	Fundamentals of Animation	3
ART 240	Illustration II	3
or AT 235	Animation Techniques: Digital 2D	
or Approved Elective (see list)		
Total Credit Hours		14

Approved Electives

Code	Title	Credit Hours
AT 108	Computer Painting and Drawing: Corel Painter	3
AT 120	Computer Drawing I: Illustrator	3
AT 135	Web Design I	3
AT 143	Web Design II	3
AT 146	3D Modeling I: Surface Modeling	3
AT 175	Video Art I	3
AT 204	Comic Book Illustration I	3
AT 205	Dimensional Illustration I	3
AT 206	3D Miniature Studio Set Design	3
AT 207	Digital Illustration	3
AT 208	Fantasy Illustration I	3
AT 233	Storyboarding/Animatics	2
AT 234	Fundamentals of Animation	3
AT 235	Animation Techniques: Digital 2D	3
AT 246	Advanced Computer Art Applications	3
AT 276	Photo Imaging II: Photoshop	3
AT 282	Workplace Learning: Graphic Communications	1-3
AT 195	Special Topics in Graphic Design	1-3
AT 284	Special Topics in Illustration	1-3
AT 238	Special Topics in Animation	1-3
ART 110	Drawing II	3
ART 112	Figure Drawing II	3
ART 114	Painting I	3
ART 125	Interactive Design I	3
ART 165	Photography I	3
ART 172	Digital Photography	3
ART 221	Page Layout: Quark/InDesign	3
ART 224	Package Design	2
ART 233	Graphic Design III	3
ART 234	Graphic Design IV	3
ART 235		2
ART 239	Illustration I	3
ART 240	Illustration II	3
ART 241		3

ART 249	Digital Photography II	3
ART 275	Photo Imaging I: Photoshop	3
ART 280	Final Cut	3

Graphic Communications, Associate in Fine Arts Degree

Florissant Valley, Forest Park and Meramec

This program is designed for students planning to transfer to a four-year art school or the University of Missouri-St. Louis and earn a bachelor of fine arts degree. The program includes concept origination and development; use of computers; logos, point-of-purchase, package and publication design; printing techniques and processes. Persons interested in this program should possess a strong interest in the visual world and a desire to produce work using traditional as well as non-traditional techniques.

Interested in this program? Start the enrollment process by visiting [stlcc.edu/enroll](http://www.stlcc.edu/enroll) (http://www.stlcc.edu/Admissions/Get_Started/Enrollment_Overview).

Program of Study

Code	Title	Credit Hours
General Education		
ENG 101	College Composition I	3
ENG 102	College Composition II	3
or COM 101	Oral Communication I	
XXX xxx	Missouri State Requirement	3
XXX xxx	Science Elective	3
Select one of the following:		3-4
MTH 140	Intermediate Algebra (140 level or higher) ¹	
	Science Elective	
Physical Education Activity		
Select 2 credit hours		2
Program Requirements		
ART 107	Design I	2
ART 108	Design II	2
ART 109	Drawing I	3
ART 110	Drawing II	3
ART 111	Figure Drawing I	3
ART 112	Figure Drawing II	3
ART 131	Computer Art Studio	3
ART 133	Graphic Design I	3
ART 134	Graphic Design II	3
ART 138	Drawing for Graphics	2
ART 239	Illustration I	3
ART 240	Illustration II	3
ART 233	Graphic Design III	3
ART 234	Graphic Design IV	3
ART 245	Portfolio Design and Professional Practices	2
ART 135	Graphic Production	2
ART 236	Typography	2
AT 242	History of Graphic Communications	3
Total Credit Hours		65-66

¹ It is recommended that students intending to transfer to an undergraduate art program requiring math should verify transfer institution requirements. Consultation with advisors at the transfer institution is strongly advised.

Health Information Technology, Associate in Applied Science

Forest Park

The Health Information Technology program provides students with the technical skills and knowledge required to provide reliable and valid information essential to the healthcare industry. Graduates are specialists working with health information systems, managing medical records, and coding information for reimbursement and research. Health information technology professionals work throughout the healthcare industry in a variety of settings. Common job titles include HIM supervisor, clinical coder, coding manager, clinical data collection and reporting specialist, cancer registrar, data integrity specialist, and reimbursement specialist. This program prepares health information technicians to support health information management in an electronic environment (e-HIM) and adheres to the American Health Information Management Association's Framework for Health Information Management (HIM) education. This program is accredited by the Commission on Accreditation for Health Informatics and Information Management Education (CAHIIM).

A background check and drug screen test are required for all healthcare professions. Students will be required to complete both the background check and drug screen test prior to enrollment in HIT:102. See Health Information Technology Handbook for additional information.

Students are required to complete the **Foundation Courses** prior to moving forward to the **Area of Concentration** courses for the Health Information Technology Program.

Interested in this program? Start the enrollment process by visiting [stlcc.edu/enroll](http://www.stlcc.edu/enroll) (http://www.stlcc.edu/Admissions/Get_Started/Enrollment_Overview).

Program of Study

Code	Title	Credit Hours
Career General Education		
ENG 101	College Composition I	3
COM 101	Oral Communication I	3
MTH 160	College Algebra	4
BIO 207	Anatomy and Physiology I	8
& BIO 208	and Anatomy and Physiology II	
XXX xxx	Social Science Elective	3
XXX xxx	Missouri State Requirement	3
Physical Education Activity		
Select 2 credit hours		2
Foundation Courses		
HIT 101	Medical Terminology	4
HIT 104	Basic Principles of Disease	2
HIT 105	Pharmacology for Health Information Technology Professionals	1
IS 116	Computer Literacy	3
Area of Concentration		
HIT 102	Health Information Management Technology	4

HIT 103	Healthcare Delivery Systems	2
HIT 106	Diagnosis Coding Systems I	3
HIT 107	Procedure Coding Systems I	3
HIT 110	Healthcare Legal and Ethical Issues	3
HIT 201	Healthcare Reimbursement	3
HIT 210	Professional Practice Experience	2
HIT 211	Electronic Health Systems	3
HIT 213	Quality and Performance Improvement in Healthcare	3
HIT 214	Calculating and Reporting Healthcare Statistics	3
HIT 291	Workplace Learning: Health Information Technology	2
IS 136	Internet Fundamentals	1
IS 151	Computer Applications in Business	4
Total Credit Hours		72

Horticulture, Associate in Applied Science

Meramec

Students learn both the science and the art of horticulture through a combination of classroom theory with laboratory practice and on-the-job training. Courses in soils, plant diseases, turfgrass management and cooperative horticulture are integral parts of the program. Students receive their training in the College's greenhouses, outdoor nursery facilities, laboratories and lath house. Students should enjoy working with plants and observing the growth process.

Graduates may specialize in nursery management, interior landscape design and maintenance, greenhouse management, horticulture retail sales, commercial grounds management and urban forestry. Entry-level jobs are available with state and city park departments, nurseries, landscape contracting firms, golf courses and retail sales.

Interested in this program? Start the enrollment process by visiting [stlcc.edu/enroll](http://www.stlcc.edu/enroll) (http://www.stlcc.edu/Admissions/Get_Started/Enrollment_Overview).

Program of Study

Code	Title	Credit Hours
Career General Education		
ENG 100 or ENG 101	Career English College Composition I	3
COM 101	Oral Communication I	3
CHM 109	Chemistry and the Environment	4
MTH 140	Intermediate Algebra	3
PSY 200	General Psychology	3
XXX xxx	Missouri State Requirement	3
Physical Education Activity		
Select 2 credit hours		2
Program Requirements		
Select 6-7 credit hours of the following:		6-7
ACC 100 or ACC 110	Applied Accounting Financial Accounting I	
BLW 101	Business Law I	
BUS 101	Small Business Management	
MGT 101	Introduction to Supervision	

MKT 104	Principles of Selling	
Horticulture Core		
HRT 101 or BIO 124	Introductory Horticulture General Botany I	4
HRT 102	Soils	3
HRT 105	Workplace Learning: Horticulture	1
HRT 206	Ornamental Plants - Trees and Vines	3
HRT 207	Ornamental Plants - Shrubs and Evergreens	3
HRT 230	Ornamental Plants - Herbaceous Perennials	3
HRT 214	Grounds Management	3
HRT 227	Plant Pest Management	4
Select one of the following focus areas:		6-9
Turfgrass Management		
Landscape Design		
Plant Production and Marketing		
Landscape Management		
General Horticulture		
Horticulture Electives		6
HRT 235	Annuals and Vegetables	
Select 3-6 credit hours from Focus Areas		
Total Credit Hours		63-67

Focus Areas

Turfgrass Management

Code	Title	Credit Hours
HRT 201	Turfgrass Management	3
HRT 220	Landscape Irrigation	3
Total Credit Hours		6

Landscape Design

Code	Title	Credit Hours
HRT 104	Landscape Design I	3
HRT 217	Landscape Design II	3
HRT 218	Landscape Design III	3
Total Credit Hours		9

Plant Production and Marketing

Code	Title	Credit Hours
HRT 103	Plant Propagation	3
HRT 205	Nursery and Garden Center Practices	3
HRT 241	Greenhouse Management	3
Total Credit Hours		9

Landscape Management

Code	Title	Credit Hours
HRT 201	Turfgrass Management	3
HRT 220	Landscape Irrigation	3
HRT 242	Urban Tree Management	3
Total Credit Hours		9

General Horticulture

Code	Title
Select 9 credit hours from above focus areas	
Total Credit Hours	

Horticulture, Certificate of Proficiency

Meramec

Interested in this program? Start the enrollment process by visiting [stlcc.edu/enroll](http://www.stlcc.edu/enroll) (http://www.stlcc.edu/Admissions/Get_Started/Enrollment_Overview).

Code	Title	Credit Hours
Horticulture Core		
HRT 101 or BIO 124	Introductory Horticulture General Botany I	4
HRT 102	Soils	3
HRT 105	Workplace Learning: Horticulture	1
HRT 206	Ornamental Plants - Trees and Vines	3
HRT 207	Ornamental Plants - Shrubs and Evergreens	3
HRT 230	Ornamental Plants - Herbaceous Perennials	3
HRT 214	Grounds Management	3
HRT 227	Plant Pest Management	4
Select one of the following focus areas:		6-9
Turfgrass Management		
Landscape Design		
Plant Production and Marketing		
Landscape Management		
General Horticulture		
Horticulture Electives		6
HRT 235	Annuals and Vegetables	
Select 3-6 credit hours from Focus Areas		
Total Credit Hours		36-39

Focus Areas**Turfgrass Management**

Code	Title	Credit Hours
HRT 201	Turfgrass Management	3
HRT 220	Landscape Irrigation	3
Total Credit Hours		6

Landscape Design

Code	Title	Credit Hours
HRT 104	Landscape Design I	3
HRT 217	Landscape Design II	3
HRT 218	Landscape Design III	3
Total Credit Hours		9

Plant Production and Marketing

Code	Title	Credit Hours
HRT 103	Plant Propagation	3
HRT 205	Nursery and Garden Center Practices	3
HRT 241	Greenhouse Management	3
Total Credit Hours		9

Landscape Management

Code	Title	Credit Hours
HRT 201	Turfgrass Management	3
HRT 220	Landscape Irrigation	3
HRT 242	Urban Tree Management	3
Total Credit Hours		9

General Horticulture

Code	Title	Credit Hours
Select 9 credit hours from above focus areas		9
Total Credit Hours		9

Hospitality and Tourism, Associate in Applied Science

Forest Park

The Hospitality and Tourism curriculum will prepare students for first-level management trainee positions in the hospitality industry with a focus choice of either Hotel Management, Food and Beverage Management, Event Planning, or Travel and Tourism. The graduate will be prepared to enter the industry at a low-supervisory or pre-supervisory level and to perform appropriate functions and duties. The program is a combined curriculum for academic training and practical application (structured experience in hospitality) courses leading to an AAS Degree in Hospitality and Tourism. The graduate will be prepared for employment in a variety of operations in the Hospitality industry or to continue their education at a four-year institution.

Interested in this program? Start the enrollment process by visiting [stlcc.edu/enroll](http://www.stlcc.edu/enroll) (http://www.stlcc.edu/Admissions/Get_Started/Enrollment_Overview).

Program of Study

Program of Study			
Credit Hours	Code	Title	Credit Hours
3			
3	Career General Education		
6	ENG 101	College Composition I	3
	COM 101	Oral Communication I	3
	or COM 107	Public Speaking	
Credit Hours	MTH 108	Elementary Applied Mathematics (or higher)	3
3	XXX xxx	Social Science	3
3	XXX xxx	Natural Science or Mathematics	3
3	XXX xxx	Missouri State Requirement	3
3	Physical Education Activity		
9	Select 2 credit hours		2
	Program Requirements		
	ACC 100	Applied Accounting	3

IS 123	Introduction to Windows	1
IS 151	Computer Applications in Business	4
HTM 100	Introduction to the Hospitality Industry	3
HTM 105	Professionalism in the Hospitality Industry	1
HTM 110	Negotiations in the Hospitality Industry	2
HTM 115	Hospitality Customer Service and Guest Relations	3
HTM 120	Supervision and Leadership in the Hospitality Industry	3
HTM 200	Procurement in the Hospitality Industry	3
HTM 205	Legal Aspects of Hospitality	3
HTM 210	Hospitality Financial Planning and Cost Control	3
HTM 215	Hospitality Sales and Marketing	3
Select one of the following focus areas:		12-14
Hotel Management		
Food and Beverage		
Event Planning		
Travel and Tourism		
Total Credit Hours		64-66

Focus Areas

Hotel Management

Code	Title	Credit Hours
CUL 101	Safety and Sanitation	1
HTM 240	Workplace Learning: Hospitality	2
HTM 220	Hotel Facilities Management	3
HTM 225	Hotel Operations	3
Elective		3
Total Credit Hours		12

Food and Beverage Management

Code	Title	Credit Hours
CUL 101	Safety and Sanitation	1
HTM 240	Workplace Learning: Hospitality	2
HTM 230	Bar and Beverage Management	3
HTM 235	Foodservice Design and Layout	3
Elective		3
Total Credit Hours		12

Event Planning Management

Code	Title	Credit Hours
HTM 245	Event Planning I	3
HTM 250	Event Planning II	3
HTM 255	Event Planning III	3
Elective		3
Total Credit Hours		12

Travel and Tourism

Code	Title	Credit Hours
HTM 260	Travel and Tourism Foundations	6
HTM 270	Travel and Tourism Computer Systems	5

HTM 265	Travel and Tourism Destination Geography	3
Total Credit Hours		14

Hotel Management, Certificate of Specialization

Forest Park

This course of study is designed for students seeking entry-level positions in the Hotel Industry. The program provides the student with the required skills and knowledge to form a solid foundation to join the hotel industry. Areas of career opportunity for students completing this certificate include front office operations, housekeeping operations, and overall hotel operations.

Interested in this program? Start the enrollment process by visiting [stlcc.edu/enroll](http://www.stlcc.edu/enroll) (http://www.stlcc.edu/Admissions/Get_Started/Enrollment_Overview).

Code	Title	Credit Hours
Core Courses		
HTM 100	Introduction to the Hospitality Industry	3
HTM 105	Professionalism in the Hospitality Industry	1
HTM 115	Hospitality Customer Service and Guest Relations	3
HTM 120	Supervision and Leadership in the Hospitality Industry	3
HTM 205	Legal Aspects of Hospitality	3
Focus Courses		
CUL 101	Safety and Sanitation	1
HTM 210	Hospitality Financial Planning and Cost Control	3
HTM 220	Hotel Facilities Management	3
HTM 225	Hotel Operations	3
HTM 240	Workplace Learning: Hospitality	2
Total Credit Hours		25

Human Services, Associate in Applied Science

Florissant Valley, Forest Park and Meramec

This program provides students with a basic social science framework and perspective for pursuing a career in human services. The program also provides currently employed human service workers the opportunity to upgrade their skills and abilities. Students are taught a specific body of theoretical knowledge and practice skills.

They are introduced to human service organizations and resources designed to meet human needs. Students learn to identify various helping strategies and techniques for working with people.

Persons interested in this program should enjoy working with people. They should possess good communications and problem solving skills and have a positive attitude about themselves and others.

Graduates are qualified for positions as alcoholism/drug abuse assistant to counselors, directors of GED (General Education Development) tutoring programs, house parents, nursing home activity therapy assistants, case workers, corrections officers, vocational rehabilitation workers, teacher's aides for exceptional children and personnel assistants. These positions are available in the areas of social welfare, mental health, juvenile and adult correctional

programs, geriatrics, education, counseling and related fields in business, industry and health care.

Interested in this program? Start the enrollment process by visiting [stlcc.edu/enroll](http://www.stlcc.edu/enroll) (http://www.stlcc.edu/Admissions/Get_Started/Enrollment_Overview).

Program of Study

Code	Title	Credit Hours
Career General Education		
ENG 101	College Composition I	3
ENG 102	College Composition II	3
or ENG 103	Report Writing	
SOC 101	Introduction to Sociology	3
XXX xxx	Missouri State Requirement	3
XXX xxx	Humanities Requirements	6
XXX xxx	Science/Mathematics Requirements ¹	6
PSY 200	General Psychology	3
PSY 205	Human Growth and Development	3
Physical Education Activity		
Select 2 credit hours		2
Program Requirements		
HMS 100	Introduction to Human Services	3
HMS 101	Human Services: Theories and Skills	3
HMS 102	Human Services: Policy and Politics	3
HMS 201	Workplace Learning I: Human Services	3
HMS 202	Workplace Learning II: Human Services	3
HMS 203	Human Services Workplace Learning Seminar I	3
HMS 204	Human Services Workplace Learning Seminar II	3
Select one of the following:		3
HMS 111	Group Practice in Human Services	
SOC 100	The Sociology of Human Relations	
SOC 103	Work and Society	
Electives		8
Recommended electives include courses with prefixes HMS, SOC, PSY, ECE, CRJ as well as computer, business and personal development courses related to the human services field.		
Total Credit Hours		64

¹ MTH 108 or above; laboratory science course recommended

IT Help Desk/End User Support, Certificate of Specialization

Meramec

This skill-oriented program prepares students for help desk and desktop support technician positions in the enterprise. The foundational principles of end-user support including client operating system and application software, hardware and software installation, system configuration, problem diagnosis and resolution and computer security. The courses in the program provide a combination of online, distance learning and intensive, classroom-based, hands-on skills development. The demonstration of hands-on skills is critical to employers. Students completing the program are prepared for a variety

of industry certification exams as well as entry-level employment technical interviews.

Interested in this program? Start the enrollment process by visiting [stlcc.edu/enroll](http://www.stlcc.edu/enroll) (http://www.stlcc.edu/Admissions/Get_Started/Enrollment_Overview).

Code	Title	Credit Hours
Required Courses		
IT 102	Desktop Client Support	3
IT 103	Help Desk Principles	3
IS 130	Hardware and Software Support	3
IS 151	Computer Applications in Business	4
IT 101	Cisco Networking Academy I: Introduction to Networks	5
IS 237	Fundamentals of Information Assurance/Security	3
IS 291	Workplace Learning: Information Systems	3
or IS 229	Unix/Linux I	
Total Credit Hours		24

Information Reporting Technology: Judicial, Associate in Applied Science

Meramec and Online

The Information Reporting: Judicial (AAS) is not accepting new students at this time. Please consult an advisor for more information.

Information Reporting Technology: Judicial, Certificate of Proficiency

Meramec and Online

The Information Reporting: Judicial (CP) is not accepting new students at this time. Please consult an advisor for more information.

Interior Design, Associate in Applied Science

Meramec

This program prepares students for careers in interior design or transfer to a four-year institution. The curriculum emphasizes a strong foundation in visual art skills, architecture and space planning. Utilizing these foundations, students develop creative projects using a systematic approach to the design processes.

The coursework for the interior design program includes solving interior design-related problems by developing free-hand and drafting skills, computers skills and oral presentation skills. Graduates will be familiar with local and national trade, professional and industry resources. Issues in sustainable design are also explored within the studio environment.

Persons interested in this program should have a strong desire to work with people, enjoy functional problem solving and appreciate the impact of design

in our environment. Previous drawing, design or drafting courses are also helpful.

Graduates of the program are qualified for entry-level positions in residential and/or commercial interior design and related fields. Careers in interior design may include: residential design, commercial design, health care design, hospitality design, kitchen and bath design, office design, architectural firms, retail stores, wholesale showrooms and lighting design. Graduates also may be employed as manufacturers' product representatives, freelance designers or facilities planning assistants.

Interested in this program? Start the enrollment process by visiting [stlcc.edu/enroll](http://www.stlcc.edu/enroll) (http://www.stlcc.edu/Admissions/Get_Started/Enrollment_Overview).

Program of Study

Code	Title	Credit Hours
Career General Education		
ENG 101	College Composition I	3
ENG 102	College Composition II	3
or ENG 103	Report Writing	
PSY 200	General Psychology	3
XXX xxx	Missouri State Requirement	3
XXX xxx	Science/Mathematics Requirement	6
Physical Education Activity		
Select 2 credit hours		2
Program Requirements¹		
ART 102	Art History II	3
ART 109	Drawing I	3
ART 107	Design I	2
ART 108	Design II	2
ART 150	Design Communication for Interior Design and Architecture I	3
or ART 110	Drawing II	
ARC 110	Architectural Graphics	3
ART 151	Interior Design I	3
ART 251	Interior Design II	3
ART 252	Interior Design III	3
ART 253	Interior Design IV	3
ART 152	Textiles	3
or AT 151	Interior Specifications, Materials, and Methods	
ART 153	History of Cultural Environments I	3
ART 254	History of Cultural Environments II	3
ART 154	Computer Aided Interior Design	3
ART 186	Building Systems and Construction for Interior Designers	3
Approved Elective¹		
Select one of the following:		3
ART 101	Art History I	
ART 103	History of Modern Art	
ART 131	Computer Art Studio	
ART 150	Design Communication for Interior Design and Architecture I	
ART 152	Textiles	
ART 155	Bath Design	

ART 156	Advanced Kitchen Design	
AT 151	Interior Specifications, Materials, and Methods	
AT 152	Lighting Design	
AT 251	Computer Aided Kitchen and Bath Design	
AT 254	Workplace Learning: Interior Design	
ARC 114	Architectural History and Theory	
ARC 124	Introduction to Building Information Modeling	
ARC 125	Sustainable Materials and Technologies in the Built Environment	
Total Credit Hours		66

¹ Students who intend to transfer to the University of Missouri-Columbia's interior design program should take ART 110 Drawing II and ART 152 Textiles.

Interior Design Professional, Certificate of Specialization

Meramec

This certificate program is designed for graduates of two-year interior design programs to meet the educational standards required to become a certified professional interior designer. The coursework will address the following content areas of the national certification requirements: building systems, construction standards, design application and specifications, and building and life safety codes. The program will also provide students with the advanced research, graphic, and computer-aided design skills to successfully apply both the theoretical and practical knowledge required for employment as a professional interior designer.

Interested in this program? Start the enrollment process by visiting [stlcc.edu/enroll](http://www.stlcc.edu/enroll) (http://www.stlcc.edu/Admissions/Get_Started/Enrollment_Overview).

Code	Title	Credit Hours
Electives		3
AT 285	Interior Design Codes and Specifications	3
AT 286	Interior Design Business Practices and Ethics	3
AT 287	Advanced Computer-Aided Interior Design	3
AT 288	Interior Detailing and Construction Documentation	3
AT 289	Interior Design Research Methods	2
AT 290	Interior Design Professional Preparation	1
Choose one of the following:		
ART 155	Bath Design	
ART 156	Advanced Kitchen Design	
AT 251	Computer Aided Kitchen and Bath Design	
AT 152	Lighting Design	
Total Credit Hours		18

Kitchen and Bath Design, Certificate of Proficiency

Meramec

This skill-oriented program emphasizes visual and oral communication skills necessary for the development of functional and aesthetically pleasing

residential kitchen and bath design. Students will become familiar with trade, professional and industry resources available both locally and nationally.

Persons interested in this program should have a strong desire to work with people, enjoy functional problem solving, and appreciate the impact of design in our environment. Previous drawing, design, drafting or computer courses are also helpful.

Students will become student members of the National Kitchen and Bath Association. At the completion of the program, students will be eligible to sit for the AKBD (Associate Kitchen and Bath Designer) exam. Graduates are qualified for entry level positions in the residential kitchen and bath design field. This program is fully accredited by the National Kitchen and Bath Association (NKBA).

Interested in this program? Start the enrollment process by visiting [stlcc.edu/enroll](http://www.stlcc.edu/enroll) (http://www.stlcc.edu/Admissions/Get_Started/Enrollment_Overview).

Code	Title	Credit Hours
ARC 110	Architectural Graphics	3
ART 186	Building Systems and Construction for Interior Designers	3
ART 151	Interior Design I	3
ART 155	Bath Design	3
ART 156	Advanced Kitchen Design	3
AT 151	Interior Specifications, Materials, and Methods	3
AT 152	Lighting Design	3
AT 251	Computer Aided Kitchen and Bath Design	3
ART 158	Workplace Learning: Kitchen and Bath Design	3
Select one of the following:		3
MKT 104	Principles of Selling	
MKT 203	Principles of Marketing	
ART 150	Design Communication for Interior Design and Architecture I	
Total Credit Hours		30

Landscape Design, Certificate of Proficiency

This program is no longer accepting new students. Please see an advisor for more information.

Legal Studies for the Paralegal, Associate in Applied Science

Florissant Valley and Meramec

This program, designed in cooperation with the Bar Association of Metropolitan St. Louis, prepares students for careers in the paralegal profession. Students develop a basic legal vocabulary and gain an understanding of Missouri statutes and cases and pretrial and trial proceedings. They study concepts of real and personal property and business organizations and develop skills in interviewing and counseling clients, writing legal resume, analyzing legal problems and drafting/preparing legal documents.

Persons interested in this program should have an interest in the law. They should be self-motivated, able to work without supervision and have good oral and written communication skills.

Graduates are qualified for positions as paralegals in private law firms, corporations, government agencies, or other businesses.

Interested in this program? Start the enrollment process by visiting [stlcc.edu/enroll](http://www.stlcc.edu/enroll) (http://www.stlcc.edu/Admissions/Get_Started/Enrollment_Overview).

Program of Study

Code	Title	Credit Hours
Career General Education		
ENG 101	College Composition I	3
ENG 102	College Composition II	3
HST 101	United States History to 1865	3
or HST 102	United States History from 1865 to the Present	
ECO 140	Introduction to Economics	3
or ECO 151	Principles of Macroeconomics	
PSC 101	Introduction to American Politics	3
or PSC 205	Constitutional Issues	
Select one of the following		3
PSY 200	General Psychology	
SOC 101	Introduction to Sociology	
SOC 103	Work and Society	
MTH Elective (BUS 103 recommended)		3
XXX xxx	Science or Math Elective ¹	3
BLW 101	Business Law I	3
XXX xxx	Business Electives	6
Physical Education Activity		
Select 2 credit hours		2
Program Requirements		
Required Courses		
LGL 104	Introduction to Civil Trial Procedures	3
LGL 108	Introduction to Law for the Paralegal	3
LGL 106	Computers and the Law	3
LGL 217	Legal Research	3
LGL 218	Legal Writing	3
Electives		
Select 12 credit hours of the following:		12
LGL 202	Wills, Trusts and Probate	
LGL 205	Real Estate Law	
LGL 206	Administrative Law	
LGL 228	Family Law	
LGL 211	Tort Law	
LGL 230	Employment Law	
LGL 216	Advanced Civil Litigation	
LGL 219	Workplace Learning: Paralegal	
LGL 233	Bankruptcy	
LGL 232	Contracts	
LGL 220	Criminal Law and Procedure for the Paralegal	
LGL 222	Legal Research on the Internet	
LGL 223	Evidence	

LGL 107	Alternative Dispute Resolution	
LGL 224	Environmental Law	
LGL 225	Administrative Law	
LGL 226	Law Office Administration	
Elective		
Select 3 credit hours of electives ²		3
Total Credit Hours		65

¹ Select from Astronomy, Biology, Chemistry, Geology, Geography, Math (100-200 level), Physical Science, Physics

² (Business course recommended but not required.)

Legal Studies for the Paralegal, Certificate of Proficiency

Florissant Valley and Meramec

Students may obtain a certificate or an associate degree.

Persons interested in this program should have an interest in the law. They should be self-motivated, able to work without supervision and have good oral and written communication skills.

The certificate is designed for students who have the following:

- a college degree, either an associate or bachelor, in any subject matter;
- or a minimum of 60 college credit hours which include Communications (6 credit hours), Social Science (12 credit hours) and Business (9 credit hours);
- or a department approval to be limited to persons with five or more years of experience working under the direct supervision of an attorney in a law office, company, corporation or court.

Interested in this program? Start the enrollment process by visiting [stlcc.edu/enroll](http://www.stlcc.edu/enroll) (http://www.stlcc.edu/Admissions/Get_Started/Enrollment_Overview).

Code	Title	Credit Hours
Required Courses		
LGL 104	Introduction to Civil Trial Procedures	3
LGL 108	Introduction to Law for the Paralegal	3
LGL 106	Computers and the Law	3
LGL 217	Legal Research	3
LGL 218	Legal Writing	3
Electives		
Select 15 credit hours of the following:		15
LGL 202	Wills, Trusts and Probate	
LGL 205	Real Estate Law	
LGL 206	Administrative Law	
LGL 228	Family Law	
LGL 211	Tort Law	
LGL 230	Employment Law	
LGL 216	Advanced Civil Litigation	
LGL 219	Workplace Learning: Paralegal	
LGL 233	Bankruptcy	
LGL 232	Contracts	
LGL 220	Criminal Law and Procedure for the Paralegal	
LGL 222	Legal Research on the Internet	

LGL 223	Evidence	
LGL 107	Alternative Dispute Resolution	
LGL 224	Environmental Law	
LGL 225	Administrative Law	
LGL 226	Law Office Administration	
Total Credit Hours		30

Life Science Laboratory Assistant, Certificate of Specialization

Florissant Valley

This program prepares students for entry-level positions in life science research, development, and production. In addition, this short-term program, designed to be delivered in two semesters, acts as a bridge into the college's AAS Biotechnology program and other STEM programs. The certificate includes contextualized and integrated courses in life science and biotechnology delivered in a Learning Community setting. A Learning Community consists of a group of students in the program, instructors, and tutors that work together toward successful completion of the program by students.

Admission to the program is contingent upon meeting the established minimum criteria of placement scores. Students will be expected to take part in additional classroom enrichment and engagement activities, such as industry tours, as part of the program.

Interested in this program? Start the enrollment process by visiting [stlcc.edu/enroll](http://www.stlcc.edu/enroll) (http://www.stlcc.edu/Admissions/Get_Started/Enrollment_Overview).

Code	Title	Credit Hours
BIO 100	Introduction to Life Science Laboratory Skills	3
BIO 104	Basic Laboratory Methods for Biotechnology	3
BIO 111	Introductory Biology I	4
MTH 140	Intermediate Algebra	3
COM 101	Oral Communication I	3
Total Credit Hours		16

Maintenance Mechanic, Certificate of Specialization

Florissant Valley

This certificate program is designed both for those preparing for entry-level positions and for those already working in the maintenance field. Graduates will be prepared to perform general maintenance duties and to use the tools necessary to repair equipment in existing facilities.

Interested in this program? Start the enrollment process by visiting [stlcc.edu/enroll](http://www.stlcc.edu/enroll) (http://www.stlcc.edu/Admissions/Get_Started/Enrollment_Overview).

Code	Title	Credit Hours
ME 101	Welding Technology (Students interested in ME:211 need department approval)	3
or ME 211	Programmable Logic Controllers	
ME 108	Principles of Plumbing/Pipefitting	3

ME 110	HVAC Operator I	3
ME 151	Manufacturing Processes I	3
ME 223	Basic Hydraulics I	2
Total Credit Hours		14

Mass Communications, Associate in Applied Science

Florissant Valley, Forest Park and Meramec

The primary purpose of this education program is to prepare students for entry-level positions in the mass communications field. Students learn the fundamentals of journalism, broadcasting and advertising through a combination of basic liberal arts courses and advanced courses in print, broadcast and multimedia that emphasize hands-on experience. Students acquire organizational, technical, speaking and writing skills, the ability to assess workplace trends and market themselves according to industry standards and expectations.

Students interested in this program should also have a willingness to interact with people from diverse backgrounds.

All students in this program are required to complete an on-the-job internship. Graduates of the program will have the skills necessary to be ready for entry-level employment and beyond in a variety of mass communications settings, such as print/online journalism, public relations, advertising, audio/radio and/or video/television/film.

Interested in this program? Start the enrollment process by visiting [stlcc.edu/enroll](http://www.stlcc.edu/enroll) (http://www.stlcc.edu/Admissions/Get_Started/Enrollment_Overview).

Program of Study

Code	Title	
Career General Education		
COM 101 or COM 107	Oral Communication I Public Speaking	3
ENG 101	College Composition I	3
ENG 102	College Composition II	3
XXX xxx	Math or Science Elective	6
XXX xxx	Missouri State Requirement	3
ECO 140	Introduction to Economics	3
XXX xxx	Humanities Elective	
MCM 102 or PHL 104	Media Literacy Ethics	3
Physical Education Activity		2
Select 2 credit hours		2
Program Requirements		
MCM 101	Introduction to Mass Communications	3
MCM 110	Journalism I: Writing and Reporting	3
MCM 124 or MUS 150	Radio Production Fundamentals of Music Technology	2-3
MCM 121 or MCM 126	Television Production Video Production - Field	3
MCM 143 or ART 125	Convergence Media Production Interactive Design I	3
MCM 140	Introduction to Advertising	3

MCM 141	Public Relations	3
Select one of the following:		3
MCM 113	Applied Journalism	
MCM 122	Applied Broadcasting	
MCM 142	Applied Advertising	
MCM 211	Applied Public Relations	
MCM 201	Workplace Learning I: Media	3
MCM 221	Media Portfolio Review	1

Electives

Select 6-8 credit hours of the following: ¹		6-8
COM 104	Persuasion	
COM 105	Interview Process	
COM 111	Voice and Articulation	
ENG 103	Report Writing	
MCM 112	Feature Writing	
MCM 115	Acting for the Camera	
MCM 120	Introduction to Broadcasting	
MCM 123	Broadcast Journalism	
MCM 125	Scriptwriting for Television and Film	
MCM 130	Film Appreciation	
MCM 217	Publications Writing	
MCM 218	Advanced Filmmaking	
MCM 219	Multimedia Applications	
MCM 220	Advanced Audio Production	
MUS 152	Audio Engineering	
MUS 154	Music Recording with Pro Tools I	
MUS 254	Music Recording with Pro Tools II	

Credit Hours	Total Credit Hours	61-64
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¹ Students must select sufficient hours of electives to reach 64 total credit hours to graduate.

Mechanical Engineering Technology, Associate in Applied Science

Florissant Valley

The Mechanical Engineering Technology (MET) AAS program provides students with the scientific and engineering knowledge needed to obtain entry-level positions in this field. Students learn the theory and principles of mechanical engineering technology in the development and testing of machinery and equipment under the direction of engineering staff and physical scientists. Through classroom work and practical experience in mechanical engineering laboratories, students learn to perform mechanical testing, data reduction and interpretation of data. Students will learn to design and develop new equipment or modify existing equipment and prepare or interpret engineering drawings or sketches.

Persons interested in this program should be mechanically inclined, possess analytical skills and have an interest in design.

Graduates are qualified for positions as engineering assistants, laboratory technicians, designers, tool designers and plant engineering technicians in the

automotive, aerospace, heavy equipment, chemical, electrical, petroleum and food processing industry.

This program is accredited by the Engineering Technology Accreditation Commission of ABET, <http://abet.org>

Interested in this program? Start the enrollment process by visiting stlcc.edu/enroll (http://www.stlcc.edu/Admissions/Get_Started/Enrollment_Overview).

Program of Study

Code	Title	
Career General Education		
ENG 100	Career English	3
or ENG 101	College Composition I	
XXX xxx	Missouri State Requirement	3
XXX xxx	Social Science Requirement	3
MTH 185	Precalculus (Or MTH 160 AND MTH 170)	5-7
PHY 111	College Physics I	4
Program Requirements		
GE 101	Technical Computer Applications	3
or ESC 101	Scientific Computer Programming	
GE 131	Engineering Technology Orientation	1
or ESC 100	Engineering Computer Applications and Design	
EGR 100	Engineering Drawing	3
ME 135	Mechanics - Statics ¹	3
or ESC 203	Engineering Mechanics I	
ME 151	Manufacturing Processes I	3
ME 230	Introduction to 3-D Solid Modeling for Design	4
ME 232	Geometric Dimensioning and Tolerancing	2
ME 242	Mechanics-Dynamics	3
ME 243	Strength of Materials (Or ESC 205 AND ESC 206)	3-4
ME 244	Mechanical Design I	3
ME 249	Materials and Metallurgy	3
ME 254	Electricity and Controls	3
or ME 211	Programmable Logic Controllers	
or EE 236	PLC/Programmable Logic Controller	
ME 255	Fluid Power	3
GE 240	Product Design and Fabrication	4
Engineering Elective		3
choose from ME or EGR prefixes		
Workplace Experience:		
Students may substitute up to six credit hours of appropriate and relevant workplace learning experience for technical courses, and/or electives, included in the program. In order for the workplace learning credit to be counted for the degree requirement, the learning experience must be pre-approved by the department, and an appropriate faculty member must supervise the work.		
Total Credit Hours		62-65

¹ESC 203 is the version of Statics required for the Engineering Science AAS. The prerequisite for ESC 203 is PHY122

Medical Billing and Coding, Certificate of Proficiency

Forest Park and Online

This program prepares students for entry-level positions as clinical code practitioners. Students will learn how to classify medical data from patient records, generally in a hospital setting. The coding practitioner will review patients' records and assign numeric codes for each diagnosis and procedure according to the industry standard classification system. Students will possess expertise in the International Classification of Diseases, 9th revision, Clinical Modification (ICD-9-CM) and International Classification of Diseases, 10th Revision, Clinical Modification (ICD-10-CM) and the International Classification of Diseases, 10th Revision, Procedure Coding System (ICD-10-CM/PCS) coding systems. Students will also gain preparation for the American Health Information Management Association (AHIMA), Certified Coding Specialist (CCS) and Certified Coding Associate (CCA) certifications. This program is approved by the Professional Certificate Approval Program (PCAP).

A background check and drug screen test are required for all healthcare professions. Students will be required to complete both the background check and drug screen test prior to enrollment in HIT:102. See Health Information Technology Handbook for additional information.

Students are required to complete all Foundation Courses prior to moving forward to the Area of Concentration courses for the Medical Billing and Coding Program

Interested in this program? Start the enrollment process by visiting stlcc.edu/enroll (http://www.stlcc.edu/Admissions/Get_Started/Enrollment_Overview).

Code	Title	Credit Hours
Foundation Courses		
HIT 101	Medical Terminology	4
BIO 207	Anatomy and Physiology I	4
BIO 208	Anatomy and Physiology II	4
HIT 104	Basic Principles of Disease	2
HIT 105	Pharmacology for Health Information Technology Professionals	1
IS 116	Computer Literacy	3
Area of Concentration		
HIT 102	Health Information Management Technology	4
HIT 103	Healthcare Delivery Systems	2
HIT 106	Diagnosis Coding Systems I	3
HIT 107	Procedure Coding Systems I	3
HIT 201	Healthcare Reimbursement	3
HIT 206	Diagnosis Coding Systems II	3
HIT 207	Procedure Coding Systems II	3
HIT 208	Advanced Coding Applications	2
HIT 210	Professional Practice Experience	2
Information Systems		
IS 123	Introduction to Windows	1
IS 151	Computer Applications in Business	4
Total Credit Hours		48

Network Engineering, Associate in Applied Science

Forest Park

This skill-oriented program prepares students to design, implement, troubleshoot, maintain, and secure enterprise networks. Foundational principles of local, wide-area and multi-segmented networks lead to a mastery of skills associated with support of enterprise level networks including network and application servers, desktop hosts, infrastructure cabling and connection devices such as switches and routers (including wireless), security appliances, virtualization of resources for performance optimization and operating policies. The courses in the Server, Infrastructure and Security focus areas enable students to pursue in-depth skill and expertise within one of these three areas while preparing for industry recognized certifications. The courses in the program provide a combination of online, distance learning and intensive, classroom-based hands-on skills development. The demonstration of hands-on skills is critical to employers. Students completing the program are prepared for a variety of industry certification exams as well as entry-level employment technical interviews.

Interested in this program? Start the enrollment process by visiting [stlcc.edu/enroll](http://www.stlcc.edu/enroll) (http://www.stlcc.edu/Admissions/Get_Started/Enrollment_Overview).

Program of Study

Code	Title	Credit Hours
Career General Education		
ENG 101	College Composition I	3
ENG 102	College Composition II	3
or ENG 103	Report Writing	
MTH 160	College Algebra	4
MTH 186	Survey of Calculus	4
XXX xxx	Missouri State Requirement	3
XXX xxx	Social Science Elective	3
Physical Education Activity		
Select 2 credit hours		2
Program Requirements		
IS 112	Software and Hardware Concepts	3
IS 130	Hardware and Software Support	3
IS 237	Fundamentals of Information Assurance/Security	3
IS 229	Unix/Linux I	3
IS 264	Unix/Linux II	3
IT 101	Cisco Networking Academy I: Introduction to Networks	5
IT 102	Desktop Client Support	3
IT 201	Cisco Networking Academy II: Routing and Switching Essentials	5
IT 210	Firewall and VPN Security	3
Select one of the following focus areas:		13-14
Server Focus		
Infrastructure Focus		
Security Focus		
Total Credit Hours		66-67

Focus Areas

Server Focus

Code	Title	Credit Hours
IT 140		3
IT 142		3
IT 246		3
IT 211	Introduction to Virtualization and Cloud Computing	4
Total Credit Hours		13

Infrastructure Focus

Code	Title	Credit Hours
IT 202	Cisco Networking Academy III: Scaling Networks	5
IT 203	Cisco Networking Academy IV: Connecting Networks	5
IT 235	Network Infrastructure Design	3
Total Credit Hours		13

Security Focus

Code	Title	Credit Hours
IT 120	Enterprise Security Management	3
IT 121	Secure E-Commerce and E-Government	3
IT 208	Cisco Networking Academy: CCNA Security	5
IT 216	Digital Forensics	3
Total Credit Hours		14

Network Engineering, Certificate of Proficiency

Forest Park

This skill-oriented program prepares students to design, implement, troubleshoot, maintain, and secure enterprise network infrastructure. It starts with the foundational principles of local and wide-area, multi-segmented networks, and then covers a wide range of skills associated with all aspects of enterprise level networks for business. The design and implementation skills developed include those required for network and application servers, desktop hosts, infrastructure cabling and connection devices such as switches and routers (including wireless), security appliances and virtualization of resources for performance optimization. The courses in the program provide a combination of online, distance learning and intensive, classroom-based, hands-on skills development. The demonstration of hands-on skills is critical to employers. Students completing the program are prepared for a variety of industry certification exams as well as entry-level employment technical interviews.

Interested in this program? Start the enrollment process by visiting [stlcc.edu/enroll](http://www.stlcc.edu/enroll) (http://www.stlcc.edu/Admissions/Get_Started/Enrollment_Overview).

Code	Title	Credit Hours
Network Infrastructure		
IS 130	Hardware and Software Support	3
IT 102	Desktop Client Support	3
IT 142		3
IT 101	Cisco Networking Academy I: Introduction to Networks	5

IT 201	Cisco Networking Academy II: Routing and Switching Essentials	5
Network Servers		
IS 229	Unix/Linux I	3
IS 264	Unix/Linux II	3
Network Security		
IS 237	Fundamentals of Information Assurance/Security	3
IT 210	Firewall and VPN Security	3
Network Virtualization		
IT 211	Introduction to Virtualization and Cloud Computing	4
Total Credit Hours		35

Network Security, Certificate of Proficiency

Forest Park

This skill-oriented program prepares student to implement security measures for a network. The Cisco Certified Network Associate (CCNA) Security courses cover knowledge and skills required to secure Cisco networks. The program competencies align with the industry CCNA Security certification examination, where a network professional demonstrates the skills required to develop a security infrastructure, recognize threats and vulnerabilities to networks, and mitigate security threats. The CCNA Security curriculum emphasizes core security technologies, the installation, troubleshooting and monitoring of network devices to maintain integrity, confidentiality and availability of data and devices, and competency in the technologies that Cisco uses in its security structure. Security solutions and processes in a network with emphasis on practical skills in the following areas: firewall, Intrusion Prevention (IPS) and Virtual Private Network (VPN) design, implementation, configuration and maintenance using Adaptive Security Appliances (ASAs) and Private Internet Exchange (PIX) Security Appliances are also included to provide the student with a comprehensive understanding of network security.

Interested in this program? Start the enrollment process by visiting [stlcc.edu/enroll](http://www.stlcc.edu/enroll) (http://www.stlcc.edu/Admissions/Get_Started/Enrollment_Overview).

Code	Title	Credit Hours
IS 229	Unix/Linux I	3
IS 237	Fundamentals of Information Assurance/Security	3
IT 101	Cisco Networking Academy I: Introduction to Networks	5
IT 201	Cisco Networking Academy II: Routing and Switching Essentials	5
IT 208	Cisco Networking Academy: CCNA Security	5
IT 210	Firewall and VPN Security	3
Total Credit Hours		24

Nursing, Associate in Applied Science

Florissant Valley, Forest Park and Meramec

This program prepares students to become registered nurses. Students learn to provide direct care for clients that is based on the nursing process. Students acquire knowledge and technical skills necessary for effective communication with clients and families. They learn management, organizational and delegation skills necessary to provide competent care to a group of clients.

Health care teaching is emphasized as a critical aspect of the communication process.

The didactic and clinical components of the curriculum are interrelated to provide a strong background for the student in attaining the objectives of the programs and in becoming a competent practitioner. Experience is provided in a variety of agencies including hospitals, nursing homes, clinics and home health care settings.

The Nursing program on each campus is approved by the Missouri State Board of Nursing and accredited by the Accreditation Commission for Education in Nursing (ACEN).

Persons considering a career in nursing should have an interest in the health sciences and in working closely with people. In addition, they should be able to meet the academic demands of a program that requires a commitment of time, energy and motivation to learn.

Admission to the program is contingent on meeting the established minimum criteria as defined in the Nursing Program Handbook. Applicants also are required to complete a health history, criminal background check, and immunization record. Applicants selected for the program are required to have a physical examination.

Graduates are eligible to apply to write the National Council Licensure Examination for Registered Nurses.

An individual who has been convicted of a felony may not be licensed to practice as a registered nurse in the state of Missouri.

Prerequisites

The following must be completed prior to applying for admission into the Nursing program:

- Cumulative GPA of 2.5 or higher on a 4.0 scale.
- Pre-entry:

Code	Title	Credit Hours
BIO 207	Anatomy and Physiology I	4
ENG 101	College Composition I	3
Math proficiency at or above the MTH 140 level		
PSY 200	General Psychology	3
LIB 101	Introduction to Library and Online Research	1

Interested in this program? Start the enrollment process by visiting [stlcc.edu/enroll](http://www.stlcc.edu/enroll) (http://www.stlcc.edu/Admissions/Get_Started/Enrollment_Overview).

Program of Study

Code	Title	Credit Hours
Career General Education		
ENG 100	Career English	3
or ENG 101	College Composition I	
COM 200	Communication Between Cultures	3
PSY 200	General Psychology	3
PSY 205	Human Growth and Development	3
XXX xxx	Missouri State Requirement	3
BIO 203	General Microbiology I	4
BIO 207	Anatomy and Physiology I	4

BIO 208	Anatomy and Physiology II	4
LIB 101	Introduction to Library and Online Research	1
Physical Education Activity		
Select 2 credit hours		2
Program Requirements		
NUR 151	Fundamentals of Nursing	7
NUR 152	Nursing Laboratory Practicum I	1
NUR 154	Nursing Laboratory Practicum II	1
NUR 153	Nursing Adults and Children I	9
NUR 251	Nursing of Adults and Children II	10
NUR 253	Management Skills in Nursing	3
NUR 252	Nursing of Adults and Children III	8
Total Credit Hours		69

Occupational Therapy Assistant, Associate in Applied Science

Meramec

This program prepares students for positions as occupational therapy assistants who work under the supervision of registered occupational therapists. Through courses in the structure and function of the human body, psychology and occupational therapy principles and techniques, in addition to clinical experience, students learn skills in interviewing; assessing; and treatment planning and implementation.

The Occupational Therapy Assistant Program is accredited by the Accreditation Council for Occupational Therapy Education (ACOTE) of the

American Occupational Therapy Association (AOTA)
4720 Montgomery Lane, Suite 200
Bethesda, MD 20824-1220
Telephone: 301-652-2682 (<http://catalog.stlcc.edu/programs/occupational-therapy-assistant-aas/tel:3016522682>)

Graduates of the program will be able to sit for the national certification examination for the occupational therapy assistant administered by the National Board for Certification in Occupational Therapy (NBCOT). After successful completion of this exam, the individual will be a Certified Occupational Therapy Assistant (COTA). Most states require licensure in order to practice; however, state licenses are usually based on the results of the NBCOT Certification Examination. This program has many prerequisites based on professional standards. See an advisor for further information.

Note: All OTA students must complete Level II Fieldwork within 18 months following completion of academic coursework.

Interested in this program? Start the enrollment process by visiting [stlcc.edu/enroll](http://www.stlcc.edu/enroll) (http://www.stlcc.edu/Admissions/Get_Started/Enrollment_Overview).

Program of Study

Code	Title	Credit Hours
Career General Education		
ENG 100 or ENG 101	Career English College Composition I	3
COM 101	Oral Communication I	3
PSY 200	General Psychology	3

PSY 205	Human Growth and Development	3
SOC 201	Aspects of Aging	3
XXX xxx	Missouri State Requirement	3
BIO 207	Anatomy and Physiology I	4
BIO 208	Anatomy and Physiology II	4
BIO 209	Kinesiology Fundamentals	3
Physical Education Activity		
Select 2 credit hours		2
Program Requirements		
OTA 101	Fundamentals of Occupational Therapy Assistant I	3
OTA 102	Fundamentals of Occupational Therapy Assistant II	4
OTA 103	Adaptive Activities I	2
OTA 104	Adaptive Activities II	2
OTA 203	Fundamentals of Occupational Therapy III	4
OTA 204	Fundamentals of Occupational Therapy IV	4
OTA 207	Health and Disease	4
OTA 208	Adaptive Living Skills	2
OTA 213	Occupational Therapy Assistant Practicum I	4
OTA 214	Occupational Therapy Assistant Practicum II	4
OTA 215	The Management of Occupational Therapy	2
OTA 216	Level II Fieldwork Seminar	1
Total Credit Hours		67

Office Information Systems, Associate in Applied Science

Florissant Valley

This program is designed to prepare students to be proficient in the use of office technology including current computer hardware, operating and application software, and traditional as well as state-of-the-art office equipment such as digital devices. Students in this program will become proficient at using computer business applications and current office technologies. In addition to learning to use these skills in the workplace, they will learn to supervise and train others in their use. The courses provide students with both the theoretical and practical knowledge required to perform as productive office professionals.

Interested in this program? Start the enrollment process by visiting [stlcc.edu/enroll](http://www.stlcc.edu/enroll) (http://www.stlcc.edu/Admissions/Get_Started/Enrollment_Overview).

Program of Study

Code	Title	Credit Hours
Career General Education		
ENG 101	College Composition I	3
COM 101	Oral Communication I	3
XXX xxx	Natural Science/Mathematics Elective	3
BUS 103	Business Mathematics	3
XXX xxx	Missouri State Requirement	3
SOC 101	Introduction to Sociology	3
Physical Education Activity		
Select 2 credit hours		2
Program Requirements		
ACC 100	Applied Accounting	3

BUS 104	Introduction to Business Administration	3
MGT 101	Introduction to Supervision	3
IS 102	Keyboarding and Formatting	3
IS 122	Windows	3
IS 136	Internet Fundamentals	1
IS 116	Computer Literacy	3
IS 109	Proofreading and Editing	1
IS 151	Computer Applications in Business	4
IS 154	Web-Based Productivity Applications	2
IS 139	Web Publishing	3
IS 152	Computer Applications in Business-Intermediate	3
IS 165	Computer Applications-Microsoft Project	1
IS 200	Electronic Records Management	2
IS 209	Computer Applications - Advanced	3
IS 210	Office Technology and Procedures	3
IS 291	Workplace Learning: Information Systems	3
Total Credit Hours		64

Paramedic Technology, Associate in Applied Science

Forest Park

This program prepares students for positions as emergency medical technicians-paramedics. Paramedics are skilled in patient assessment and recognition of diagnostic signs and symptoms of major injuries and illnesses. They learn to use ambulance, rescue vehicle and hospital emergency room equipment to provide high-level emergency medical care and stabilize emergency patients. Paramedics also are trained to provide advanced life support to include fluid and drug therapy, as well as the performance of some essential emergency surgical techniques under the written or oral orders of licensed physicians.

Persons interested in this program should have maturity in dealing with others as well as co-workers. They should have good manual dexterity and physical coordination for carrying, lifting, extricating, climbing, hoisting, etc. In addition, they should be able to give as well as receive written and oral directions and instruction and have good vision and visual color discrimination in examination of patients for determining diagnostic signs requiring immediate treatment.

Graduates are eligible to sit for state and national licensing boards. Positions are available with ambulance services, fire departments, hospitals, emergency communications centers and industrial medical and safety departments.

The St. Louis Community College Paramedic Technology program is accredited by the Commission on Accreditation of Allied Health Education Programs (www.caahep.org) upon the recommendation of the Committee on Accreditation of Educational Programs for the Emergency Medical Services Professions (CoAEMSP).

To contact CAAHEP:

1361 Park St.
Clearwater, FL 33756
Telephone: 727-210-2350 (<http://catalog.stlcc.edu/programs/paramedic-technology-aas/tel:7272102350>)

To contact CoAEMSP:

8301 Lakeview Pkwy.
Suite 111-312
Rowlett, TX 75088
Telephone: 214-703-8445 (<http://catalog.stlcc.edu/programs/paramedic-technology-aas/tel:2147038445>)
Fax 214-703-8992 (<http://catalog.stlcc.edu/programs/paramedic-technology-aas/tel:2147038992>)
www.coaemsp.org (<http://www.coaemsp.org>)

Interested in this program? Start the enrollment process by visiting stlcc.edu/enroll (http://www.stlcc.edu/Admissions/Get_Started/Enrollment_Overview).

Program of Study

Code	Title	Credit Hours
Career General Education		
ENG 101	College Composition I	3
or ENG 100	Career English	
ENG 102	College Composition II	3
or ENG 103	Report Writing	
XXX xxx	Missouri State Requirement	3
XXX xxx	Social Science Requirement	3
BIO 207	Anatomy and Physiology I	4
BIO 208	Anatomy and Physiology II	4
BIO 203	General Microbiology I	4
CHM 101	Fundamentals of Chemistry I	5
or CHM 105	General Chemistry I	
Physical Education Activity		
Select 2 credit hours		2
Program Requirements		
PAR 201	Principles of Paramedic Technology I	8
PAR 202	Principles of Paramedic Technology II	8
PAR 226	Principles of Paramedic Technology III	3
PAR 227	Principles of Paramedic Technology IV	4
PAR 203	Pharmacology for Paramedics	3
PAR 211	Paramedic Laboratory I	1
PAR 212	Paramedic Laboratory II	1
PAR 221	Paramedic Clinical I	1
PAR 222	Paramedic Clinical II	2
PAR 228	Paramedic Clinical III	1
PAR 223	Paramedic Internship I	1
PAR 224	Paramedic Internship II	1
PAR 225	Paramedic Internship III	4
Total Credit Hours		69

Photography, Associate in Fine Arts Degree

Florissant Valley, Forest Park, Meramec and Wildwood

This program is designed for students planning to transfer to a four-year art school, including the University of Missouri-St. Louis, to earn a bachelor of fine arts degree. Students develop skills in black and white and digital printing techniques, learn effective methods for gathering and using information from visual images, and study current approaches used in portrait, architectural and documentary photography. Persons interested in this program should possess

a strong interest in perceiving and working in the visual world and a desire to produce results using current tools, as well as historical and non-traditional techniques.

Interested in this program? Start the enrollment process by visiting stlcc.edu/enroll (http://www.stlcc.edu/Admissions/Get_Started/Enrollment_Overview).

Program of Study

Code	Title	Credit Hours
General Education		
ENG 101	College Composition I	3
ENG 102	College Composition II	3
XXX xxx	Missouri State Requirement	3
XXX xxx	Social Science Elective	3
Select one of the following:		3-4
MTH 140	Intermediate Algebra (140 level or higher)	
Science Elective		
XXX xxx	Science Elective	3
ART 168	History of Photography	3
Select one of the following Art History electives:		3
ART 101	Art History I	
ART 102	Art History II	
ART 103	History of Modern Art	
ART 169	Visual Language	
Physical Education Activity		
Select 2 credit hours		2
Program Requirements		
ART 107	Design I	2
ART 108	Design II	2
ART 109	Drawing I	3
ART 110	Drawing II	3
or ART 111	Figure Drawing I	
ART 165	Photography I	3
ART 166	Photography II	3
ART 204	Photography III	3
ART 172	Digital Photography	3
ART 265	Artificial Light Photography	3
ART 275	Photo Imaging I: Photoshop	3
Photography Electives		
Select 6 credit hours of the following:		6
ART 266	Black and White Printing Lab	
AT 279	Alternative Photographic Processes	
AT 267	Color Photography II	
ART 249	Digital Photography II	
ART 272	Documentary Photography	
ART 269	Field Photography	
ART 271	Portrait Photography	
ART 273	Architectural Photography	
AT 175	Video Art I	
AT 275	Video Art II	
AT 276	Photo Imaging II: Photoshop	
AT 212	Special Topics in Photography	

AT 105	Digital Printing
AT 280	Advanced Photography
ART 228	Workplace Learning: Photography
ART 267	Contemporary Concepts in Photography
ART 270	Fashion Photography
Other Art Electives	
Select 4-6 credit hours of the following:	
ART 110	Drawing II
ART 209	Drawing III
ART 210	Advanced Drawing
ART 111	Figure Drawing I
ART 112	Figure Drawing II
ART 211	Figure Drawing III
ART 113	Ceramics I
ART 213	Ceramics II
ART 114	Painting I
ART 115	Printmaking I
ART 215	Printmaking II
ART 116	Sculpture I
ART 131	Computer Art Studio
ART 207	Design III
ART 208	Design IV
AT 108	Computer Painting and Drawing: Corel Painter
AT 135	Web Design I
AT 201	Mixed Media
Total Credit Hours	

64-67

Physical Therapist Assistant, Associate in Applied Science

Meramec

Physical Therapists Assistants (PTAs) work as a team to assist the physical therapists (PTs) to manage movement dysfunction and enhance physical and functional abilities. They provide physical therapy services under the direction and supervision of the PT to restore, and promote optimal physical function, wellness and fitness. The PTA assists the PT in the care of individuals of all ages to prevent the onset and progression of impairments, functional limitations, and disabilities that may result from diseases, disorders or injuries.

Students in the PTA program take general education courses, related science courses, and introductory PTA courses in the first year. During the second year of the program, students enroll in physical therapy didactic courses and clinical courses.

Graduates are prepared to perform components of interventions and data collection and assess the patient's/client's safety and response to the interventions provided under the direction and supervision of the PT in an ethical, legal, safe and effective manner. As a PT/PTA team, graduates are prepared to educate and communicate with patients, caregivers and other healthcare providers with recognition of individual, cultural and economic differences.

Persons interested in this program should be service oriented and comfortable working with diverse people of all age groups in close one-to-one contact. They should enjoy physical activity and be patient and empathetic when instructing

others. In addition, they should be able to meet the academic demands of a program that requires a commitment of time, energy, and motivation to learn.

Admission to the program is contingent on meeting established minimum criteria available through the academic advising office and online at the program webpage. Students are also required to complete a health history, immunization record, physical exam, drug test, and criminal background check.

The Physical Therapist Assistant Program is accredited by the Commission on Accreditation in Physical Therapy Education. Graduates of the program will be able to sit for the national licensure examination administered by the Federation of State Boards of Physical Therapy. Licensure is required in Missouri and most other states.

Interested in this program? Start the enrollment process by visiting [stlcc.edu/enroll](http://www.stlcc.edu/enroll) (http://www.stlcc.edu/Admissions/Get_Started/Enrollment_Overview).

Program of Study

Code	Title	Credit Hours
Career General Education		
ENG 100 or ENG 101	Career English College Composition I	3
COM 101	Oral Communication I	3
PSY 200	General Psychology	3
PSY 205 or PSY 203	Human Growth and Development Child Psychology	3
SOC 201	Aspects of Aging	3
XXX xxx	Missouri State Requirement	3
BIO 207	Anatomy and Physiology I	4
BIO 208	Anatomy and Physiology II	4
BIO 209	Kinesiology Fundamentals	3
Physical Education Activity		
Select 2 credit hours		2
Program Requirements		
PTA 100	Introduction to Physical Therapist Assistant	2
PTA 104	Clinical Experience I	2
PTA 105	Fundamentals of Patient Care for the PTA	4
PTA 208	Health Occupation Seminar	2
PTA 211	Physical Agents	3
PTA 212	Therapeutic Exercise and Rehabilitation Concepts I	7
PTA 213	Therapeutic Exercise and Rehabilitation Concepts II	2
PTA 214	Data Collection and Intervention Techniques for the PTA	4
PTA 215	Medical Conditions in Rehabilitation	3
PTA 216	Clinical Education IIA	4
PTA 217	Clinical Education IIB	4
Total Credit Hours		68

Precision Machining Technology, Certificate of Specialization

Florissant Valley

The Precision Machining Technology Certificate of Specialization prepares students for entry level jobs in the machine tool trade. Students will learn to

safely set up and operate milling machines, lathes, grinders and drill presses. They will also learn the basics of CNC machine set up and operation. The program is designed around the National Institute for Metalworking skills (NIMS) credentials and prepares students for testing in seven of the level one credentials.

Interested in this program? Start the enrollment process by visiting [stlcc.edu/enroll](http://www.stlcc.edu/enroll) (http://www.stlcc.edu/Admissions/Get_Started/Enrollment_Overview).

Code	Title	Credit Hours
ME 100	Measurement, Materials and Safety	3
ME 111	Job Planning, Benchwork & Layout	3
ME 120	Manual Machining I	3
ME 200	Manual Machining II	3
ME 212	Introduction to Computer Numerical Control (CNC) Machining	3
ME 154	Mechanical Blueprint Reading	2
Total Credit Hours		17

Radiologic Technology, Associate in Applied Science

Forest Park

This program prepares students for entry-level positions as radiographers (X-ray technologists). Student must attend full-time and satisfy both the didactic and clinical components to successfully complete the program.

The program is accredited by the

Joint Review Committee on Education in Radiologic Technology (JRCERT)
20 N. Wacker Drive, Suite 2850
Chicago, IL, 60606-3182
Phone number: 312-704-5300 (<http://catalog.stlcc.edu/programs/radiologic-technology-aas/tel:3127045300>)

Students learn to use complex X-ray and image processing equipment designed to record images which aid radiologists in diagnosing various health problems.

Persons interested in this program should be comfortable working with and caring for people from diverse backgrounds. They should be able to meet the academic and physical demands of the program that require a commitment of time, effort and motivation.

Students are required to complete a health history, immunization record, physical exam, essential functions acknowledgment form and drug and criminal background check prior to the first day of class. Students not passing the criminal background check and/or drug screen may be prohibited from participating in clinical education. This will prevent the student from being able to complete all program requirements for graduation.

Completion of college level medical terminology course (HIT 101 Medical Terminology or equivalent) is highly recommended.

To graduate a grade of C or better is required for all math and science courses and all courses in the area of concentration.

Graduates are eligible to sit for the national certification examination administered by the American Registry of Radiologic Technologists (ARRT).

Employment is available in hospital radiology departments, clinics, imaging centers, outpatient surgery centers and physician offices.

Prerequisites

The following must be completed prior to applying for admission into the Radiologic Technology program:

- MTH 030 Elementary Algebra or two semesters of high school algebra.
- BIO 111 Introductory Biology I or two semesters of high school biology with labs.
- Math and science cumulative GPA of 2.5 or higher on a 4.0 scale.
- Math and science courses must be completed within five calendar years of entering the program.
- Cumulative GPA of 2.5 or higher on a 4.0 scale.

Interested in this program? Start the enrollment process by visiting [stlcc.edu/enroll](http://www.stlcc.edu/enroll) (http://www.stlcc.edu/Admissions/Get_Started/Enrollment_Overview).

Program of Study

Code	Title	Credit Hours
General Education		
ENG 101	College Composition I	3
COM 101	Oral Communication I	3
MTH 124	Technical Mathematics I (or higher) ¹	3-4
BIO 207	Anatomy and Physiology I ²	4
BIO 208	Anatomy and Physiology II	4
PSY 200	General Psychology	3
XXX xxx	Missouri State Requirement	3
Physical Education Activity		
Select 2 credit hours		2
Program Requirements		
XRT 101	Radiographic Procedures I	4
XRT 102	Radiographic Procedures II	3
XRT 103	Radiographic Procedures III	3
XRT 104	Principles of Radiographic Exposure I	3
XRT 105	Principles of Radiographic Exposure II	3
XRT 107	Radiologic Physics I	2
XRT 108	Radiologic Physics II	2
XRT 111	Clinical Education I	2
XRT 112	Clinical Education II	2
XRT 116	Clinical Education III	3
XRT 121	Radiographic Image Evaluation I	2
XRT 122	Radiographic Image Evaluation II	2
XRT 207	Radiologic Pathology	2
XRT 208	Advanced Imaging Modalities	2
XRT 209	Radiobiology	2
XRT 211	Radiologic Technology Review	3
XRT 212	Professional Development in Radiography	2
XRT 213	Clinical Education IV	3
XRT 214	Clinical Education V	3
XRT 215	Clinical Education VI	2
Total Credit Hours		75-76

¹ Except MTH 165 or MTH 166

² BIO 207 is a prerequisite for XRT 101 and must be completed with a grade C or better before starting the Area of Concentration courses.

Respiratory Care, Associate in Applied Science

Forest Park

This program prepares students for positions as respiratory therapists. Students learn to administer treatment(s) or conduct tests on persons with lung and heart ailments, as ordered by a patient's physician. The program includes natural sciences, humanities, and respiratory therapy courses, in addition to clinical practice at area health facilities.

Persons interested in the program should be team-oriented, compassionate individuals who derive satisfaction from helping others in time of crisis. They also should be able to tolerate moderate physical activity, long hours of standing, and be able to work effectively under stress.

Graduates are eligible to challenge the Therapist Multiple Choice and Clinical Simulation examinations offered through the National Board for Respiratory Care in order to obtain the Registered Respiratory Therapy credential. Employment is available through hospitals, clinics, home care agencies, education, equipment sales and marketing. This program has many prerequisites based on professional standards. See an advisor for further information.

Interested in this program? Start the enrollment process by visiting [stlcc.edu/enroll](http://www.stlcc.edu/enroll) (http://www.stlcc.edu/Admissions/Get_Started/Enrollment_Overview).

Program of Study

Code	Title	Credit Hours
Career General Education		
ENG 101	College Composition I	3
ENG 102	College Composition II	3
MTH 124	Technical Mathematics I (or higher)	3-4
CHM 101	Fundamentals of Chemistry I	5
BIO 203	General Microbiology I	4
BIO 207	Anatomy and Physiology I	4
BIO 208	Anatomy and Physiology II	4
XXX xxx	Missouri State Requirement	3
PSY 200	General Psychology	3
Physical Education Activity		
Select 2 credit hours		2
Program Requirements		
RTH 120	Introduction to Respiratory Care and Respiratory Physics	5
RTH 121	Orientation to the Hospital	2
RTH 125	Airway Management	3
RTH 126	Introduction to Mechanical Ventilation	3
RTH 127	Respiratory Pharmacology	2
RTH 128	Arterial Blood Gases	2
RTH 131	Pediatric Respiratory Care	3
RTH 140	Respiratory Care Clinical I	1
RTH 146	Clinical Level II	3
RTH 220	Pulmonary Pathophysiology	3

RTH 221	Critical Care Monitoring	2
RTH 222	Cardiopulmonary Physiology	2
RTH 223	Mechanical Ventilation: A Clinical Approach	4
RTH 225	Pulmonary Function Testing	3
RTH 228	N.B.R.C. Review	2
RTH 240	Respiratory Care Clinical III	2
RTH 245	Respiratory Care Clinical IV	2
Total Credit Hours		78-79

Robotics and Automation, Certificate of Specialization

Florissant Valley

This program focuses on robotics and automation techniques within the workplace. Students take courses which emphasize the use of equipment. The program provides a mix of theory and hands on training. Persons interested in this program should be mechanically inclined, and logic oriented self starters. Flexible and creative thinking are assets in this field. Graduates are qualified for a variety of technical positions within the automotive, aerospace, heavy equipment, chemical, electrical, petroleum and food processing industries that utilize robotics and automation processes.

Interested in this program? Start the enrollment process by visiting [stlcc.edu/enroll](http://www.stlcc.edu/enroll) (http://www.stlcc.edu/Admissions/Get_Started/Enrollment_Overview).

Code	Title	Credit Hours
ME 140	Introduction to Robotics	3
or ME 121	Computer Integrated Manufacturing	
ME 210	Robotics Subsystems and Components	3
ME 211	Programmable Logic Controllers	3
or EE 236	PLC/Programmable Logic Controller	
ME 237	Programmable Logic Controllers II	3
ME 230	Introduction to 3-D Solid Modeling for Design	4
Total Credit Hours		16

Skilled Trades Industrial Occupations Technology, Associate in Applied Science

Florissant Valley

This program allows individuals to earn an associate degree tailored to their occupational/career needs. College credit for technical areas may be earned through established articulation agreements with apprenticeship programs recognized by the college or individualized programs of study developed in consultation with the Engineering and Technology department. In addition, on-the-job training and/or supervised work-based learning may be included in the student's degree program. Areas of concentration may include: aerospace assembly worker, carpenter apprenticeship, electronic alarm technician, machine technician apprenticeship and sheet metal worker.

Interested in this program? Start the enrollment process by visiting [stlcc.edu/enroll](http://www.stlcc.edu/enroll) (http://www.stlcc.edu/Admissions/Get_Started/Enrollment_Overview).

Program of Study

Code	Title	Credit Hours
Career General Education		
ENG 101	College Composition I	3
COM 101	Oral Communication I	3
MTH 124	Technical Mathematics I (or higher)	3
XXX xxx	Science Elective	3-5
XXX xxx	Missouri State Requirement	3
XXX xxx	Social Science Elective	3
Physical Education Activity		
Select 2 credit hours		2
Program Requirements		
GE 101	Technical Computer Applications	3
or IS 103	Information Systems for Business	
or IS 116	Computer Literacy	
Select one of the following focus areas:		41-42
Apprenticeship Program Agreement		
Technical Electives		
Total Credit Hours		64-67

Focus Areas

Apprenticeship Program Agreement

Where St. Louis Community College has an agreement with an apprenticeship training program, students will receive credit as per the apprenticeship agreement. Depending on the credit awarded based on the articulation agreement; additional technical course approved by the department may be required. Transcription of credit for apprenticeship training programs will be done as per the college procedures in place at that time.

Technical Electives

This option allows individuals to tailor their area of concentration based on the skilled trades by selecting course(s) from the department prefixes: BE, CE, EE, EGR, ESC, GE, ME, QC, SKT, TEL and MGT – with at least 9 credit hours from one of the above prefixes. The individual's program of study must be developed in consultation with the Engineering and Technology department.

Skilled Trades Industrial Occupations Technology, Certificate of Specialization

Florissant Valley

This program provides industrial technical education and training associated with a variety of skilled trades.

Dependent on the skilled trade classification, an additional 9-12 credit hours of technical courses are required for the particular Certificate of Specialization. The courses must be selected in consultation with the program advisor.

Skilled trades classifications and emphasis areas may include:

- Electronics
- PLC/Robotics
- Sheet Metal Worker Manufacturing
- Assembly Worker

Interested in this program? Start the enrollment process by visiting [stlcc.edu/enroll](http://www.stlcc.edu/enroll) (http://www.stlcc.edu/Admissions/Get_Started/Enrollment_Overview).

Code	Title	Credit Hours
MTH 108	Elementary Applied Mathematics (or higher)	3
Select one of the following focus areas:		9-12
Electronics		
PLC/Robotics		
Sheet Metal Worker		
Manufacturing Assembly Worker		
Total Credit Hours		12-15

Software Developer, Associate in Applied Science

Florissant Valley, Forest Park and Meramec

This program provides students with the technical skills and knowledge required to design, write, implement, secure, and maintain business software systems in the enterprise. It teaches the principles of software architecture using current development tools, languages, and environments. The courses in the web, software developer and database focus areas enable students to pursue in-depth skill and expertise within one of these three areas while preparing for industry recognized certifications. The courses in the program provide a combination of online, distance learning and intensive, classroom-based, hands-on skills development. Students completing the program are prepared for a variety of industry certification exams as well as entry-level employment as software developer or to pursue advanced studies in software design and development.

Interested in this program? Start the enrollment process by visiting [stlcc.edu/enroll](http://www.stlcc.edu/enroll) (http://www.stlcc.edu/Admissions/Get_Started/Enrollment_Overview).

Program of Study

Code	Title	Credit Hours
Career General Education		
ENG 101	College Composition I	3
ENG 102	College Composition II	3
or ENG 103	Report Writing	
MTH 160	College Algebra	4
XXX xxx	Natural Science/Math Elective	3
XXX xxx	Missouri State Requirement	3
XXX xxx	Social Science Elective	3
Physical Education Activity		
Select 2 credit hours		2
Program Requirements		
IS 112	Software and Hardware Concepts	3
IS 139	Web Publishing	3
IS 225	Database Management	4
IS 229	Unix/Linux I	3
IS 241	Systems Analysis and Design	3
IS 237	Fundamentals of Information Assurance/Security	3
IS 153	C# Programming I	4
or IS 187	Java Programming I	

Select one of the following options:		8
C# Language		
IS 253 & IS 283	C# Programming II and C# Programming III	
Java Language		
IS 287 & IS 288	Java Programming II and Java Programming III	
Select one of the following focus areas:		12
Language		
Web		
Database		
Total Credit Hours		64

Focus Areas

Language

Code	Title	Credit Hours
IS 290	C# Frameworks: .NET Web App Framework	3
or IS 294	Java Frameworks: Struts and Hibernate	
Select 9 credit hours of approved IS electives		9
Total Credit Hours		12

Web

Code	Title	Credit Hours
IS 141	Graphics for the Web	3
IS 265	Web Scripting Technologies	3
IS 142	Web Development I	3
Select 3 credit hours of approved IS electives		3
Total Credit Hours		12

Database

Code	Title	Credit Hours
IS 240	SQL and Database Development	3
IS 257	Advanced Database Design	3
Select one of the following:		3
IS 268	SQL Server Programming	
IS 273	Oracle Design and Implementation	
IS 276	Oracle Programming	
Select 3 credit hours of approved IS electives		3
Total Credit Hours		12

Surgical Technology, Certificate of Proficiency

Forest Park

This program prepares students for entry-level positions as surgical technologists. Students learn aseptic technique, instrumentation, surgical procedures and patient care through classroom, laboratory practice and at a clinical affiliate. Students learn to assist the surgeon by passing instruments and sutures, holding retractors and cutting sutures.

Persons interested in this program should be able to work well with others in a team environment. They should have good manual dexterity, enjoy the

operating room situation, and function effectively under intense and stressful situations.

This program is CAAHEP accredited and graduates are qualified to take the National Certification Exam offered by the National Board of Surgical Technology and Surgical Assisting (NBSTSA) to become a Certified Surgical Technologist (CST).

Commission on Accreditation of Allied Health Education Programs
1361 Park Street
Clearwater, FL 33756
Phone: 727-210-2350 (<http://catalog.stlcc.edu/programs/surgical-technology-certificate-proficiency/tel:7272102350>)
Fax: 727-210-2354 (<http://catalog.stlcc.edu/programs/surgical-technology-certificate-proficiency/tel:7272102354>)
www.caahep.org (<http://www.caahep.org>)

Prerequisites

The following courses must be completed prior to applying for the program.

Code	Title	Credit Hours
MTH 030	Elementary Algebra	3
BIO 203	General Microbiology I	4
BIO 207	Anatomy and Physiology I	4

Interested in this program? Start the enrollment process by visiting stlcc.edu/enroll (http://www.stlcc.edu/Admissions/Get_Started/Enrollment_Overview).

Required Courses

Code	Title	Credit Hours
BIO 208	Anatomy and Physiology II	4
ENG 101	College Composition I	3
PSY 200 or SOC 101	General Psychology Introduction to Sociology	3
ST 104	Pharmacology for Surgical Technologists	2
ST 105	Fundamentals of Surgical Technology	4
ST 108	Introduction to Surgical Technology	6
ST 109	Principles of Operating Room Communication	2
ST 110	Surgical Procedures I	4
ST 111	Surgical Technology Clinical I	8
ST 210	Surgical Procedures II	2
ST 211	Surgical Technology Clinical II	4
Total Credit Hours		42

Telecommunications Engineering Technology: Basic Electronics, Certificate of Specialization

This program is no longer accepting new students. Please see an advisor for more information.

Travel and Tourism, Certificate of Specialization

Forest Park

This course of study is designed for students seeking entry-level positions in the field of travel and tourism. The curriculum is intended as a two-semester program covering travel industry segments, terms and definitions, codes, and tourism geography, along with computer automation and Internet use as related to the profession.

Persons interested in this program should possess keyboarding and computer navigation abilities, an aptitude for memorization, along with developed interpersonal and organizational skills.

Graduates are eligible to pursue entry-level employment opportunities with travel agencies, tour companies, airlines, car rental firms, incentive travel organizations, and Internet travel entities.

Interested in this program? Start the enrollment process by visiting stlcc.edu/enroll (http://www.stlcc.edu/Admissions/Get_Started/Enrollment_Overview).

Code	Title	Credit Hours
Core Courses		
IS 123	Introduction to Windows	1
IS 151	Computer Applications in Business	4
HTM 105	Professionalism in the Hospitality Industry	1
HTM 110	Negotiations in the Hospitality Industry	2
GEG 106	World Geography	3
Focus Courses		
HTM 260	Travel and Tourism Foundations	6
HTM 270	Travel and Tourism Computer Systems	5
HTM 265	Travel and Tourism Destination Geography	3
Total Credit Hours		25

Web Developer, Certificate of Specialization

Forest Park and Meramec

This Certificate of Specialization is designed for students seeking skills to qualify for positions as Web Developers. The certificate was developed to include topics that will build the programming and database skills a Web Developer needs in order to build and maintain a corporation's website. Emphasis is placed upon object-oriented languages that are prevalently used for the Internet and intranets. The courses provide students with both the theoretical and technical knowledge and practical hands-on experience to be successful in the high demand Web Developer occupation.

Interested in this program? Start the enrollment process by visiting stlcc.edu/enroll (http://www.stlcc.edu/Admissions/Get_Started/Enrollment_Overview).

Code	Title	Credit Hours
Required Courses		
IS 139	Web Publishing	3
IS 153 or IS 187	C# Programming I Java Programming I	4

IS 265	Web Scripting Technologies	3
IS 142	Web Development I	3
IS 141	Graphics for the Web	3
IS 253	C# Programming II	4
or IS 287	Java Programming II	
Total Credit Hours		20

GENERAL EDUCATION REQUIREMENTS

General Education Course Requirements

St. Louis Community College's Associate in Arts degree requires 42 credit hours of general education courses. These courses provide an opportunity for students to develop skills and knowledge that will enhance their lives far beyond graduation. The ability to communicate effectively, solve problems, understand values, and demonstrate quantitative literacy are skills that are important whether the student is pursuing further education, is active in the workforce, or participates in the civic and cultural life of the community. Courses that provide general knowledge in science, social and behavioral sciences, humanities, and cultural diversity serve to broaden each student's perspective in an increasingly complex world. A one-credit hour capstone course serves as an intentional opportunity for students to demonstrate their ability to integrate skill and knowledge areas while investigating a topic of interest.

Students who complete the 42-credit hour block of general education courses will have "Missouri General Education Requirement completed" noted on their transcripts. Students who complete this block will have satisfied all general education at any Missouri public college or university to which they may transfer, except the University of Missouri-Columbia. Students wishing to transfer to UM-C should consult an advisor for specific requirements. Many private institutions also accept the 42-credit hour block to satisfy their general education requirements.

Foundation Courses (FND)	13
Select both ENG 101 and ENG 102	
Select either COM 101 or COM 107	
Select one MTH course	
Main Floor Courses (must include one Global/Intercultural course)	28
Humanities and Fine Arts (HFA) (9 credit hours)	
Social and Behavioral Sciences (SBS) (9 credit hours, must include one Missouri State Requirement course)	
Life and Physical Sciences (LPS) (7 credit hours, must include one laboratory course)	
Interdisciplinary Studies (IDS) (3 credit hours)	
Capstone	1
Total Credit Hours	42

Foundation Courses

13 Credits Required

- Select both ENG 101 and ENG 102
- Select either COM 101 or COM 107
- Select one MTH course

COM 101	Oral Communication I	3
COM 107	Public Speaking	3
ENG 101	College Composition I	3
ENG 102	College Composition II	3
MTH 160	College Algebra	4
MTH 161	Applications of College Mathematics	4
MTH 170	Trigonometry	3
MTH 180	Introductory Statistics	4
MTH 185	Precalculus	5
MTH 186	Survey of Calculus	4
MTH 210	Analytic Geometry and Calculus I	5
MTH 212	Discrete Mathematics	3
MTH 215	Linear Algebra	3
MTH 220	Analytic Geometry and Calculus II	5
MTH 230	Analytic Geometry and Calculus III	5
MTH 240	Differential Equations	3

Humanities and Fine Arts

9 Credits Required

ARC 126	Architectural History I	3
ARC 127	Architectural History II	3
ART 100	Art Appreciation	3
ART 101	Art History I	3
ART 102	Art History II	3
ART 103	History of Modern Art	3
ART 128	Survey of African American Art	3
ART 168	History of Photography	3
ART 169	Visual Language	3
CHI 101	Elementary Chinese I	4
COM 104	Persuasion	3
COM 114	Oral Interpretation of Literature	3
DCS 104	American Sign Language I	5
DCS 105	American Sign Language II	5
ENG 110	Creative Writing	3
ENG 114	Writing Plays and Film Scripts	3
ENG 201	Introduction to Fiction	3
ENG 204	American Literature Before 1865	3
ENG 211	British Literature After 1800	3
ENG 213	The Short Novel	3
ENG 214	Contemporary Literature	3
ENG 215	Gothic, Horror and Fantasy	3
ENG 216	Women in Literature	3
ENG 217	Major Black Writers	3
ENG 224	Fiction Writing	3
ENG 225	Poetry Writing	3

ENG 228	Studies in Literature	3	COM 120	Gender Communication	3
ENG 230	Environmental Literature	3	COM 200	Communication Between Cultures	3
ENG 231	World Literature	3	ENG 211	British Literature After 1800	3
ENG 233	Writing Memoirs and Creative Nonfiction	3	ENG 215	Gothic, Horror and Fantasy	3
FRE 101	Elementary French I	4	ENG 216	Women in Literature	3
FRE 102	Elementary French II	4	ENG 217	Major Black Writers	3
GER 101	Elementary German I	4	ENG 230	Environmental Literature	3
HUM 101	Humanities: Pre-History to 1600	4	ENG 231	World Literature	3
HUM 102	Humanities: 1600 to the Present	4	GEG 101	Regional Geography	3
HUM 106	Black Humanities	3	GEG 106	World Geography	3
HUM 109	Arts and Ideas in the Ancient World	3	HST 115	Ancient and Medieval History to 1500	3
HUM 110	The Middle Ages and the Renaissance	3	HST 119	The Modern World	3
HUM 113	Introduction to Irish Studies	3	HST 128	Western Civilization from 1500 to the Present	3
ITL 103	Elementary Italian I	4	HST 201	History of East Asia	3
ITL 104	Elementary Italian II	4	HUM 101	Humanities: Pre-History to 1600	4
JPN 101	Modern Japanese I	4	HUM 102	Humanities: 1600 to the Present	4
JPN 102	Modern Japanese II	4	HUM 106	Black Humanities	3
MCM 102	Media Literacy	3	HUM 109	Arts and Ideas in the Ancient World	3
MCM 130	Film Appreciation	3	HUM 110	The Middle Ages and the Renaissance	3
MCM 131	History of Film	3	HUM 113	Introduction to Irish Studies	3
MCM 132	Major Themes in Film	3	IDS 103	Topics in Arab Culture	3
MCM 134	Filmmaking	3	IDS 109	Global Dimensions of Race, Ethnicity and Religion in America	3
MCM 209	Black Cinema	3	IDS 112	Sex Trafficking in Global Perspective	3
MCM 218	Advanced Filmmaking	3	IDS 113	Global Encounters in the Visual Arts	3
MUS 113	History of Jazz	3	IDS 116	Historical, Social, and Cultural Constructions of Youth	3
MUS 114	Music Appreciation	3	PHL 103	World Religions	3
MUS 128	History of Rock and Roll	3	PSC 201	International Relations	3
PHL 101	Introduction to Philosophy	3	PSC 211	United States Foreign Policy, 1898 to Present	3
PHL 102	Introduction to Logic	3	SOC 202	Social Problems	3
PHL 103	World Religions	3	SOC 203	Crime and Society	3
PHL 104	Ethics	3	SOC 212	Race and Ethnicity	3
PHL 109	Bio-Medical Ethics	3	SPA 201	Intermediate Spanish I	4
PHL 111	Environmental Ethics	3	THT 110	History of Theatre	3
PHL 112	Business Ethics	3	WMS 100	Introduction to Women's Studies	3
PHL 114	Philosophy of Religion	3			
RUS 101	Elementary Russian I	4			
SPA 101	Elementary Spanish I	4			
SPA 102	Elementary Spanish II	4			
SPA 201	Intermediate Spanish I	4			
THT 101	Introduction to Theatre	3			
THT 110	History of Theatre	3			

Global/Intercultural Requirement

1 Course Required

ARC 126	Architectural History I	3
ARC 127	Architectural History II	3
ART 100	Art Appreciation	3
ART 101	Art History I	3
ART 102	Art History II	3
ART 128	Survey of African American Art	3
ART 168	History of Photography	3
COM 110	Organizational Communication in a Global Age	3

Social and Behavioral Sciences

9 Credits Required

AT 242	History of Graphic Communications	3
COM 110	Organizational Communication in a Global Age	3
COM 120	Gender Communication	3
COM 200	Communication Between Cultures	3
ECO 140	Introduction to Economics	3
ECO 151	Principles of Macroeconomics	3
ECO 152	Principles of Microeconomics	3
GEG 101	Regional Geography	3
GEG 106	World Geography	3
HST 101	United States History to 1865	3
HST 102	United States History from 1865 to the Present	3
HST 105	United States in the Twentieth Century	3
HST 107	The African American Experience, 1619 to the Present	3
HST 115	Ancient and Medieval History to 1500	3

HST 117	Early Modern Europe	3
HST 119	The Modern World	3
HST 128	Western Civilization from 1500 to the Present	3
HST 137	African American History through Reconstruction	3
HST 138	African American History from Reconstruction to the Present	3
HST 141	United States History, 1945-Present	3
HST 201	History of East Asia	3
HST 205	The United States and the Middle East, 1776-Present	3
HST 206	Women in United States History	3
HST 207	America in Vietnam	3
MCM 101	Introduction to Mass Communications	3
PSC 101	Introduction to American Politics	3
PSC 103	State and Local Politics	3
PSC 201	International Relations	3
PSC 205	Constitutional Issues	3
PSC 211	United States Foreign Policy, 1898 to Present	3
PSY 200	General Psychology	3
PSY 203	Child Psychology	3
PSY 205	Human Growth and Development	3
PSY 206	Introduction to Social Psychology	3
PSY 208	Abnormal Psychology	3
PSY 214	Adolescent Psychology	3
SOC 100	The Sociology of Human Relations	3
SOC 101	Introduction to Sociology	3
SOC 202	Social Problems	3
SOC 203	Crime and Society	3
SOC 204	Family and Society	3
SOC 212	Race and Ethnicity	3
WMS 100	Introduction to Women's Studies	3

Missouri State Requirement

1 Course Required

HST 101	United States History to 1865	3
HST 102	United States History from 1865 to the Present	3
HST 105	United States in the Twentieth Century	3
HST 107	The African American Experience, 1619 to the Present	3
HST 137	African American History through Reconstruction	3
HST 138	African American History from Reconstruction to the Present	3
HST 141	United States History, 1945-Present	3
HST 206	Women in United States History	3
PSC 101	Introduction to American Politics	3
PSC 103	State and Local Politics	3
PSC 205	Constitutional Issues	3

Life and Physical Sciences

7 Credits Required (at least one laboratory course required)

Laboratory Courses

BIO 106	Human Heredity	4
BIO 110	General Zoology	4

BIO 111	Introductory Biology I	4
BIO 124	General Botany I	4
CHM 101	Fundamentals of Chemistry I	5
CHM 102	Fundamentals of Chemistry II	4
CHM 105	General Chemistry I	5
CHM 106	General Chemistry II	5
CHM 109	Chemistry and the Environment	4
GEO 111	Physical Geology	5
GEO 123	Geologic Field Experiences in North America	4
PSI 125	Introduction to Atmospheric Science	4

Non-Laboratory Courses

BIO 105	Topics in Evolution	3
BIO 109	Human Biology	3
BIO 113	Modern Aspects of Biology	3
BIO 117	Conservation and Ecology	3
BIO 123	Animal Behavior	3
BIO 151	Biology of Human Health and Disease	3
BIO 154	The Biology of Human Sex	3
GEG 103	Physical Geography	3
GEO 100	Earth Science	3
GEO 103	Environmental Geology	3
GEO 104	Prehistoric Life	3
GEO 113	Oceanography	3
PSI 101	Physical Science	3
PSI 111	Introduction to Astronomy I	3
PSI 123	Meteorology	3

Interdisciplinary Studies

3 Credits Required

IDS 102	Urban Legends and American Society	3
IDS 103	Topics in Arab Culture	3
IDS 104	Equity in Education	3
IDS 105	Law Goes to the Movies	3
IDS 106	The Artist in Society	3
IDS 107	Representations of Race, Class, Gender, and Sexuality in U.S. Society	3
IDS 108	Movement Culture of 1960s America	3
IDS 109	Global Dimensions of Race, Ethnicity and Religion in America	3
IDS 112	Sex Trafficking in Global Perspective	3
IDS 113	Global Encounters in the Visual Arts	3
IDS 114	Leadership in the 21st Century	3
IDS 115	The Science and Value of Happiness	3
IDS 116	Historical, Social, and Cultural Constructions of Youth	3
IDS 117	Sport and Society	3
IDS 118	Environmental Conflicts and Consequences	3
IDS 119	Reel Life vs. Real Life: Movies, History, and Historical Truth	3
IDS 120	Science, Sci-Fi, Society and Cinema	3

Capstone

1 Credit Required

GEN 200	Capstone	1
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COURSE DESCRIPTIONS

This section contains descriptions of all credit courses offered at St. Louis Community College as well as other off-campus locations during the academic year. The courses listed herein are current as of March 2016. For descriptions of courses approved after this date, consult the website at stlcc.edu/programs (<http://stlcc.edu/programs>).

All of the courses listed in this section are not offered every semester. Information on where and when these courses are available may be found in each semester's course schedule available online at stlcc.edu/schedule (<http://stlcc.edu/schedule>). Contact the Enrollment Services office for more information.

Reading Proficiency Prerequisite

Many of the courses in this catalog include a prerequisite of "Reading Proficiency." This means that before a student can enroll in one of these courses, he or she must demonstrate the ability to read at the college level. This ability will give the student a much better chance to pass the course, since many courses require a certain amount of reading, whether it be a textbook, journal articles or reports from many sources.

The student can meet the Reading Proficiency prerequisite by scoring at least 82 on the Compass reading placement test, given as part of the admission process. Students who present an ACT reading score of at least 18 or an SAT verbal score of at least 500 meet the prerequisite. Students with a college reading course with a grade of at least "C" or who have earned a college degree (associate or baccalaureate) also meet the prerequisite. In addition, transfer students who present evidence of a grade of at least "C" in a three-hour college course numbered 100 or higher will be considered to have met the prerequisite. This applies also to students with dual credit courses taken in high school.

Students who do not meet this prerequisite in any of these ways must enroll for RDG 030. A grade of "C" or higher in this course meets the Reading Proficiency requirement. Students who are not native speakers of English can meet this prerequisite with at least a "C" in ENG 070.

Course Levels

The course numbering system uses an abbreviation to identify subject matter area and a three-digit number to identify course level. Course levels are defined as follows:

001-079	Developmental courses
080-099	Special problems developmental credit courses
100-199	Beginning level credit courses
200-299	Advanced level credit courses
500-599	Special problems credit courses
600-699	Special problems credit courses
700-799	Non-credit continuing education courses

Example

DA 144 PRECLINICAL PRACTICE

DA indicates the subject area of Dental Assisting. The number 144 indicates that the course is on the beginning level.

Course Hours

Unless otherwise noted in the course description, the credit hours shown represent the number of lecture hours per week over a 16-week semester that the student will spend in class for a given course.

Key to Abbreviations

ACC	Accounting
ANT	Anthropology
ARA	Arabic
ARC	Architectural Technology
ART/AT	Art
AUT	Automotive Technology
AVI	Aviation Technology
BAP	Baking and Pastry Arts
BIO	Biology
BE	Biomedical Engineering Technology
BIC	Building Inspection Technology
BUS	Business Administration
BLW	Business Law
CHM	Chemistry
CFD	Child and Family Development
CHI	Chinese
CE	Civil Engineering Technology
CLT	Clinical Lab Technology
COL	College Orientation
COM	Communications
CRJ	Criminal Justice
CUL	Culinary Arts
DCS	Deaf Communication Studies
DA	Dental Assisting
DHY	Dental Hygiene
DMS	Diagnostic Medical Sonography
DIE	Diesel Technology
DIT	Dietetic Technology
ECE	Early Care and Education
ECO	Economics
EDU	Education
EE	Electrical/Electronic Engineering Technology
EMT	Emergency Medical Technology
EGR	Engineering Graphics
ESC	Engineering Science
ENG	English
FIN	Finance
FIR	Fire Protection Technology
FRE	French
FD	Funeral Directing
FSE	Funeral Services Education
GE	General Engineering
GEG	Geography
GEN	General Education
GEO	Geology
GER	German
GLE	Global Education
HIT	Health Information Technology
HMS	Human Services
HST	History
HRT	Horticulture

HTM	Hospitality and Tourism
HUM	Humanities
IRT	Information Reporting Technology
IS	Information Systems
IT	Information Technology
IDS	Interdisciplinary Studies
IB	International Business
ITL	Italian
JPN	Japanese
LGL	Legal Studies
LIB	Library and Information Studies
MGT	Management
MKT	Marketing
MCM	Mass Communications
MTH	Mathematics
ME	Mechanical Engineering Technology
MUS	Music
NUR	Nursing
OTA	Occupational Therapy Assistant
PAR	Paramedic Technology
PRD	Personal Development
PHL	Philosophy
PE/PED	Physical Education
PSI	Physical Science
PTA	Physical Therapist Assistant
PHY	Physics
PSC	Political Science
PSY	Psychology
QC	Quality Control
XRT	Radiologic Technology
RDG	Reading
RTH	Respiratory Therapy
RUS	Russian
SKT	Skilled Trades
STR	Smart Start
SOC	Sociology
SPA	Spanish
ST	Surgical Technology
TEL	Telecommunications
THT	Theatre
TUR	Tourism
WMS	Women's Studies

Courses A-Z

Accounting (ACC)

ACC 100. Applied Accounting. 3 Credit Hours.

An introductory course in the principles of accounting with emphasis on practice in bookkeeping techniques, designed to familiarize career students with the basic accounting system and the knowledge of keeping records.
Prerequisite: Reading Proficiency.

ACC 110. Financial Accounting I. 4 Credit Hours.

The emphasis of this course is on the measurement and presentation of financial data. The course focuses on preparation and use of corporate financial statements consistent with General Accepted Accounting Principles.
Prerequisites: ACC 100 or one year of high school accounting or department approval and Reading Proficiency.

ACC 114. Managerial Accounting. 3 Credit Hours.

Emphasis is on evaluation and utilization of accounting data for the purpose of planning and controlling operations. Topics include financial statement analysis, methods of cost accumulation, budgeting, standard costs, direct costing, and cost-volume-profit analysis.
Prerequisites: ACC 110 with grade of "C" or better or departmental approval and Reading Proficiency.

ACC 120. Computer Accounting Applications for Business. 3 Credit Hours.

This survey course introduces various commercial accounting software in a hands-on environment. Topics covered include general ledger, receivables, payables, inventory, payroll, and importing and exporting accounting data to other software. The course provides an introduction to accounting applications of spreadsheet and presentation software and the Internet. No previous computer experience is necessary.
Prerequisites: ACC 100 and/or ACC 110 and/or department approval and Reading Proficiency.

ACC 122. Computer Accounting Applications - Spreadsheets. 3 Credit Hours.

This course covers accounting applications using spreadsheet software as a tool in solving accounting problems and presenting and analyzing accounting data. Topics include using spreadsheet software to prepare accounting reports such as the income statement, balance sheet, statement of cash flow, and special purpose accounting reports for decision making. Financial reports are analyzed using spreadsheet software. In addition, auditing a worksheet and graphical analysis of accounting information is performed using the charting feature of spreadsheet software.
Prerequisites: ACC 110 or department approval and Reading Proficiency.

ACC 124. Computer Accounting Applications - Databases. 3 Credit Hours.

This course covers how to build a database for accounts receivable, accounts payable, inventory, fixed assets and payroll.
Prerequisites: ACC 110 or department approval and Reading Proficiency.

ACC 203. Cost Accounting. 3 Credit Hours.

This course covers modern cost/managerial theory and practices with an emphasis on using cost information for managerial decision making.
Prerequisites: ACC 114 with a grade of "C" or better and Reading Proficiency.

ACC 204. Income Tax Accounting. 3 Credit Hours.

A study of federal tax accounting; emphasis is placed on the procedure required to comply with the tax laws and to make the required tax returns. Income tax, social security and payroll tax accounting is included.
Prerequisite: Reading Proficiency.

ACC 206. Auditing. 3 Credit Hours.

This course teaches the procedures of examination of financial statements by external and internal auditors. Topics include auditing standards, development of working papers and reports, and development of sampling and original records examination.
Prerequisites: ACC 208, ACC 209 and Reading Proficiency.

ACC 208. Intermediate Accounting I. 3 Credit Hours.

This course covers financial accounting theory relating to asset, liability and owner's equity accounts, including methods of valuation and the related effects on financial statements. Reading Proficiency.
Prerequisites: ACC 114 with a grade of "C" or better or department approval.

ACC 209. Intermediate Accounting II. 3 Credit Hours.

A further study of financial accounting theory. Topics will include intangible assets, current and long-term liabilities, equity, earnings per share, and investments.
Prerequisites: ACC 208 with a grade of "C" or better or department approval and Reading Proficiency.

ACC 211. Current Topics in Accounting. 3 Credit Hours.

Study of selected topics or current topics in Accounting. This course will provide an opportunity to explore various current issues in greater detail.
Prerequisites: ACC 110 or department approval and Reading Proficiency.

ACC 212. Nonprofit Accounting. 3 Credit Hours.

The course addresses the principles, concepts and processes involved in the accounting treatment for nonprofit entities. Organizations discussed will include state and local governments, the federal government, college and universities, hospitals and health organizations, and other voluntary health and welfare organizations.
Prerequisites: ACC 110 or department approval and Reading Proficiency.

ACC 213. Survey of Business Taxes. 3 Credit Hours.

This is a survey course of Business Taxes. Topics include federal taxation of income, state taxation of income, state capital base taxes, state sales and use tax, federal and state employment related taxes and property taxes.
Prerequisites: ACC 110 or department approval and Reading Proficiency.

ACC 214. Business Taxes: Research and Planning. 3 Credit Hours.

This course concentrates on advanced business tax issues for partnerships, corporations, and S-corporations. Topics include tax planning, tax practice considerations, and tax research.
Prerequisite: Reading Proficiency.

ACC 291. Accounting Internship. 3 Credit Hours.

An Accounting Internship allows students to apply skills learned in the classroom, learn new skills, and explore career opportunities while supervised by an employer and a faculty member. Working as an intern for 120 hours under the supervision of an accounting professional, the student will have the opportunity to participate in the accounting functions of an accounting firm, accounting department, or other business unit.
Prerequisites: Approval of department chair or program coordinator and Reading Proficiency.

ACC 292. Accounting Internship II. 3 Credit Hours.

This is an additional internship opportunity for accounting students to apply skills learned in the classroom, learn new skills, and explore career opportunities while supervised by an employer and a faculty member. Working as an intern for 120 hours under the supervision of an accounting professional, the student will have the opportunity to participate in the accounting functions of an accounting firm, accounting department, or other business unit.
Prerequisites: Approval of department chair or program coordinator and Reading Proficiency.

ACC 293. Accounting Internship III. 3 Credit Hours.

This is an additional internship opportunity for accounting students to apply skills learned in the classroom, learn new skills, and explore career opportunities while supervised by an employer and a faculty member. Working as an intern for 120 hours under the supervision of an accounting professional, the student will have the opportunity to participate in the accounting functions of an accounting firm, accounting department, or other business unit.

Prerequisites: Approval of department chair or program coordinator and Reading Proficiency.

Anthropology (ANT)

ANT 101. Introduction to Physical Anthropology and Archaeology. 3 Credit Hours.

This course is designed to present the principles, theories, data and methods used by anthropologists and archaeologists in their attempts to study human evolutionary development. Generally speaking, three broad topics are covered: the mechanisms of evolution, human prehistory, and the fossil evidence of *Homo Sapiens* and ancestral forms.

Prerequisite: Reading Proficiency.

ANT 102. Introduction to Cultural Anthropology. 3 Credit Hours.

In this course, students are introduced to the great diversity of human cultures. Economic, social, political and religious systems are compared, including such topics as the nature of culture, cultural ecology, magic and witchcraft, disease and curing, sex roles, and rites of passage. Problems resulting when traditional societies confront industrial societies or industrialization are discussed.

Prerequisite: Reading Proficiency.

ANT 202. Ethnography: North American Indians. 3 Credit Hours.

This course presents an introduction to the beliefs, customs and social organization of the Indians of North America. The course will deal with the Indians as they were before Columbus, their life ways, world views, and religion, economic patterns and technology, patterns of family life, warfare and confrontations with Europeans.

Prerequisite: Reading Proficiency.

Arabic (ARA)

ARA 101. Modern Arabic I. 4 Credit Hours.

This is a practical, beginning course in speaking and understanding modern Arabic. It is designed for persons who want to learn some Arabic, who want to travel to an Arabic-speaking country, or who have previous limited experience in Arabic. Attention is given to proper pronunciation, to practicing the words and basic structures most frequently in daily conversation and to learning the social conventions and Arabic culture necessary for interpersonal communication with native speakers of contemporary Arabic.

Prerequisite: Reading Proficiency.

Architectural Technology (ARC)

ARC 110. Architectural Graphics. 3 Credit Hours.

Foundation course in which quality drafting in the areas of line weight and quality, lettering, dimensioning, notes is taught. Drafting procedures such as orthographics, axonometrics, perspective, shade and shadow, topography, entourage rendering are introduced. Care and use of drafting and print tools and media are considered. (Approximate cost of supply kit - \$50). Additional lab hours required.

Prerequisite: Reading Proficiency.

ARC 112. Architectural Design and Production I. 3 Credit Hours.

A small project is designed and detailed. Topics covered include design method, design presentation techniques, construction details, and construction document set production. Verbal and graphic communication of ideas is developed. A portfolio of student work is begun. Additional lab hours required.

Prerequisites: ARC 110 with a grade of "C" or better and Reading Proficiency.

ARC 114. Architectural History and Theory. 3 Credit Hours.

Course presents a survey of the history of shelter, monuments, other building types, towns and cities, and site design in relation to current architectural trends. Forces which shape the built-environment are studied. Tours of area sites or buildings may be included.

Prerequisite: Reading Proficiency.

ARC 123. Introduction to Computer-Aided Architectural Drafting. 3 Credit Hours.

Students learn to operate hardware and software generally in use in the architectural profession. A basic introduction to the systems will be presented. Hands-on use of the equipment will be emphasized.

Prerequisite: Reading Proficiency.

ARC 124. Introduction to Building Information Modeling. 3 Credit Hours.

This is a hands-on introduction to the use of building information modeling (BIM) software for architecture. Instruction will focus on how both graphic and non-graphic architectural information for a building is produced through the creation of a single project database represented in a 3D model.

Prerequisite: Reading Proficiency.

ARC 125. Sustainable Materials and Technologies in the Built Environment. 3 Credit Hours.

This foundational course examines the process for producing high performing, sustainable built environments. The student will learn how to research, evaluate, select, and specify appropriate materials and systems at all scales within the built environment. Code and Certification process criteria will be discussed as it relates to environmental performance.

Prerequisite: Reading Proficiency.

ARC 126. Architectural History I. 3 Credit Hours.

This course is a survey of the influences and development of architecture from pre-history to the beginning of the Industrial Revolution. The language of architecture, aesthetics and structure are presented. Methodologies and the architectural styles of different periods and cultures are examined within the context of social, political and technological forces.

Prerequisite: Reading Proficiency.

ARC 127. Architectural History II. 3 Credit Hours.

This course presents a survey of modern architecture from the beginning of the Industrial Revolution to the present. The language of architecture, aesthetics and structure are presented. Methodologies and the architectural styles of different periods and cultures are examined within the context of social, political and technological forces.

Prerequisite: Reading Proficiency.

ARC 209. Mechanical and Electrical Systems I. 3 Credit Hours.

An introduction to the physics and practical design aspects of plumbing systems, and the systems and building form and fabric affecting the heat loss and gain and internal comfort of buildings.

Prerequisites: MTH 124 or MTH 140 and Reading Proficiency.

ARC 211. Architectural Design and Production II. 3 Credit Hours.

A small commercial project is designed and detailed. Topics covered include design method, design presentation techniques, construction details and construction document production. Verbal and graphic communication of ideas is continued. Students continue to develop a portfolio. Additional lab hours required.

Prerequisites: ARC 112 with grade of "C" or better, ARC 123 and Reading Proficiency.

ARC 219. Professional Architectural Practice. 2 Credit Hours.

This course explores issues related to the functions of the architectural office business practices and development, professional conduct and liability, project management, contract management, and marketing.

Prerequisite: Reading Proficiency.

ARC 220. Architectural Design and Production III. 3 Credit Hours.

Students will work on commercial/institutional projects designed to reinforce skills in building design, architectural rendering, and construction document production. A professional portfolio is completed during this course. Additional lab hours required.

Prerequisites: ARC 114 and ARC 211 with grades of "C" or better and Reading Proficiency.

ARC 222. Site Planning and Landscape Drafting. 3 Credit Hours.

This course provides an introduction to the art of arranging the external environment to support human behavior. The student will learn skills used in architecture, engineering, landscape architecture and city planning. Principles of plane surveying as related to site planning are also studied. Drafting skills are studied with emphasis on site plans and techniques of landscape drafting. Additional hours required.

Prerequisites: ARC 110 and Reading Proficiency.

ARC 229. Architectural Specifications, Materials, and Methods. 3 Credit Hours.

This course explores the process of selecting building materials, and introduces the Project Manual as an essential element of the Contract Documents. The student will learn how to research, evaluate, select and specify appropriate products for a variety of architectural projects.

Prerequisite: Reading Proficiency.

Art (ART)

ART 100. Art Appreciation. 3 Credit Hours.

This course is intended to stimulate student's visual, aesthetic and intellectual awareness of our global artistic heritage. Both historic and thematic approaches to a wide variety of objects and media will develop students' abilities to evaluate and discuss the arts. It is intended for non-art majors.

Prerequisite: Reading Proficiency.

ART 101. Art History I. 3 Credit Hours.

This course is a survey of art before 1300 C.E. Works of art and characteristics of artistic styles are presented and discussed as manifestations of influential ideas from the following cultures or periods Prehistoric, Mesopotamian, Egyptian, Aegean, Greek, Etruscan, Roman, Early Christian, Byzantine, Early and Late Medieval, and two or more Non-Western Cultures.

Prerequisite: Reading Proficiency.

ART 102. Art History II. 3 Credit Hours.

This course is a survey of art after 1300 C.E. Works of art and characteristics of artistic styles are presented and discussed as manifestations of influential ideas from the following periods or styles Proto-Renaissance, Early Italian Renaissance, Early and Late Northern Renaissance, High Renaissance, Mannerism, Baroque, Rococo, selected 19th and 20th Century styles, and two or more on-Western cultures.

Prerequisite: Reading Proficiency.

ART 103. History of Modern Art. 3 Credit Hours.

This course surveys modern art beginning with the late 18th century and proceeding through the work of contemporary artists. Recurrent themes from the following periods will be examined Impressionism, Cubism, Surrealism, Abstract Expressionism, and other modern and contemporary styles.

Prerequisite: Reading Proficiency.

ART 107. Design I. 2 Credit Hours.

Emphasis on principles and elements of design through a series of assigned problems. Additional studio hours required.

Prerequisite: Reading Proficiency.

ART 108. Design II. 2 Credit Hours.

The study of color, exploring various color theories and the historical application through a series of problems. Additional studio hours required.

Prerequisites: ART 107 and Reading Proficiency.

ART 109. Drawing I. 3 Credit Hours.

This is a beginning course in fundamentals of drawing that includes an introduction to drawing principles, construction, proportion, form, value, perspective, composition, tools and media. Perception, visual awareness, sensitivity, attitude and judgment are all stressed. Additional studio hours required.

Prerequisite: Reading Proficiency.

ART 110. Drawing II. 3 Credit Hours.

A continuation of ART 109, the fundamentals and principles of drawing, with more emphasis on organizational concepts and a variety of media. Additional studio hours required.

Prerequisites: ART 109 and Reading Proficiency.

ART 111. Figure Drawing I. 3 Credit Hours.

Introduction to drawing from the human figure, analysis of structure, proportion and basic forms. Additional studio hours required.

Prerequisite: Reading Proficiency.

ART 112. Figure Drawing II. 3 Credit Hours.

Continuation of ART 111. Emphasizes the use of various drawing media. Analysis of the structure of the human figure through anatomy. Additional studio hours required.

Prerequisites: ART 111 and Reading Proficiency.

ART 113. Ceramics I. 3 Credit Hours.

A study of the basic principles of ceramics and ceramic sculpture with emphasis on hand-built techniques. As the student progresses, there will be study on the kick wheel. Additional studio hours required.

Prerequisite: Reading Proficiency.

ART 114. Painting I. 3 Credit Hours.

An introduction to oil painting from still-life objects, with emphasis on technique and the effective use of color. Composition and drawing will be stressed as they relate to painting. Additional studio hours required.

Prerequisites: ART 109 and Reading Proficiency.

ART 115. Printmaking I. 3 Credit Hours.

This is an introductory course in traditional and contemporary printmaking. The student will be exposed to a variety of printmaking media from a selection of monotypes, linoleum blocks, wood blocks, collagraphs, dry points, etchings, and solvent transfers. Additional studio hours required.

Prerequisite: Reading Proficiency.

ART 116. Sculpture I. 3 Credit Hours.

A course based on individual development stressing the elements of sculpture form, space, light, movement, texture, proportion in relation to the basic methods associated with the sculpture field. Additional studio hours required.

Prerequisite: Reading Proficiency.

ART 125. Interactive Design I. 3 Credit Hours.

This course introduces students to the methods and practices of creating graphics for use in interactive digital media. Students will create graphics used in video, mobile devices, web, social media sites and other formats of digital communication. Software used will include Photoshop, Illustrator, After Effects, iMovie, Second Life and others. Additional lab hours required. Prerequisites: ART 131 or ART 275 and Reading Proficiency.

ART 128. Survey of African American Art. 3 Credit Hours.

This course covers major Black artists from colonial to contemporary greats. These artists and their work are presented and discussed in context with the art movement prevalent at the time. Museum and gallery visits will give students the opportunity to see actual works. The course is designed to inspire artists and educate non-artists to appreciate and understand these important artists and their work. Prerequisite: Reading Proficiency

ART 131. Computer Art Studio. 3 Credit Hours.

Computer Art Studio introduces students to the most common graphic software programs. Students will learn to navigate through the operating system and will gain basic experience with drawing, photo-imaging and page-layout applications. This course concentrates on how to use various graphic software programs, techniques, and tools. Additional lab hours required. Prerequisite: Reading Proficiency.

ART 133. Graphic Design I. 3 Credit Hours.

This course is an introduction to graphic communications with an emphasis on the elements and principles of graphic design. It will cover basic layout processes, typography, concept generation, and the use of tools and materials required in the field. Art, design, and advertising history in a graphic design context will be covered. Prerequisite: Reading Proficiency.

ART 134. Graphic Design II. 3 Credit Hours.

Students in this course will further explore the area of graphic design with an emphasis on various layout formats, the creative use of typography, color systems and theory, and the historic aspects of graphic design. Concept origination and development are also addressed. The use of computers and software design tools will be employed. Additional studio hours required. Prerequisites: ART 107, ART 131 and ART 133 all with minimum grades of "C" and Reading Proficiency.

ART 135. Graphic Production. 2 Credit Hours.

Students will study the history of printing and the basics of the different commercial printing processes available today. The major emphasis will be on proper preparation of electronic pre-press files for spot-color, multi-color and process-color print production, the selection of printing papers, and communicating with printing suppliers. Design printing challenges, multiple page document preparation, and preparing files for electronic publication will also be covered. Additional studio hours required. Prerequisites: ART 131 and ART 133 with grades of "C" or better and Reading Proficiency.

ART 138. Drawing for Graphics. 2 Credit Hours.

This course emphasizes the process of drawing as it relates to graphic design. Original drawings are created to convey design concepts using models, photographs, and other reference material. Additional studio hours required. Prerequisites: ART 107, ART 109 and ART 111 with minimum grades of "C" and Reading Proficiency.

ART 150. Design Communication for Interior Design and Architecture I. 3 Credit Hours.

This course provides an introduction to graphic communication techniques as a way to communicate architecture and interior design processes and solutions. Students will gain experience in perspective drawing, rendering, sketching, layout and composition utilizing traditional and digital methods. Additional studio hours required. Prerequisite: Reading Proficiency.

ART 151. Interior Design I. 3 Credit Hours.

An introduction to interior space planning through the use of scaled floor plans and elevations. Emphasis is placed on the design and selection of furnishings, textiles, accessories, and other interior components. Additional studio hours required. Prerequisite: Prior or concurrent enrollment in ARC 110 and Reading Proficiency.

ART 152. Textiles. 3 Credit Hours.

A study of fabric selection, care and performance based on the characteristics of textile fibers, processing, color application, and finishes. Prerequisite: Reading Proficiency.

ART 153. History of Cultural Environments I. 3 Credit Hours.

The history of furniture styles, decorative arts, and architecture from Mesopotamia to French Empire will be taught. The emphasis is on materials, techniques, and aesthetics that make environments unique within their historical cultural environments. Prerequisite: Reading Proficiency.

ART 154. Computer Aided Interior Design. 3 Credit Hours.

This course is an introduction to hardware and software used in the practice of interior design. AutoCAD will be used to create scaled drawings, specifications and programming documents. Additional lab hours required. Prerequisites: Prior or concurrent enrollment in ARC 110 and Reading Proficiency.

ART 155. Bath Design. 3 Credit Hours.

This course explores how to apply design principles and presentation standards in the planning and designing of safe and functional bathrooms. This course meets the standards established by the National Kitchen and Bath Association. Prerequisites: ART 151, prior or concurrent enrollment in ARC 110 and Reading Proficiency.

ART 156. Advanced Kitchen Design. 3 Credit Hours.

This course applies design principles and presentation standards in the planning and designing of efficient kitchen layouts. Following National Kitchen and Bath Association (NKBA) guidelines, students obtain experience studying proper cabinet, appliance, and fixture selection. Prerequisites: ARC 110, ART 151 and Reading Proficiency.

ART 158. Workplace Learning: Kitchen and Bath Design. 3 Credit Hours.

This experiential course provides the student the opportunity to apply theory and skills learned in the classroom, learn new skills, and explore career possibilities while supervised by a professional in the field and a faculty member. Students will observe and participate in functions of the kitchen and bath industry in order to enhance their preparation for entering the kitchen and bath design field. Minimum of 160 hours in the workplace throughout the term. Prerequisites: ART 155, ART 156 and Reading Proficiency.

ART 165. Photography I. 3 Credit Hours.

This course provides an introduction to the settings and creative controls of the camera, as well as the craft of black and white printing. Students will learn traditional darkroom techniques, as well as methods for approaching a variety of subjects and improving photographic compositions. Additional studio hours required.

Prerequisite: Reading Proficiency.

ART 166. Photography II. 3 Credit Hours.

A more concentrated study of photographic methods, printing techniques, and portfolio development is pursued in this course. Aesthetic issues, as well as more enhanced imaging and darkroom options, are also explored. Additional studio hours required.

Prerequisites: ART 165 and Reading Proficiency.

ART 167. Color Photography. 3 Credit Hours.

This course explores the materials of color imaging, color theories, and the techniques associated with color printing. Sets of color images that display a variety of technical and aesthetic issues will be produced by the student. Additional lab hours required.

Prerequisites: ART 165, ART 172 and Reading Proficiency.

ART 168. History of Photography. 3 Credit Hours.

This course explores the understanding of photography as a cultural, commercial and aesthetic endeavor. Significant historical events, techniques, equipment, aesthetic trends and individual contributions that have influenced this art form throughout the world are discussed and analyzed.

Prerequisite: Reading Proficiency.

ART 169. Visual Language. 3 Credit Hours.

This course critiques the roles, uses and messages of photographs and other visual images. By exploring the ways in which we gather and interpret information from a variety of sources to form mental constructs, this course is valuable to anyone with a desire to further their skills in critical perception. Students will examine artistic and journalistic photographs, advertising, film, television, and other media images as forces affecting twentieth and twenty-first century thought.

Prerequisite: Reading Proficiency.

ART 172. Digital Photography. 3 Credit Hours.

Students will be introduced to the medium of digital photography. They will learn digital camera basics, including the mechanics of the camera and printing with the computer. Students will follow guided exercises and projects and produce portfolios of prints using digital printers. Additional lab hours required.

Prerequisite: Reading Proficiency.

ART 186. Building Systems and Construction for Interior Designers. 3 Credit Hours.

This course explores building construction, systems and technology and their relationship to design development and project completion.

Prerequisite: Reading Proficiency.

ART 204. Photography III. 3 Credit Hours.

This course is a continuation of the exploration of the photographic process and techniques begun in Photography I and Photography II, with a greater emphasis being placed on the creative process and the individual's perception and understanding of the elusive nature of images. Additional studio hours required.

Prerequisites: ART 166, ART 172 and Reading Proficiency.

ART 207. Design III. 2 Credit Hours.

An introduction to 3-D work, exploring the spatial qualities of mass, shape, volume. Additional studio hours required.

Prerequisites: ART 108 and Reading Proficiency.

ART 208. Design IV. 2 Credit Hours.

Advanced problems in various aspects of design. Additional studio hours required.

Prerequisites: ART 207 and Reading Proficiency.

ART 209. Drawing III. 3 Credit Hours.

Emphasis is placed on methods of achieving compositional unity in drawing. Balance, variety, rhythm, and repetition, some of the factors responsible for unified structure in drawing, will be examined on an advanced level. Additional studio hours required.

Prerequisites: ART 110 and Reading Proficiency.

ART 210. Advanced Drawing. 3 Credit Hours.

Research in drawing problems that will deal primarily with concept, media, style and composition. The human figure, still-life objects and surroundings will be used as topical sources.

Prerequisites: ART 209, ART 211 and Reading Proficiency.

ART 211. Figure Drawing III. 3 Credit Hours.

Advanced figure drawing from the model. Additional studio hours required.

Prerequisites: ART 112 and Reading Proficiency.

ART 213. Ceramics II. 3 Credit Hours.

A study of the techniques of wheel-thrown ceramics and extensive experimentation with glazes and oxides. Additional studio hours required.

Prerequisites: ART 113 and Reading Proficiency.

ART 214. Painting II. 3 Credit Hours.

A continuation of ART 114 with emphasis on composition and color. Knowledge will be developed for future individual study. Additional studio hours required.

Prerequisites: ART 114 and Reading Proficiency.

ART 215. Printmaking II. 3 Credit Hours.

A continuation of ART 115. In addition to continued exploration of media covered in Printmaking I, this course introduces students to additional printmaking techniques, from a selection of lithography, silk screen, photo-mechanical methods, chine chine collé and mixed media. Additional studio hours required.

Prerequisites: ART 115 and Reading Proficiency.

ART 216. Sculpture II. 3 Credit Hours.

A continuation of the study of the elements of sculpture, stressing the more creative approach in terms of new methods and materials. Emphasis will be on the human and natural forms as a basis for academic and subjective analysis. Additional studio hours required.

Prerequisites: ART 116 and Reading Proficiency.

ART 221. Page Layout: Quark/InDesign. 3 Credit Hours.

This course is designed to provide students with an advanced exploration and understanding of the QuarkXPress and Adobe InDesign digital page design and layout software programs. Principles of page layout design and the graphic synthesis of typographic elements will be studied with these programs on an advanced level. Additional lab hours required.

Prerequisites: ART 131 and Reading Proficiency.

ART 224. Package Design. 2 Credit Hours.

This course explores the concepts, techniques and concerns of graphic design as applied to package design and presentation display. Issues covered include the creation of effective package design, special production processes and the creation of three-dimensional package mock-ups utilizing both traditional methods and the computer. Additional studio hours required.

Prerequisites: ART 131 and ART 133 with minimum grades of "C" and Reading Proficiency.

ART 228. Workplace Learning: Photography. 3 Credit Hours.

This experiential course provides the student the opportunity to apply theory and skills learned in the classroom, learn new skills, and explore career possibilities while supervised by a professional in the field and a faculty member. Students will observe and participate in the functions of the business to enhance their preparation for entering the field. Minimum of 150 hours in the workplace throughout the term.

Prerequisites: ART 166, ART 167, department approval and Reading Proficiency.

ART 233. Graphic Design III. 3 Credit Hours.

This class will continue to examine the subject of graphic design with the emphasis on finding creative solutions to complex visual communication problems. A professional approach to the discipline will be stressed with client briefs, simulated client meetings, and critiques. Additional studio hours required.

Prerequisites: ART 108 and ART 134 with minimum grades of "C" and Reading Proficiency.

ART 234. Graphic Design IV. 3 Credit Hours.

This course is an advanced exploration of graphic design, with the emphasis upon creative problem solving and the use of professional practices. Students will learn to solve complex visual communication problems such as branding, three-dimensional design, complex two-dimensional design, and design for electronic media. Additional studio hours required.

Prerequisites: ART 135 and ART 233 with grades of "C" or better and Reading Proficiency.

ART 235. Graphic Production II. 2 Credit Hours.

This course is a continuation of Graphic Production I but with a greater emphasis on the proper preparation of electronic pre-press files for spot-color, multi-color and process-color print production. Students will execute print projects using the computer to create pre-press files for print production. They will also examine many advanced printing techniques, multiple page document preparation and the proper methods for sending files to printers. Additional studio hours required.

Prerequisites: ART 134 and ART 135 with grades of "C" or better and Reading Proficiency.

ART 236. Typography. 2 Credit Hours.

This course will stress the refined use of typography as a design and communication tool. Students will study the history and classifications of letterforms and employ this knowledge base in the creation of various typographical designs and presentations. Typical projects may range from letter and alphabet design to the use of typographical forms as the feature design elements in graphic designs or page layouts. Additional studio hours required.

Prerequisites: ART 131 and ART 133 with grades of "C" or better and Reading Proficiency.

ART 238. Drawing for Graphics II. 2 Credit Hours.

Students will build upon the principles covered in Drawing for Graphics I as they learn about additional techniques and materials necessary to explore drawing solutions to graphic design problems typically encountered in this field. Additional studio hours required.

Prerequisites: ART 138 with a grade of "C" or better and Reading Proficiency.

ART 239. Illustration I. 3 Credit Hours.

This course explores methods and theories of illustrative drawing and painting as it is used in support of graphic communication. A special emphasis will be placed on its application to advertising and publication design. Additional studio hours required.

Prerequisites: ART 131 with a minimum grade of "C" and prior or concurrent enrollment in ART 138 with a minimum grade of "C", and Reading Proficiency.

ART 240. Illustration II. 3 Credit Hours.

This course exposes students to an advanced approach to illustrate drawing and painting. Student will create illustrations using both traditional and digital methods. Additional lab hours required.

Prerequisites: ART 239 with a minimum grade of "C" and Reading Proficiency.

ART 245. Portfolio Design and Professional Practices. 2 Credit Hours.

This course is the culmination of all the student has learned and produce in their graphic communications course of study. Students will be guided in the preparation of a print and digital portfolio of their work, in the development of a resume and related self-promotion documents, and will learn practical interviewing techniques. The intent will be to prepare students to enter the graphic communications fields and/or transfer to an accredited four-year university or art institute. Additional lab hours required.

Prerequisites: Permission of program coordinator based upon review of body of work and Reading Proficiency.

ART 249. Digital Photography II. 3 Credit Hours.

This course explores advanced techniques and aesthetics associated with digital photography. Students will expand their knowledge and use of camera controls, editing software and workflow solutions while building a successful portfolio of images. Additional studio hours required.

Prerequisites: ART 172 and Reading Proficiency.

ART 251. Interior Design II. 3 Credit Hours.

This course focuses on creating functional and aesthetically pleasing commercial and residential interiors using a systematic approach to the design process. Special emphasis is placed on commercial and residential planning guidelines and the impact of building and life safety codes on interior environments. Additional studio hours required.

Corequisite: ART 154.

Prerequisites: ARC 110 and ART 151 and Reading Proficiency.

ART 252. Interior Design III. 3 Credit Hours.

This course is an in-depth study of interior design emphasizing the influence of abstract design, universal design, global design, and sustainable practices on the built environment. A systematic approach to design processes will be used to develop projects that apply knowledge of space planning, principles and elements of design, color theory, and visual art skills in two dimensional and three dimensional design. Additional studio hours required.

Prerequisites: ART 251 with a minimum grade of "C" and Reading Proficiency.

ART 253. Interior Design IV. 3 Credit Hours.

This course is an advanced study and application of the problem solving approach to design of the built environment. This course will also introduce students to the ethical standards and business procedures of the interior design industry. Additional studio hours required. and Reading Proficiency.

Prerequisites: ART 252 with a minimum grade of "C".

ART 254. History of Cultural Environments II. 3 Credit Hours.

This course is a continuation of the history of furniture, decorative arts, and architectural elements from Tudor England to current times. The emphasis is on materials, techniques, and aesthetics that make environments unique within their historical cultural environments.

Prerequisites: ART 153 and Reading Proficiency.

ART 265. Artificial Light Photography. 3 Credit Hours.

An introduction to basic theories of illumination, as applied to various subject compositions is a primary component of this course. The utilization of a variety of light sources within this context will also be studied, along with their proper use with SLR and medium-format cameras. The production of professional quality prints will be undertaken.

Prerequisites: ART 165 or ART 172 and Reading Proficiency.

ART 266. Black and White Printing Lab. 3 Credit Hours.

A guided study of black and white printing techniques geared to individual student needs and interests. Competence and excellence in traditional techniques of "straight" photography are stressed, with study undertaken in image refinement and contemporary printing alternatives. This course is geared towards individuals who have a basic knowledge of darkroom processes and would like further direction. Additional studio hours required. Prerequisites: ART 165 and Reading Proficiency.

ART 267. Contemporary Concepts in Photography. 3 Credit Hours.

This class focuses on current issues and ideas about photography. Students will practice the most recent trends through assignments, augmented by lectures, demonstrations and visits to galleries. Reading, writing and discussion of latest concepts will be central to the course. Additional studio hours may be required.

Prerequisites: ART 165 or ART 172 and Reading Proficiency.

ART 269. Field Photography. 3 Credit Hours.

The emphasis of this course is on photographing subject matter found in nature. Trips to areas of photographic interest will provide students the opportunity to explore and visually portray elements within natural environments. Attention is especially given to methods for adapting to and photographing successfully in new situations.

Prerequisites: ART 165 or ART 172 and Reading Proficiency.

ART 270. Fashion Photography. 3 Credit Hours.

This course addresses the approaches and concepts associated with this professional field. Methods for lighting and posing models in the studio and in outdoor locations will be stressed. Post-production techniques and the critical evaluation of photographs will encourage the development of a portfolio based on professional standards. Additional studio hours required.

Prerequisites: ART 165 or ART 172, and Reading Proficiency.

ART 271. Portrait Photography. 3 Credit Hours.

Photographic techniques to create effective portraits of people will be studied, using both natural and artificial illumination. Close-ups, environmental portraits, and photographing groups will be covered. Work will also include the creation of quality prints and the building of a successful portfolio for presentation. Additional studio hours required.

Prerequisites: ART 165 or ART 172 and Reading Proficiency.

ART 272. Documentary Photography. 3 Credit Hours.

This course studies the use of photography in exploring social or cultural issues. The methods of approach used by documentary photographers will be discussed and practiced, with students considering the possible impact of images on society. Students will use cameras to study subjects in their own environments and will consider various contexts for the presentation of photographs. Additional studio hours required.

Prerequisites: ART 165 or ART 172 and Reading Proficiency.

ART 273. Architectural Photography. 3 Credit Hours.

Methods for photographing the exteriors and interiors of structures and buildings are studied in this course. The utilization of several camera formats, including the view camera and digital SLR, will be undertaken. The control of perspective with the camera and current software, along with the balance of lighting, will also be emphasized. Work will include the making of fine quality prints and appropriate image presentation. Additional studio hours required.

Prerequisites: ART 165 or ART 172 and Reading Proficiency.

ART 275. Photo Imaging I: Photoshop. 3 Credit Hours.

This course is an investigation of processing of continuous tone image files. Software tools and adjustment controls will be learned. Students will investigate scanning, color and tonal management, image repair and compositing, and printing. A portfolio of prints will be created emphasizing the individual expressiveness of the student. Additional lab hours required.

Prerequisite: Reading Proficiency.

ART 280. Final Cut. 3 Credit Hours.

Students will produce professional quality video content using Macintosh Final Cut non-linear editing software. Students will create digital video content and process project through the software. Clips will be edited; sound, transitions and titles will be added. Students will conceive, photograph, edit and complete a short movie. Additional lab hours required.

Prerequisites: ART 275 and Reading Proficiency.

Art (AT)

AT 100. Hardware Configuration and Troubleshooting: Macintosh/Windows. 1 Credit Hour.

This course will address setting up the computer and connecting peripheral devices such as cameras, scanners and printers; partitioning the hard drive, adding RAM, installing software and virus protection, and troubleshooting simple problems. Advanced topics include networking and using a server. Additional lab hours may be required.

Prerequisite: Reading Proficiency.

AT 105. Digital Printing. 3 Credit Hours.

This course is a survey of digital printing possibilities. Methodologies for converting electronic files to printed media are investigated. Varieties of printing technologies are evaluated for appearance, color fidelity, resolution, saturation and permanence. Where applicable to the process examined, variations in media (paper, canvas or films) will be tested. Additional lab hours required.

Prerequisites: ART 275, ART 165 and Reading Proficiency.

AT 106. Motion Media Design. 3 Credit Hours.

This course provides instruction in the use of still imagery, typography, sound, special effects, video and other digital media to create animated, motion graphic sequences. Additional lab hours required.

Prerequisites: ART 131 with a minimum grade of "C" and Reading Proficiency.

AT 108. Computer Painting and Drawing: Corel Painter. 3 Credit Hours.

Students will utilize a variety of computer drawing software programs to create life drawings utilizing digitizing tablets. Assignments will include still life as well as the human figure. The techniques of using the pressure sensitive drawing tablet will be investigated to allow the creation of expressive line, mass and shading. A portfolio of drawings in both color and monochrome will be submitted at the conclusion of the course. Additional lab hours required.

Prerequisites: ART 131 with a grade of "C" or better, ART 109 and Reading Proficiency.

AT 120. Computer Drawing I: Illustrator. 3 Credit Hours.

This course is an investigation of vector imaging software used for the creation of drawings, typography and logotypes. Tools, palettes and menus will be learned, and methods of creating original expressive works will be developed. Students will investigate scanning reflective art, tracing, creating shapes, line control, color fills, and printing. Additional lab hours required.

Prerequisites: ART 109 and ART 131 with grades of "C" or better, and Reading Proficiency.

AT 121. Watercolor I. 3 Credit Hours.

A foundation course covering basic watercolor techniques and materials including washes, wet-into-wet, glazing, shading, color mixing and layering. Course will emphasize development of skills, diverse approaches and an individual style. Through the study of both contemporary and traditional watercolors, students will become familiar with the amazing potential of this medium. Class will paint a variety of subjects including still lifes and nature.

Additional studio hours required.

Prerequisite: Reading Proficiency.

AT 135. Web Design I. 3 Credit Hours.

This course is an introduction to creating and building Web pages that effectively deliver art and information for business/organizational communications. Industry-standard software will be used and beginning HTML and CSS computer languages will be covered as well as design principles and how they relate to Web design. Additional lab hours required.

Prerequisites: ART 131 and ART 133 with minimum grades of "C" and Reading Proficiency.

AT 143. Web Design II. 3 Credit Hours.

This course continues the exploration of web site design and creation begun in Web Design I and introduces students to the methods and practices of creating graphics for use in interactive digital media. Students will also continue using standard web languages of HTML and CSS. Building and modifying content management systems (CMS) is a major focus of the class. Web sites are designed and built that utilize best practices for multiple-page site design and navigation, advanced layout solutions, and incorporating multimedia. Students will create projects to be used in video, on mobile devices, online, and for social media content as well as for interactive communication. Additional lab hours required.

Prerequisites: AT 135 with a minimum grade of "C" and Reading Proficiency.

AT 146. 3D Modeling I: Surface Modeling. 3 Credit Hours.

This course focuses on the development of three-dimensional models for use in multimedia, industrial design, and character development. Creation of 3D objects and spatial environments will be studied, in addition to photorealistic rendering, texture mapping and lighting techniques. Additional studio lab hours required.

Prerequisites: ART 131 or ART 275 and Reading Proficiency.

AT 151. Interior Specifications, Materials, and Methods. 3 Credit Hours.

This course is an in depth analysis of materials used in interior environments. Students will gain experience in the process of researching, evaluating, selecting, and specifying appropriate materials for interior environments. Special emphasis is placed on textiles and sustainable materials.

Prerequisite: Reading Proficiency.

AT 152. Lighting Design. 3 Credit Hours.

This is a lecture/studio course where students will learn methods of successful lighting design and applications of lighting details to working drawings for residential and commercial environments. Students will learn specifications and how to write a lighting schedule. Additional studio hours required.

Prerequisite: Reading Proficiency.

AT 175. Video Art I. 3 Credit Hours.

Students will explore video art as a personal expressive media for the individual artist, including work with specific software programs, sound equipment, and other tools used in the contemporary art world. Students will have the opportunity to investigate these technologies as they combine the various media to make artistic statements based on personal concerns and aesthetic decisions.

Prerequisite: Reading Proficiency.

AT 176. Photography Workshop. 1 Credit Hour.

Photography workshops will cover a variety of subjects in photography. Multiple sections on different topics may be offered during the same semester. Topics can include bookmaking, hand coloring, emulsion lifts, medium format photography, night photography, etc. Additional hours required.

Prerequisite: Reading Proficiency.

AT 177. Jewelry and Metalsmithing. 2 Credit Hours.

This course will introduce students to jewelry design and metalsmithing techniques. Students will be exposed to a variety of fabrication methods from a selection of cold-joining, soldering, sawing and piercing, metal forming, roll-printing, hammer and chasing, toll texturing, bezel stone-setting, pin backing systems, casting, and surface finishing. Additional lab hours required.

Prerequisite: Reading Proficiency.

AT 195. Special Topics in Graphic Design. 1-3 Credit Hours.

This course allows for the exploration of special topics as they emerge in the field of graphic design, maintaining a curriculum of problem solving and critical thinking. Additional hours required.

Prerequisites: ART 131 and ART 133 with minimum grades of "C" and Reading Proficiency.

AT 201. Mixed Media. 3 Credit Hours.

An introduction to mixed media (assemblage) art; the complementary component for design, drawing and figure drawing. An incorporation of all aspects of picture-making with an emphasis on experimentation, process and concepts with paint integration in the visual arts. Additional lab hours required.

Prerequisites: ART 107, ART 109 and Reading Proficiency.

AT 204. Comic Book Illustration I. 3 Credit Hours.

This course emphasizes the basics of comic book illustration and techniques associated with this popular genre. Various materials and techniques will be explored to produce formatted comic strips. Additional lab hours required.

Prerequisites: ART 138 with a minimum grade of "C" and Reading Proficiency.

AT 205. Dimensional Illustration I. 3 Credit Hours.

Students interested in Illustration will go beyond usual two-dimensional art methods to create dimensional art. Various material and techniques will be explored to introduce unique three-dimensional sculpture-based art methods to students. Additional studio hours required.

Prerequisites: ART 138 and Reading Proficiency.

AT 206. 3D Miniature Studio Set Design. 3 Credit Hours.

Students interested in creating 3D Miniature Studio Sets will learn the basics of designing and constructing miniature sets for various entertainment venues and other related uses. The student will utilize skills learned in Drawing for Graphics and Illustration classes to execute imaginative sets. Additional studio hours required.

Prerequisites: ART 138 and Reading Proficiency.

AT 207. Digital Illustration. 3 Credit Hours.

This course is an exploration of the methods and theories of creating illustrations using the computer as the medium. A special emphasis will be placed on creative processes and using computer graphic software to produce illustrations. Additional lab hours required.

Prerequisites: ART 131 and ART 138 with minimum grades of "C" and Reading Proficiency.

AT 208. Fantasy Illustration I. 3 Credit Hours.

Students interested in Illustration will learn the basics and techniques used on books and gaming covers. The student will utilize skills learned in drawing for graphics and illustration to execute imaginative and creative illustrations. Additional lab hours required.

Prerequisites: ART 138 and Reading Proficiency.

AT 210. Drawing Problems. 3 Credit Hours.

This course focuses on drawing problems of an advanced nature. It will stress the continued development of individual ideas formulated in ART 210. Additional lab hours required.

Prerequisites: ART 210 and Reading Proficiency.

AT 212. Special Topics in Photography. 3 Credit Hours.

This course allows for advanced and specialized study within the medium of photography, concentrating on a specific set of materials or aesthetic issues, during the course of the term. A variety of topics, outside of the normal curriculum studies, can be offered on a rotating basis. Additional studio hours required.

Prerequisites: ART 165, ART 166 and Reading Proficiency.

AT 213. Advanced Ceramics. 3 Credit Hours.

A self-directed learning experience for students. Course work may include throwing, glaze formulation, hand-building and kiln firing. Additional studio hours required.

Prerequisites: ART 213 and Reading Proficiency.

AT 215. Advanced Printmaking. 3 Credit Hours.

A continuation of ART 115 and ART 215. Students will pursue a more individual course of instruction and portfolio development in the printmaking media. The student will choose from media taught in ART 115 and ART 215 to develop a portfolio of professional prints. Additional studio hours required.

Prerequisites: ART 215 or permission of coordinator and Reading Proficiency.

AT 221. Watercolor II. 3 Credit Hours.

An expansion and application of the basic watercolor techniques from the foundation course AT 121 through a series of paintings. Course will emphasize color theory, composition and development of an individual style along with study of master watercolorists both past and present. Students will paint a variety of subjects including still lifes, landscape and the human figure. Development of individual response and fluency of technique will be emphasized. Additional studio hours required.

Prerequisites: AT 121 or permission of coordinator and Reading Proficiency.

AT 225. Watercolor III. 3 Credit Hours.

An expansion of AT 221. The self-motivated student will work on advanced watercolor techniques in specific assignments and in self-directed paintings. Course will emphasize advanced color theory and development of content, subject matter, personal style and the ability to self-critique, with significant input from the instructor. Additional studio hours required.

Prerequisites: AT 221 or permission of coordinator and Reading Proficiency.

AT 226. Watercolor IV. 3 Credit Hours.

An expansion of AT 225. The advanced and self-motivated student will work on specific assignments and on self-directed paintings with significant input from the instructor. Emphasis will be on using the watercolor medium to create sophisticated compositions, a thematic body of work and a personal style. Additional studio hours required.

Prerequisites: AT 225 or permission of coordinator and Reading Proficiency.

AT 227. 3-D Studio. 3 Credit Hours.

This course provides students with the opportunity to pursue extended study in 3-dimensional studio disciplines. Additional studio hours required.

Prerequisites: AT 213 or ART 216 and Reading Proficiency.

AT 229. Advanced Painting Projects. 3 Credit Hours.

This course will develop the painting and perceptual skills of students. The course is taught with an emphasis on individual study. Additional studio hours required.

Prerequisites: ART 214 and Reading Proficiency.

AT 233. Storyboarding/Animatics. 2 Credit Hours.

This course is an introduction to pre-production planning for special effects and animation as applied to multimedia, interactive media, video and film. The class will focus on communicating the drama of movement and special effects through effective design and pacing. Course topics include storytelling, storyboarding formats and flowcharts, along with sound track and script interpretation. Additional lab hours required.

Prerequisites: ART 111 and ART 131 with minimum grades of "C" and Reading Proficiency.

AT 234. Fundamentals of Animation. 3 Credit Hours.

This course teaches the basic principles of animation and how to apply them to create the convincing illusion of motion. They will explore the concepts of acting, staging, and storytelling through the creation of a number of short animated projects. Additional lab hours required.

Prerequisites: ART 111 and ART 131 with minimum grades of "C" and Reading Proficiency.

AT 235. Animation Techniques: Digital 2D. 3 Credit Hours.

Building upon what the students learned in Fundamentals of Animation, students will further explore techniques for the creation of animated films and videos. This course will introduce students to the use of sound and lip-sync. Students will learn a variety of strategies for creating digital 2D animation including cell, cut-out ("flash" animation), and freehand. Additional lab hours required.

Prerequisites: AT 234 with a minimum grade of "C" and Reading Proficiency.

AT 238. Special Topics in Animation. 1-3 Credit Hours.

This course allows for the exploration of special topics as they emerge in the field of animation, involving current software and delivery formats. Additional hours required.

Prerequisites: ART 134 with a minimum grade of "C" and Reading Proficiency.

AT 242. History of Graphic Communications. 3 Credit Hours.

This is a survey course on the history of graphic communications as it developed throughout human history. This course covers the history and development of visual communication, as relayed through the use of fine and applied art, printed words and imagery. Students study how historical events and culture influence advertising and design. Design developments in different cultures and how they affect each other is also explored.

Prerequisite: Reading Proficiency.

AT 246. Advanced Computer Art Applications. 3 Credit Hours.

This course is a continuation of Computer Art Studio. Students learn advanced software techniques that apply to graphic design and illustration. Industry standard software is used. Additional lab hours required.

Prerequisites: ART 131 with a minimum grade of "C" and Reading Proficiency.

AT 249. Multidimensional Design and Printing. 3 Credit Hours.

Students will learn to plan and design 3D objects and output them using 3D printers and other devices. Principles of 3D design will be examined, and various kinds of 3D printers will be explored, along with their operation and maintenance. The integration of 3D design and printing as a part of the creative process applied to various disciplines (such as product and packaging design) will be emphasized. Additional hours required.

Prerequisite: ART 131 and ART 133 both with minimum grades of "C" and Reading Proficiency.

AT 251. Computer Aided Kitchen and Bath Design. 3 Credit Hours.

Utilizing 3-D design software, students will learn to layout, design and specify residential kitchens and baths. Students will create 2-D and 3-D visual presentations and renderings of kitchen and bath interiors.

Prerequisite: Reading Proficiency.

AT 254. Workplace Learning: Interior Design. 3 Credit Hours.

This experiential course provides the student the opportunity to apply theory and skills learned in the classroom, learn new skills, and explore career possibilities while supervised by a professional in the field and a faculty member. Students will observe and participate in the functions of the interior design industry to enhance their preparation for entering the field. Minimum 150 hours in the workplace throughout the term.

Prerequisites: Satisfactory completion of the first year of program, department approval and Reading Proficiency.

AT 267. Color Photography II. 3 Credit Hours.

Advanced instruction in the theory of color, materials of color photography, and techniques of color printing. Students will work with transparencies and color reversal materials and explore large format color processes. A portfolio of color prints will be created by the student. Additional studio hours required.

Prerequisites: ART 167 and Reading Proficiency.

AT 275. Video Art II. 3 Credit Hours.

A continued investigation into video art as a personal expressive media for the individual artist, including work with computers, sound equipment, photography, and other tools used in the contemporary art world. Students will have the opportunity to investigate these technologies as they combine the various media to make artistic statements based on personal concerns and aesthetic decisions. This course is specifically for the fine artist who wishes to use "low end" and/or "consumer" equipment as a creative media. Emphasis is on relatively complex projects and collaborative ventures, and further developing an individual style of personal expression with these strategies and technologies. Additional lab hours required.

Prerequisites: AT 175 or permission of instructor and Reading Proficiency.

AT 276. Photo Imaging II: Photoshop. 3 Credit Hours.

This course explores intermediate methods of working with continuous tone images in an efficient manner. Topics include refinements in tonal and color adjustment tools, masking tools, typography tools, color modes, sharpening procedures, and compositing techniques. A portfolio of color images will be produced by the end of the course emphasizing the individual expressiveness of the student. Additional studio hours required.

Prerequisites: ART 275, ART 108 (may be taken concurrently) and Reading Proficiency.

AT 279. Alternative Photographic Processes. 3 Credit Hours.

This course explores the use of non-traditional methods, and a variety of hand-applied emulsions, to produce photographic images. Students will have the opportunity to create prints using historic processes (cyanotype, Van Dyke brown, gum bichromate, etc.) on a variety of papers or fabrics, as well as working with other light-based formats. Additional lab hours may be required.

Prerequisites: ART 165 Reading Proficiency.

AT 280. Advanced Photography. 1-4 Credit Hours.

This course is a course that emphasizes both the conceptual and technical challenges of creating a cohesive, related body of work for either a portfolio or exhibition. Additional lab hours required.

Prerequisites: ART 166, ART 172 and Reading Proficiency.

AT 282. Workplace Learning: Graphic Communications. 1-3 Credit Hours.

This experiential course provides the student the opportunity to apply theory and skills learned in the classroom, learn new skills, and explore career possibilities while supervised by a professional in the field and a faculty member. Students will observe and participate in the functions of the business to enhance their preparation for entering the field. Minimum of 50 hours per credit in the workplace throughout the term is required.

Prerequisites: ART 234 with a minimum grade of "C" and Reading Proficiency.

AT 283. Digital Media Portfolio. 2 Credit Hours.

Preparing effective presentations of creative work within current digital formats is the focus of this course. Students will learn to edit, record and prepare material for the development of an effective portfolio, aiding the completion of their studies in various career programs. Recommended preparation: Permission of program coordinator. Additional lab hours required.

Prerequisites: ART 131 and Reading Proficiency.

AT 284. Special Topics in Illustration. 1-3 Credit Hours.

This course allows for the exploration of special topics as they emerge in the field of illustration, especially as related to problem-solving in current design formats. Additional hours required.

Prerequisites: ART 138 with a minimum grade of "C" and Reading Proficiency.

AT 285. Interior Design Codes and Specifications. 3 Credit Hours.

Interior Design Codes and Specifications explores codes, standards, and federal regulations that impact the design of the built environment. Students will analyze interior codes related to building and life safety, accessibility standards, sustainability practices, mechanical and electrical requirements, and furniture and finish selections. Students will then apply the codes requirements to interior design projects.

Prerequisites: ART 251 with a minimum grade of "C" and Reading Proficiency.

AT 286. Interior Design Business Practices and Ethics. 3 Credit Hours.

Interior Design Business Practices and Ethics provides an overview of common business practices and ethical standards in the interior design profession. Students will gain an understanding of the characteristics of the interior design profession, analyze strategies and solutions to common ethical situations, and develop interior design business documents.

Prerequisites: ART 251 with a minimum grade of "C" and Reading Proficiency.

AT 287. Advanced Computer-Aided Interior Design. 3 Credit Hours.

Advanced Computer-Aided Interior Design builds upon previous computer-aided interior design knowledge and introduces students to methods for utilizing building information modeling (BIM) software to create interior design drawings. Students will create presentation drawings, construction documents, schedules, and construction details for interior environments utilizing BIM software. Reading Proficiency.

Prerequisites: ART 154, ART 251 both with minimum grades of "C".

AT 288. Interior Detailing and Construction Documentation. 3 Credit Hours.

Interior Detailing and Construction Documentation focuses on the process of developing concept drawings into comprehensive detailed drawings to clearly communicate design choices in interior environments. Students will create detailed casework and construction drawings utilizing computer-aided design software.

Prerequisites: ART 186, AT 287 both with minimum grades of "C" and Reading Proficiency.

AT 289. Interior Design Research Methods. 2 Credit Hours.

Interior Design Research Methods explores common research methods used in the interior design profession. Students will research interior design-related topics utilizing quantitative and qualitative methods and synthesize information into a comprehensive research project.

Prerequisites: ART 252, ENG 101 both with minimum grades of "C" and Reading Proficiency.

AT 290. Interior Design Professional Preparation. 1 Credit Hour.

Interior Design Professional Preparation prepares students for the first phase of interior design professional certification. Students will explore the Interior Design Fundamental Examination (IDFX) content areas that cover the knowledge and skills interior designers must acquire to protect public health, safety, and welfare.

Prerequisites: AT 285, AT 286, AT 287, AT 288, AT 289 all with minimum grades of "C" and Reading Proficiency.

Automotive Technology (AUT)

AUT 150. Automotive Fuel and Induction Systems. 3 Credit Hours.

This course is a study of fuel and induction systems which includes gasoline fuel delivery systems, and diesel engines. Diagnosis and repair techniques as well as basics of the control systems will be covered.

Corequisite: AUT 151.

AUT 151. Automotive Engine Operation. 3 Credit Hours.

This course will be concerned with theory, design and repair procedures of the automotive engine including valves and lower engine service. Additional lab hours required.

AUT 156. Automotive Electricity. 3 Credit Hours.

This course is a study of the fundamentals of automotive electricity, magnetism, induction, and the use of wiring diagrams. This course also includes operating principles, diagnosis and repair of starting systems, charging systems, ignition systems, batteries, lighting and accessory circuits. Additional lab hours required.

AUT 158. Charts, Diagrams and Handbook Usage. 2 Credit Hours.

This course teaches the use of handbooks, with emphasis upon interpreting specifications and automotive charts and diagrams.

AUT 167. Automotive Electronics. 3 Credit Hours.

This course deals with advanced electrical systems including basics of electronic engine control systems, electronic functions, electronic system diagnosis and repair. Additional lab hours may be required.

Prerequisite: AUT 156.

AUT 168. Suspension and Steering I. 3 Credit Hours.

This course will be concerned with the design principles, diagnosis and repair of the front and rear suspension systems including front-end alignment, 4-wheel alignment, manual and power steering assemblies and related components to include gears and linkages, as well as tire and wheel balance. Additional lab hours required.

AUT 169. Suspension and Steering II. 3 Credit Hours.

Continuation of AUT 168 including the design, principles of operation, diagnosis and repair of the following components conventional brake systems, anti-lock brake systems, electronic steering and ride control systems. Attention is given to live car diagnosis and repair procedures related to frame, suspension, steering, and brake components. Additional lab hours required.

Prerequisite: AUT 168.

AUT 256. Automotive Powertrains. 3 Credit Hours.

Theory of operation and service and service procedures of drive lines, constant velocity joints, manual transmissions and transaxles, differentials and clutches.

Corequisite: AUT 272 and AUT 282.

Prerequisite: AUT 281.

AUT 259. Emissions and Drivability Diagnosis. 3 Credit Hours.

This course emphasizes proper diagnostic procedures and use of proper test equipment such as oscilloscopes, exhaust analyzers, meters, and Powertrain Control test equipment. Additional lab hours required.

Corequisite: AUT 258.

Prerequisites: AUT 150 and AUT 167.

AUT 271. Diagnostic Equipment and Emissions. 3 Credit Hours.

Students will learn proper diagnosis and troubleshooting procedures and related test equipment including oscilloscopes, infra-red exhaust analyzers, meters, gauges and diagnostic lane exposure. Additional lab hours required.

Prerequisites: AUT 150, AUT 167 and AUT 169.

AUT 272. Accessories, Controls and Air Conditioning. 3 Credit Hours.

This course emphasizes theory, operation and design of power windows, power seats, speed controls, vacuum systems, other accessories, and air conditioning. Additional lab hours may be required.

Prerequisites: AUT 271, AUT 281 and AUT 291.

AUT 273. Automatic Transmissions and Transaxles. 3 Credit Hours.

This course emphasizes the operations, theory, design and repair procedures of automatic transmissions and transaxles. Additional lab hours required.

Prerequisites: AUT 150, AUT 167 and AUT 169.

AUT 281. Automotive Field Work I. 5 Credit Hours.

This is an advanced course with practical application on customer's vehicles, involving student work on the diagnosis, testing, and repair of vehicles. Students have the responsibility of all shop functions. Emphasis of lab work will include five of the ASE service specialty areas. Additional lab hours required.

Corequisites: AUT 271, AUT 273, AUT 291.

Prerequisites: AUT 150, AUT 156, and AUT 169.

AUT 282. Automotive Field Work II. 5 Credit Hours.

Continuation of AUT 281. Emphasis of lab work will include all eight ASE service specialty areas. Additional lab hours required.

Prerequisites: AUT 273, AUT 271, and AUT 281.

AUT 291. Automotive Service Management. 2 Credit Hours.

This is a Service Advisor training course complete with necessary management practices enabling a student to understand the set-up of the automotive service department. The studies include customer relations, repair order writing, and economics of shop operations. Additional hours required.

Aviation Technology (AVI)

AVI 101. General Mechanics, Drawings and Safety. 2 Credit Hours.

This course covers several foundational topics for studying aviation maintenance. Safety in the work environment and mechanical drawings are covered, along with weight and balance requirements and working with pressurized fluid lines in a variety of aircraft systems. The general curriculum subjects included in this course and required by Federal Aviation Regulations (FAR) Part 147, Appendix B, are Aircraft Drawings, Weight and Balance, and Fluid Lines and Fittings. Additional lab hours required.

Prerequisite: Reading Proficiency.

AVI 102. Basic Electricity for Aviation Technicians. 2 Credit Hours.

This course covers principles of electricity needed for aviation technicians. Course material includes static and current electricity, terminology, magnetism, and circuits. Theory, testing and maintenance of batteries are included and solid state devices are introduced. The general curriculum subject included in this course and required by Federal Aviation Regulations (FAR) Part 147, Appendix B, is Basic Electricity. Additional lab hours required.

Prerequisite: Reading Proficiency.

AVI 103. Structural Materials and Corrosion Control. 2 Credit Hours.

In this course, students learn materials identification, metalworking and fabrication processes. They also learn nondestructive testing procedures, corrosion treatment and prevention. The general curriculum subjects in this course and required by Federal Aviation Regulations (FAR) Part 147, Appendix B, are Materials and Processing, and Cleaning and Corrosion Control. Additional lab hours required.

Prerequisite: Reading Proficiency.

AVI 104. Federal Regulations and Ground Operations. 2 Credit Hours.

This course concerns the Federal Aviation Regulations (FAR) governing aircraft maintenance and mechanics' privileges and responsibilities regarding maintenance. Students learn research techniques, the correct use of FAA forms and how to make maintenance record entries. Ground operations encompasses shop and flight line safety, including fire, jacking and hazardous materials procedures, towing, taxiing and tie-down procedures, fueling procedures and standard hand signals. The general curriculum subjects in this course and required by Federal Aviation Regulations (FAR) Part 147, Appendix B are Maintenance Publications, Mechanic Privileges and Limitations, Maintenance forms and Records and Ground Operations and Servicing. Additional lab hours required.

Prerequisite: Reading Proficiency.

AVI 105. Basic Physics for Aviation. 2 Credit Hours.

This course covers principles of physics with applications in aviation maintenance. Topics include matter, energy, work, power, force, motion, and gas/fluid mechanics. The course introduces aerodynamics for fixed and rotor wing aircraft. The general curriculum subject included in this course and required by Federal Aviation Regulations (FAR) Part 147, Appendix B, is Basic Physics. Additional lab hours required.

Prerequisite: Reading Proficiency.

AVI 106. Quantitative Applications. 2 Credit Hours.

In this course important principles of aerodynamics and computational skills essential for aviation technicians are reinforced through mathematical applications. Applications include topics such as weight, center of gravity, cylinder displacement and compression ratio. The general curriculum subject included in this course are required by Federal Aviation Regulations (FAR) Part 147, Appendix B, is Mathematics. Additional lab hours required.

Prerequisite: Reading Proficiency.

AVI 121. Aircraft Non-metallic Structures and Finishes. 2 Credit Hours.

This course covers aircraft maintenance principles that apply to the exterior surfaces and internal structures of an aircraft. Students learn about wooden structures, fabric coverings and the various paints and sealants that are used to protect them. The airframe curriculum subjects included in this course and required by Federal Aviation Regulations (FAR) Part 147, Appendix C, are Aircraft Coverings, Aircraft Finishes and Wood Structures. Additional lab hours required.

Prerequisites: AVI 103 and Reading Proficiency.

AVI 122. Aviation Welding. 2 Credit Hours.

Various types of welding, soldering and brazing used in aircraft structural materials are introduced in this course. Students will work with sheet steel, tube steel and other metals. The airframe curriculum subject in this course and required by Federal Aviation Regulations (FAR) Part 147, Appendix C, is Welding. Additional lab hours required.

Prerequisites: AVI 101 and Reading Proficiency.

AVI 123. Airframe Fuel Systems and Fire Detection. 1 Credit Hour.

Students learn about the inspection, service and repair of fuel systems and components, and aircraft fire detection and extinguishing systems. The airframe curriculum subjects included in this course and required by Federal Aviation Regulations (FAR) Part 147, Appendix C, are Aircraft Fuel Systems and Fire Protection. Additional lab hours required.

Prerequisite: AVI 101 and Reading Proficiency.

AVI 124. Aircraft Metallic Structures. 4 Credit Hours.

This course covers sheet metal and non-metallic aircraft structures introducing student to various materials used in fabrication and repair including fasteners, rivets, and sheet metal flat layouts. Students study composite structures, inspection methods, fabrication and repair procedures. The airframe curriculum subject included in this course and required by Federal Aviation Regulations (FAR) Part 147, Appendix C, is Sheet Metal and Non-metallic Structures. Additional lab hours required.

Prerequisites: AVI 103 and Reading Proficiency.

AVI 125. Aircraft Fluid and Pneumatic Power Systems. 2 Credit Hours.

This course covers the principles of hydraulic and pneumatic systems in aircraft and their purpose, inspection, service and repair. This includes in depth study of various landing gear and components, braking systems, wheels, tires and struts with emphasis on disassembly, inspection, removal and replacement of these systems and components. The airframe curriculum subjects included in this course and required by Federal Aviation Regulations (FAR) Part 147, appendix C, are Aircraft Landing Gear Systems and Hydraulic and Pneumatic Power Systems. Additional lab hours required.

Prerequisites: AVI 101 and Reading Proficiency.

AVI 126. Rigging, Inspection, Cabin Environment, Ice and Rain. 3 Credit Hours.

In this course students learn assembly procedures for aircraft components including flight control systems. They also learn about ice and rain control systems, and cabin temperature and pressure systems. The FAA regulations and procedures for inspecting an aircraft airframe are also included. The airframe curriculum subjects included in this course and required by Federal Aviation Regulations (FAR) Part 147, Appendix C, are cabin Atmosphere Control Systems, Ice and Rain Control Systems, Assembly and Rigging, and Airframe Inspection. Additional lab hours required.

Prerequisites: AVI 101 and Reading Proficiency.

AVI 127. Communication/Navigation Systems. 3 Credit Hours.

In this course students learn how aircraft communication and navigation systems work and how to install, inspect and check system components. The airframe curriculum subjects included in this course are required by Federal Aviation Regulations (FAR) Part 147, Appendix C, are Communication and Navigation Systems, Position Warning Systems and Aircraft Instrument Systems. Additional lab hours are required.

Prerequisites: AVI 101 and Reading Proficiency.

AVI 128. Aircraft Electrical Systems. 4 Credit Hours.

This course covers the operation and maintenance of electrical and power distribution systems on aircraft as well as the fabrication and installation of electrical wiring or components. The airframe curriculum subject included in this course and required by Federal Regulations (FAR) Part 147, Appendix C, is Aircraft Electrical Systems. Additional lab hours required.

Prerequisites: AVI 102 and Reading Proficiency.

AVI 131. Power Plant Electrical Systems. 1 Credit Hour.

Students learn the principles and procedures governing charging systems and motors. The course will emphasize inspecting, servicing and repairing electrical system components in an aircraft power plant. The power plant curriculum subject included in this course and required by Federal Aviation Regulations (FAR) Part 147, Appendix D is Engine Electrical Systems. Additional lab hours required.

Prerequisites: AVI 102 and Reading Proficiency.

AVI 132. Ignition and Starting Systems. 2 Credit Hours.

Students learn the principles and procedures governing ignition and starting systems. Course material will include inspecting, servicing and repairing ignition and starting system components in an aircraft power plant. The power plant curriculum subject included in this course and required by Federal Aviation Regulations (FAR) Part 147, Appendix D is Ignition and Starting. Additional lab hours required.

Prerequisites: AVI 102 and Reading Proficiency.

AVI 133. Airflow, Exhaust, Lubrication and Engine Instruments. 3 Credit Hours.

This course covers the inspection, service and maintenance of non-engine accessory systems and instruments critical for the proper operation of reciprocating and turbine engines. The power plant curriculum subjects included in this course and required by Federal Aviation Regulations (FAR) Part 147, Appendix D, are Induction and Engine Airflow Systems, Engine Cooling Systems, Engine Exhaust and Reversing Systems, Lubrication Systems and Engine Instrument System. Additional lab hours required.

Prerequisites: AVI 101 and Reading Proficiency.

AVI 134. Reciprocating Engines. 4 Credit Hours.

This course addresses the theory, development and maintenance of reciprocating engines for aircraft. Projects will include disassembly, re-assembly, overhaul, repair, inspection, removal, installation and testing engine components. Students will further develop skills in the use of maintenance publications and documentation of maintenance activities. The power plant curriculum subject included in this course and required by Federal Aviation Regulations (FAR) Part 147, appendix D is Reciprocating Engines. Additional lab hours required.

Prerequisites: AVI 101 and Reading Proficiency.

AVI 135. Propeller Systems. 3 Credit Hours.

The development and application of fixed-pitch through constant speed propellers is presented in this course. Students inspect, replace, service or repair propellers, their accessories or auxiliary systems. The use of maintenance publications and appropriate documentation of maintenance activities will be emphasized. The power plant curriculum subject included in this course and required by Federal Aviation Regulations (FAR) Part 147, Appendix D is Propellers. Additional lab hours required.

Prerequisites: AVI 101 and Reading Proficiency.

AVI 136. Power Plant Fuel and Fire Protection Systems. 3 Credit Hours.

Students learn about aircraft fuel, engine fuel systems and components, and fuel metering devices. Carburetors and injection systems are covered along with fuel systems, fire protection systems, pumps valves, filters and metering units. The power plant curriculum subjects included in the course and required by Federal Aviation Regulations (FAR) Part 147, Appendix D are Fuel Metering Systems, Engine Fuel Systems and Engine Fire Protection Systems. Additional lab hours required.

Prerequisites: AVI 101 and Reading Proficiency.

AVI 137. Turbine Engines. 4 Credit Hours.

Theory and application of various types of turbine engines are provided in this course. Course material includes removal, replacement, installation, inspection, overhaul, repair and adjustment of turbine engines. The power plant curriculum subjects included in this course and required by Federal Aviation Regulations (FAR) Part 147, Appendix D, are Turbine Engines, Auxiliary Power Systems and Unducted Fans. Additional lab hours required.

Prerequisites: AVI 101 and Reading Proficiency.

AVI 138. Power Plant Inspections. 1 Credit Hour.

This course requires students use skills developed in the power plant courses to inspect turbine or reciprocating engines, propellers, engine accessories and auxiliary systems. Students will use extensive research of maintenance publications and effective documentation of inspection activities. The power plant curriculum subject included in this course and required by Federal Aviation Regulations (FAR) Part 147, Appendix D, is Engine Inspection. Additional lab hours required.

Prerequisites: AVI 131 and Reading Proficiency.

Baking and Pastry (BAP)

BAP 101. Introduction to Baking Theory. 3 Credit Hours.

This course introduces the principles of food science and nutrition as they apply to baking and pastry arts. The Scientific Method is used to explore pastry ingredients and their function in product preparation and storage. Emphasis will be placed on formulation, ingredients, and sensory evaluations. Additional lab hours required.

Prerequisites: CUL 101 and Reading Proficiency.

BAP 105. Breads, Rolls, and Bakeries. 3 Credit Hours.

This course introduces the techniques in preparation of assorted breads quick breads, yeast-raised, laminated, and enriched doughs for the bakeshop as well as cookies, pies, and basic bakery staples. The use of baking equipment, scaling and shaping techniques, inventory control, baker's mathematics, and sanitation are covered. Additional lab hours required.

Prerequisites: BAP 101 with a minimum grade of "C" and Reading Proficiency.

BAP 110. Production Pastry Techniques. 3 Credit Hours.

This course is designed to give the student working knowledge of traditional and contemporary methods of producing puff pastry, pate a choux, creams, custards, tarts, and mousses. Fundamentals of production and finishing techniques are introduced. Additional lab hours required.

Prerequisites: BAP 105 with a minimum grade of "C" and Reading Proficiency.

BAP 115. Cake Production and Decoration. 3 Credit Hours.

This course is designed to expose students to the proper procedures for producing traditional and contemporary cakes. Emphasis will be placed on mixing methods of batters, fillings, and icings. Skills taught include cake decoration, piping techniques, writing with chocolate, and proper use of a pastry bag. Additional lab hours required.

Prerequisites: BAP 110 with a minimum grade of "C" and Reading Proficiency.

BAP 150. Bakeshop Basics for Culinaricians. 3 Credit Hours.

This course is an introduction to the fundamentals of baking and pastry utilized in the culinary industry. Students will learn the theories of baking science, mathematics, and production techniques, along with the principles and procedures for producing basic breads, custards, mousses, pastries, and bakeries. Additional lab hours required.

Prerequisites: CUL 101, HRM 134 and Reading Proficiency.

BAP 201. Artisan and Decorative Bread. 2 Credit Hours.

This course will cover various styles of producing artisan and decorative bread. Instruction will include techniques of production utilizing various processes of fermentation. Elements of showpieces and decorative breads will be produced in class yielding attractive displays. Fundamentals of Baking Mathematics will play a key role in everyday production activities. Additional lab hours required.

Prerequisites: BAP 115 with a minimum grade of "C" and Reading Proficiency.

BAP 205. Ice Cream and Frozen Desserts. 2 Credit Hours.

This course introduces the multiple production techniques of frozen desserts. Students will be taught the fundamentals of balancing formulations, controlling texture, and developing flavor profiles, with an emphasis on the creation of classical and modern frozen desserts. Consumer marketing and evaluation will also occur during this class. Additional lab hours required. Prerequisites: BAP 201 with a minimum grade of "C" and Reading Proficiency.

BAP 210. Chocolate Candies and Showpieces. 2 Credit Hours.

During this course, students will learn and utilize proper tempering techniques of chocolate. Hand-dipped and molded candies will be produced utilizing various methods. Variations of chocolates, fillings, manufacturing techniques, and decorations will be utilized in daily activities. Cocoa-based coloring and texturing mediums will be introduced and used to produce showpieces. Additional lab hours required.

Prerequisites: BAP 205 with a minimum grade of "C" and Reading Proficiency.

BAP 215. Plated Desserts. 2 Credit Hours.

This course focuses on the preparation and presentation of plated desserts. Contemporary versions of traditional desserts will be created utilizing several styles of plate presentation. Advanced flavor development and menu planning will be introduced. Students will simulate a la carte restaurant plating techniques to present finished desserts. Additional lab hours required.

Prerequisites: BAP 210 with a minimum grade of "C" and Reading Proficiency.

BAP 220. Sugar Candies and Showpieces. 2 Credit Hours.

This course introduces students to the process of artistic design, drawing, and creation of two- and three-dimensional centerpieces utilizing sugar and pastillage. Students will also produce sugar-based candies utilizing various production methods. Additional lab hours required.

Prerequisites: BAP 215 with a minimum grade of "C" and Reading Proficiency.

BAP 260. Baking and Pastry Arts Capstone. 3 Credit Hours.

This culminating course focuses on the synthesis and application of the knowledge and skills necessary to successfully obtain the Certified Pastry Culinarian certification through the American Culinary Federation. Coursework will include written and practical baking assessments in preparation for this industry-recognized examination. Additional lab hours required.

Prerequisites: BAP 220 with a minimum grade of "C"; CUL 150, HRM 112, HRM 128, HRM 134, HRM 146, HRM 201, HRM 205 and Reading Proficiency.

Biology (BIO)

BIO 100. Introduction to Life Science Laboratory Skills. 3 Credit Hours.

This course is part of the Certificate of Specialization in Life Science Laboratory Assistant program. Students will practice basic lab skills in a research laboratory setting. Pipetting, solution and media preparation, dilutions, sterile technique, separation methods, lab math, quality control, documentation, and other appropriate skills are taught with an emphasis on standard lab instrumentation, calibration or verification, and maintenance. Additional lab hours required.

Prerequisites: BIO 111, MTH 030 and Reading Proficiency.

BIO 103. Problems in Anatomy. 3 Credit Hours.

A course dealing with the anatomy of the human body; study of the structure of cells, tissues, organs, and systems with emphasis on those subjects important to embalming. Additional lab hours required.

Prerequisites: BIO 111 and Reading Proficiency.

BIO 104. Basic Laboratory Methods for Biotechnology. 3 Credit Hours.

This course introduces basic laboratory skills in preparation for Biotechnology I. Topics and techniques include safety, sterile technique, laboratory math, quality systems, documentation, collection of data, metrology, filtration, solution and mini prep, and other appropriate laboratory methods. Additional lab hours required.

Prerequisites: MTH 030 or MTH 040 with a minimum grade of "C" and Reading Proficiency.

BIO 105. Topics in Evolution. 3 Credit Hours.

This is an introductory course emphasizing both evolutionary mechanisms and evolutionary history. Areas of interest will include evolution as a process, the development of biological diversity, reconstructing past evolutionary events, and the evolution of major groups, including humans.

Prerequisite: Reading Proficiency.

BIO 106. Human Heredity. 4 Credit Hours.

This course will introduce students to basic concepts in human heredity.

Areas of emphasis will include patterns of inheritance, population genetics, the genetics of immunity and cancer, genetic engineering, gene therapy, and reproductive technologies. Additional lab hours required. Prerequisite: Reading Proficiency

BIO 109. Human Biology. 3 Credit Hours.

This course is an introduction to basic human structure, function and the human body's interaction with its surroundings, including cell theory, genetics, systems biology, ecology and evolution. This course does not fulfill any of the Allied Health and Nursing program requirements at St Louis Community College. This course may fulfill Allied Health and Nursing program requirements at other institutions.

Prerequisite: Reading Proficiency.

BIO 110. General Zoology. 4 Credit Hours.

This course provides a survey of the animal kingdom with emphasis on comparative anatomy, physiology, ecology and evolution of the major invertebrate and vertebrate groups. Additional lab hours required.

Prerequisite: Reading Proficiency.

BIO 111. Introductory Biology I. 4 Credit Hours.

Introductory Biology provides a consideration of the principles of biology, with emphasis on the molecular approach to the structure and function of living organisms. This course is for liberal arts students and majors in physical education, physical and occupational therapy, nursing, and other allied health areas. (Credit is not allowed for both BIO 111 and BIO 140). Additional lab hours required.

Prerequisite: Reading Proficiency.

BIO 113. Modern Aspects of Biology. 3 Credit Hours.

This course provides a consideration of the principles of biology as they relate to socially relevant issues in nutrition, reproduction, sexuality, heredity, and disease.

Prerequisite: Reading Proficiency.

BIO 117. Conservation and Ecology. 3 Credit Hours.

This course focuses on the environment and the effects that mankind is having on the Earth. Interrelationships of living things to their environment and to each other are discussed with particular focus on the impact of humans on the environment. Mankind's use and abuse of renewable and non-renewable natural resources are also considered.

Prerequisite: Reading Proficiency.

BIO 120. Field Zoology. 3 Credit Hours.

A natural history of animals using a wide variety of Missouri habitats. Topics will include insects and other invertebrates, fish, amphibians, reptiles, birds, mammals, conservation and the history of wildlife populations in Missouri. Techniques for collection, preservation or live maintenance and identification will be covered. Not intended for Biology majors.
Prerequisite: Reading Proficiency.

BIO 122. Human Sexuality. 3 Credit Hours.

Human sexuality includes not only the biological component of male and female sexuality but also attitudes, values and feelings about one's own gender and sex role. Consequently, in dealing with sex as a natural biological function, the expression of which is a dimension of psychosocial behavior, the sexual development and/or differentiation of men and women from conception to maturity will be stressed. Same course as PSY 125.
Prerequisite: Reading Proficiency.

BIO 123. Animal Behavior. 3 Credit Hours.

This course is an introductory course in invertebrate and vertebrate animal behavior. Emphasis will be placed on biological clocks, migrational patterns, reproductive strategies and hormones. The reoccurring theme will be the role of genetics and evolution in driving behavior.
Prerequisite: Reading Proficiency.

BIO 124. General Botany I. 4 Credit Hours.

Students will be introduced to the biological aspects of plant life, including cell structure and function, anatomy, morphology, physiology, taxonomy. The laboratory reinforces some of the topics and concepts covered in the lecture. Additional lab hours required.
Prerequisite: Reading Proficiency.

BIO 140. Principles of Biology I. 5 Credit Hours.

Principles of Biology I presents an introduction to scientific methodology and biological principles applied to the molecular level of the structure and function of living organisms. This course is intended for pre-medicine, pre-dentistry, pharmacy, biology, and other science majors. (Credit is not allowed for both BIO 111 and BIO 140).
Corequisite: CHM 105.
Prerequisites: Reading Proficiency.

BIO 141. Principles of Biology II. 4 Credit Hours.

Principles of Biology II presents an introduction to scientific methodology and biological principles applied to the organism and supraorganism levels of biology. Topics covered include: population biology, evolution, and a survey of the major Domains and Kingdoms of living organisms. This course is intended for pre-medicine, pre-dentistry, biology, and other science majors.
Prerequisites: BIO 140 with a grade of C or better and Reading Proficiency.

BIO 148. Ozark Ecology. 3 Credit Hours.

This course introduces students to one of the most biological diverse ecosystems in the Midwest. It will focus on the interaction of plants and animals with unique Ozark natural communities such as oak-hickory forests, glades, bluffs, caves, springs, and streams. Management and land use practices affecting this ecosystem will be reviewed. An optional 1-2 week field experience course (BIO 149) is available to students who successfully complete this lecture course.
Prerequisite: Reading Proficiency.

BIO 151. Biology of Human Health and Disease. 3 Credit Hours.

This course examines human health and disease from a biological perspective. It will also explore the evolution of microbes and human disease and the influences that regular exercise, diet, and genetic factors have on every day good health. The course will also explore mechanisms, manifestations, and prevention of common diseases, such as heart disease and cancer.
Prerequisite: Reading Proficiency.

BIO 152. Quantitative Methods in Biotechnology. 2 Credit Hours.

This course is designed to instruct students in the common calculations encountered in a cellular-molecular research setting.
Prerequisites: MTH 140 and CHM 101 or CHM 105 and Reading Proficiency.

BIO 154. The Biology of Human Sex. 3 Credit Hours.

This course covers the biological aspects of human sexuality. Topics include male and female reproductive systems, sexual gender, sexually transmitted infections, contraception, assisted reproductive techniques and the development of the fetus. This course will also cover typical and atypical behaviors of sexuality.
Prerequisite: Reading Proficiency.

BIO 156. Native Landscaping for Wildlife and People. 3 Credit Hours.

The field study course focuses on which native wildflowers, grasses, shrubs, and trees furnish food and cover for wildlife and provide attractive native landscapes of flowers, fruits, and leaves for people. Highlights include 1) investigating biodiversity and sustainability of natural communities, 2) selecting best-adapted species, and 3) designing, planting, and maintaining native landscapes.
Prerequisite: Reading Proficiency.

BIO 203. General Microbiology I. 4 Credit Hours.

Introduction to microbes with emphasis on morphology, culture techniques and biochemical activities of bacteria, viruses and fungi. A consideration of human disease producing organisms with regard to their infection and resistance. Additional lab hours required.
Prerequisites: BIO 111 with grade of "C" or better; or one year of high school biology and chemistry (with labs) within previous five years of registration date; or permission of the department chairperson of Biology and Reading Proficiency.

BIO 207. Anatomy and Physiology I. 4 Credit Hours.

A study of the organization of cells into tissues, organs, and organ systems, with special in-depth study of the integumentary, skeletal, muscular, nervous and endocrine system, and the sensory receptors. Additional lab hours required.
Prerequisites: BIO 111 with grade of "C" or better; or one year of high school biology and chemistry (with labs) within previous five years of registration date; or permission of the department chairperson of Biology and Reading Proficiency.

BIO 208. Anatomy and Physiology II. 4 Credit Hours.

A continuation of BIO 207 with consideration given to the integrative functions of the cardiovascular, digestive, respiratory, urogenital and reproductive systems. Additional lab hours required.
Prerequisites: BIO 207 with a minimum grade of "C" and Reading Proficiency.

BIO 209. Kinesiology Fundamentals. 3 Credit Hours.

Kinesiology is the study of human movement. It involves applying the anatomy of the musculo-skeletal system to functional movement as a basis to understanding of exercise. Additional lab hours required.
Prerequisites: BIO 207 and Reading Proficiency.

BIO 218. Microbiology for Biotechnology. 4 Credit Hours.

A course for biotechnology majors providing a detailed exposure to structure, metabolism, genetics and growth characteristics of microbes and viruses as well as the role they play in disease, ecological and industrial applications. The structure and function of the immune system will also be covered. Additional lab hours required.
Prerequisites: BIO 140, CHM 105 and Reading Proficiency.

BIO 219. Biotechnology I. 5 Credit Hours.

This course introduces basic biotechnology skills in preparation for Biotechnology II. Topics and techniques may include safety, cGMP, agarose gel electrophoresis, plasmid construction, ELISA, PAGE, PCR, mammalian cell culture, rapid plant genotyping and other molecular research techniques. Additional laboratory hours required.

Prerequisites: BIO 104, BIO 140, BIO 152, GE 101, all with a minimum grade of "C" and Reading Proficiency.

BIO 220. Biotechnology II. 5 Credit Hours.

A project-oriented course applying the fundamental DNA and protein manipulation techniques used in biotechnology/bioengineering research laboratories in academia and industry. Additional lab hours required.

Prerequisites: BIO 219 or consent of the instructor and Reading Proficiency.

BIO 221. Workplace Learning: Biotechnology. 3 Credit Hours.

This workplace-based course provides the student the opportunity to apply theory and skills learned in the classroom, learn new skills, and explore career possibilities while supervised by a professional in the field and a faculty member. Students will observe and participate in the functions of the industry to enhance their preparation for entering the field. Minimum of 50 hours per credit hour in the workplace throughout the term. Additional hours required.

Prerequisites: Prior or concurrent enrollment in BIO 220 and Reading Proficiency.

BIO 223. Research Techniques in Biology. 1-3 Credit Hours.

Students will participate in research projects that can include introduction to HPLC, cell culture, histology techniques, or research in molecular ecology or molecular genetics. Exposure to data processing, data analysis, poster or manuscript preparation and presentation may also be included. Contact the instructor for current research project information.

Prerequisites: MTH 140, CHM 101 and BIO 111 or BIO 140 and Reading Proficiency.

BIO 225. Genetics. 5 Credit Hours.

This course for life science majors reviews the fundamental principles of inheritance, including classical genetic theory, as well as recent advances in the molecular basis of heredity. Additional hours required.

Prerequisites: BIO 140, CHM 105 and Reading Proficiency.

BIO 226. Advanced Topics in Biotechnology. 3 Credit Hours.

This lecture/laboratory course consists of current techniques used in biotechnology research and industry. Topics can include, but are not limited to, techniques from biomedical, pharmaceutical, agricultural, environmental, microbiological, bioprocessing, biocomputing, and/or bioethical aspects of biotechnology. Life science research and industry scientists will be employed as instructors. Additional lab hours required.

Prerequisites: Prior or concurrent enrollment in BIO 219 or consent of the program coordinator or department chair, and Reading Proficiency.

BIO 227. Biotechnology Capstone. 2 Credit Hours.

Biotechnology Capstone focuses on the development and delivery of a scientific presentation.

Corequisite: BIO 220.

Prerequisite: Reading Proficiency.

Biomedical Engineering Tech (BE)

BE 153. Workplace Learning: Biomedical Engineering Technology. 4 Credit Hours.

This workplace-based course provides the student the opportunity to apply theory and skills learned in the classroom, learn new skills, and explore career possibilities while supervised by a professional in the field and a faculty member. Students will observe and participate in the functions of the industry to enhance their preparation for entering the field. Minimum 50 hours per credit hour in the workplace throughout the term.

Prerequisites: BE 150, BIO 102, and EE 132 and Reading Proficiency.

BE 160. Workplace Learning: Biomedical Electronics Technology. 4 Credit Hours.

This workplace-based course provides the student the opportunity to apply theory and skills learned in the classroom, learn new skills and explore career possibilities while supervised by a professional in the field and a faculty member. Students will observe and participate in the functions of the industry to enhance their preparation for entering the field. Minimum 50 hours per credit hour in the workplace throughout the term.

Prerequisites: EE 132 and Reading Proficiency.

BE 254. Biomedical Applications. 5 Credit Hours.

This course develops competencies, including maintenance, troubleshooting and repair, with such basic hospital equipment as transducers, amplifiers, processors, display modules, and respiratory and radiography instruments. Additional lab hours required.

Prerequisites: BE 251 and Reading Proficiency.

Building Inspection Technology (BIC)

BIC 101. Basic Building Inspection Techniques. 3 Credit Hours.

This course offers the student an introduction to the general principles of building inspection. It includes current techniques of field inspections with emphasis on wood, steel frames, modern masonry and concrete design as employed in construction of buildings.

Prerequisite: Reading Proficiency.

BIC 102. Housing Inspections and Programs. 3 Credit Hours.

A course covering housing codes and housing inspection techniques. The need for the implementation of housing programs and their impact on the community is included.

Prerequisite: Reading Proficiency.

BIC 103. Building Codes and Ordinances. 3 Credit Hours.

This course offers a detailed study of national, state, and local ordinances geared to public safety, land use controls, and building codes. It will include a detailed summary of use philosophy and development of the latest edition of BOCA Building Codes.

Prerequisite: Reading Proficiency.

BIC 104. Housing Inspection Problems. 3 Credit Hours.

Housing evaluation skills as taught in this course shall cover space requirements, sanitation requirements, comfort requirements, electrical requirements, maintenance standards, and environmental needs. The course should prepare persons for the task of evaluating existing residential housing. This preparation shall consist of teaching 1) requisite skills in detecting deficiencies; 2) know-how in correcting deficiencies; 3) systematic procedures for documentation and control of housing inspections.

Prerequisite: Reading Proficiency.

BIC 200. Plumbing and Mechanical Inspection. 4 Credit Hours.

An introduction to the theory of residential and commercial, industrial and institutional details of plumbing systems, safety principles, heating, cooling and ventilation, layouts and code inspection problems.

Prerequisites: MTH 124, PSI 101 and Reading Proficiency.

BIC 201. Electrical Inspection. 2 Credit Hours.

Electrical inspection of buildings, residential, commercial, institutional, and industrial, based on the National Electrical Code, including electrical wiring procedures and layouts.

Prerequisites: MTH 124, PSI 101 and Reading Proficiency.

BIC 202. Administration of Building Regulations. 3 Credit Hours.

This course offers an introduction to the effective administration of building and zoning regulations. Particular attention will be given to the major methods and procedures for the enforcement of building codes and ordinances.

Procedures for the building department operations will also be discussed.

Prerequisites: BIC 101, BIC 103 and Reading Proficiency.

BIC 203. Plan Review I (Non-Structural). 3 Credit Hours.

This course provides the student with an understanding of building plans for residential, commercial, industrial and institutional building as related to the requirements of various codes and the zoning ordinances. Solutions to problems will be taught through the study of specific situations, employing an authentic set of plans. The student is taught to identify the problems on the plan and then to solve them by correct application of plan review.

Prerequisites: FIR 210, BIC 103 and Reading Proficiency.

BIC 204. Plan Review II (Structural). 3 Credit Hours.

This course provides the student with an understanding of building plans with emphasis on structural elements of building design. The student will be instructed in review and calculations of loads and sizing of structural elements of a building, including footings, foundations, beams and columns, walls, roofs, and floors.

Prerequisites: BIC 203, ME 243 and Reading Proficiency.

Business Administration (BUS)

BUS 101. Small Business Management. 3 Credit Hours.

A comprehensive survey course which deals with the theoretical and practical aspects of starting and operating a small business. Each major function of business (accounting, production, marketing) is discussed with particular reference to small business. Students taking this course are normally not encouraged to enroll subsequently in BUS 104 due to similarity of course content.

Prerequisite: Reading Proficiency.

BUS 103. Business Mathematics. 3 Credit Hours.

This course includes a review of basic arithmetic fractions, decimals, ratios, non-decimal numbering systems, and graphical representation of numbers. It also covers fundamental problems involving interest, mark-ups, commissions, payroll, taxes, depreciation, consumer credit, insurance and security transactions. Students will analyze simple financial statements, discounts, volume/profit relationships, and banking records.

Prerequisite: Reading Proficiency.

BUS 104. Introduction to Business Administration. 3 Credit Hours.

This is a survey course designed to give the student general knowledge of the modern business world and the environments within which it exists. Students are introduced to functional areas that work together to create products and services.

Prerequisite: Reading Proficiency.

BUS 201. Elementary Statistics. 3 Credit Hours.

This course introduces the student to the basic principles and methods of statistical measurement and statistical inference. Descriptive statistical concepts include data organization and presentation, measures of location and dispersion, probability theory and distributions. Applications of statistical inference include random sampling techniques and sampling distributions, interval estimation, hypothesis testing for large and small samples, ANOVA, correlation, regression analysis, and nonparametric testing.

Prerequisites: MTH 160 or MTH 160A or MTH 160B or MTH 160C and Reading Proficiency.

BUS 250. Workplace Learning: Business and Economics. 1-3 Credit Hours.

This experiential course provides the student the opportunity to apply theory and skills learned in the classroom, learn new skills, and explore career possibilities while supervised by a professional in the field and a faculty member. Students will observe and participate in the functions of the business to enhance their preparation for entering the field. Minimum 50 hours per credit hour in the workplace throughout the term.

Prerequisites: Department approval and Reading Proficiency.

Business Law (BLW)

BLW 101. Business Law I. 3 Credit Hours.

A survey course which considers an introduction to the judicial system, as well as principles of law in the following areas legal ethics, constitutional law contracts, torts, products, liability, intellectual property and business crime.

Prerequisite: Reading Proficiency.

BLW 201. Legal Environment of Business. 3 Credit Hours.

This course covers an introduction to law and the judicial system, business organizations, contracts, torts, property, agency or administrative law, antitrust, labor-management, international and other topics such as law related to energy, health, safety and the environment. 0 or higher and Reading Proficiency.

Prerequisites: Student must have sophomore standing with a cumulative GPA of 2.

Chemistry (CHM)

CHM 101. Fundamentals of Chemistry I. 5 Credit Hours.

Fundamental of Chemistry I is a one semester course which presents the fundamental concepts and symbolism of chemistry with applications to everyday life. The course is suited for allied health students and for students not planning to major in science. Laboratory work presents opportunity to use laboratory equipment, emphasizes observations and measurements, and provides elementary quantitative and qualitative analysis. Additional hours required.

Prerequisites: MTH 030 with a minimum grade of "C", placement into MTH 140 or higher on the Math placement test and Reading Proficiency.

CHM 102. Fundamentals of Chemistry II. 4 Credit Hours.

This course presents the fundamental concepts of organic chemistry and biochemistry. It is suited for allied health students and for students not planning to major in chemistry. Topics include basic structure and reactions of organic molecules and a survey of carbohydrates, lipids, amino acids and proteins, with an introduction to metabolic pathways. Laboratory work emphasizes observations. Additional lab hours required.

Prerequisites: CHM 101 or CHM 105 with minimum grades of "C" and Reading Proficiency.

CHM 105. General Chemistry I. 5 Credit Hours.

General Chemistry I is a one-semester course designed for science-related majors that emphasizes the fundamental principles of chemistry. Topics include measurement, physical and chemical processes, nomenclature, atomic structure, quantum theory, stoichiometry, molecular structure, bonding theory, physical properties of gases, thermochemistry, and properties of solutions. Upon completion of the course, students should be able to demonstrate an understanding of the fundamental chemical laws and concepts and will obtain prerequisite chemical knowledge needed for advancement to General Chemistry II. Additional lab hours required. Prerequisites: MTH 140 (or at least one and a half years of high school algebra) and CHM 101 with a minimum grade of "C" or one year of high school chemistry, and Reading Proficiency.

CHM 106. General Chemistry II. 5 Credit Hours.

This course is a continuation of General Chemistry I. Topics include quantitative analysis of kinetics, equilibrium, thermodynamics, electrochemistry, nuclear chemistry, and some descriptive chemistry and organic chemistry. It includes laboratory work involving qualitative and quantitative analysis. Completion of the course provides students with an understanding of general chemical laws and concepts, and prerequisite knowledge needed for higher level chemistry courses. Additional lab hours required.

Prerequisites: CHM 105 and (MTH 160 or MTH 160A or MTH 160B or MTH 160C) with minimum grades of "C" or test in MTH 170 or higher on the Math placement test and Reading Proficiency.

CHM 109. Chemistry and the Environment. 4 Credit Hours.

This course is a one-semester course presenting the concepts and symbolism of chemistry with an emphasis on the natural environment and applications to everyday life. This course is suited for students who have a general interest in the study of chemistry in a course containing a laboratory component and is not intended for students planning to major in science or enter an allied health field. Additional lab hours required.

Prerequisites: MTH 030 with a minimum grade of "C" or testing into MTH 140 or higher on the Math placement test and Reading Proficiency.

CHM 114. Industrial Chemistry. 3 Credit Hours.

This is a non-laboratory lecture and demonstration course covering elementary chemistry with emphasis on potentially dangerous chemicals in fires and in other industrial situations. The course is not intended for chemistry or engineering majors.

Prerequisite: Reading Proficiency.

CHM 206. Organic Chemistry Lecture I. 3 Credit Hours.

An introductory course in the theory of Organic Chemistry, stressing reaction types and mechanisms.

Prerequisites: CHM 106 with a grade of "C" or better and Reading Proficiency.

CHM 207. Organic Chemistry Lecture II. 3 Credit Hours.

A continuation of CHM 206 including relevant new topics such as polymers and biochemicals.

Prerequisites: CHM 206 with a grade of "C" or better and Reading Proficiency.

CHM 210. Organic Chemistry Lab I. 2 Credit Hours.

This course is an introduction to the laboratory work in organic chemistry. The emphasis of the course is on generally-employed laboratory techniques for purification and characterization of organic compounds and an introduction to laboratory instrumentation. Additional lab hours required.

Prerequisites: concurrent or prior enrollment of CHM 206 with a grade of "C" or better and Reading Proficiency.

CHM 211. Organic Chemistry Lab II. 2 Credit Hours.

This course is a continuation of CHM 210 Organic Chemistry Lab I. The emphasis of the course is on synthesis of organic compounds, including multi-step syntheses, and on characterization and analysis of organic compounds and exploration of instrumentation. Additional lab hours required.

Prerequisites: Concurrent or prior enrollment in CHM 207 with a minimum grade of "C" and CHM 210 with a minimum grade of "C" and Reading Proficiency.

CHM 214. Advanced Chemical Technology Seminar. 2 Credit Hours.

Emphasis on specialized laboratory techniques and procedures in advances in analytical chemistry instrumentation. An introduction to chemical literature searches both manually and by computer will be presented using both in-house and external consultants and facilities. This course will explore the opportunities and profession of chemical technicians. Specialized resources, advances, and professionals will be presented in seminar format. Specialized topics (ethics, chemical waste disposal and separations) will be included.

Prerequisite: Concurrent enrollment in CHM 222 or permission from the instructor and Reading Proficiency.

Chinese (CHI)

CHI 101. Elementary Chinese I. 4 Credit Hours.

This course is a beginning course that presents the basic structure and vocabulary necessary to participate in elementary Chinese conversations. Students will communicate in written form using the Pinyin style of writing and will learn the correct tones for spoken Chinese.

Prerequisite: Reading Proficiency.

CHI 102. Elementary Chinese II. 4 Credit Hours.

Continuation of CHI 101. Concentration will be placed on vocabulary acquisition and the oral use of the language.

Prerequisites: CHI 101 and Reading Proficiency.

Civil Engineering Technology (CE)

CE 108. Construction Methods. 3 Credit Hours.

This course covers many of the principles, materials, and methods used in light construction. Topics include building codes, construction standards and specializations, wood and wood products, concrete, masonry, glass, plastics, aluminum products, bituminous products, gypsum products, asbestos cement products, construction methods systems, foundation systems, slabs-on-ground, floor/ceiling systems, wood framed floors, wall systems, masonry walls, roof/ceiling systems, stucco, and terrazzo.

Prerequisite: Reading Proficiency.

CE 115. Construction Materials and Methods. 3 Credit Hours.

This course is an introduction to the elements of building construction principles and materials. Students will learn the background and history of building materials and systems; review sustainable design, materials, and construction concepts; and review industry standards, specifications, codes and barrier-free design.

Prerequisite: Reading Proficiency.

CE 116. Construction Blueprint Reading. 3 Credit Hours.

The interpretation of construction working drawings and specifications for residential and commercial building projects. Architectural, structural, and utility drawings will be covered.

Prerequisite: Reading Proficiency.

CE 117. Statics and Strength of Materials. 3 Credit Hours.

This course deals with the fundamental principles of structural design. Topics include the analysis of structures to determine internal and external forces and the design of members and connections based on allowable bending, tension, compression and shearing stresses. The graphical analysis of statics problems is included. Students considering careers as architects or engineers should enroll in this course, rather than in Structures for Technicians. Additional lab hours required.

Prerequisites: MTH 124 or equivalent and Reading Proficiency.

CE 118. Sustainable Construction. 3 Credit Hours.

The emphasis in this class is on the 'green building' revolution, its socioeconomic importance and impact, how sustainable construction differs from the traditional approach, the Leadership in Energy and Environmental Design (LEED) and Green Globes rating systems and how these rating systems impact various aspects of a building and its components and systems.

Prerequisite: Reading Proficiency.

CE 130. Introduction to Construction. 3 Credit Hours.

An introductory course providing an overview of the total construction process including city and regional planning, construction management, contracting, labor and management relations, the design process, estimating and bidding, scheduling and purchasing, construction, and equipment.

Prerequisite: Reading Proficiency.

CE 131. Construction Estimating. 3 Credit Hours.

The total estimating and bidding process. Topics will include bid form contracts, specifications, overhead, unit costs, quantity surveys, subcontract bids, pricing, checking and alternates. Students should be able to read construction drawing prior to enrolling in this course.

Prerequisites: CE 116 and Reading Proficiency.

CE 132. Construction Scheduling. 3 Credit Hours.

Construction scheduling methods to include bar graphs and Critical Path Method with emphasis on manual and computerized design, calculations, and interpretation using both arrow and precedence diagramming.

Prerequisites: 1 year Algebra and Reading Proficiency.

CE 151. Introduction to Civil Engineering and Architecture. 3 Credit Hours.

This course is an introduction to many of the varied factors involved in building design and construction including building components and systems, structural design, storm water management, site design, utilities and services, cost estimation, energy efficiency, and careers in the design and construction industry. Additional lab hours required.

Prerequisites: GE 121 or EGR 147 or department approval.

CE 230. Construction Materials and Testing. 3 Credit Hours.

The properties and standard tests used in construction on soils, aggregates, bituminous products, and concrete. Additional lab hours required.

Prerequisites: Concurrent with ME 243 and Reading Proficiency.

CE 235. Construction Office Practice. 3 Credit Hours.

The interactive role of organizations in the construction process; the structure of alternative construction delivery systems, such as general contractor, construction manager, and design-build contractor; specification and building codes; cost control reporting systems for construction.

Prerequisite: Reading Proficiency.

CE 240. Surveying I. 3 Credit Hours.

This course will explore the history and practice of surveying, the use and care of transits, levels, and tapes, as well as their more modern counterparts. Office and field methods will emphasize laboratory problems in area measurements, elevation determinations, angle collection methods, traverse calculations and topographic map compilation. Additional hours required.

Prerequisites: MTH 170 or MTH 185 and Reading Proficiency.

CE 247. Legal Aspects of Boundary Surveying. 3 Credit Hours.

Topics covered will include legal principles of surveying, Missouri survey law, legal principles of boundaries, property, monumentation, legal descriptions, deed interpretations, and legal aspects of surveying and professional liability. Prerequisites: CE 240 or department approval and Reading Proficiency.

CE 248. Fundamentals of Land Surveying. 3 Credit Hours.

This course includes essential elements necessary in the initiation and follow through of any property survey; evidence of ownership, historical information in the subdivision of public lands, methods of measurements, description of property and legal requirements for recording.

Prerequisites: CE 240 or department approval and Reading Proficiency.

CE 250. Surveying II. 3 Credit Hours.

This is an intermediate course in land surveying techniques applicable to the office and field practices. It explores the theory, history and practice of route surveying, including the use of simple horizontal curves, vertical curves, spirals, super-elevations and earth-work computations as applied to highway and railroad surveying. Additional introductory topics may include but are not limited to photogrammetry, astronomy and GIS. Additional hours required.

Prerequisites: CE 240 and Reading Proficiency.

Clinical Laboratory Technology (CLT)

CLT 100. Orientation to the Medical Laboratory. 1 Credit Hour.

Orientation to the profession of medical technology, its functions, specialties and responsibilities. The philosophy and ethics of the practice of medical technology are considered and interpersonal relationship of technologist to medical staff, laboratory staff, patient and other departments. Medical terminology will be stressed as well.

Prerequisites: Admission to program and Reading Proficiency.

CLT 101. Medical Microbiology. 3 Credit Hours.

Theory and principles of micro-organisms and human disease. Growth requirement of micro-organisms with consideration of media, biochemical reactions, susceptibility testing will be studied. Application of theory will be practiced in laboratory sessions. Additional lab hours required.

Prerequisites: Admission to program and Reading Proficiency.

CLT 110. Urinalysis and Body Fluids. 2 Credit Hours.

This course is an introduction to urine and body fluid analysis. It includes the anatomy and physiology of the kidney, physical, chemical and microscopic examination of urine, cerebrospinal fluid, and other body fluids as well as quality control, quality assurance and safety. Practical application will be stressed. Addition hours required. Reading Proficiency.

Prerequisites: Admission to the program or permission of the program director.

CLT 111. Hematology and Coagulation. 4 Credit Hours.

This course is an introduction to the theory and principles of the physiology of blood forming organs. Blood cell maturation, blood dyscrasia, techniques of staining, counting and differentiating cell morphology will be presented. Additional lab hours required.

Prerequisites: CLT 100 with a minimum grade of "C" or permission of the program director, and Reading Proficiency.

CLT 113. Pathogenic Bacteriology. 2 Credit Hours.

This course presents the study of micro-organisms with emphasis on the bacteria associated with human diseases. Theory and principles of isolation, identification, biochemical reactions, growth requirements, and susceptibility testing will be considered. Theory and practical application will be stressed. Addition lab hours required.

Prerequisites: CLT 101 with a minimum grade of "C" or permission of the program director, and Reading Proficiency.

CLT 115. Immunology and Serology. 2 Credit Hours.

This course is the study of the theories and principles of immunological reactions. Included are antigen-antibody reactions, complement action, humoral and cellular immune response, and other body defenses, and reactions to infectious and non-infectious agents. Serological methodology will also be discussed, demonstrated, and practiced. Additional lab hours required. Prerequisites: CLT 101 with a minimum grade of "C" and Reading Proficiency.

CLT 120. Clinical Laboratory Skill Development. 4 Credit Hours.

This course provides practice of fundamental skills common to most clinical laboratories. Skills such as pipetting, phlebotomy, use of small instruments, laboratory mathematics, determination of cell counts and other diagnostic procedures will be developed. Quality assurance and problem-solving skills will be emphasized.

Prerequisites: CLT 110, CLT 111, CLT 113, CLT 115 all with minimum grades of "C" and Reading Proficiency.

CLT 202. Clinical Practice I. 4 Credit Hours.

Practical experience is attained in one of the clinical affiliated laboratories. The students rotate through each of the major departments of the clinical (medical) laboratory and are closely supervised by bench technologists and faculty. Rotation and practical experience is gained in microbiology, clinical chemistry, blood bank, hematology, urinalysis, serology and immunology departments. Prerequisites: CLT 120 and Reading Proficiency.

CLT 207. Clinical Practice II. 4 Credit Hours.

A continuation of CLT 202. Twenty-four hours clinical practice each week in hospital or private laboratories.

Prerequisites: CLT 202 and Reading Proficiency.

CLT 211. Parasites, Fungi and Intracellular Pathogens. 2 Credit Hours.

The role of parasites, fungi, and intracellular organisms in human diseases with emphasis on differential microscopic and culture methods are presented. Diagnostic tests used for identification and susceptibility testing will be discussed. Practical application will be stressed. Additional lab hours required. Prerequisites: CLT 101 with a minimum grade of "C" or permission of program director, and Reading Proficiency.

CLT 213. Introduction to Clinical Chemistry. 2 Credit Hours.

This course is an introduction to the principles and procedures of various laboratory tests performed in Clinical Chemistry. Specimen collection, instrumentation, mathematical calculations and quality control will be discussed. An introduction to proteins, carbohydrates and lipids will be provided. Reading Proficiency.

Prerequisites: BIO 208, CHM 101 or CHM 105, CLT 100, MTH 140 or MTH 160, all with minimum grades of "C" or permission of program director.

CLT 215. Immunohematology. 4 Credit Hours.

This course includes the basic immunological and genetic principles governing blood groups and transfusion medicine. Theory and principles of routine laboratory testing procedures will be presented. Additional lab hours required. Reading Proficiency.

Prerequisites: CLT 115 with minimum grade of "C" or permission of program director.

CLT 217. Clinical Chemistry. 5 Credit Hours.

This course is an advanced study of the principles and procedures of various laboratory tests performed in the chemistry department. The clinical significance of proteins, enzymes, carbohydrates, lipids, electrolytes and blood gases will be covered. Endocrinology, therapeutic drug monitoring and toxicology will be discussed. Reading Proficiency.

Prerequisites: CLT 213 with a minimum grade of "C" or permission of program director.

CLT 219. Professional Skills Seminar. 1 Credit Hour.

This course will stress the inter-relationships of laboratory tests correlated with diseases. Significance of laboratory testing and results will be taught with a dynamic overview of diagnosis and prognosis. The course also includes cross cultural communication and principles of technical training sufficient to orient a new employee. Additional lab hours required. Reading Proficiency.

Corequisite: CLT 207.

Prerequisites: CLT 202 with a grade of "S" or permission of the program director.

College Orientation (COL)

COL 100. Freshman Academic Orientation. 1 Credit Hour.

Through interactive learning experiences, Freshman Academic Orientation introduces students to college level thinking skills, interpersonal skills, and effective study skills necessary for academic success. Students have the opportunity to participate in a faculty/student academic mentoring program. Prerequisite: Reading Proficiency.

COL 101. College Survival and Success. 3 Credit Hours.

This course is designed to facilitate a successful academic experience for first semester Gateway to College students. Students will be assisted in the personal, academic and social adjustments needed for college success. Learning styles, stress management, identification of personal strengths and weaknesses in learning, managing time, and the integration of school, work, and family are emphasized. Credit will not be given for this course if COL 100 and/or COL 507 is also taken. Co-requisite Concurrent enrollment in the Gateway to College program is required.

Prerequisites: Approval from the Gateway to College staff and Reading Proficiency.

Communications (COM)

COM 101. Oral Communication I. 3 Credit Hours.

This is the basic course in speech communication. It offers students an opportunity to explore effective one-to-one, small group, and large group oral communication processes. Emphasis is placed on a theoretical/conceptual approach as well as skill development and application of oral communication concepts to various communication settings and relationships.

Prerequisites: Reading Proficiency and concurrent enrollment in RDG 030 or ENG 070.

COM 104. Persuasion. 3 Credit Hours.

This course examines the principles of persuasion as they apply to a wide variety of communication formats and situations. Students are given the opportunity to analyze and create persuasive messages that pertain to work, relationships, the mass media, and the arts. The course focuses on the skills necessary to become a more effective sender and receiver of persuasive communication.

Prerequisite: Reading Proficiency.

COM 105. Interview Process. 3 Credit Hours.

This course will provide students with an understanding of the interview process, the principles involved, types of interview questions and their uses, and interview structures.

Prerequisite: Reading Proficiency.

COM 107. Public Speaking. 3 Credit Hours.

This course studies the role of public speaking in communication through the theory and practice of researching, organizing, and delivering of public presentations. Audience analysis, critical listening, and the ethical dimensions of communication are also emphasized. Skills are developed through practicing speech fundamentals and analyzing contemporary and classical presentations.

Prerequisite: Reading Proficiency or concurrent enrollment in RDG 030 or ENG 070.

COM 110. Organizational Communication in a Global Age. 3 Credit Hours.

This course examines the communication systems and behaviors within organizations functioning in a global society. Students develop systematic improvement of communication skills as employer and/or employee necessary for success in national and transnational organizations. Additionally, students gain a more in-depth understanding of the way communication functions in organizations including variations in management styles, intercultural communication competence, and effective business presentations and writing. The course also includes opportunities to practice using and evaluating effective communication skills in diverse organizational contexts.

Prerequisite: Reading Proficiency.

COM 111. Voice and Articulation. 3 Credit Hours.

Principles and practice of improving voice, articulation, pronunciation, foreign and regional dialects. Primary emphasis on individual speech improvement. Frequent use of audio-video tape for self evaluation.

Prerequisite: Reading Proficiency.

COM 114. Oral Interpretation of Literature. 3 Credit Hours.

This course focuses on the analysis and effective oral communication of literature. Course goals include increasing appreciation and understanding of literature through performance and the development of an expressive and responsive communication style.

Prerequisite: Reading Proficiency.

COM 117. Health Communication. 3 Credit Hours.

This course focuses on patient-provider interactions and health literacy through communication theory and techniques for developing communication competency. Students are given the opportunity to examine and discuss content pertaining to health interactions with healthcare professionals, patients, other providers, corporate entities such as insurance companies, and those of various cultural backgrounds. Skills are developed through a variety of assignments such as discussion, role play, presentations, and other practical applications.

Prerequisite: Reading Proficiency.

COM 120. Gender Communication. 3 Credit Hours.

This course is aimed at increasing students' understanding of how men and women communicate across a variety of settings and relationships. Students explore ways to improve communication behaviors and strategies in various contexts. Topics include biological, sociological, and cultural factors influencing gender identity; nonverbal and verbal communication styles; and images of men and women in society and the media.

Prerequisite: Reading Proficiency.

COM 200. Communication Between Cultures. 3 Credit Hours.

This course introduces the topic of Intercultural Communication, including the communication process, perception, verbal/nonverbal symbols, beliefs, values, world view, norms, identity, and social institutions. Barriers such as stereotyping, language, and culture shock are examined as well as case studies, cultural research, relationships, and communication skills.

Prerequisite: Reading Proficiency.

COM 201. Interpersonal Communication. 3 Credit Hours.

This course will take a theoretical case study examination of interpersonal communication. Relational issues as they pertain to communication will be examined in depth. These issues will include conflict, stages of relationships, power, assertiveness, message analysis, and self-awareness.

Prerequisite: Reading Proficiency.

Criminal Justice (CRJ)

CRJ 101. American Correctional System. 3 Credit Hours.

A study of the correctional process from law enforcement through the administration of justice, probation, parole, prisons and correctional institutions. A study of the history and philosophy of corrections.

Prerequisite: Reading Proficiency.

CRJ 102. Rehabilitation, Parole, and Probation. 3 Credit Hours.

Analysis and evaluation of the concept and practices of rehabilitation in contemporary correctional systems; discussion of correctional institutions and the various field services. Development, organization, operation and result of systems of probation and parole.

Prerequisites: CRJ 101 and Reading Proficiency.

CRJ 111. Rules of Criminal Evidence. 3 Credit Hours.

The study of basic rules of evidence applicable to the investigation of criminal activities and other related police duties. Emphasis is placed on the question of admissibility of evidence and the practical application of procedural and substantive guarantees.

Prerequisite: Reading Proficiency.

CRJ 122. Introduction to Criminal Justice. 3 Credit Hours.

The history and philosophy of the system of criminal justice in America, identifying the various sub-systems; role expectations, and their interrelationships; theories of crime, punishment and rehabilitation.

Prerequisite: Reading Proficiency.

CRJ 123. Juvenile Justice. 3 Credit Hours.

The organization, functions and jurisdiction of juvenile agencies; the detention of juveniles and the processing of neglected and abused children. The intent, application, and procedures of the Missouri Juvenile Code; juvenile case disposition, rights of juveniles, crime prevention methods and reporting procedures.

Prerequisite: Reading Proficiency.

CRJ 124. Criminal Law and Procedures. 3 Credit Hours.

An introduction to the study of criminal, common, and statutory law within the context of enforcement.

Prerequisite: Reading Proficiency.

CRJ 206. Management of Human Conflicts. 3 Credit Hours.

Explores the areas of potential conflict that can occur between members of the criminal justice community and various ethnic, racial, and regional sub-cultures. The root causes of the potential conflicts in both criminal justice organizations and occupational subcultures will be investigated. Issues of prejudice and discriminatory practices, both real and perceived, will be discussed as factors contributing to conflict. Proactive and reactive intervention techniques will be addressed in order to learn how to keep potential conflict from becoming actual conflicts.

Prerequisite: Reading Proficiency.

CRJ 207. Police Supervision. 3 Credit Hours.

A comprehensive overview of police personnel, recruiting, selection, training, promotion, personnel development, discipline, control, communication, labor relation issues, and current problems and theories facing the first level line police manager. Emphasis is placed on both individual and organizational development.

Prerequisite: Reading Proficiency.

CRJ 208. Correctional Policies and Procedures. 3 Credit Hours.

The study of policies, procedures and supervision in the field of Corrections.

Prerequisites: CRJ 101, CRJ 102 or consent of department and Reading Proficiency.

CRJ 209. Criminal Justice Practicum. 3 Credit Hours.

A field work experience in Criminal Justice organizations. Students are expected to commit themselves to 120 hours of work experience during the semester. Law Enforcement Option--CRJ 122, CRJ 124 and CRJ 111. Reading Proficiency. Concurrent enrollment in CRJ 211.

Prerequisites: Corrections Option--CRJ 122, CRJ 101 and CRJ 102.

CRJ 211. Criminal Justice Practicum Seminar. 3 Credit Hours.

Discussion and analysis in small groups of the Criminal Justice Practicum experience. Law Enforcement Option--CRJ 122, CRJ 124 and CRJ 111. Reading Proficiency. Concurrent enrollment in CRJ 209.

Prerequisite: Corrections Option--CRJ 122, CRJ 101 and CRJ 102.

CRJ 212. Criminal Investigation. 3 Credit Hours.

The study of the criminal act and its investigation, including specific crimes against persons and property. The process of fact-gathering and problem of legally admissible proof will be considered.

Prerequisite: Reading Proficiency.

CRJ 213. Victimology. 3 Credit Hours.

This course examines the criminal justice process from the perspective of the victim, their families, and society. Emphasis is placed on the etiology of trauma, motivational issues of offending, the probability and effects of victimization and response patterns to victimization by criminal justice practitioners, the community and the media.

Prerequisites: CRJ 122 and PSY 200 with minimum grades of "C" and Reading Proficiency.

CRJ 214. Introduction to Homeland Security. 3 Credit Hours.

This course is an introduction to the different topics associated with Homeland Security. The impact of historical events, laws associated with Homeland Security, affiliated agencies as well as technology, communication and the future of Homeland Security are explored.

Prerequisite: Reading Proficiency.

CRJ 215. Transportation and Border Security. 3 Credit Hours.

This course provides an in-depth view of modern border and transportation security. Topics include security for seaports, ships, aircraft, trains, trucks, pipelines and buses. The course also focuses on the technology needed to detect terrorists and their weapons in addition to the legal, economic, political and cultural aspects of terrorism.

Prerequisites: CRJ 216 and Reading Proficiency.

CRJ 216. Intelligence Analysis and Security Management. 3 Credit Hours.

This course examines intelligence analysis and its indispensable relationships to the security management of terrorist attacks, man-made and natural disasters. It also explores vulnerabilities of our national defense and private sectors, as well as the threats posed to these institutions. It examines intelligence support of homeland security measures implemented by the United States and how the intelligence community operates.

Prerequisites: CRJ 214 and Reading Proficiency.

Culinary Arts (CUL)

CUL 101. Safety and Sanitation. 1 Credit Hour.

This course will prepare students to take the ServSafe Food Protection Manager Certification exam. Content focuses on the sanitation and safety issues involved with handling food through the foodservice process. The course will cover the causes and prevention of foodborne illness, laws for consumer protection, pest prevention, and the principals of Hazard Analysis & Critical Control Points (HACCP). Additional hours required.

Prerequisite: Reading Proficiency.

CUL 110. Food Preparation Practical I. 3 Credit Hours.

The student will master competencies for tools and equipment, kitchen organization, converting and following recipes, applying safety and sanitation, vegetable cuts (American Culinary Federation competition cuts), stocks, soups, sauces, basic cooking methods, and introduction to meat, and poultry preparation. Additional hours required.

Prerequisites: Grades of "C" or better in CUL 101 and CUL 105 and Reading Proficiency.

CUL 115. Food Preparation Theory & Practical II. 3 Credit Hours.

This course introduces the student to the subject of meats and their application in foodservice operations. Students will learn about the muscle and bone structure of beef, veal, pork, lamb, poultry and fish; fabrication methods for sub-primal and foodservice cuts; and proper tying and trussing methods. Topics will include meat inspection, quality and yield grading, costing and yield testing, purchasing specifications, preferred cooking methods for all meats, proper knife selection, and butchery equipment. Sanitation and safety standards will be stressed throughout. Additional hours required.

Prerequisites: CUL 110 with a minimum grade of "C" and Reading Proficiency.

CUL 120. Food Preparation Theory & Practical III. 3 Credit Hours.

The student will master the foundation of cooking techniques and theories from Food Prep Theory I & II. Emphasis is placed on individual as well as team production. The focus is on cooking fundamentals, ratios, and formulas in a professional kitchen. Additional hours required.

Prerequisites: CUL 115 with a minimum grade of "C" and Reading Proficiency.

CUL 150. Culinary Essentials for the Pastry Arts. 3 Credit Hours.

This course will introduce students enrolled in the Baking and Pastry Arts curriculum to the fundamentals of savory food production. Proper methods of preparing stocks, soups, sauces, classical vegetable cuts, and basic cooking principles for meat, poultry, seafood, sandwiches, breakfast, starches, vegetables, and salads will be paramount. Additional hours required.

Prerequisites: CUL 101, HRM 134 and Reading Proficiency.

CUL 201. Garde Manger. 3 Credit Hours.

This course is designed for cold food production and Charcuterie. The course will allow the student to develop fundamental principles of the cold kitchen including methods of salad and sandwich preparation. Aspic Gelee, Chaud Froid, Hors d'oeuvres, canapes and appetizers, buffet and platter presentations, ice and vegetable carvings, pickling, smoking and condiments. Students will also gain an understanding of various cheese categories and their culinary uses. Additional hours required.

Prerequisites: BAP 150 and CUL 120 with minimum grades of "C" and Reading Proficiency.

CUL 205. Global Cuisine. 3 Credit Hours.

In this course students prepare, taste, serve, and evaluate traditional, regional dishes of Europe and the Mediterranean, Asia, Africa and Middle East. Emphasis will be placed on ingredients, flavor profiles, preparation, and techniques representative of various global cuisines. Additional hours required.

Prerequisites: BAP 150 and CUL 120 with minimum grades of "C" and Reading Proficiency.

CUL 210. Nutritional Cooking. 3 Credit Hours.

This course is a study of nutritional cooking. We know that a healthy diet is based on eating a wide variety of high quality foods that provide balanced nutrition. This course is designed to acquaint foodservice professionals with the knowledge and skills to do so. Additional hours required.
Prerequisites: Grades of "C" or better in HRM 128, CUL 115 and BAP 150 and Reading Proficiency.

CUL 215. American Regional Cuisine. 3 Credit Hours.

This course introduces the student to regional American cuisine from nine distinct regional culinary and two specialty traditions within North American cuisine. Students will gain the opportunity to develop professional culinary skills in classic and contemporary formats. Additional hours required.
Prerequisites: CUL 120 and BAP 150 with minimum grades of "C" and Reading Proficiency.

CUL 250. Culinary Arts Capstone. 6 Credit Hours.

The course will be operational in nature by requiring the student to use both technical knowledge and managerial ability to organize and complete a commercial simulation of a one meal operation. The application of theory will be used and tested in the lab setting. Additional hours required.
Prerequisites: CUL 201, CUL 205, CUL 215 all with a minimum grade of "C" and HRM 205 and Reading Proficiency.

Deaf Communication Studies (DCS)

DCS 104. American Sign Language I. 5 Credit Hours.

In American Sign Language (ASL) I, Deaf instructors whose native language is ASL provide intensive exposure to basic ASL, expressively and receptively. The "voice off" policy in class creates a total immersion learning environment. Topics include: basic fingerspelling; cardinal numbers 1-66; statements, yes-no questions, wh-questions, and commands; personal activities; describing shapes and people; giving directions; spatial agreement; modifying verbs; Deaf communication cultural norms; biographies and accomplishments of Deaf individuals. Prerequisite: Reading Proficiency

DCS 105. American Sign Language II. 5 Credit Hours.

This course is for students planning to pursue sign language studies in depth. Intensive exposure is given to American Sign Language (ASL), allowing continued development of intermediate level communication skills used with Deaf persons. Comprehension of target language is emphasized. ASL linguistic and cultural features are presented in the context of language learning experiences.
Prerequisites: DCS 104 with grade of "C" or better or permission of department and Reading Proficiency.

DCS 106. American Sign Language III. 5 Credit Hours.

Continued exposure is given to ASL, allowing greater development of expressive and receptive ASL communication skills. Linguistic features of ASL and cultural features of the American Deaf community are presented in the context of language learning experiences.
Prerequisites: Department permission and Reading Proficiency.

DCS 107. Fingerspelling. 3 Credit Hours.

This course develops expressive and receptive fingerspelling skills based on word and phrase recognition principles. Because a manual alphabet is used by deaf people, it is essential to develop communication skills in ASL or PSE.
Prerequisites: DCS 104 and Reading Proficiency.

DCS 108. Orientation to Interpreting. 3 Credit Hours.

An overview of interpreting as an occupation. Topics include interpersonal skills, professional ethics, parameters of responsibility of the paraprofessional, examination of community resources, and legal ramifications.
Prerequisites: DCS 106, DCS 109 with a grade of "C" or better and Reading Proficiency.

DCS 109. Etymology for Interpreters. 3 Credit Hours.

This course instructs students in the fundamentals of language building, interpreting, translating English idioms in the correct meaning, and identifying the variation of verb versatility, multiple meanings, multiple signs, and contextual clues. Concentrated attention is given to English and sign vocabulary development. Students will learn discourse and comparative analysis techniques.
Corequisite: DCS 106.
Prerequisites: ENG 101 with a grade of "C" or better and department permission and Reading Proficiency.

DCS 110. Deaf Theatre Studies. 3 Credit Hours.

This course addresses the special considerations of sign language performance. Emphasis is placed on developing theatrical sign and mime skills. Lectures and field trips are included. The course is open to Deaf and non-Deaf students.
Prerequisites: Department permission and Reading Proficiency.

DCS 111. Theory of American Sign Language. 3 Credit Hours.

Theory of American Sign Language (ASL) examines the phonetic, grammatical, and syntactic features of ASL in contrast with English. Topics include ASL linguistic terms, ten sentence types (statements, yes-no questions, wh-questions, rhetorical questions, negation, classifiers, chronological sequencing, spatialization, directionality, and conditionals), colors, places, occupations, numbers, and the terminology that names the features of English and ASL.
Corequisite: DCS 119.
Prerequisites: Prior or concurrent enrollment in DCS 104 with a grade of "C" or better and Reading Proficiency.

DCS 115. Introduction to Deaf Communications Studies. 3 Credit Hours.

This course surveys the aspects of deafness by familiarizing students with the physiology of the ear, causes and types of hearing losses, social and psychological aspects of deafness, national and community organizations (i.e. NAD, RID), and history of deaf education.
Prerequisite: Reading Proficiency.

DCS 116. American Sign Language Semantics. 3 Credit Hours.

This course is designed to expand student's knowledge, recognition, and understanding of American Sign Language semantics and semantic units. Focus will be on interpreting and translating ASL idiomatic expressions into equivalent English meaning and usage; developing a recognition of cultural variations of sentence types, time, pronominalization, subjects and objects, classifiers, locatives, pluralization and temporal and distributional aspects. Emphasis will be on cross-cultural influences on language usage and thought.
Prerequisites: DCS 104 and DCS 115 with grades of "C" or better and Reading Proficiency.

DCS 118. Sign Seminar. 3 Credit Hours.

This course is designed to provide increased interactive opportunities for students to continue development of their knowledge of vocabulary and grammatical features of ASL. Instructional approaches include discussion, expansion and explanation in the target language. In addition, the course focuses on colloquialisms, varying registers and socially restricted vocabulary in numerous contexts.
Prerequisites: DCS 105 with a grade of "C" or better and Reading Proficiency.

DCS 119. Theory of American Sign Language Lab. 1 Credit Hour.

This course is designed to reinforce concepts taught in DCS 111 (Theory of American Sign Language) within individualized and small group settings. Additional hours required.

Corequisite: DCS 111.

Prerequisite: Reading Proficiency.

DCS 120. Fingerspelling Lab. 1 Credit Hour.

This course is designed to reinforce concepts taught in DCS 107 (Fingerspelling) within individualized and small group settings. Additional hours required.

Corequisite: DCS 107.

Prerequisite: Reading Proficiency.

DCS 121. American Sign Language IV. 3 Credit Hours.

This course provides continued and in-depth exposure to ASL allowing greater development of expressive and receptive ASL communication skill. Advanced linguistic and cultural features are presented in the context of language learning experiences. Reading Proficiency.

Prerequisites: DCS 106 with a grade of "C" or better.

DCS 206. Consecutive Interpreting. 3 Credit Hours.

Introduces basic skills necessary for an individual to interpret ASL to English or English to ASL. The course is built around a sequencing of drills and incorporates video and deaf signers. The Code of Ethics is reinforced in the classroom.

Prerequisites: DCS 106 and DCS 109 with grades of "C" or better or permission of department and Reading Proficiency.

DCS 207. Simultaneous Interpreting. 3 Credit Hours.

Introduces basic skills necessary to simultaneously transliterate Contact/PSE to English or English to Contact/PSE. The course is built around sequencing of drills and exercises and incorporates videos and deaf signers. The Code of Ethics will be reinforced in context.

Prerequisites: DCS 106 and DCS 109 with grades of "C" or better or permission of department and Reading Proficiency.

DCS 209. Interpreting/Transliterating Lab. 1 Credit Hour.

Designed to reinforce concepts discussed in DCS 206/207 within individualized and small group settings. Concurrent enrollment in DCS 206 or DCS 207.

Additional lab hours required.

Prerequisite: Reading Proficiency.

DCS 210. Sign to Voice Interpreting. 3 Credit Hours.

The purpose of this course is to provide the student an opportunity to build skills in interpreting and transliterating into spoken English from ASL and various contact varieties.

Prerequisites: DCS 206, DCS 207 and COM 111 with grades of "C" or better and Reading Proficiency.

DCS 211. Specialized Interpreting. 3 Credit Hours.

Various interpreting settings are explored, including educational, legal, medical, mental health, religious, platform, rehabilitation, and performing arts. The course also develops understanding of additional types of communication techniques, such as interpreting for those who are deaf-blind, oral or exhibit minimal language skills.

Prerequisites: DCS 105 and COM 111 with grades of "C" or better and Reading Proficiency.

DCS 212. Deaf History and Culture. 3 Credit Hours.

This course helps students understand historical values and traditions within the culture of Deaf people. Traditions include use of humor, success stories and behaviors of empowerment. Values include the importance of clubs, perspectives on education of Deaf children, interpreter services and the preservation of ASL.

Prerequisites: DCS 211 with a grade of "C" or better or approval of department chair and Reading Proficiency.

DCS 213. Professional Issues and Ethics. 3 Credit Hours.

This course will explore the current role of the interpreter as a professional. Topics will include, but not be limited to, the art of cross-cultural mediation, ethical standards, application of interpreting theories, resume development and business practices. This course will prepare students for the workplace learning experience.

Prerequisites: DCS 211 and DCS 216 both with grades of "C" or better and Reading Proficiency.

DCS 214. Interactive Interpreting. 3 Credit Hours.

This skill development course will provide students with the opportunity to practice skills associated with interactive interpreting situations. Students will use both consecutive and simultaneous interpreting methods. Interactive interpreting refers to the process of initiating an interpretation both manual and verbal during a variety of interview and one-on-one situations (mental health, medical, employment, educational and business). Students will begin working with isolated cognitive subtasks (critical listening, analyzing the information, constructing the interpretation and generating the interpretation) of interpretation and work to integrate component skills to perform an interactive interpretation.

Prerequisites: DCS 210, DCS 216 and DCS 217 with grades of "C" or better and Reading Proficiency.

DCS 215. Interpreter Seminar. 2 Credit Hours.

This course is designed to provide increased interactive opportunities for students to continue the development of their knowledge of the interpreting process. Instructional approaches include discussion, expansion, and explanation of interpreting and transliterating. In addition, the course focuses on cross cultural mediation and discourse analysis.

Prerequisites: DCS 206 and DCS 207 with grades of "C" or better and Reading Proficiency.

DCS 216. Educational Interpreting - Classroom Applications. 3 Credit Hours.

This course is designed to focus on the principles of interpreting within the framework of an educational system. Procedures and strategies for effective communication in the educational setting are discussed. The role of the educational interpreter to facilitate communication between Deaf individuals and their peers, educational instructors, staff and students is stressed. Also emphasized is the interpreter as a member of the educational team.

Prerequisites: DCS 206 and DCS 207 with grades of "C" or better and Reading Proficiency.

DCS 217. Translation Applications of ASL. 3 Credit Hours.

This is a skill development course based on English written text analysis and American Sign Language equivalent meaning and appropriate interpretation with conceptual accuracy. Students will engage in the analysis, discussion and translation of ASL and/or English texts from one language into the other. Student demonstration of translations will be used to discuss meaning of message and degrees of equivalency. The discourse style of American English and Sign Language usage will be analyzed to distinguish the patterns of low and high context usage, linguistic structure and cultural differences.

Prerequisites: DCS 216 with a grade of "C" or better or concurrent enrollment in DCS 216 and Reading Proficiency.

DCS 218. Pre-Workplace Learning. 3 Credit Hours.

This course will prepare students to enter the workplace learning experience. Topics will include professional organizations, certification, contextual factors, market analysis, time management, business management, consumer attitudes and minority accommodations.

Prerequisites: DCS 206 and DCS 207 with grades of "C" or better and Reading Proficiency.

DCS 219. Workplace Learning: Deaf Communication Studies. 3 Credit Hours.

This experiential course provides the student the opportunity to apply theory and skills learned in the classroom, learn new skills, and explore career possibilities while supervised by a professional in the field and a faculty member. Students will observe and participate in the functions of interpreting to enhance their preparation for entering the field. Minimum of 150 hours in the workplace throughout the term.

Prerequisites: DCS 206, DCS 207, DCS 218 with grades of "C" or better and Reading Proficiency.

Dental Assisting (DA)

DA 143. Chairside Assisting: Operative Dentistry. 2 Credit Hours.

This course provides the basic principles and theory of common restorative dental procedures. Emphasis is placed on instrumentation and materials preparation and use, and the assistant's role in chairside restorative procedures.

Corequisite: DA 164.

Prerequisites: DA 144 and DA 151, current enrollment in Dental Assisting program and Reading Proficiency.

DA 144. Preclinical Practice. 1 Credit Hour.

This preclinical course gives the student an opportunity to apply knowledge and practice basic dental assisting skills and clinical support functions in the laboratory setting. Additional lab hours required.

Corequisites: DA 149, DA 150, DA 151 and DA 159.

Prerequisites: Current enrollment in the Dental Assisting program and Reading Proficiency.

DA 149. Dental Terminology. 1 Credit Hour.

An introduction to the structure and function of teeth and oral cavity components. Additional topics include dental charting and restorative terms.

Prerequisites: Current enrollment in Dental Assisting program and Reading Proficiency.

DA 150. Infection Control in Dentistry. 1 Credit Hour.

This course will cover the process of disease transmission, methods and agents for sterilization and disinfection, universal precautions, and means of protection for the dental team and patient.

Corequisite: DA 144.

Prerequisites: Current enrollment in Dental Assisting program and Reading Proficiency.

DA 151. Fundamentals of Chairside Assisting. 2 Credit Hours.

This course introduces the student to patient and treatment room preparation, data collection, four-handed dentistry techniques common to all dental procedures, and recognition and management of medical emergencies.

Corequisite: DA 144.

Prerequisites: Current enrollment in Dental Assisting program and Reading Proficiency.

DA 157. Dental Radiology. 2 Credit Hours.

This course will cover radiation production, safety and protection, exposure and processing procedures, and quality assessment of radiographs. Lab emphasis placed on developing proficiency in intraoral exposure techniques. Additional lab hours required.

Corequisite: DA 164.

Prerequisites: Current enrollment in Dental Assisting program and Reading Proficiency.

DA 159. Dental Office Procedures. 1 Credit Hour.

An introduction to procedures associated with the business aspects of the dental office that include scheduling appointments, telephone and written correspondence, and records management.

Corequisite: DA 144.

Prerequisites: Current enrollment in the Dental Assisting program and Reading Proficiency.

DA 161. Dental Assisting Practicum. 2 Credit Hours.

This course introduces the student to the dental office and provides an opportunity for the application of basic dental assisting skills and clinical support functions. Additional hours required.

Prerequisites: DA 144, DA 164, and current enrollment in the Dental Assisting program and Reading Proficiency.

DA 162. Dental Systems Management. 1 Credit Hour.

An introduction to the use and application of dental office computer software for data entry and records management. The student will learn how to use dental software and will explore its utilization potential in the modern dental office.

Prerequisites: DA 159 and current enrollment in the Dental Assisting program and Reading Proficiency.

DA 164. Clinical Applications I. 2 Credit Hours.

Theoretical knowledge is applied in the clinical lab setting. Emphasis is on developing skill in assisting with restorative procedures and manipulating dental materials. Additional lab hours required.

Corequisites: DA 143, DA 157 and DA 165.

Prerequisites: DA 144, current enrollment in Dental Assisting program and Reading Proficiency.

DA 165. Dental Materials. 1 Credit Hour.

This course presents the basic physical properties and technical aspects of materials used in restorative and laboratory procedures with emphasis on restorative materials, dental cements, gypsum products, and impression materials.

Prerequisites: Current enrollment in the Dental Assisting program and Reading Proficiency.

DA 166. Dental Lab Procedures. 1 Credit Hour.

This course is a continued study of dental materials, focusing on those materials used in the fabrication of appliances and prostheses. Lab sessions give the student an opportunity to develop skill in manipulation of material and use of lab equipment. Additional lab hours required.

Corequisite: DA 174.

Prerequisites: DA 164, DA 165, current enrollment in the Dental Assisting program and Reading Proficiency.

DA 167. Dental Radiology II. 1 Credit Hour.

A study of the principles of extraoral radiography, variations in intraoral radiographic procedures, physical properties and biological effects of radiation, and the appearance of normal anatomical structures and pathological conditions.

Corequisite: DA 174.

Prerequisites: DA 157, current enrollment in the Dental Assisting program and Reading Proficiency.

DA 168. Integrated Dental Sciences. 2 Credit Hours.

A study of basic anatomy and physiology with emphasis on structures of the head, neck, and oral cavity. Dental anatomy, oral embryology and histology, oral pathology, and pharmacology are also covered in this course.

Prerequisites: DA 149, current enrollment in the Dental Assisting program and Reading Proficiency.

DA 169. Preventive Dental Health. 2 Credit Hours.

A study of the principles of preventive dentistry in terms of oral health maintenance and nutrition. This course emphasizes the dental assistant's role in dental health teaching, patient motivation, and preventive intraoral procedures.

Corequisite: DA 174.

Prerequisites: Current enrollment in the Dental Assisting program and Reading Proficiency.

DA 172. Dental Practice Management. 1 Credit Hour.

A study of principles and procedures related to the daily operation and management of the dental office. Additional topics include resume preparation and interviewing skills, discussion of legal and ethical issues, and interpersonal work relations.

Prerequisites: DA 159, DA 162, current enrollment in the Dental Assisting program and Reading Proficiency.

DA 173. Chairside Assisting: Dental Specialties. 2 Credit Hours.

This course covers the scope and function of the dental specialties, as well as terminology, instrumentation, and treatment procedures unique to each specialty. Emphasis is placed on the assistant's role in chairside procedures and patient teaching.

Corequisite: DA 174.

Prerequisites: DA 151, DA 161, current enrollment in the Dental Assisting program and Reading Proficiency.

DA 174. Clinical Applications II. 2 Credit Hours.

The student continues to assimilate and apply theoretical knowledge through practice and demonstration of proficiency in the clinical lab setting. Emphasis on dental specialty procedures, dental health education, dental lab procedures, and special radiographic techniques.

Corequisites: DA 166, DA 167, DA 168, DA 169, DA 172 and DA 173.

Prerequisites: DA 161, DA 164, current enrollment in the Dental Assisting program and Reading Proficiency.

DA 175. Dental Assisting Practicum II. 2 Credit Hours.

A continuation of practical experience in the general or specialty dental office. The student will acquire new skills and increase proficiency in four handed dentistry techniques, lab procedures, and clinical support functions. Additional hours required.

Corequisite: DA 174.

Prerequisites: DA 161, current enrollment in Dental Assisting program and Reading Proficiency.

DA 176. Dental Assisting Practicum III. 2 Credit Hours.

The student will assume the role and responsibilities of the dental assistant as an integral member of the dental team during this final phase of clinical experience. Emphasis is placed on the application of theoretical knowledge and practical skills in performing advanced dental assisting procedures and clinical support functions. Additional hours required.

Corequisite: DA 174.

Prerequisites: DA 161, DA 175, current enrollment in Dental Assisting program and Reading Proficiency.

DA 201. Expanded Functions I. 1 Credit Hour.

Techniques and concepts of restorative and preventive expanded function procedures delegated to dental assistants in the state of Missouri as specified in the rules and regulations set forth in the Missouri Dental Practice Act. Procedures include placing restorations and dressings, sizing stainless steel crowns, and use of the air polisher. Additional lab hours required.

Prerequisites: Current enrollment in the Dental Assisting program or department approval and Reading Proficiency.

DA 202. Expanded Functions II. 1 Credit Hour.

Techniques and concepts of prosthodontic expanded function procedure delegated to dental assistants in the state of Missouri as specified in the rules and regulations set forth in the Missouri Dental Practice Act. Procedures include placing retraction cord, making impressions for fixed and removable prostheses, extra-oral adjustment of prostheses, cementation of permanent appliances or prostheses, and placement of temporary soft liners. Additional lab hours required.

Prerequisites: Current enrollment in the Dental Assisting program or department approval and Reading Proficiency.

DA 203. Expanded Functions III. 1 Credit Hour.

Techniques and concepts of orthodontic expanded function procedures delegated to dental assistants in the state of Missouri as specified in the rules and regulations set forth in the Missouri Dental Practice Act. Procedures include preliminary bending of archwires, placement and cementation of bands and brackets, removal of orthodontic bands and brackets, palliative care of orthodontic emergencies. Additional lab hours required.

Prerequisites: Current enrollment in the Dental Assisting program or department approval and Reading Proficiency.

Dental Hygiene (DHY)

DHY 120. Concepts of Pre-Clinical Dental Hygiene I. 3 Credit Hours.

Development of basic foundations for competent delivery of preventive, therapeutic and educational dental hygiene services to the public. Establish a solid knowledge base for assessment, planning, implementation and evaluation of patient care. Theory and practical aspects of prevention of disease transmission and pre-treatment patient evaluation are emphasized. Basic instrumentation design and technique for use are covered in depth. Additional lab hours required.

Prerequisites: Current enrollment in the Dental Hygiene program, CPR health care provider level and Reading Proficiency.

DHY 121. Clinical Applications Lab I. 1 Credit Hour.

Application of introductory clinical assessment techniques. Theory and application of pit and fissure sealants. Proper positioning for the patient, operator, and dental unit for rendering effective patient treatment. Additional lab hours required.

Prerequisites: Current enrollment in the Dental Hygiene program, CPR health care provider level and Reading Proficiency.

DHY 125. Periodontics I. 2 Credit Hours.

A study of the healthy periodontium and an introduction to gingival conditions and diseases. Acquired soft and hard deposits as well as the microbiology of periodontal diseases are covered in depth. Methods of basic oral physiotherapy are introduced.

Prerequisites: Current enrollment in the Dental Hygiene program and Reading Proficiency.

DHY 126. Dental Radiology I. 2 Credit Hours.

A study of the production and effects of radiation. Emphasis is given to the effects of variations in exposure control factors, personnel and patient safety measures, and dental radiographic film and film processing. Anatomical landmarks, and their radiographic presentation are introduced. Techniques for placing, positioning, exposing, processing and mounting intraoral radiographs are covered in depth. Additional lab hours required.

Prerequisites: Current enrollment in the Dental Hygiene program and Reading Proficiency.

DHY 127. Oral Anatomy. 3 Credit Hours.

Introductory study of the teeth, as well as intraoral and perioral structures. Anatomical features of the teeth and oral cavity are covered in depth. Processes and techniques for constructing dental chartings and dentition findings documentations are detailed. The dental caries process is introduced. Rationales and techniques for the use of pit and fissure sealants, as a supportive primary preventive procedure, are presented. Prerequisites: Current enrollment in the Dental Hygiene program and Reading Proficiency.

DHY 128. Biomedical Sciences for the Dental Hygienist. 2 Credit Hours.

This course is designed to acquaint the dental hygiene student with the basic concepts of pathophysiology. It will deal with selected conditions of the cardiovascular, respiratory, immune, nervous and endocrine systems. Emphasis is on the relationship between these conditions and potential actions and treatment modifications in the dental health care setting. Prerequisites: Current enrollment in the Dental Hygiene program, BIO 207, BIO 208, CHM 101 and Reading Proficiency.

DHY 129. Dental-Medical Emergencies. 1 Credit Hour.

Survey of defects/medical problems that have dental management implications and/or possible medical emergency sequelae. Prompt, accurate and ethical emergency prevention, preparation and management techniques are detailed with related legal implications. One lecture hour per week. Prerequisites: Current enrollment in the Dental Hygiene program and Reading Proficiency.

DHY 130. Concepts of Clinical Dental Hygiene II. 3 Credit Hours.

Techniques for the assessment of medical status and dental conditions as a basis for the dental hygiene diagnosis, and learning theory as a basis for patient education, are covered. Fluoride, as an individual and a community primary preventive measure, is emphasized. Extrinsic stain removal principles are included. Prerequisites: Current enrollment in the Dental Hygiene program, CPR health care provider level, DHY 120, DHY 121 and Reading Proficiency.

DHY 131. Clinical Applications Lab II. 1 Credit Hour.

Application of clinical assessment techniques and caries prevention agents, and instrument care and maintenance. Theory and application of periodontal probe instrumentation, and prostheses and appliances care and maintenance. Additional lab hours required. DHY 120, DHY 121 and Reading Proficiency. Prerequisites: Current enrollment in the Dental Hygiene program, CPR health care provider level.

DHY 132. Clinical Dental Hygiene II. 4 Credit Hours.

Patient contact is established and coordinates with application of the theories, principles, and responsibilities related to dental hygiene practice at the student's current level of knowledge. Additional lab hours required. Prerequisites: Current enrollment in the Dental Hygiene program, CPR health care provider level, DHY 120, DHY 121 and Reading Proficiency.

DHY 136. Dental Nutrition and Biochemistry. 3 Credit Hours.

This course is designed to acquaint the student with the concepts of biochemistry and cell metabolism, especially those which are required for a clear understanding of nutrition. Major topics of the course include energy balance and the chemistry, digestion, and metabolism of proteins, carbohydrates and fats. Emphasis is on the importance and function of nutrients for health and disease prevention and the relation of nutrition and oral health. Prerequisites: Current enrollment in the Dental Hygiene program, BIO 207, BIO 208, CHM 101 and Reading Proficiency.

DHY 137. Anatomy and Embryology of the Head and Neck. 2 Credit Hours.

This course covers the gross morphology and embryology of the structures of the head and neck. Lectures in embryology emphasize development of the face and oral structures. Lectures on gross morphology emphasize the cranial nerves (especially the trigeminal and facial), the muscles of mastication and facial expression, and the blood and lymphatic vessels of the head and neck. Prerequisites: Current enrollment in the Dental Hygiene program, BIO 207, BIO 208 and Reading Proficiency.

DHY 138. General and Oral Pathology. 2 Credit Hours.

An introduction to general pathology with emphasis on oral pathosis. Oral diseases and oral manifestations of systemic diseases are studied in depth. Prerequisites: Current enrollment in the Dental Hygiene program, DHY 127 and Reading Proficiency.

DHY 142. Clinical Dental Hygiene Summer. 2 Credit Hours.

Students continue to apply the learned theories, principles and responsibilities related to the field of dental hygiene practice in the dental hygiene clinic. Additional lab hours required. DHY 132, DHY 130, DHY 131 and Reading Proficiency. Prerequisites: Current enrollment in the Dental Hygiene program, CPR health care provider level.

DHY 172. Clinical Dental Hygiene: Summer Clinic. 2 Credit Hours.

In Clinical Dental Hygiene: Summer Clinic, students continue to apply the learned theories, principles, procedures, instrumentation and responsibilities related to the field of dental hygiene practice in the dental hygiene clinic. Prerequisites: DHY 273, Current CPR-Basic Life Support with AED Certification and Reading Proficiency.

DHY 215. Pain Control. 2 Credit Hours.

Theory and clinical applications of pain control interventions appropriate for use within the context of dental hygiene care delivery. The psychology, physiology, and pharmacology of pain control are covered, with emphasis on the prevention, recognition and management of adverse reactions. Interventions within the legal scope of dental hygiene practice in Missouri are the focus of this course. Additional lab hours required. Prerequisites: Current enrollment in the Dental Hygiene program, CPR health care provider level, DHY 137 and Reading Proficiency.

DHY 220. Concepts of Clinical Dental Hygiene III. 2 Credit Hours.

Introduction of additional clinical dental hygiene procedures including advanced periodontal instrumentation and skills to further develop the assessment and implementation of the dental hygiene diagnosis and treatment plan. Theories and principles for the use of power scalers, air polishers, pulp vitality testers, cast and models, tooth bleaching, and tray fabrication and use of the intraoral camera are covered. Research assignments for review of the current literature will continue. Prerequisites: Current enrollment in the Dental Hygiene program, DHY 142, DHY 215, ENG 101 and Reading Proficiency.

DHY 221. Clinical Applications Lab III. 1 Credit Hour.

Application of clinical dental hygiene concepts learned in Clinical Dental Hygiene III. Additional lab hours required. Prerequisites: Current enrollment in the Dental Hygiene program, CPR health care provider level, DHY 142, DHY 215 and Reading Proficiency.

DHY 222. Clinical Dental Hygiene III. 4 Credit Hours.

Students continue to apply the learned theories, principles and responsibilities related to the field of dental hygiene practice in the dental hygiene clinic and at community dental health facilities. Additional dental hygiene modalities will be implemented into patient treatment care. Additional lab hours required. Prerequisites: Current enrollment in the Dental Hygiene program, CPR health care provider level, DHY 142, DHY 215, COM 101 and Reading Proficiency.

DHY 223. Community Public Health. 2 Credit Hours.

This course is designed to provide a study of the history, economics, and management of the public health organization, its delivery, and supportive services. Included are the assessment and control of dental disease through dental personnel roles in schools, industry, civic, and public organizations. Emphasis is placed on examinations of the principles of public health, epidemiological methods of investigation, the US health care system, basic concepts in research and biostatistics and community based program planning. Introduction to techniques for evaluating dental/dental hygiene literature is established.

Prerequisites: Current enrollment in the Dental Hygiene program, ENG 101, COM 101 and Reading Proficiency.

DHY 225. Periodontics II. 2 Credit Hours.

Advanced study of the periodontium in disease. Periodontitis, and its various presentations, is covered in depth, with emphasis on assessment methods and dental hygiene interventions. Basic surgical concepts are introduced.

Prerequisites: Current enrollment in the Dental Hygiene program, DHY 125, DHY 138, BIO 203, ENG 101 and Reading Proficiency

DHY 226. Dental Radiology II. 1 Credit Hour.

Advanced study of supplemental dental radiographic techniques and procedures used in contemporary dental practices and facilities. Emphasis is given to extraoral and digital radiography techniques. Supplemental procedures for edentulous and pediatric dental patients are presented. Additional lab hours required.

Prerequisites: Current enrollment in the Dental Hygiene program, DHY 126 and Reading Proficiency.

DHY 228. Dental Pharmacology. 2 Credit Hours.

A study of pharmaceutical classifications, properties and effects. Emphasis is given to the systemic effects of drugs and their dental implications in the management of various medical conditions.

Prerequisites: Current enrollment in the Dental Hygiene program, BIO 203 and Reading Proficiency.

DHY 230. Transition into Professional Dental Hygiene Practice. 2 Credit Hours.

Dental hygiene care for cancer patients, dental implants and suspected cases of child abuse are introduced. The health care provider-patient legal relationship and state rules and regulations for the practice of dentistry and dental hygiene are emphasized. Employment-seeking skills are covered. This course includes a community service practicum learning component. Additional hours required.

Prerequisites: Current enrollment in the Dental Hygiene program, DHY 220, DHY 221, DHY 222, DHY 223 and Reading Proficiency.

DHY 232. Clinical Dental Hygiene IV. 4 Credit Hours.

Patient care continues and coordinates with the application of the theories, principles, and responsibilities related to dental hygiene practice in the dental clinic and at off-campus community rotation sites. Students will also complete a community service practicum field experience as a component of this course. Additional lab hours required.

Prerequisites: Current enrollment in the Dental Hygiene program, CPR health care provider level, DHY 220, DHY 221, DHY 222 and Reading Proficiency.

DHY 290. Dental Hygiene Skills Review. 1 Credit Hour.

Dental Hygiene Skills Review is an independent study course that is offered to make available review/remediation of dental hygiene skills for currently enrolled Dental Hygiene students and/or students re-entering the Dental Hygiene Program. It is contracted on an as needed basis only.

Prerequisites: Current enrollment in the Dental Hygiene program and Reading Proficiency.

Diagnostic Medical Sonography (DMS)

DMS 103. Ultrasound Physics and Instrumentation I. 2 Credit Hours.

Topics covered in this course include basic physical principles of ultrasound, Doppler principles and ultrasound equipment controls. Emphasis will be placed on control manipulation and parameters required for optimum sonographic examinations.

Prerequisites: Current enrollment in the Diagnostic Medical Sonography program or permission of the program director and Reading Proficiency.

DMS 104. Ultrasound Physics and Instrumentation II. 2 Credit Hours.

Ultrasound Physics and Instrumentation II addresses transducer parameters, principles of ultrasound instruments and modes of operation, principles of Doppler techniques, methods of Doppler flow analysis and acoustical artifacts.

Prerequisites: DMS 103 or permission of the program director and Reading Proficiency.

DMS 105. Medical Sonography I. 3 Credit Hours.

This course will present normal sectional anatomy and patterns for the most common examinations within abdominal and OB/GYN sonography. An introduction to clinical applications will include the pathophysiologic basis, clinical signs and symptoms and typical sonographic patterns related to the most common abnormalities encountered in the clinical environment.

Prerequisites: Current enrollment in the Medical Sonography learning concentration, Diagnostic Medical Sonography program or permission of the program director and Reading Proficiency.

DMS 106. Medical Sonography Scanning Techniques I. 2 Credit Hours.

Medical Sonography Scanning Techniques I addresses laboratory demonstrations and student performance of standard protocols for the most common abdominal, obstetric and gynecologic sonographic examinations, with emphasis on normal anatomy and pattern recognition. Additional lab hours required.

Prerequisites: Current enrollment in the Medical Sonography learning concentration or permission of the program director and Reading Proficiency.

DMS 107. Medical Sonography Practicum I. 2 Credit Hours.

Observation and initial scanning experience of abdominal, obstetrical and gynecologic sonographic examinations. Additional hours required.

Prerequisites: Current enrollment in the Medical Diagnostic Sonography learning concentration or permission of the program director and Reading Proficiency.

DMS 108. Medical Sonography II. 3 Credit Hours.

Further study of the clinical applications of abdominal, obstetric and gynecologic sonography. Lecture topics include the pathologic basis, clinical signs and symptoms, related diagnostic procedures and typical sonographic patterns of common and rare conditions and abnormalities encountered in the clinical setting.

Prerequisites: DMS 105 or permission of the program director and Reading Proficiency.

DMS 109. Medical Sonography Scanning Techniques II. 1 Credit Hour.

Laboratory demonstration and student performance of standard protocols for superficial structures and less common procedures within abdominal and OB/GYN sonography, with emphasis on normal anatomy and pattern recognition. Additional lab hours required.

Prerequisites: DMS 106 or permission of the program director and Reading Proficiency.

DMS 110. Medical Sonography Clinical Applications. 2 Credit Hours.

Medical Sonography Clinical Applications incorporates a review of abnormal abdominal sonographic examinations in order to further develop the critical thinking skills required to correlate the clinical history, clinical signs and symptoms and results of other diagnostic tests with the results of the sonographic examination.

Prerequisites: DMS 105 or permission of the program director and Reading Proficiency.

DMS 111. Medical Sonography Practicum II. 3 Credit Hours.

Clinical performance of abdominal, obstetric and gynecologic sonographic examinations under the supervision of experienced sonographers. Additional hours required.

Prerequisites: DMS 107 or permission of the program director and Reading Proficiency.

DMS 112. Cardiac Sonography I. 3 Credit Hours.

This course will present normal sectional anatomy, hemodynamics, patient assessment and diagnostic testing related to cardiac sonography. An introduction to clinical applications will include the pathophysiologic basis, clinical signs and symptoms and typical findings related to the most common types of adult cardiac disease.

Prerequisites: Current enrollment in the Cardiac learning concentration, Diagnostic Medical Sonography program or permission of the program director and Reading Proficiency.

DMS 113. Cardiac Sonography Scanning Techniques I. 2 Credit Hours.

Cardiac Sonography Scanning Techniques I addresses laboratory demonstrations and student performance of standard protocols for transthoracic adult cardiac sonographic examinations, with emphasis on normal 2-D, M-Mode and Doppler pattern recognition. Additional lab hours required.

Prerequisites: Current enrollment in the Cardiac learning concentration or permission of the program director and Reading Proficiency.

DMS 114. Cardiac Sonography Practicum I. 2 Credit Hours.

Observation and initial scanning experience of transthoracic adult cardiac sonographic examinations. Additional hours required.

Prerequisites: Current enrollment in the Cardiac Sonography learning concentration, Diagnostic Medical Sonography Program or permission of the program director and Reading Proficiency.

DMS 115. Cardiac Sonography II. 3 Credit Hours.

Presentation of the clinical applications of cardiac sonography including the pathophysiologic basis, clinical signs and symptoms and typical findings related to acquired and congenital adult cardiac disease.

Prerequisites: DMS 112 or permission of the program director and Reading Proficiency.

DMS 116. Cardiac Sonography Scanning Techniques II. 1 Credit Hour.

Laboratory demonstration and performance of pulsed and continuous wave Doppler examinations and less common protocols in cardiac sonography including stress echo and the use of contrast agents. Additional lab hours required.

Prerequisites: DMS 113 or permission of the program director and Reading Proficiency.

DMS 117. Cardiac Sonography Clinical Applications. 2 Credit Hours.

Cardiac Sonography Clinical Applications incorporates a review of abnormal cardiac sonographic examinations in order to further develop the critical thinking skills required to correlate the clinical history, clinical signs and symptoms and results of other diagnostic tests with the results of the sonographic examination. Prerequisites: DMS 112 or permission of the program director and Reading Proficiency

DMS 118. Cardiac Sonography Practicum II. 3 Credit Hours.

Clinical performance of transthoracic adult cardiac sonographic examinations under the supervision of experienced sonographers. Additional hours required. Prerequisites: DMS 114 or permission of the program director and Reading Proficiency.

DMS 126. Introduction to Vascular Sonography. 3 Credit Hours.

Introduction to Vascular Sonography addresses normal sectional anatomy, hemodynamics, patient assessment and diagnostic testing related to Vascular Technology. An introduction to clinical applications will include the pathophysiologic basis, clinical signs and symptoms and typical findings related to the most common vascular examinations.

Prerequisites: Current enrollment in the Cardiac learning concentration, Diagnostic Medical Sonography program or permission of the program director, and Reading Proficiency.

DMS 127. Introduction to Sonography. 3 Credit Hours.

Introduction to Sonography will include general pathology and pathophysiology, ultrasound terminology, clinical laboratory tests and diagnostic procedures, patient interview and examination techniques, chart and referral evaluation and embryology. In addition, the course will cover topics including psychological support, professional interaction skills, multicultural diversity, professional codes of conduct and scopes of practice, pertinent legal principles, administrative procedures and trends in healthcare systems.

Prerequisites: Current enrollment in the Cardiac learning concentration, Diagnostic Medical Sonography program or permission of the program director and Reading Proficiency.

DMS 128. Introduction to Vascular Sonography Scanning Techniques. 1 Credit Hour.

Introduction to Vascular Sonography Scanning Techniques addresses laboratory demonstrations and student performance of standard vascular protocols for the most common venous and arterial examinations, with emphasis on recognition of normal gray scale and Doppler patterns.

Prerequisites: Current enrollment in the Cardiac learning concentration, Diagnostic Medical Sonography program or permission of the program director and Reading Proficiency.

DMS 201. Ultrasound Physics and Instrumentation III. 2 Credit Hours.

Ultrasound Physics and Instrumentation III addresses quality assurance procedures, biological effects, 3-D ultrasound applications and a general review in preparation for the certification examinations in physics and instrumentation.

Prerequisites: DMS 104 or permission of the program director and Reading Proficiency.

DMS 202. Medical Sonography III. 2 Credit Hours.

A study of the clinical applications of superficial structures, including the pathophysiologic basis, clinical signs and symptoms, related diagnostic tests and typical sonographic patterns of common and rare conditions encountered in the clinical setting. Additional hours required.

Prerequisites: DMS 108 or permission of the program director and Reading Proficiency.

DMS 203. Medical Sonography Practicum III. 4 Credit Hours.

A continuation of clinical experience achievement of minimal competency in the most common examinations. Additional hours required.

Prerequisites: DMS 111 or permission of the program director and Reading Proficiency.

DMS 204. Medical Sonography IV. 4 Credit Hours.

This course will present normal sectional anatomy and patterns, and the clinical applications for neonatal neurosonography and the pediatric abdomen and pelvis. The remainder of the course will consist of review in preparation for the certification examinations in Abdomen and OB/GYN sonography.

Prerequisites: DMS 202 or permission of the program director and Reading Proficiency.

DMS 206. Medical Sonography Practicum IV. 3 Credit Hours.

Students will complete all clinical competency requirements for the specialties of abdomen, OB/GYN and superficial structures. Additional hours required.

Prerequisites: DMS 203 or permission of the program director and Reading Proficiency.

DMS 207. Cardiac Sonography III. 2 Credit Hours.

Further study of the clinical applications of cardiac sonography including pediatric applications and other advanced and/or rare imaging techniques. Additional hours required.

Prerequisites: DMS 115 or permission of the program director and Reading Proficiency.

DMS 208. Cardiac Sonography Practicum III. 4 Credit Hours.

A continuation of clinical experience with achievement of minimal competency in the most common types of examinations. Additional hours required.

Prerequisites: DMS 118 or permission of the program director and Reading Proficiency.

DMS 209. Cardiac Sonography IV. 4 Credit Hours.

Further study of the clinical applications of cardiac sonography, including fetal echocardiography. The remainder of the course will consist of review in preparation for the certification examination in cardiac sonography.

Prerequisites: DMS 207 or permission of the program director and Reading Proficiency.

DMS 211. Cardiac Sonography Practicum IV. 3 Credit Hours.

Students will complete all clinical competency requirements for adult cardiac sonography. Additional hours required.

Prerequisites: DMS 208 or permission of the program director and Reading Proficiency.

Diesel Technology (DIE)

DIE 100. Introduction to Diesel Technology. 3 Credit Hours.

Introduction to Diesel Technology will introduce the student to current shop and personal safety, tools and equipment, chemicals and adhesives, and repair / information systems used in the industry. Emphasis will be on computer-based service information systems, identification and proper use of tools and equipment used in the industry, training for safety and pollution, measuring both metric and U.S. systems, identification of fasteners, threads, pitches, sizes and proper applications, and adhesive and chemical usage.

Prerequisites: MTH 020 with a grade of "C" or better or satisfactory score on placement test and Reading Proficiency.

DIE 101. Diesel Engine Operation and Repair. 3 Credit Hours.

This course examines through practical application the theories of operation, construction, maintenance, disassembly, and assembly of the diesel engine and its supporting systems; including lubrication system, cooling system, and engine brakes. Additional lab hours required.

Prerequisite: Reading Proficiency.

DIE 102. Medium/Heavy Truck Suspension and Steering. 3 Credit Hours.

Medium/Heavy Truck Suspension and Steering is the study of the types of suspension and steering systems found on medium and heavy trucks. Emphasis will be in areas of steering gears and columns, power steering systems, suspension system types and components, wheel alignment diagnosis, wheel and tire diagnosis and repair, truck frame types and repair, and trailer connection devices.

Prerequisite: DIE 100 and Reading Proficiency.

DIE 103. Medium/Heavy Truck Electricity. 3 Credit Hours.

Medium/Heavy Truck Electricity examines through practical application the theories of basic electricity and the diagnostic equipment used to perform general electrical system diagnosis of medium and heavy trucks. Subsystems covered include batteries, charging systems, lighting systems, starting systems, and wiring.

Corequisite: DIE 100.

Prerequisite: Reading Proficiency.

DIE 104. Electronic Information Systems and Manuals. 3 Credit Hours.

This course will introduce the student to current repair and information systems for trucks. Emphasis will be on computer based systems and on interpreting specifications in both metric and English systems of measurement.

Prerequisite: Reading Proficiency.

DIE 105. Diesel Fuel Systems. 3 Credit Hours.

Diesel Fuel systems is the study of the theories of operation, construction, maintenance, and service of diesel engine fuel systems including, air induction and exhaust systems, mechanical fuel injection systems, and electronic fuel injection systems.

Prerequisites: DIE 100, DIE 101, DIE 107, and Reading Proficiency.

DIE 106. Medium/Heavy Truck Brakes. 3 Credit Hours.

Medium/Heavy Truck Brakes is the study of the types of brake systems found on medium and heavy trucks. Emphasis will be in areas of air brakes, hydraulic brakes, foundation brakes, parking brakes, anti-lock brakes, and power brakes.

Prerequisite: DIE 100 and Reading Proficiency.

DIE 107. Medium/Heavy Truck Electronics. 3 Credit Hours.

Medium/Heavy Truck Electronics examines through practical application the theories of electronics and diagnostic equipment used to perform general electronic system diagnosis and repair of medium and heavy truck gauge and warning devices, electronic fuel injection, and electrical accessories.

Prerequisites: DIE 103 and Reading Proficiency.

DIE 201. Preventive Maintenance Inspection. 3 Credit Hours.

Preventive Maintenance Inspection examines through practical application the areas of inspection and maintenance on medium and heavy trucks to include engine, fuel system, cooling system, lubrication system, cab and hood, electrical, drive train, brakes, and tires and wheels.

Prerequisite: DIE 100 and Reading Proficiency.

DIE 202. Co-op Work Experience I-Diesel Technology. 3 Credit Hours.

Co-op Work Experience I-Diesel Technology is a cooperative education work experience at a truck or bus repair facility which allows students to apply skills learned in diesel technology courses. Students will also learn new skills and explore employment possibilities while supervised by employer. The course requires a minimum of 150 hours of working.

Corequisite: DIE 205.

Prerequisites: DIE 102, DIE 106, DIE 107, and Reading Proficiency.

DIE 203. Truck Heating, Ventilation and Air Conditioning. 3 Credit Hours.

Truck Heating, Ventilation and Air Conditioning is the study of the types of air conditioning, heating, and ventilation systems found on medium and heavy trucks. Emphasis will be in the areas of system diagnosis, component repair, and refrigerant recovery, recycling, and handling.

Prerequisite: DIE 100 and Reading Proficiency.

DIE 204. Service and Parts Management. 3 Credit Hours.

Service and Parts Management will introduce the student to current management practices of parts and service departments in modern truck repair shops. Shop operations, design, equipment, and safety will also be emphasized. Workplace employability skills will be emphasized.
Prerequisite: Reading Proficiency.

DIE 205. Co-op Work Experience II - Diesel Technology. 3 Credit Hours.

Co-op Work Experience II- Diesel Technology is a cooperative education work experience at a truck or bus repair facility which allows students to apply skills learned in diesel technology courses. Students will also learn new skills and explore employment possibilities while supervised by employer. The course requires a minimum of 150 hours of working.
Corequisite: DIE 202.
Prerequisite: Reading Proficiency.

DIE 206. Medium/Heavy Truck Drivetrains. 3 Credit Hours.

Medium/Heavy Truck Drivetrains examines through practical application the types of manual and automatic transmission drivetrains found on medium and heavy trucks to include the repair of clutches, drive shafts, universal joints, and drive axles.
Prerequisite: DIE 100 and Reading Proficiency.

Dietetic Technology (DIT)

DIT 104. Clinical Nutrition. 3 Credit Hours.

Study of the roles of dietetics professionals in the nutrition care process, focusing on patient interviewing and counseling, conducting nutritional assessments, nutrition support and documentation in medical records. Dietary modifications for calorie and nutrient control, and various disease states, such as diabetes, cancer, cardiovascular disease and AIDS will be studied.
Prerequisites: DIT 115 and Reading Proficiency.

DIT 106. Food Management Practicum. 3 Credit Hours.

This course provides students the opportunity to obtain experience in food service departments of designated food service facilities. Assigned experiences are designed to complement and reinforce the corresponding lecture courses.
Reading Proficiency.
Prerequisites: Student to successfully complete the readiness for practice assessment, including didactic preparation and necessary work-entry paperwork.

DIT 107. Clinical Nutrition Practicum. 3 Credit Hours.

Experience in patient care areas of designated health care facilities. Assigned experiences are designed to complement and reinforce the knowledge gained in the corresponding lecture courses. Additional hours required.
Prerequisites: Prior or concurrent enrollment in DIT 104, permission of the program coordinator and Reading Proficiency.

DIT 108. Food: Preparation and Science Lecture. 3 Credit Hours.

This course explores the basic principles of food science, preparation and selection. Recognition and evaluation of standard products, function of ingredients, and the link of food service to nutrition and health will be emphasized. Discussions and demonstrations will focus on the nutrient content of food and principles of food science and preparation for nutrient retention and quality.
Prerequisite: Reading Proficiency.

DIT 109. Food: Preparation and Science Lab. 2 Credit Hours.

Food science principles will be reinforced and applied in lab experiments and recipe production. The scientific method will be used in the exploration of food science and food preparation methods. Experiments and preparation will focus on nutrient retention and high quality products. Material from Food Preparation/Science Lecture course will be reinforced. Additional lab hours required.
Prerequisite: Reading Proficiency.

DIT 115. Principles of Nutrition. 3 Credit Hours.

This is an introductory nutrition class that relates to individual and family health. Topics include the functions and sources of food nutrients, how the body handles foods through digestion, absorption and metabolism, and planning health diets for a variety of people. Appropriate methods of weight control, sports nutrition, and eating disorders will be covered, as well as an overview of nutrition throughout the life cycle, food safety, and ethnic influences on the American diet.
Prerequisite: Reading Proficiency.

DIT 202. Medical Nutrition Therapy. 3 Credit Hours.

Study of the pathophysiology of selected disease states, the evaluation of nutrition status and appropriate nutrition intervention during various disease processes. Emphasizes the application of clinical nutrition skills, including counseling clients, interpretation of laboratory values, taking vital signs and documentation in the medical record.
Prerequisites: DIT 104 and Reading Proficiency.

DIT 207. Quantity Foods. 3 Credit Hours.

Students will apply food preparation and management skills to a quantity food production system. Food preparation, sensory evaluation, menu planning, recipe development and expansion, food production and procurement, personnel management, sanitation, quality improvement, equipment, food cost calculation/control, and marketing techniques are emphasized. Facility design and financial management are discussed. Additional lab hours required.
Prerequisites: DIT 103 and Reading Proficiency.

DIT 209. Community Nutrition Practicum. 4 Credit Hours.

Advanced nutrition practicum, with emphasis on staff performance. Students will function as staff members in patient care or community education settings. Additional hours required.
Prerequisites: DIT 107, DIT 210 (may be taken concurrently), permission of program coordinator and Reading Proficiency.

DIT 210. Community Nutrition. 3 Credit Hours.

Study of the roles and resources of community/public health nutrition professionals promoting wellness in the community. Assessment of community nutritional needs, and planning, implementing and evaluating nutrition education programs for various age groups under different socio-economic conditions. The legislative process, health care insurance industry, and domestic food assistance programs will also be covered.
Prerequisites: DIT 115 or permission of the program coordinator and Reading Proficiency.

DIT 214. Nutrition Through the Life Cycle. 3 Credit Hours.

A study of every stage of the life cycle, normal growth and development, common nutritional deficiencies, and nutrient needs, including the impact of lifestyles, culture, economics and values of nutritional intake. Basic assessment and practical methods of delivering nutrition education are also addressed.
Prerequisites: DIT 115 and Reading Proficiency.

DIT 225. The Cultural Feast: An Introduction to Food and Society. 3 Credit Hours.

This course will examine, through the common ground of food, how cultural influences mold society. A central goal of the course-to broaden students' horizons and to make them aware of their own ethnocentric assumptions - will be accomplished through experiencing different foods and customs and through discussing cultural practices and values.

Prerequisite: Reading Proficiency.

Early Care and Education (ECE)

ECE 101. Introduction to Early Care and Education. 3 Credit Hours.

An overview of early childhood programs and curricula, history, trends, and career opportunities are introduced. Quality characteristics of the environment and the role of the professional are examined. Five clock hours (minimum) of observation of children in various settings is required.

Prerequisite: Reading Proficiency or concurrent enrollment in RDG 030 or ENG 070.

ECE 102. Creative Experiences in Early Care and Education. 3 Credit Hours.

This course introduces the expressive philosophy of creativity. Students explore materials and tools useful in creative expression across the curriculum.

Prerequisite: Reading Proficiency or concurrent enrollment in RDG 030 or ENG 070.

ECE 103. Language and Literacy in Early Care and Education. 3 Credit Hours.

Students examine quality literature appropriate for children from infancy through age eight. Appropriate literacy experiences of reading, writing, and language are practiced. Students also examine methods of presentation and the creation of literature-based settings.

Prerequisite: Reading Proficiency or concurrent enrollment in RDG 030 or ENG 070.

ECE 104. Principles of Early Care and Education. 3 Credit Hours.

This course focuses on the methodology for establishing developmentally appropriate care and education for young children. Topics include, designing appropriate physical environments, play development and facilitation, tailoring curriculum planning toward individual needs and interests of children, and classroom management styles.

Prerequisites: ECE 101 and ECE 125 with grades of "C" or better and Reading Proficiency or concurrent enrollment in RDG 030 or ENG 070.

ECE 105. Child Development Laboratory. 3 Credit Hours.

Students will actively participate in the daily operation of a quality early care and education setting for 6 hours each week, plus additional seminar meetings. A faculty supervisor will guide students through selecting, planning, and organizing curriculum in developmentally appropriate ways. Students will design learning experiences for young children.

Prerequisites: ECE 104 (or concurrent enrollment), ECE 101 and ECE 125 all with minimum grades of "C" and Reading Proficiency or concurrent enrollment in RDG 030 or ENG 070.

ECE 107. Early Care and Special Education. 3 Credit Hours.

Students will be introduced to the field of early care and special education with a focus on intervention and the role of the teacher. The course includes screening, assessment, and working with families. Five clock hours (minimum) of observation and field study is required.

Prerequisite: Reading Proficiency or concurrent enrollment in RDG 030 or ENG 070.

ECE 108. Infant, Toddler and Two-Year-Old Children. 3 Credit Hours.

This course is a study of the development of infants, toddlers, and two-year-olds. It includes current theories of development and a variety of caregiving practices for both the early care practitioner and parent. Students will observe and participate in an infant, toddler, or two-year-old setting a minimum of 10 hours during the semester.

Prerequisite: Reading Proficiency or concurrent enrollment in RDG 030 or ENG 070.

ECE 124. Child Nutrition, Health and Safety. 3 Credit Hours.

This course will focus on health, nutrition and safety issues in early care and education. Topics will include nutrition and nutrition education, menu planning, indoor and outdoor safety, childhood diseases and injuries and appropriate health and hygiene practices for caregivers, as well as for children.

Prerequisite: Reading Proficiency or concurrent enrollment in RDG 030 or ENG 070.

ECE 125. Child Growth and Development I. 3 Credit Hours.

Students will study human development from conception to age eight, including physical and motor, cognitive, language, social and emotional development. There is an emphasis on the interrelationship of growth and behavior in young children. Eight clock hours (minimum) of observation is required.

Prerequisite: Reading Proficiency or concurrent enrollment in RDG 030 or ENG 070.

ECE 127. Family and Teacher Interactions. 3 Credit Hours.

Students will examine strategies and develop skills in effective communication with individual parents and families. Reflections on the contemporary American family, developing partnerships, utilizing community resources, parent education meetings, and home visiting will be included.

Prerequisite: Reading Proficiency or concurrent enrollment in RDG 030 or ENG 070.

ECE 200. Guiding Young Children. 3 Credit Hours.

A practical study of child guidance literature that includes normative development, theory, and strategies for guiding children's behavior at home and in diverse settings. Observation and field study of children from infancy through age eight will be the foundation of this course. A minimum of eight clock hours of observation will be required.

Prerequisite: Reading Proficiency or concurrent enrollment in RDG 030 or ENG 070.

ECE 201. Math and Science in Early Care and Education. 3 Credit Hours.

Students will design and implement developmentally appropriate experiences that enhance math and science concepts for children birth to age eight. Various cognitive theories and stages of development are integrated throughout the course. Topics include implementation strategies, sensory awareness, problem solving, thinking and questioning skills, exploration and discovery learning.

Prerequisite: Reading Proficiency or concurrent enrollment in RDG 030 or ENG 070.

ECE 202. Movement and Music in Early Care and Education. 3 Credit Hours.

The student will explore movement and music as it relates to the development and interests of young children. Students will prepare appropriate experiences in gross motor, fine motor, perceptual motor and auditory perception, targeted toward young children in diverse populations and settings.

Prerequisite: Reading Proficiency or concurrent enrollment in RDG 030 or ENG 070.

ECE 203. Early Care and Education Practicum I. 3 Credit Hours.

The student will continue practice in developmentally appropriate lesson planning, leading individual and group experiences, utilizing observation and reflection techniques, and demonstrating the ability to guide young children in positive ways. The student will participate in an early childhood setting for 9 hours each week, with additional seminar meetings.

Prerequisites: ECE 104 and ECE 105 with minimum grades of "C" and Reading Proficiency or concurrent enrollment in RDG 030 or ENG 070.

ECE 204. Management of Early Care and Education Settings. 3 Credit Hours.

This course focuses on the organizational and managerial structure of various center and home-based settings. Topics include licensing and accreditation standards, spatial design, fiscal responsibilities, employment procedures, staff development, marketing, and the planning and evaluation of center operations.

Prerequisite: Reading Proficiency or concurrent enrollment in RDG 030 or ENG 070.

ECE 205. Child and Society. 3 Credit Hours.

This course is an introduction to the sociology of child development, emphasizing the role of the family, school, and community in the socialization process. The effect of culture and political forces upon the delivery of appropriate early care and education is discussed, as well as available community resources for a diverse society.

Prerequisite: Reading Proficiency or concurrent enrollment in RDG 030 or ENG 070.

ECE 206. Early Care and Education Practicum II. 3 Credit Hours.

The student will demonstrate the ability to execute all teaching and caregiving aspects of the assigned early childhood setting. Planning, implementation, developmentally appropriate guidance methods, as well as professional job searching preparation is included. The student will participate in an early childhood setting for nine hours each week, with additional seminar meetings. Prerequisite: ECE 203 with a minimum grade of "C" and Reading Proficiency or concurrent enrollment in RDG 030 or ENG 070.

ECE 207. Activities for Special Individuals. 3 Credit Hours.

Covers practical techniques for working with exceptional individuals including task analysis and behavior modification. Experience with screening instruments and charting behavior as part of developing and implementing individualized programs will be emphasized.

Prerequisites: ECE 107 and Reading Proficiency or concurrent enrollment in RDG 030 or ENG 070.

ECE 208. Before and After School Care. 3 Credit Hours.

This course focuses upon the development expectations and unique needs of the five through twelve-year-old in before and after school settings and summer programs. Legal issues, community resources, personnel relationships, nutrition and health concerns, communication with families, administrative procedures, and curriculum are discussed.

Prerequisite: Reading Proficiency or concurrent enrollment in RDG 030 or ENG 070.

Economics (ECO)

ECO 140. Introduction to Economics. 3 Credit Hours.

This course is a study of basic economic concepts, institutions, and policies, (both macroeconomic and microeconomic) necessary for a general understanding of the economy. Students who intend to transfer to a business administration program should take the two-course undergraduate sequences in Economics, ECO 151 and ECO 152 instead of ECO 140.

Prerequisites: MTH 030 and Reading Proficiency.

ECO 151. Principles of Macroeconomics. 3 Credit Hours.

This course presents an introductory description and analysis of economics from a national perspective. Included are the basic concepts relating to the demand and supply model, macroeconomic data, trends and fluctuations in macroeconomic variables, simple models of the macroeconomy, fiscal and monetary policy, and economic growth.

Prerequisite: MTH 030 with a minimum grade of "C" and Reading Proficiency.

ECO 152. Principles of Microeconomics. 3 Credit Hours.

This introductory microeconomics course develops tools and models to explore the behavior of individuals and firms. The course develops the demand and supply model to examine outcomes in both output and input markets explores market failures, compares behaviors in competitive and noncompetitive markets, examines the economic concept of cost, and uses comparative advantage to explain both local and international trade. Reading Proficiency.

Prerequisites: MTH 030 with a minimum grade of "C", or higher level math course or placement in higher level math course.

Education (EDU)

EDU 120. Art for Children. 3 Credit Hours.

The course will acquaint the student with art media and methods appropriate for children. The student will develop projects to promote the child's appreciation of art and to integrate art into the total curriculum.

Prerequisite: Reading Proficiency.

EDU 210. Teaching Profession with Field Experience. 3 Credit Hours.

Teaching Profession with Field Experience includes an introductory, minimum 36 hours of school field experience in accredited P-12 classrooms that provide opportunities to observe and contribute to teaching and learning. This course allows preservice teachers to connect firsthand school experience with an emerging professional knowledge base. The course develops professional knowledge of diverse educational settings through observation, instruction, experience, and reflection. This course is designed to assist students in determining if a career in teaching is an appropriate goal. Requirements for teacher preparation and certification are reviewed.

Prerequisites: ENG 101 and Reading Proficiency.

EDU 211. Foundations of Education in a Diverse Society. 3 Credit Hours.

Foundations of Education in a Diverse Society is designed to examine education practice from diverse historical, philosophical, sociological, economic, and legal perspectives. The course will address issues of educational equity, sociocultural influences on teaching and learning, and how teachers and schools can contribute to interpersonal and intercultural understanding and respect, social justice, and democratic citizenship. Students will explore the nature of school environments, the fundamental goals of education in the American public school, English Language Learners, the relationship between school and a diverse society, the organization of school curricula, and characteristics of effective schools and instruction in grades P-12.

Prerequisites: ENG 101 and Reading Proficiency.

EDU 218. Educational Technology. 3 Credit Hours.

Educational Technology students will learn how to integrate instructional technology into P-12 classrooms. Students will study a variety of software programs, presentation technology, telecommunication tools, and assistive technology. The focus will also be on social, ethical, legal, and human issues surrounding the use of technology.

Prerequisites: ENG 101 and Reading Proficiency.

EDU 219. Education of Exceptional Learners. 3 Credit Hours.

Education of Exceptional Learners is an introduction to exceptional learners and their education in grades P-12. Students will gain a comprehensive understanding of the characteristics of people with special needs in addition to strategies of educating and including all learners in general education and special education settings. Students will research and discuss complex issues related to compliance with state and federal education laws, such as the Individuals with Disabilities Educational Act (IDEA) and the Americans with Disabilities Act (ADA) as well learn to navigate special education processes, such as referral, eligibility, re-evaluation, and IEPs. This course requires a 15-hour special education field experience component. Prerequisites: EDU 211 and Reading Proficiency

EDU 226. Children's Literature. 3 Credit Hours.

This course will familiarize students with examples of good children's books, for children from infancy to adolescence. It will also help students develop the ability to evaluate a book, analyze its appeal, and present it effectively. (Same course as ENG 226.)

Prerequisite: Reading Proficiency.

EDU 227. Educational Psychology. 3 Credit Hours.

Educational Psychology is designed to help students relate theories and principles of educational psychology to teaching, learning, and assessment. This course focuses on the diversity of learners and learning processes, as well as teacher characteristics, classroom strategies, and data analysis in P-12 classrooms. Appropriate strategies for increasing motivation, multi-dimensional development, and academic achievement for all learners are introduced.

Prerequisites: EDU 210 and PSY 203, PSY 205 or PSY 214 and Reading Proficiency.

EDU 228. Multicultural Education. 3 Credit Hours.

Multicultural Education is designed to examine the multicultural context of education and prepare students to understand and teach learners from diverse backgrounds, with diverse characteristics, and with differing social identities. The course will address issues of educational equity, sociocultural influences on teaching and learning, and how teachers and schools can contribute to interpersonal and intercultural understanding and respect, social justice, and democratic citizenship.

Prerequisites: ENG101 and Reading Proficiency.

Electrical/Electronic Egr Tech (EE)

EE 106. IBM Personal Computer Installation and Repair. 1 Credit Hour.

This course will help you learn how to install and repair the popular IBM series of personal computers. Connection and setup of monitors, printers, hard disks, and memory will be covered. Some previous electronics or computer experience is recommended but not required.

Prerequisite: Reading Proficiency.

EE 109. Personal Computer Configuration. 1 Credit Hour.

This course is designed to teach the student to configure the IBM-compatible personal computer for optimum performance. Emphasis will be placed on the interaction between peripheral equipment and applications. Prior experience with personal computers and DOS is highly recommended. Additional hours required.

Prerequisites: EE 106 and Reading Proficiency.

EE 110. Technical Electric Circuits I. 4 Credit Hours.

This combination classroom and laboratory course is a study of the basics of electricity and electrical circuits. It includes such fundamentals as static electricity, resistance, Ohm's Law, Kirchoff's Laws, power, series and parallel circuits, voltage dividers, magnetism and electromagnetic induction as well as an introduction to generators. Additional lab hours required.

Prerequisites: Concurrent enrollment in MTH 124 and Reading Proficiency.

EE 112. Technical Electronics I. 5 Credit Hours.

The basic principles of electronics will be introduced in this course. Semiconductor theory with emphasis on diodes and transistors. The diode and bipolar devices will be studied in their applications to rectifiers, small signal amplifiers and power amplifiers. Additional lab hours required.

Prerequisites: Concurrent enrollment in EE 110 and EE 111 and Reading Proficiency.

EE 121. Fundamentals of Digital Electronics. 3 Credit Hours.

This course is an introduction to Digital Electronics. Students will learn basic lab safety, electron theory, Ohm's and Kirchoff's Laws, logic, number systems, binary addition and Boolean Expression applications. Students will design, construct, troubleshoot and evaluate design problems, and will present oral reports of their results. Students will also study PLDs, Flip-Flops, microprocessors, and shift registers and counters.

Prerequisites: GE 121 or department approval.

EE 130. Electric Circuits I. 4 Credit Hours.

This course emphasizes basic DC circuit configurations, components, and calculations. Content continues with introductory AC circuits and calculations, oscilloscope overview, and transformers. Laboratory experiments reinforce topics. Troubleshooting concepts are addressed along with the theory content. Additional lab hours required.

Prerequisites: MTH 140 or equivalent placement test scores or department approval and Reading Proficiency.

EE 131. Electric Circuits II. 4 Credit Hours.

This course emphasizes AC circuit components, configurations, and characteristics. Content includes circuit theorems, AC quantities and calculations, component characteristics, circuit analysis and applications. Hands-on laboratory experiments coincide with classroom topics. Troubleshooting concepts will be continually addressed along with the theory content. Additional lab hours required.

Prerequisites: EE 130, MTH 170 or MTH 185, and Reading Proficiency.

EE 132. Electronic Devices. 5 Credit Hours.

This course introduces theory, characteristics and applications of most of the basic electronic devices used in industry. Basic practical circuits will be presented to reinforce the theory. Additional lab hours required.

Prerequisites: Prior or concurrent enrollment in EE 131 and Reading Proficiency.

EE 204. Three-Phase Power. 4 Credit Hours.

This course includes a study of single-phase and three-phase systems and transformer theory. Practical applications of single-phase and three-phase loads are also covered. The circuit concepts of wye and delta connections will be discussed using the two-wattmeter and three-wattmeter methods of measuring power, emphasizing analysis of circuit concepts.

Prerequisites: EE 131, MTH 170 or MTH 185 or program department approval, and Reading Proficiency.

EE 233. Digital Logic. 4 Credit Hours.

Digital computer fundamentals from the systems and circuit approach and an introduction to the basic theory of analog computers. Additional lab hours required.

Prerequisites: EE 130 or departmental approval and Reading Proficiency.

EE 235. Electronic Communications. 4 Credit Hours.

The fundamental theory and application of communications circuits and devices. The study of radar fundamentals, transmission lines, and electromagnetic interference will be included. Additional lab hours required. Prerequisites: EE 132 and Reading Proficiency.

EE 236. PLC/Programmable Logic Controller. 3 Credit Hours.

This course presents the fundamentals of ladder logic (formerly relay logic) used in modern industrial controllers. Basic elements such as timers, counters, and sequencers are studied, as well as traditional methods of applying them to machine control. Students will program and perform laboratory experiments with programmable logic controllers, using the Allen Bradley SLC 500 family and the Micrologic series, with an introduction to control logic. Additional lab hours required.

Prerequisites: GE 101 or EE 233 or ME 140 or department approval and Reading Proficiency.

EE 242. Introduction to Microprocessors. 3 Credit Hours.

This course will focus on the structure of a microcomputer input/output central processor and control units, memory programming techniques, logic circuits and arithmetic operations. Additional lab hours required.

Prerequisites: EE 130 or department approval and Reading Proficiency.

EE 260. Electronic Project Design and Fabrication. 3 Credit Hours.

This course provides techniques in safety precautions, use of laboratory equipment and component familiarization. Students receive experience in soldering techniques, chassis fabrication such as bending, drilling and punching, wiring, harnessing, and general shop practice. This course also provides the student with specialized training in printed circuit board layout and production procedures. Students are required to select a project which must be assembled on PCB, tested for proper operation, and mounted in an appropriate housing. Students must submit the completed project with documentation of the fabrication procedures for final grade assignment. Additional lab hours required.

Prerequisites: EE 132 or EE 208, EGR 104 and Reading Proficiency.

Emergency Medical Technology (EMT)

EMT 119. EMT Emergency Medical Skills. 1 Credit Hour.

EMT Emergency Medical Skills provides the student with hands-on instruction in the skills necessary to function as an EMT, such as patient assessment, airway maintenance, CPR, and stabilization of injuries. Additional hours required.

Corequisite: EMT121.

Prerequisite: Reading Proficiency.

EMT 121. Emergency Care, Principles, and Techniques. 9 Credit Hours.

Emergency Care, Principles, and Techniques is a course that meets all the current requirements for Missouri State EMT-Basic licensure. It includes the assessment and care of the sick and injured, pediatric and geriatric emergencies, childbirth, defibrillation, lifting and moving of patients, hazardous material situations and the use of adjunctive EMS equipment. Prerequisites: American Heart Association Basic Life Support Provider CPR and Reading Proficiency.

EMT 122. EMT Internship. 6 Credit Hours.

This course is designed to give students hands-on experience with foundational skills and introduce paramedic topics related to medical terminology, paramedic procedures, and situations encountered in ambulance field work. The course includes 100 hours of EMT practicum in an assigned pre-hospital setting. Additional hours required.

Prerequisites: EMT 121 and Reading Proficiency.

Engineering Graphics (EGR)

EGR 050. Fundamentals of Drafting. 3 Credit Hours.

First course in drafting for persons with little or no previous drafting coursework. Practice of using drafting tools, board skills, good line work, lettering, geometric construction, accurate layout of multiview and pictorial drawings and basic dimensioning will be emphasized. Additional lab hours required.

EGR 100. Engineering Drawing. 3 Credit Hours.

This course uses a combination of instruments and CAD systems for making drawings. The course includes use of instruments, lettering, geometrical constructions, technical sketching, principles of orthographic projection, pictorial drawing, descriptive geometry, sectional views and conventions, auxiliary views and dimensioning. Additional lab hours required.

Prerequisites: EGR 050, previous drafting work or department approval and Reading Proficiency.

EGR 104. Electronic Drafting. 2 Credit Hours.

Review of basic drafting with emphasis on technical sketching and lettering. Topics include schematic diagrams, block diagrams, electronic symbols, etched circuit layout, wiring diagrams, mechanical and electronic detail and assembly drawings. Additional lab hours required.

Prerequisite: Reading Proficiency.

EGR 133. Introduction to AutoCAD I. 2 Credit Hours.

Fundamentals of the AutoCAD drafting system. Drawing setup units, limits, layers, linetypes, colors. Drawing procedures points, lines, arcs, circles. Special features polylines, blocks, dimensioning, cross-hatching, plotting.

Prerequisites: EGR 050 and Reading Proficiency.

EGR 141. Introduction to AutoCAD II. 2 Credit Hours.

Continuation of Introduction to AutoCAD 1. DOS for AutoCAD, Blocks, attributes, symbol libraries, bill of material extraction, screen and tablet menus, digitizing drawings, slides and slide shows, introduction to LISP language.

Prerequisites: EGR 133 and Reading Proficiency.

EGR 145. Computer Solids Modeling. 2 Credit Hours.

Students will learn to design and model objects using three dimensional solids modeling computer software. Extrusion, revolution, and sweeping are examples of techniques that will be studied. Students will model individual parts and assemblies of parts. The projection of working drawings and shaded pictorials will also be completed. Additional hours required.

Prerequisite: Reading Proficiency.

EGR 147. Introduction to Engineering Design. 3 Credit Hours.

This course is an introduction to the elements of Engineering Design. Students will learn the history of design, design process, sketching and visualization, geometric relationships, and modeling. Elements of manufacturing production, marketing, analysis, and quality control will also be studied. Students will learn presentation techniques and develop a portfolio.

EGR 148. Solid Modeling with Unigraphics. 2 Credit Hours.

This course teaches the use of 3-D modeling using the Unigraphics CAD package. Students will productively develop solid models, detail drawings and product assemblies. The class introduces assembly modeling in the context of a real-life scenario that includes parts modeled by the student as well as existing part models.

Prerequisite: Reading Proficiency.

EGR 256. Solid Modeling with CATIA. 2 Credit Hours.

This course is designed for students with 3-D modeling experience to learn the use of 3-D solid modeling using the CATIA CAD package. The student will productively develop solid models, detail drawings and product assemblies. Additional hours required.

Prerequisite: Reading Proficiency.

EGR 258. CAD Portfolio Preparation & Review. 1 Credit Hour.

CAD Portfolio Preparation & Review provides students the opportunity to create new projects or enhance CAD projects from other courses to industry entry-level quality. Students are expected to have a proficiency in CAD operation.

Prerequisite: Reading Proficiency.

Engineering Science (ESC)

ESC 100. Engineering Computer Applications and Design. 3 Credit Hours.

This course provides the student with basic skills in the use of Computer Aided Drafting (CAD), word-processing, spreadsheets, and computer math software. Students will be divided into teams to solve an engineering related design problem. They will need to conceptualize and build their project/product, and prepare and present a report. They will utilize the computer and applications software they have learned in the class as a tool in preparation and presentation of their report.

Prerequisites: MTH 140 or higher and Reading Proficiency.

ESC 101. Scientific Computer Programming. 3 Credit Hours.

This course emphasizes instruction in computer programming language to solve engineering problems. Instruction will include such topics as study of digital computer systems, programming techniques, program structure, coding, execution, debugging and verification of programs. Computer laboratory exercises will be conducted to analyze, interpret and synthesize engineering data.

Prerequisites: MTH 160 (A, B or C) or higher and Reading Proficiency.

ESC 200. Engineering Circuits I. 4 Credit Hours.

This is a problem-solving course that develops analytical skills important for all engineering disciplines as well as fundamental circuit theory for electrical engineers. The course covers circuit elements and the fundamental laws governing their behavior, network theorems, and analysis techniques, including transient responses. Circuit simulation using computer models and practical circuit testing are included in the laboratory work. Additional lab hours required.

Prerequisites: PHY 122, concurrent enrollment in MTH 230 and Reading Proficiency.

ESC 201. Engineering Circuits II. 4 Credit Hours.

This is a problem solving course that develops analytical skills important for all engineering disciplines as well as all fundamental circuit theory for electrical engineers. The course covers sinusoidal AC circuit analysis (including AC power and three-phase systems, mutual inductance and transformers, complex frequency, and filters. The primary focus of this course is on phasors and frequency-domain responses. Laboratory work will include circuit simulation using computer models, as well as practical limitations of these models. Additional lab hours required.

Prerequisites: ESC 200 and Reading Proficiency.

ESC 203. Engineering Mechanics I. 3 Credit Hours.

Application of the principles of mechanics to the solution of engineering problems involving particles and systems in equilibrium. Topics include force systems in equilibrium, centers of gravity, friction, moments of inertia. Where appropriate, vector analysis is used.

Prerequisites: PHY 122 and Reading Proficiency.

ESC 204. Engineering Mechanics II. 3 Credit Hours.

Application of the principles of mechanics to the solution of engineering problems involving particle and rigid body motion. Topics include linear, curvilinear relative motion, energy, impulse, and momentum. Where appropriate, vector methods are used.

Prerequisites: ESC 203 and Reading Proficiency.

ESC 205. Mechanics of Materials. 3 Credit Hours.

Application of principles of mechanics to engineering problems of strength and stiffness. Topics include stress, strain, thin cylinders, beams, torsion, columns, and combined stresses at a point.

Prerequisites: ESC 203 and Reading Proficiency.

ESC 206. Strength of Materials Lab. 1 Credit Hour.

This is the laboratory component of the Mechanics of Materials course (ESC 205). Students will perform tension, compression, shear, torsion, bending, and hardness tests on various materials in a materials testing laboratory. The students will be required to document their test data and write reports summarizing the test and results.

Prerequisites: Concurrent or prior enrollment in ESC 205 and Reading Proficiency.

ESC 207. Engineering Thermodynamics. 3 Credit Hours.

Energy transformations and the relation of energy to the states of matter. Fundamental laws, concepts and modes of analysis which underlie all applications of energy conversion in engineering.

Prerequisites: MTH 230, PHY 223 and Reading Proficiency.

English (ENG)

ENG 003. Sentence Combining. 1 Credit Hour.

Using a selected sequence of sentence building exercises, this course will help students develop a feel for both sentence structure and paragraph organization. It is a "skill-building" course, whose main purpose is to help students hear the stylistic options available to them and to help them see patterns of development, both in sentences and paragraphs.

ENG 004. Grammar Review. 1 Credit Hour.

This course will provide instruction for students who need extensive help with writing problems which may include punctuation, capitalization, usage, sentence construction, coherence and organization.

ENG 005. Writing Improvement. 1 Credit Hour.

Students work individually on writing style, documentation, and other problems of advanced expository writing.

ENG 006. Writing Effective Paragraphs. 1 Credit Hour.

This course will help students who have already mastered the writing of sentences to learn about writing longer forms. Beginning with the writing of good topic sentences, it will proceed to consider such issues as paragraph development, unity and coherence. Thus, it will provide an additional valuable support for students who intend to write essays, business letters, stories and other longer prose forms.

ENG 007. Business Writing Review. 1 Credit Hour.

This course will provide instruction in business writing formats e-mails, letters, memos, and/or reports.

ENG 013. ESL: Academic English Prep. 1 Credit Hour.

This course is designed for non-native English speakers who need to improve basic language skills before beginning the ESL Academic English sequence. Students will work individually with the assistance of the designated ESL support staff.

Prerequisites: Michigan Test and writing sample.

ENG 014. ESL: Academic Listening Comprehension. 1 Credit Hour.

This course is designed to help non-native English speakers increase their ability in listening comprehension. Students will work individually with the assistance of the designated ESL support staff.

ENG 015. ESL: Vocabulary Development for Non-native Speakers. 1 Credit Hour.

This course is designed to help non-native English speakers increase their knowledge of English vocabulary, especially idioms and general academic vocabulary. Students will work individually with the assistance of the designated ESL support staff.

ENG 017. ESL: Writing Skills. 1 Credit Hour.

This course is designed for students who need to demonstrate improved skills in Academic English outcomes before proceeding to the next level. Students will work individually with the assistance of the designated ESL support staff. Prerequisites: ENG 050, ENG 060 or ENG 070 and recommendation of instructor.

ENG 020. Developmental English. 3 Credit Hours.

This course provides comprehensive review and development of student ability in English sentences, paragraphs, and multiple paragraph texts. The course focuses on topics such as development, organization, grammar, sentences, paragraphs, and essay structure.

Prerequisites: Prior or concurrent enrollment in STR 050 with a minimum grade of "C" or previous or concurrent enrollment in appropriate reading course.

ENG 030. Introduction to College Writing. 3 Credit Hours.

This course is designed primarily to prepare students for College Composition I. The course develops students' abilities in writing multiple paragraph texts and will focus on topics such as development, organization, grammar, sentences, paragraphs, and essay structure. Prior or concurrent enrollment in STR 050 with a minimum grade of "C".

Prerequisites: ENG 020 with grade of "C" or better or recommendation of department.

ENG 050. Academic English for Non-native Speakers I. 6 Credit Hours.

This course is designed for non-native English speakers who wish to develop English language skills necessary for success in college courses. Instruction in the course will promote overall English language proficiency, with an intensive focus on reading and writing. Additional hours in lab or with an ESL tutor may be required.

Prerequisite: Recommendation of ESL staff.

ENG 051. English Grammar for Non-Native Speakers I. 3 Credit Hours.

This course provides non-native English speakers with a review of basic English grammar rules, with attention given to form, meaning, and use. Students will apply rules through speaking and writing activities.

Prerequisite: Recommendation of ESL staff.

ENG 053. Listening and Note-Taking for Non-native Speakers. 3 Credit Hours.

This course is designed for non-native speakers who are new to the higher education system in the USA. Students will develop all language skills, with a focus on listening and note-taking skills, vocabulary, and lecture and discussion structure and content.

Prerequisite: Recommendation of ESL staff.

ENG 060. Academic English for Non-native Speakers II. 6 Credit Hours.

This course is designed for non-native English speakers who have demonstrated general fluency in reading and writing English, and need to develop clarity in using English for academic purposes. Instruction in the course will focus on reading and writing responses to texts. Additional hours in lab or with ESL tutor may be recommended.

Prerequisites: ENG 050 and ENG 051 with grades of "C" or better.

ENG 061. English Grammar for Non-native Speakers II. 3 Credit Hours.

This course provides non-native English speakers with an intensive review of basic English grammar, with emphasis on application of rules to academic reading and writing tasks.

Prerequisites: ENG 050 and ENG 051 with grades of "C" or better.

ENG 062. Spoken Communication and Pronunciation for Non-native Speakers. 3 Credit Hours.

This course is designed for non-native English speakers who wish to improve their comprehensibility in communicating in English. The course will provide practice in stress, rhythm, and intonation patterns, and in troublesome consonant and vowel sounds.

Prerequisite: Recommendation of ESL staff.

ENG 070. Academic English for Non-native Speakers III. 3 Credit Hours.

This course is designed to facilitate non-native English speakers' performance in college-level courses which require moderate to heavy amounts of reading, writing, and note-taking. Students recommended to take ENG 070 will have achieved the reading and writing performance outcomes of ENG 050 and ENG 060, but still need to improve grammatical and lexical accuracy in a variety of writing tasks. Reading and writing assignments will be linked to assignments in content areas.

Prerequisites: ENG 060 and ENG 061 with grades of "C" or better and ENG 053.

ENG 071. English Grammar for Non-native Speakers III. 3 Credit Hours.

This course is for non-native speakers of English to improve the grammatical accuracy in their written English. The course will provide students with intensive reinforcement and practice of structures taught in previous grammar courses. Written practice will emphasize personal essays and tasks related to shorter academic reading passages.

Prerequisites: ENG 060 and ENG 061 with minimum grades of "C", permission of ESL faculty or staff member.

ENG 100. Career English. 3 Credit Hours.

This course primarily focuses on the development of career-related writing techniques. Students will develop writing styles, writing processes, revision practices, and analytical skills necessary for the workplace.

Prerequisites: ENG 030 and Reading Proficiency or concurrent enrollment in RDG 030.

ENG 101. College Composition I. 3 Credit Hours.

This course primarily focuses on the development of writing techniques. Students will develop effective writing styles, writing processes, revision practices, and analytical skills.

Prerequisites: ENG 030 or ENG 070 with a grade of "C" or better or recommendation of department and Reading Proficiency or concurrent enrollment in RDG 030.

ENG 102. College Composition II. 3 Credit Hours.

This course builds on knowledge and skills learned in ENG 101 and primarily focuses on argumentative and persuasive writing techniques. Students will develop effective writing processes, writing styles, research abilities, analytical skills, and argumentative tools.

Prerequisites: ENG 100 or ENG 101 with a grade of "C" or better or department approval and Reading Proficiency.

ENG 103. Report Writing. 3 Credit Hours.

This course builds on knowledge and skills learned in previous writing courses and primarily focuses on the development of writing techniques required in fields such as business, health science, technology, and engineering. Students will develop effective writing styles, writing processes, and analytical skills for business and technical writing.

Prerequisites: ENG 100 or ENG 101 with minimum grades of "C" or department approval and Reading Proficiency.

ENG 110. Creative Writing. 3 Credit Hours.

This course is designed to illustrate the creative process and value of creative literature, including three of the following genres poetry, fiction, drama, and creative nonfiction. Students learn about various themes, perspectives, and approaches associated with creative writing, as well as the creative writing process and methods of submitting creative work for publication.

Prerequisites: ENG 101 with a minimum grade of "C" and Reading Proficiency.

ENG 114. Writing Plays and Film Scripts. 3 Credit Hours.

This course is for beginning and experienced writers of plays and film scripts. The course is designed to illustrate the creative writing process beginning with the importance of drafting, audience feedback, and revision, and ending with the methods of submitting plays and film scripts for publication and production.

Prerequisite: ENG 101 and Reading Proficiency.

ENG 201. Introduction to Fiction. 3 Credit Hours.

This course provides students with an understanding of short and long fiction. Students have the opportunity to study various forms and styles of fiction as well as the major themes and concepts presented within this genre.

Prerequisites: ENG 101 and Reading Proficiency.

ENG 202. Introduction to Poetry and Plays. 3 Credit Hours.

This course focuses on the pleasures of poetry and drama. By reading, analysis, discussions and student projects, the student should gain a familiarity with the statements and craft of a selection of American, European, African and Oriental poems and plays.

Prerequisite: Reading Proficiency.

ENG 204. American Literature Before 1865. 3 Credit Hours.

This course is a study of representative works of American literature including socially and ethnically diverse writers from the pre-colonial period to 1865, with particular focus on the development of a unique national literature that reflects evolving notions of American identity through the Civil War.

Prerequisites: ENG 101 and Reading Proficiency.

ENG 205. American Literature Between 1865 and 1945. 3 Credit Hours.

Presenting United States literature written between 1865 and 1945, this course includes writers such as Adams, Cather, Chopin, Crane, Cullen, Cummings, Dickinson, DuBois, Eliot, Faulkner, Fitzgerald, Frost, Gilman, H.D., Hemingway, Hughes, James, Jewett, Millay, Moore, O'Neill, Porter, Pound, Stevens, Twain, Washington, Wharton, Whitman, Williams.

Prerequisite: Reading Proficiency.

ENG 206. American Literature After 1945. 3 Credit Hours.

Presenting United States literature after 1945, this course includes writers such as Albee, Baldwin, Bellow, Bishop, Brooks, Ellison, Erdrich, Ginsberg, Gluck, Kingston, Levertov, Lowell, Malamud, Miller, Morrison, Plath, Rich, Sexton, Shepard, Silko, Snyder, Updike, Vonnegut, Welty, Williams, and Wright.

Prerequisite: Reading Proficiency.

ENG 207. Humor in American Literature. 3 Credit Hours.

This course explores American humor primarily in written sketches, short stories, and novels by authors from Twain and Thurber to Bombeck and Vonnegut. It also analyzes jokes, movies, comic strips, stand-up comedians, and television sit-coms. The course questions what American humor is, what forces have shaped its growth, what personal and social functions it serves, and what value it might have for contemporary Americans.

Prerequisite: Reading Proficiency.

ENG 211. British Literature After 1800. 3 Credit Hours.

This course provides a survey study of representative works of British writers after 1800. Works will be examined in the context of the dominant social, cultural, and artistic concerns of the period as reflected in the literature.

Prerequisites: ENG 101 with a minimum grade of "C" and Reading Proficiency.

ENG 213. The Short Novel. 3 Credit Hours.

This course offers an introduction to the short novel or novella, a work situated between a short story and a novel, and is organized around works by writers from both within and outside the United States with emphasis on the short fiction form and historical and cultural context. Geographical focus varies from semester to semester, as do choices of literary genres.

Prerequisites: ENG 101 and Reading Proficiency.

ENG 214. Contemporary Literature. 3 Credit Hours.

This course is a study of representative works of literature produced within the last thirty years with an emphasis on recent and developing literary trends and forms alongside an investigation of the culture and values of contemporary society. Geographical focus varies from semester to semester as does the choice of literary genres.

Prerequisites: ENG 101 and Reading Proficiency.

ENG 215. Gothic, Horror and Fantasy. 3 Credit Hours.

This course focuses on major themes of gothic, horror, and fantasy literature.

Students have the opportunity to study representative works of gothic, horror and fantasy as well as examine the causes, effects, and contexts of these genres across an international spectrum of writers, formats, and subjects.

Prerequisites: ENG 101 with a minimum grade of "C" and Reading Proficiency.

ENG 216. Women in Literature. 3 Credit Hours.

This course explores the experiences of women as authors and characters in local, national, and international literature. Topics and reading will focus on the roles, challenges, and contributions women have made in the area of literary studies in various contexts and communities.

Prerequisites: ENG 101 and Reading Proficiency.

ENG 217. Major Black Writers. 3 Credit Hours.

This course focuses on selected literary works by popular Black writers across the African Diaspora. The writings of the authors have gained public attention by virtue of their excellence or historical significance. Students have the opportunity to examine various literary works, forms, and styles of these writers and the various contexts in which they are placed.

Prerequisites: ENG 101 and Reading Proficiency.

ENG 224. Fiction Writing. 3 Credit Hours.

This course is intended for students to further develop their understanding of fiction and their abilities in narrative writing. Students learn about various themes, perspectives, and approaches associated with fiction, as well as the creative writing process and methods of submitting creative work for publication.

Prerequisites: ENG 101 and Reading Proficiency.

ENG 225. Poetry Writing. 3 Credit Hours.

This course is intended for students to further develop their understanding of poetry and their abilities in poetry writing. Students learn about various themes, perspectives, and approaches associated with poetry, as well as the creative writing process and methods of submitting creative work for publication.

Prerequisites: ENG 101 and Reading Proficiency.

ENG 226. Children's Literature. 3 Credit Hours.

This course will familiarize students with examples of good children's books, for children from infancy to adolescence. It will also help students develop the ability to evaluate a book, analyze its appeal, and present it effectively. (Same course as EDU 226.)

Prerequisite: Reading Proficiency.

ENG 228. Studies in Literature. 3 Credit Hours.

This course allows students to study specific themes, theories, genres, movements, perspectives, or historical periods within the contexts of literature. Literary topics and genres vary from semester to semester. This course may be retaken for credit with different topics. Please refer to the Interactive Course Schedule for current course topics.
Prerequisites: ENG 101 and Reading Proficiency.

ENG 230. Environmental Literature. 3 Credit Hours.

This course explores ecological, sustainable global themes and nature aesthetics in literature. Readings include an interdisciplinary, transnational, and multi-genre mixture of non-fiction prose, prose fiction, and poetry.
Prerequisites: ENG 101 and Reading Proficiency.

ENG 231. World Literature. 3 Credit Hours.

This course offers an introduction to the classic writings organized around various national communities. Its geographical focus varies from semester to semester, as do its choices of literary genres. Students will learn how to read and analyze national writers and their works within historical and cultural contexts.
Prerequisites: ENG 101 and Reading Proficiency.

ENG 233. Writing Memoirs and Creative Nonfiction. 3 Credit Hours.

This course is intended for students to further develop their understanding of creative nonfiction and their abilities in writing nonfiction prose forms, such as the personal essay, memoir, travel narrative, and/or biography. Students learn about various methodologies, ethical concerns, and perspectives associated with creative nonfiction, as well as the writing process and methods of submitting work for publication.
Prerequisites: ENG 101 with a minimum grade of "C" and Reading Proficiency.

ENG 234. Literary Publishing. 3 Credit Hours.

This course allows students to gain experience in the production practices of literary publications. Students will become exposed to various stages of the editing and publishing process as well as utilize design software to produce a literary publication.
Prerequisites: ENG 101 with a minimum grade of "C" and Reading Proficiency.

Finance (FIN)

FIN 100. Personal Finance. 3 Credit Hours.

This course involves the study of personal financial planning and is intended to provide the student with a basis of knowledge that will enable the individual to better manage their income while maximizing the value received for the expenditures made. This course also addresses the safeguarding of assets and will provide the student with the tools for developing their own financial plan. Topics may include financial planning, developing personal financial statements and plans, insurance needs, basic taxing theories, and stock market options for personal financial planning.
Prerequisite: Reading Proficiency.

FIN 201. Fundamentals of Finance. 3 Credit Hours.

Basic methods and principles of finance, such as money and banking, financing working capital and fixed capital needs, stocks and bonds, the marketing of securities, and the working of financial institutions.
Prerequisites: ACC 110 or department approval and Reading Proficiency.

Fire Protection (FIR)

FIR 100. Fire Department Apparatus. 2 Credit Hours.

A study of the description and specification of the various fire department apparatus found in the modern organization, special emphasis is given to manufacturer's specifications, analysis of the various codes and standards of construction and methods of writing specifications for various pieces of equipment. In addition, the instruction covers the principles of care maintenance, and operation of the various types of apparatus including principles of pumping, pumps, and accessories, power development and transmissions and pumping practices.
Prerequisite: Reading Proficiency.

FIR 102. Fire Characteristics. 3 Credit Hours.

Characteristics and behavior of fire found in ordinary materials and special materials such as oils and other combustible chemicals. A review of basic chemistry with emphasis on combustion and internal combustion. Hazards of liquids and gases, special techniques in regard to oxygen supplies.
Prerequisites: CHM 114 and Reading Proficiency.

FIR 103. Fire Service Management and Administration. 3 Credit Hours.

Instruction in management and administration for the fire service including the functions of management, planning, organizing, directing, controlling, the management cycle, motivation, behavioral science, executive development, educational development, and labor relations.
Prerequisite: Reading Proficiency.

FIR 105. Inspection and Fire Prevention. 3 Credit Hours.

Inspection surveying and mapping procedures associated with the organization and function of fire prevention. A survey of the various codes and standards; how these various standards are used in inspecting buildings for fire hazards; how to actually inspect a building with respect to existing fire protection equipment-structural details that must be known to avoid undue loss in case of fire. Opportunity will be provided to make at least one complete inspection and report on an operating industry.
Prerequisite: Reading Proficiency.

FIR 106. Teaching Techniques for Fire Department Personnel. 3 Credit Hours.

The basic theories of learning and methods of instruction are discussed. The use of lectures, demonstrations, and visual aids as applied to the instruction of fire department personnel is illustrated. Practice is provided in the use of lesson plans, visual aids, tests, and other teaching devices including module on the use of microcomputers as an instructional device. Each student's application of a teaching procedure is critically discussed and evaluated.
Prerequisite: Reading Proficiency.

FIR 110. Basic Fire Protection and Alarm Systems. 3 Credit Hours.

A study of modern fire protection, including water supply, private fire protection methods, chemical extinguishers, and a study of various types of fixed and portable fire detection and alarm systems. This will include municipal, central station, proprietary and local alarm systems; heat, flame and smoke detectors; telephone, teletype and radio systems.
Prerequisites: MTH 124 and Reading Proficiency.

FIR 111. Fire Fighter I. 4 Credit Hours.

This course presents students with the in-depth knowledge and performance skills necessary to function as members of a fire department and prepares students to sit for the state certification exam. Additional lab hours required.
Prerequisite: Reading Proficiency.

FIR 112. Fire Fighter II. 4 Credit Hours.

This course presents students with the advanced knowledge and performance skills necessary to function as members of a fire department and prepares students to sit for the state certification exam. Additional lab hours required.
Prerequisites: FIR 111 and Reading Proficiency.

FIR 113. Fire Prevention. 3 Credit Hours.

Fire Prevention provides fundamental knowledge relating to the field of fire prevention. Topics include: history and philosophy of fire prevention; organization and operation of a fire prevention bureau; use and application of codes and standards; plans review; fire inspections; fire and life safety education and fire investigation.

Prerequisite: Reading Proficiency.

FIR 114. Fire Protection Systems. 3 Credit Hours.

Fire Protection Systems provides information related to the features of design and operation of fire alarm systems, water-based fire suppression systems, special hazard fire suppression systems, water supply for fire protection and portable fire extinguishers.

Prerequisite: Reading Proficiency.

FIR 115. Principles of Emergency Services. 3 Credit Hours.

Principles of Emergency Services provides an overview to fire protection and emergency services including their history, function, regulations and strategy and tactics.

Prerequisite: Reading Proficiency.

FIR 116. Fire Investigation I. 3 Credit Hours.

Fire Investigation I provides the student with the fundamentals and technical knowledge needed for proper fire scene interpretations, including recognizing and conducting origin and cause, preservation of evidence and documentation, scene security, motives of the fire setter and types of fire causes.

Prerequisite: Reading Proficiency.

FIR 117. Occupational Safety and Health for Emergency Services. 3 Credit Hours.

Occupational Safety and Health for Emergency Services introduces the basic concepts of occupational health and safety as it relates to emergency services organizations. Topics include risk and hazard evaluation and control procedures for emergency service organizations.

Prerequisite: Reading Proficiency.

FIR 202. Fire Investigation. 3 Credit Hours.

Methods determining point of origin, path of fire travel and fire causes; motives and methods for fire setting, recognizing and preserving evidence; arson laws, and types of arson fires, court testimony, reports and records.

Prerequisite: Reading Proficiency.

FIR 204. Fire Fighting Tactics and Strategy. 3 Credit Hours.

Fundamental strategy and method of attack employed for various fire problems. Principles of fire fighting as applied to small and large scale fire problems and problems that are complex or unique in nature. Some practice with problems involving the use of tactics and strategy that employ equipment and manpower at various organizational levels.

Prerequisite: Reading Proficiency.

FIR 207. Codes and Ordinances. 3 Credit Hours.

A detailed study of national, state and local ordinances applicable to the fire service and electrical, plumbing and building codes. Some coverage of problems in mutual aid pacts and agreements with other fire departments, and relations with civil defense and other government agencies.

Prerequisite: Reading Proficiency.

FIR 208. Hazardous Materials. 3 Credit Hours.

A second semester of basic fundamentals of chemistry used in fire science with emphasis on less common special hazards. Topics covered will include nuclear reactions, ionization, radiation detection equipment, peacetime uses of radioactive materials and control of resulting hazards.

Prerequisite: Reading Proficiency.

FIR 210. Architectural Structural Representation-Materials. 3 Credit Hours.

Basic fundamentals of building plan reading including conventional delineation, symbols, abbreviations, methods of showing floor plans, elevations, and dimensions. Also basic characteristics of various materials and building structural systems when subjected to fire.

Prerequisites: MTH 124 and Reading Proficiency.

FIR 213. Building Construction for Fire Prevention. 3 Credit Hours.

Building Construction for Fire Prevention presents building construction as it relates to fire and life safety. The focus of this course is on firefighter safety. The elements of construction and design of structures are shown to be key factors when inspecting buildings, preplanning fire operations and operating at emergencies.

Prerequisites: FIR 115 and Reading Proficiency.

FIR 214. Fire Behavior and Combustion. 3 Credit Hours.

Fire Behavior and Combustion explores the theories and fundamentals of how and why fires start, spread and are controlled.

Prerequisite: Reading Proficiency.

FIR 215. Principles of Fire and Emergency Services Safety and Survival. 3 Credit Hours.

Principles of Fire and Emergency Services Safety and Survival introduces the basic principles and history related to the national firefighter life safety initiatives, focusing on the need for cultural and behavior change throughout the emergency.

Prerequisite: Reading Proficiency.

FIR 216. Principles of Fire and Emergency Services Administration. 3 Credit Hours.

Principles of Fire and Emergency Services Administration introduces the student to the organization and management of a fire and emergency services department and the relationship of government agencies to the fire service. Emphasis is placed on fire and emergency service, ethics and leadership from the perspective of the company officer.

Prerequisite: Reading Proficiency.

FIR 217. Fire Investigation II. 3 Credit Hours.

Fire Investigation II provides the student with advanced technical knowledge on the rule of law, fire scene analysis, fire behavior, evidence collection and preservation, scene documentation, case preparation and court room testimony.

Prerequisites: FIR 116 and Reading Proficiency.

FIR 218. Fire Protection Hydraulics and Water Supply. 3 Credit Hours.

Fire Protection Hydraulics and Water Supply provides a foundation of theoretical knowledge in order to understand the principles of the use of water in fire protection and to apply hydraulic principles to analyze and to solve water supply problems.

Prerequisites: MTH 124 and Reading Proficiency.

FIR 219. Hazardous Materials Chemistry. 3 Credit Hours.

Hazardous Materials Chemistry provides basic chemistry relating to the categories of hazardous materials including recognition, identification, reactivity and health hazards encountered by emergency services.

Prerequisite: Reading Proficiency.

FIR 220. Strategy and Tactics. 3 Credit Hours.

Strategy and Tactics provides the principles of fire ground control through utilization of personnel, equipment and extinguishing agents.

Prerequisites: FIR 115 and Reading Proficiency.

FIR 221. Legal Aspects of Emergency Services. 3 Credit Hours.

Legal Aspects of Emergency Services will address the federal, state and local laws that regulate emergency services and include a review of national standards, regulations and consensus standards.

Prerequisite: Reading Proficiency.

French (FRE)

FRE 101. Elementary French I. 4 Credit Hours.

This is the beginning course which introduces the basic sentence structure and vocabulary necessary to participate in elementary French conversations. Additional course topics include reading short French passages, aspects of contemporary culture, and a variety of grammatical forms useful in writing French prose. Supplemental online lab work is required.
Prerequisite: Reading Proficiency.

FRE 102. Elementary French II. 4 Credit Hours.

This course continues to focus on the topics introduced in FRE 101. These include more complex sentence structures and an expanded vocabulary necessary to participate in French conversations. Additional course topics include reading short French passages of increasing complexity, elements of contemporary culture, and a number of grammatical forms useful when writing in French. Supplemental online lab work is required.
Prerequisites: FRE 101 or 2 years of high school French and Reading Proficiency.

FRE 201. Intermediate French I. 4 Credit Hours.

A continuation of FRE 102. Emphasis is on becoming proficient in using the language so that students can function in a francophone culture. Primary concentration is on developing speaking and listening skills. Testing is both oral and written.
Prerequisites: FRE 102 or 3 or more years of high school French and Reading Proficiency.

FRE 202. Intermediate French II. 4 Credit Hours.

The major emphasis is preparing students to be functioning members of a French speaking community. The student will gain the linguistic skills necessary to perform in everyday situations. Speaking and listening skills are further developed. Testing is both oral and written. Additional lab hours required.
Prerequisites: FRE 201 or 4 or more years of high school French and Reading Proficiency.

Funeral Directing (FD)

FD 101. Funeral Management/Merchandising. 6 Credit Hours.

The practices and procedures of establishing a funeral home are covered including personnel management, vital statistics, records and forms. Government regulations of OSHA, FTC and ADA are studied. An in-depth study of merchandising funeral goods including caskets and vaults is covered.
Prerequisites: Admitted to Funeral Directing program and Reading Proficiency.

FD 102. Funeral Service Psychology. 3 Credit Hours.

This course studies the implications of grief and bereavement and the role of the funeral director in counseling the bereaved. The social role of the funeral director in the dynamics of grief and an investigation into the changing attitudes toward death is also studied.
Prerequisites: Admitted to Funeral Directing program and Reading Proficiency.

FD 103. History of Funeral Service. 3 Credit Hours.

The historic role of the funeral director is investigated from ancient to present day as well as projected directions and functions of the funeral profession. Ethical and legal implications of these changing trends are discussed. Various religious, ethnic, fraternal and military practices are studied.
Prerequisites: Admitted to Funeral Directing program and Reading Proficiency.

FD 104. Funeral Service Law. 3 Credit Hours.

This course identifies the methods of disposing of human remains and the legal responsibilities of the funeral director. Principles of both mortuary and business law are covered from the local, state and federal level. Cemetery regulations, liability and pre-need are also studied.
Prerequisites: Admitted to Funeral Directing program and Reading Proficiency.

Funeral Service Education (FSE)

FSE 101. History and Sociology of Funeral Service. 3 Credit Hours.

This course surveys funeral and burial customs associated with the beliefs and practices in various cultures from the early Egyptians to present day. In addition, the general principles related to customs, religions, human relations, social behavior, and their influences on funeral practices will be examined. Successful completion of this course is required for subsequent enrollment in all FSE courses in the AAS/FSE program.
Prerequisites: Admission to AAS/FSE program and Reading Proficiency.

FSE 102. Dynamics of Grief Management. 3 Credit Hours.

This course explores the topic of funeral service psychology, which includes the theories of grief, the purposes of the funeral rite, and the importance of interpersonal communication skills and basic helping techniques.
Prerequisites: FSE 101 and PSY 200 with minimum grades of "C" and Reading Proficiency.

FSE 103. Funeral Directing. 2 Credit Hours.

This course introduces the primary duties and responsibilities of the funeral director. Special emphasis is placed on the funeral director's role in working with the family of the decedent, as they select options for funeral rites, ceremonies, and committal services. Legal and ethical obligations, as well as the value of effective communication skills, are also examined.
Corequisite: FSE 104.
Prerequisite: Reading Proficiency.

FSE 104. Funeral Directing Practicum I. 2 Credit Hours.

This course introduces the practical aspects of funeral home operations, which includes local, state, and federal laws as they pertain to funeral service. In addition, students will participate in funeral arranging, funeral directing, and committal service procedures. All funeral directing functions will be performed under the direct supervision of a licensed funeral director and the St. Louis Community College Funeral Service Education faculty. Additional hours required.
Corequisite: FSE 103.
Prerequisite: Reading Proficiency.

FSE 105. Funeral Directing Practicum II. 2 Credit Hours.

This course is a continuation of Funeral Directing Practicum I and will provide additional experience with the practical aspects of funeral home operations, which includes local, state, and federal laws as they pertain to funeral service. In addition, students will participate in funeral arranging, funeral directing, and committal service procedures. All funeral directing functions will be performed under the direct supervision of a licensed funeral director and the St. Louis Community College Funeral Service Education faculty. Additional hours required.
Prerequisites: FSE 103 and FSE 104 with minimum grades of "C" and Reading Proficiency.

FSE 106. Mortuary Law and Ethics. 3 Credit Hours.

This course introduces legal and ethical issues in the funeral service profession. This includes the sources of business law, mortuary law, rights and duties regarding disposition of dead bodies, state and federal regulation of funeral homes, funeral directors and cemeteries, probate law, and funeral professional ethics.
Prerequisites: FSE 101 with a minimum grade of "C" and Reading Proficiency.

FSE 107. Funeral Service Merchandising. 2 Credit Hours.

This course introduces the practical aspects of product knowledge and merchandising for caskets, outer burial containers, and other related funeral service merchandise. Required minimum course grade "C" or higher.

Prerequisites: FSE 101 with a minimum grade of "C" and Reading Proficiency.

FSE 201. Funeral Home Management. 2 Credit Hours.

This course introduces management principles for funeral home operations, which includes human resources, financial, marketing, facilities, and office management, as well as their application to the small business environment.

Prerequisites: FSE 101 with a minimum grade of "C" and Reading Proficiency.

FSE 202. Embalming I. 2 Credit Hours.

This course will provide discussion of the theoretical aspects of embalming, as well as examining the purpose and need for embalming, types of death, signs of death, tests for death, postmortem changes, ethics of embalming, chemical and physical changes, formulating chemical solutions, and selection and raising of vessels.

Corequisite: FSE 203.

Prerequisites: BIO 103 with a minimum grade of "C" and Reading Proficiency.

FSE 203. Embalming Practicum I. 2 Credit Hours.

This course applies the theoretical aspects of an embalming operation.

All embalming operations are performed under the direct supervision and instruction of a licensed embalmer and the St. Louis Community College Funeral Service Education faculty. Additional hours required.

Corequisite: FSE 202.

Prerequisites: BIO 103 with a minimum grade of "C" and Reading Proficiency.

FSE 204. Embalming II. 2 Credit Hours.

This course illustrates the advanced theoretical aspects of embalming and is a continuation of FSE 203. Special emphasis is placed on the principles and techniques of embalming, which includes case analysis, methods of injection and drainage, cavity embalming, and special problem cases.

Corequisite: FSE 205.

Prerequisites: FSE 202 and FSE 203, both with minimum grades of "C" and Reading Proficiency.

FSE 205. Embalming Practicum II. 2 Credit Hours.

This course applies the theoretical aspects of an embalming operation, with emphasis placed upon advanced procedures for embalming autopsy and trauma cases. Embalming operations are performed under the direct supervision and instruction of a licensed embalmer and the St. Louis Community College Funeral Service Education. Additional hours required.

Corequisite: FSE 204.

Prerequisites: FSE 202 and FSE 203, both with minimum grades of "C" and Reading Proficiency.

FSE 206. Restorative Art. 4 Credit Hours.

Restorative Art prepares the student to recognize and apply the various restorative and cosmetology techniques used in the restoration of the deceased.

Prerequisites: FSE 210 with a minimum grade of "C" and Reading Proficiency.

FSE 207. Microbiology and Pathology for Funeral Service. 3 Credit Hours.

This course introduces the principles of microbiology and pathology, especially as they can be applied to the embalming and restorative art processes. Special emphasis will be placed on tissue pathology and major causative agents of death.

Prerequisites: FSE 202 with a minimum grade of "C" and Reading Proficiency.

FSE 208. Funeral Service Seminar. 2 Credit Hours.

Comprehensive preparation for and completion of the International Conference of Funeral Service Examining Board, Inc. National Board Examination (NBE). Student must pass both the Funeral Service Arts and Funeral Service Sciences section of the NBE to graduate from the Funeral Service program. Reading Proficiency.

Prerequisites: Approval of AAS/FSE Program Director, eligibility for completion of and graduation from the AAS/FSE program.

FSE 209. Pathology for Funeral Service. 3 Credit Hours.

Pathology for Funeral Service introduces the principles of pathology, especially as it can be applied in embalming and restorative art processes. Special emphasis will be placed on tissue pathology and major causative agents of death.

Prerequisites: Admission to AAS/FSE program, BIO 103, FSE 210, FSE 101 with a minimum grade of "C" and Reading Proficiency.

General Education (GEN)

GEN 200. Capstone. 1 Credit Hour.

In this culminating experience of the general education curriculum, the student demonstrates the skills of higher order thinking, valuing, managing information and communicating through the independent, scholarly, self-directed project. Recommended Preparation 27 credit hours of general education coursework including completion of the global/intercultural requirement and the interdisciplinary studies requirement.

Prerequisites: ENG 102 with a minimum grade of "C", and COM 101 or COM 107 with a minimum grade of "C", Sophomore standing, and Reading Proficiency.

General Engineering (GE)

GE 101. Technical Computer Applications. 3 Credit Hours.

This course is an introduction to the use of personal computers in technology.

Topics of this course include PC hardware, operating systems, word processing, spreadsheets, graphics and the Internet.

Prerequisite: Reading Proficiency.

GE 121. Principles of Engineering. 3 Credit Hours.

This course is an introduction to the opportunities and responsibilities of Engineering. Students will learn the field of Engineering, and explore Engineering Careers. They will complete projects in Design, Engineering Systems, Thermodynamics, Fluid Systems, Electrical and Control Systems, Strength and Properties of Materials, and Production Process and Quality Control.

GE 122. Engineering Design and Development. 3 Credit Hours.

Students will work in teams to design and build solutions to authentic engineering problems. Student teams will make progress reports to their peers, mentor and instructor, and will present their research paper and defend their projects to a panel of engineers, business leaders and instructors for professional review and feedback.

Prerequisites: GE 121 and EGR 147 or ME 121; or ME 151 and EGR 100.

GE 131. Engineering Technology Orientation. 1 Credit Hour.

This course introduces students to college level thinking skills, interpersonal skills, effective study skills and college services necessary for academic and professional success in engineering technology. Students will also be exposed to career opportunities and responsibilities in various fields of technology.

Additional lab hours required.

Prerequisite: Reading Proficiency.

GE 133. Quantitative Methods in Engineering Technologies. 2 Credit Hours.

This is a study of the mathematical and scientific applications found in engineering technologies. Topics include SI (metric) and customary (English) conversions, Pythagorean applications and triangular structures, and electrical resistance. Mechanical and electrical systems applications are demonstrated and investigated for each topic area.

Prerequisites: MTH 030 or higher and Reading Proficiency.

GE 151. Introduction to Aerospace Engineering. 3 Credit Hours.

This course will expose students to the world of aeronautics, flight and engineering. Through activity-based, project-based and problem-based learning students will be engaged in engineering design problems related to aerospace information systems, astronautics, rocketry, propulsion, the physics of space science, space life sciences, principles of aeronautics, structures and materials, and systems engineering. Additional lab hours required.

Prerequisites: EGR 147 and GE 121 or department approval.

GE 240. Product Design and Fabrication. 4 Credit Hours.

This course presents students with an authentic engineering design challenge. Engineering technology students from a variety of disciplines, work together to define problems, evaluate possible solutions and build a functional prototype. The course brings together skills developed in other engineering and technology courses. Additional lab hours required.

Prerequisites: Prior or concurrent enrollment in ME 152 or EE 233 or department approval, and Reading Proficiency.

GE 290. Workplace Learning: General Engineering. 1-6 Credit Hours.

This workplace-based course provides the student the opportunity to apply theory and skills learned in the classroom, learn new skills, and explore career possibilities while supervised by a professional in the field and a faculty member. Students will observe and participate in the functions of the industry to enhance their preparation for entering the field. Minimum 50 hours per credit hour in the workplace throughout the term.

Prerequisites: Department approval and Reading Proficiency.

Geography (GEG)

GEG 101. Regional Geography. 3 Credit Hours.

This course surveys various world regions, their major countries, and the physical, cultural, economic, and political roles of these countries within the global family of nations. This course introduces the discipline of geography and provides understanding of the world, its different people, places, and regions. Regional Geography also places an emphasis on the ways that people and places interact across space and time to produce particular outcomes. Technological innovations, the spread of political/economic ideologies, and the movement of people and goods across the globe have made most contemporary problems and solutions global in nature.

Prerequisite: Reading Proficiency.

GEG 103. Physical Geography. 3 Credit Hours.

This course introduces the characteristics of the Earth's surface and the interaction of processes that produce a world pattern of distinctive environments significant to humanity. Topics include Earth surface processes and the development of landforms and landscapes; weather and climate; soils and vegetation and their global distribution.

Prerequisite: Reading Proficiency.

GEG 106. World Geography. 3 Credit Hours.

This course surveys the continents of the Earth, including the study of geographical regions, their functions, location, and cultural landscape. This course explores climate, resources, and landforms and studies how humans interact with the physical earth. This course covers both physical and human geography.

Prerequisite: Reading Proficiency.

Geology (GEO)

GEO 100. Earth Science. 3 Credit Hours.

This introductory geoscience course emphasizes basic principles of astronomy, geology, oceanography and meteorology. Topics covered include the origin of the Universe, solar system and Earth, minerals and rocks, plate tectonics geologic time, prehistoric life and evolution, ocean structure and life, weather and climate change.

Prerequisite: Reading Proficiency.

GEO 101. Earth Science (Laboratory). 2 Credit Hours.

Laboratory and field experiences illustrating the principles of earth science. Additional lab hours required.

Prerequisites: GEO 100 concurrent enrollment and Reading Proficiency.

GEO 103. Environmental Geology. 3 Credit Hours.

This introductory geoscience course focuses on natural hazards and the human consequences associated with geologic processes. Topics include the study of plate tectonics, earthquakes, volcanoes, floods, tornadoes, storms, wildfires, climate change and global warming. Emphasis is placed on how those hazards affect humans and how human activity affects Earth's environment.

Prerequisite: Reading Proficiency.

GEO 104. Prehistoric Life. 3 Credit Hours.

This course is an introductory Historical Geology course that emphasizes paleontology and evolution through the fossil record. Topics covered include the origin of the Universe, the origin and evolution of Earth through geologic processes, plate tectonics, origin and evolution of life on Earth through four billion years of geologic time and hands-on study of fossils including dinosaurs.

Prerequisite: Reading Proficiency.

GEO 111. Physical Geology. 5 Credit Hours.

This course introduces earth processes and products, including the origin of rocks, volcanos, landforms, mountain belts, earthquakes, and the structure of Earth within the framework of plate tectonics. The interdependence between humans and the geological environment is emphasized throughout the course. A one-day fieldtrip is required. Additional lab hours required.

Prerequisite: Reading Proficiency.

GEO 113. Oceanography. 3 Credit Hours.

This introductory Oceanography course focuses on the geological aspects of oceanography combined with the physical, chemical and biological processes in the ocean. Topics covered include the origin of the Universe, Earth and life, plate tectonics, waves, atmosphere and marine life. Special emphasis is placed on worldwide, human-induced changes within the marine environment.

Prerequisite: Reading Proficiency.

GEO 123. Geologic Field Experiences in North America. 4 Credit Hours.

This field course studies the geology of North America. Topics include basic geologic mapping and measuring skills utilizing geological instrumentation, understanding geologic features, rock types, mineral identification and fossil identification through experiential learning. Planning session(s) prior to departure is required. Laboratory work is in a field setting and a major part of the course. Evening lectures and student presentations in the field are required. Additional hours required.

Prerequisite: Reading Proficiency.

German (GER)

GER 101. Elementary German I. 4 Credit Hours.

This course is a beginning course presenting the basic sentence structure, vocabulary, and cultural knowledge necessary to participate in elementary German conversations and to begin reading short German passages. Additional topics include aspects of contemporary culture and a variety of grammatical forms useful in writing German prose.
Prerequisite: Reading Proficiency.

GER 102. Elementary German II. 4 Credit Hours.

A continuation of GER 101. Students complete the basic elements of German grammar, increase their vocabulary and gain added facility in speaking and reading German. Additional lab hours required.
Prerequisites: GER 101 or 2 or more years of high school German and Reading Proficiency.

GER 201. Intermediate German I. 4 Credit Hours.

A continuation of GER 102. Emphasis is on speaking German. A review of grammar assists the student in perfecting basic skills. A variety of up-to-date literary and cultural selections are read and form the basis for classroom discussions. Additional lab hours required.
Prerequisites: GER 102 or 3 or more years of high school German and Reading Proficiency.

GER 202. Intermediate German II. 4 Credit Hours.

A continuation of GER 201. Emphasis is on spoken German with continued grammar review. A variety of short stories and contemporary cultural selections are read and discussed in class. Additional lab hours required.
Prerequisites: GER 201 or 4 or more years of high school German and Reading Proficiency.

Global Education (GLE)

GLE 101. Global Education Studies. 1-3 Credit Hours.

This course will present an opportunity for students to travel to and to engage in the direct study of international cultures in order to foster an enhanced sensitivity to, appreciation of, and an understanding of the global community.
Prerequisites: Permission of instructor and Reading Proficiency.

Health Information Technology (HIT)

HIT 101. Medical Terminology. 4 Credit Hours.

This course provides a broad survey of the language of medicine and health technologies. Students learn to accurately spell and define common medical terms related to major disease processes, diagnostic procedures, laboratory tests, abbreviations, drugs, and treatment modalities. Emphasis is placed on formation, definition and pronunciation. (Same as course IS 205).
Prerequisite: Reading Proficiency.

HIT 102. Health Information Management Technology. 4 Credit Hours.

This course introduces healthcare data content and structure including its collection, arrangement, presentation, and verification. Healthcare data sets, primary and secondary record systems, and data quality and integrity are introduced. Students learn how Information Technology (IT) supports healthcare delivery and are introduced to health information systems concepts and applications. Communication skills and techniques for the workplace are emphasized throughout the course.
Prerequisite: HIT 101 and Reading Proficiency.

HIT 103. Healthcare Delivery Systems. 2 Credit Hours.

This course describes the organization of healthcare delivery in the United States. Students are introduced to healthcare organizations, their structure and operations, external standards, regulations and initiatives including licensure, certification, accreditation, and Health Information Portability and Accountability Act (HIPAA). Payment and reimbursement methodologies are discussed for each type of healthcare provider and setting. Communication skills and techniques for the workplace are emphasized throughout the course.
Prerequisite: HIT 101 and Reading Proficiency.

HIT 104. Basic Principles of Disease. 2 Credit Hours.

This course is an in-depth study of common pathological conditions of the human body. Course focus is on description of conditions and diseases of the organ systems including etiology, signs and symptoms, methods of diagnosis, and treatment. Expected student outcomes include ability to pronounce disease terminology, to analyze signs and symptoms in identifying disease entities and ability to describe appropriate diagnostic and treatment modalities. Communication skills and techniques for the workplace are emphasized throughout the course. Students should enroll in HIT 105 in the same semester.
Corequisite: HIT 105.

Prerequisites: BIO 207, BIO 208, HIT 101, and Reading Proficiency.

HIT 105. Pharmacology for Health Information Technology Professionals. 1 Credit Hour.

This course is a study of drug classifications, drug dosage and administration, and diagnostic procedures. Instruction includes pronunciation of medications, along with information on recognizing common laboratory findings and knowing the significance of abnormal findings in disease processes. At the conclusion of the course, the student should be able to apply knowledge regarding medications and tests used in treatment and diagnosis of abnormal human conditions, and recognize and apply J codes from Healthcare Common Procedure Coding System (HCPCS) to medications. Communication skills and techniques for the workplace are emphasized throughout the course. Students should enroll in HIT 104 in the same semester.

Corequisite: HIT 104.

Prerequisites: BIO 207, BIO 208, HIT 101 and Reading Proficiency.

HIT 106. Diagnosis Coding Systems I. 3 Credit Hours.

This course introduces current clinical coding, classifications, taxonomies, nomenclatures, terminologies, clinical vocabularies and auditing. Principles and applications of current industry standards for International Classifications of Diseases (ICD) and the relationship of Diagnosis-Related Groupings (DRGs) to coding will be covered. Use of computerized encoding and application software and work processes to support clinical classification and coding is required. Communication skills and techniques for the workplace are emphasized throughout the course. Students should enroll in HIT 107 in the same semester.

Corequisite: HIT 107.

Prerequisites: BIO 207, BIO 208, HIT 101, HIT 104, HIT 105 and Reading Proficiency.

HIT 107. Procedure Coding Systems I. 3 Credit Hours.

This course is an introduction to the current industry standards for procedural coding in various healthcare settings. Reading and interpreting healthcare documentation to classify services and procedures will be covered. Communication skills and techniques for the workplace are emphasized throughout the course. Students should enroll in HIT 106 in the same semester.
Corequisite: HIT 106.

Prerequisites: BIO 207, BIO 208, HIT 101, HIT 104, HIT 105 and Reading Proficiency.

HIT 110. Healthcare Legal and Ethical Issues. 3 Credit Hours.

This course investigates ethical issues in healthcare while examining the procedures and laws that regulate the content, confidentiality, disclosure, use, and retention of health information. Patient rights/advocacy, advanced directives, privacy, release of information, and security policies and procedures of healthcare organizations will be emphasized. Communication skills and techniques for the workplace are emphasized throughout the course.

Prerequisites: HIT 102, HIT 103, HIT 106, HIT 107 and Reading Proficiency.

HIT 201. Healthcare Reimbursement. 3 Credit Hours.

This course compares and contrasts healthcare payers, illustrates the reimbursement cycle, and compliance with regulatory guidelines. Payment methodologies and systems are compared using computerized encoding and grouping software, Diagnosis-Related Groups (DRGs), Ambulatory Payment Classifications (APCs), and Resource Utilization Groups (RUGs) as assigned. Chargemaster maintenance and reimbursement monitoring and reporting are emphasized. Communication skills and techniques for the workplace are emphasized throughout the course.

Prerequisites: HIT 102, HIT 103, HIT 106, HIT 107 and Reading Proficiency.

HIT 206. Diagnosis Coding Systems II. 3 Credit Hours.

This course is a continuation of Diagnosis Coding Systems I. Students are introduced to intermediate coding cases and scenarios along with Diagnosis Related Groups (DRGs) and their relationship to clinical coding. Communication skills and techniques for the workplace are emphasized throughout the course. Students should enroll in HIT 207 in the same semester. Corequisite: HIT 207.

Prerequisites: HIT 102, HIT 103, HIT 106, HIT 107 and Reading Proficiency.

HIT 207. Procedure Coding Systems II. 3 Credit Hours.

This course is a continuation of Procedure Coding Systems I. Students use computerized encoding systems and healthcare data/content to assign appropriate current standard Procedure codes. Communication skills and techniques for the workplace are emphasized throughout the course. Students should enroll in HIT 206 in the same semester.

Corequisite: HIT 206.

Prerequisites: HIT 102, HIT 103, HIT 106, HIT 107 and Reading Proficiency.

HIT 208. Advanced Coding Applications. 2 Credit Hours.

This course is the capstone course for the Medical Billing and Coding Certificate of Proficiency Program. This course provides students with extensive practice to apply their knowledge of anatomy, the clinical disease process, diagnosis and procedural terminology and pharmacology for correct code assignment and sequencing using various clinical classification systems. This course is a culmination of Prerequisite knowledge and skills to prepare for the national coding certification exam. Communication skills and techniques for the workplace are emphasized throughout the course. Students should enroll in HIT 210 in the same semester. All other courses in the Medical Billing and Coding Program must be completed prior to enrollment in this course.

Corequisite: HIT 210.

Prerequisites: Permission from department chair or program coordinator, HIT 206, HIT 207, and Reading Proficiency.

HIT 210. Professional Practice Experience. 2 Credit Hours.

This course allows students to experience the American Health Information Management Association (AHIMA) electronic-Health Information Management (e-HIM) Virtual Lab in an environment that closely simulates real-world application of various technologies. Students apply problem-solving and analysis skills, and gain experience and familiarity with a range of healthcare applications including patient identification, administrative and reimbursement coding, data capture, and abstracting. Students create professional portfolios and engage in professional leadership activities and discussions. Communication skills and techniques for the workplace are emphasized throughout the course. Medical Billing and Coding majors should enroll in HIT 208 in the same semester. Health Information Technology majors should enroll in HIT 291 in the same semester.

Prerequisites: Concurrent enrollment in HIT 208 or HIT 291, permission of department chairperson or program coordinator and Reading Proficiency.

HIT 211. Electronic Health Systems. 3 Credit Hours.

This course emphasizes the role of Information Technology in healthcare, describes key elements of health information systems, defines the electronic health record (EHR), and establishes the context of the EHR within the scope of health information technology (HIT). Communication skills and techniques for the workplace are emphasized throughout the course.

Prerequisites: IS 103 or IS 116, IS 136, IS 151, HIT 102, HIT 103, HIT 106, HIT 107, HIT 110, HIT 201 and Reading Proficiency.

HIT 213. Quality and Performance Improvement in Healthcare. 3 Credit Hours.

This course introduces students to the theory, practice and management of quality performance and improvement through examination of peer review processes, collection tools, data analysis and reporting techniques. Utilization, risk, and case management are blended concepts used throughout this course. Regulatory quality monitoring requirements and outcome measures monitoring are addressed. Communication skills and techniques for the workplace are emphasized throughout the course.

Prerequisites: IS 103 or IS 116, IS 136, IS 151, HIT 102, HIT 103, HIT 106, HIT 107 and Reading Proficiency.

HIT 214. Calculating and Reporting Healthcare Statistics. 3 Credit Hours.

This course focuses on the management of medical data for statistical purposes to include descriptive statistics such as means, frequencies, ranges, percentiles and standard deviations. Knowledge-based research techniques are explored. Vital statistics, registries and national guidelines regarding human subject research are examined along with Institutional Review Board (IRB) processes. Communication skills and techniques for the workplace are emphasized throughout the course.

Prerequisites: HIT 102, HIT 103, HIT 106, HIT 107, MTH 140 and Reading Proficiency.

HIT 291. Workplace Learning: Health Information Technology. 2 Credit Hours.

This course provides the student the opportunity to apply theory and skills learned in the classroom, learn new skills, and explore career possibilities while supervised by a professional in the field and a faculty member. Students will observe and participate in the functions of health information technology to enhance their preparation for entering the field. A minimum 100 hours in the workplace throughout the term will be completed. Communication skills and techniques for the workplace are emphasized throughout the course. Students should enroll in HIT 210 in the same semester. All other courses in this program must be completed prior to enrollment in this course.

Corequisite: HIT 210.

Prerequisites: Permission of department chairperson or program coordinator and Reading Proficiency.

History (HST)

HST 101. United States History to 1865. 3 Credit Hours.

United States History to 1865 surveys the cultural, economic, institutional, political, and social forces and events which have shaped the United States from the colonial period through the Civil War.

Prerequisite: Reading Proficiency.

HST 102. United States History from 1865 to the Present. 3 Credit Hours.

United States History from 1865 to the Present surveys the cultural, economic, institutional, political and social forces and events which have shaped the United States from the Civil War to the present.

Prerequisite: Reading Proficiency.

HST 105. United States in the Twentieth Century. 3 Credit Hours.

The United States in the Twentieth Century surveys the social, economic, political and intellectual forces which have shaped contemporary American life and institutions. This course will focus on change within America during the period 1898 to the present and will consider the effects of that change both on America and on America's relations with the rest of the world.

Prerequisite: Reading Proficiency.

HST 107. The African American Experience, 1619 to the Present. 3 Credit Hours.

The African American Experience surveys the cultural, economic, institutional, political, social forces and events that have shaped the African American experience from early American origins to the present. This course will promote a better understanding of America's past by developing increased awareness of the history of African Americans, their problems and their accomplishments both individually and as a group.

Prerequisite: Reading Proficiency.

HST 115. Ancient and Medieval History to 1500. 3 Credit Hours.

This course is a survey of the Western World with comparisons to non-Western civilizations and cultures from antiquity through the late middle ages. The course will cover ancient civilizations of the Mediterranean and the Near East; ancient Greece and Rome; the impact of Christianity, Islam, Byzantium on western heritage; and the contributions of Celtic, Germanic, and other tribal societies to a medieval western medieval heritage, as well as the development of that heritage from late antiquity to 1500 and the impact and application of these of today's world.

Prerequisite: Reading Proficiency.

HST 117. Early Modern Europe. 3 Credit Hours.

This course surveys the history of western Europe from the later Middle Ages through the French Revolution. It examines the cultural, economic, intellectual, political, religious, and social forces that shaped the Western World and its spheres of influence.

Prerequisite: Reading Proficiency.

HST 119. The Modern World. 3 Credit Hours.

This course examines the development of the "the modern world" from a variety of global perspectives, including demographics, the human impact on the environment, social transformations and the rise of gender, ethnic, and class issues and identities, the impact of warfare and political and ideological conflict, and the implications for culture of global communications networks. The course highlights the nature of changes in global frameworks and their causes and consequences, as well as comparisons among major societies.

Prerequisite: Reading Proficiency.

HST 128. Western Civilization from 1500 to the Present. 3 Credit Hours.

This course surveys the political, economic, cultural, military, and social forces that have shaped the Western World. The course also examines religious developments, overseas colonization, the Enlightenment, industrialization, imperialism, the world wars, and globalization.

Prerequisite: Reading Proficiency.

HST 130. African History I. 3 Credit Hours.

This course will deal with the history of black Africans from the time of ancient Egypt to contemporary Africa. It will be concerned with the chronological progression of African civilization, covering individuals, events and the ideas of the various periods.

Prerequisite: Reading Proficiency.

HST 137. African American History through Reconstruction. 3 Credit Hours.

A survey of African American History from its African background through the Civil War and Reconstruction. The course will investigate African-American leaders, sociocultural institutions, as well as the Black community's relationship with the larger community.

Prerequisite: Reading Proficiency.

HST 138. African American History from Reconstruction to the Present. 3 Credit Hours.

A survey of African American history from the era of Jim Crow to the present. The course will investigate African-American leaders, socio-cultural institutions, as well as the Black community's relationship with the larger community.

Prerequisite: Reading Proficiency.

HST 139. British History. 3 Credit Hours.

This course is a survey of British history from the time of Roman rule until the union of England and Scotland in 1707. Through lectures, videos, text assignments, and field trips, students will trace the historical development of the United Kingdom.

Prerequisite: Reading Proficiency.

HST 141. United States History, 1945-Present. 3 Credit Hours.

This course surveys how the end of World War II gave rise to social, cultural, intellectual, political, economic, and environmental forces that have collectively shaped American experience in the twenty-first century.

Prerequisite: Reading Proficiency.

HST 201. History of East Asia. 3 Credit Hours.

This course surveys the development of China, Japan, Korea, and Vietnam from ancient times to the present. Themes include the nature of traditional East Asian society and culture, war and revolutions, East Asia responses to political and economic challenges posed by an industrialized West, and modernization of the twentieth century.

Prerequisite: Reading Proficiency.

HST 205. The United States and the Middle East, 1776-Present. 3 Credit Hours.

This course surveys the political, economic, cultural, military, and social forces that have shaped the United States relationship with the Middle East. The course examines American involvement in the Middle East and its impact on domestic politics in the US; how US foreign policy toward the Middle East evolved over time; and the role the United States has played in shaping the political history of the Arab-Islamic world.

Prerequisite: Reading Proficiency.

HST 206. Women in United States History. 3 Credit Hours.

This course surveys the history of women in what is now the United States, beginning with the era of the first contact between Native American and Europeans to the present. The course focuses upon the ways gender, race, ethnicity, class, religion and region interacted to shape women's lives. It also surveys women's changing family, work, and social roles. The course examines women's political contributions, their quest for equality, and their role in U.S. constitutional changes over time.

Prerequisite: Reading Proficiency.

HST 207. America in Vietnam. 3 Credit Hours.

This course surveys the United States involvement in Vietnam from the end of World War II through the fall of Saigon in 1975. This course surveys the social, political, and military history of the Vietnam Era. This course also examines both United States foreign policy and domestic politics within the context of the Vietnam War.

Prerequisite: Reading Proficiency.

Horticulture (HRT)

HRT 101. Introductory Horticulture. 4 Credit Hours.

Beginning horticulture students will be introduced to the biological aspects of plant life, including cell structure, anatomy, morphology, physiology and taxonomy, and to the environmental factors which affect plant growth, including light, temperature, moisture, soils and the essential elements. Additional lab hours required.

Prerequisite: Reading Proficiency.

HRT 102. Soils. 3 Credit Hours.

This course is designed to give the student an understanding of soil formation, the chemical and physical properties of natural soils and soil management. Topics include soil use as it relates to plant growth and nutrition, fertility, drainage, and soil sampling and testing. Additional lab hours required.

Prerequisites: HRT 101 or BIO 124 and Reading Proficiency.

HRT 103. Plant Propagation. 3 Credit Hours.

This course is designed to give students an understanding of the various methods of plant propagation. Propagation by seed as well as vegetative propagation including cutting, grafting, layering, propagation of specialized structures and tissue culture will be presented. Additional lab hours required.

Prerequisites: HRT 101 or BIO 124 and Reading Proficiency.

HRT 104. Landscape Design I. 3 Credit Hours.

This course is an introduction to the basic principles of landscape design. It will emphasize learning computer aided design (CAD) programs that will be utilized professionally. Traditional drafting skills will also be developed to enhance plan presentation to clients. Additional lab hours required.

Prerequisites: HRT 101 or BIO 124 and Reading Proficiency.

HRT 105. Workplace Learning: Horticulture. 1 Credit Hour.

This experiential course provides the student the opportunity to apply theory and skills learned in the classroom, learn new skills, and explore career possibilities while supervised by a professional in the field and a faculty member. Students will observe and participate in the functions of the horticultural business or institution to enhance their preparation for entering the field. Minimum 120 hours in the workplace throughout the term.

Prerequisites: HRT 101 or BIO 124, approval of Horticulture department and Reading Proficiency.

HRT 201. Turfgrass Management. 3 Credit Hours.

This course will cover general and special-purpose turfgrasses. Turfgrass use, establishment and management will be emphasized. The laboratory is designed to give the student basic skills in turfgrass identification, pest diagnosis and cultural management. Additional lab hours required.

Prerequisites: HRT 101 or BIO 124 and Reading Proficiency.

HRT 205. Nursery and Garden Center Practices. 3 Credit Hours.

This course is an overview of the nursery and garden center industries. Discussion of nursery operations will include practices from propagation through growing to final product production and distribution. Garden center topics will include merchandising, garden center layout, product trends and specialty items.

Prerequisites: HRT 101 or BIO 124 and Reading Proficiency.

HRT 206. Ornamental Plants - Trees and Vines. 3 Credit Hours.

This course is a study of ornamental landscape plants with an emphasis on woody vines and deciduous trees. Botanical characteristics of plants will be emphasized for identification purposes. Landscape use and plant culture will also be discussed. Additional lab hours required.

Prerequisites: HRT 101 or BIO 124 and Reading Proficiency.

HRT 207. Ornamental Plants - Shrubs and Evergreens. 3 Credit Hours.

This course is a study of ornamental landscape plants with an emphasis on deciduous shrubs and evergreen shrubs and trees. Botanical characteristics of plants will be emphasized for identification purposes. Landscape use and plant culture will also be discussed. Additional lab hours required.

Prerequisites: HRT 101 or BIO 124 and Reading Proficiency.

HRT 214. Grounds Management. 3 Credit Hours.

This course is designed to provide students the skills necessary to manage and maintain the varied aspects of landscapes in residential and commercial settings. Specific topics will include planting techniques, soil preparation, pruning, fertilizing, water and irrigation management, and other related subjects. Additional lab hours required.

Prerequisites: HRT 101 or BIO 124 and Reading Proficiency.

HRT 217. Landscape Design II. 3 Credit Hours.

This course is a continuation of HRT 104. Emphasis will be on applying the principles of art and design in developing landscape plans. Plant selection and use will be emphasized. CAD training will continue. Landscape construction plan details will be introduced.

Prerequisites: HRT 104 and Reading Proficiency.

HRT 218. Landscape Design III. 3 Credit Hours.

This course is a continuation of Landscape Design II with emphasis on the application of the principles of art and design in developing landscape plans. This class will detail conceptual and planting design and emphasize construction plans. CAD training will continue. Additional lab hours required.

Prerequisites: HRT 217 and Reading Proficiency.

HRT 220. Landscape Irrigation. 3 Credit Hours.

This course will provide an overview of the components, management, design and use of irrigation systems used in various landscape situations. Specific applications for turf and garden irrigation will be addressed.

Prerequisites: HRT 101 or BIO 124 and Reading Proficiency.

HRT 227. Plant Pest Management. 4 Credit Hours.

This course is a study of the insect and disease pests that affect ornamental plants. Emphasis is on pest identification and treatment through a knowledge of signs, symptoms and pest life cycles. Preparation for the Missouri Pesticide Applicator License is also included.

Prerequisites: HRT 101 or BIO 124 and Reading Proficiency.

HRT 230. Ornamental Plants - Herbaceous Perennials. 3 Credit Hours.

Students will study the uses of perennials in the landscape and the role of perennials in commercial and residential garden design. Plant identification including specific characteristics such as growth habit, foliage and flowers will be emphasized. Gardening and cultural practice will be discussed.

Prerequisites: HRT 101 or BIO 124 and Reading Proficiency.

HRT 235. Annuals and Vegetables. 3 Credit Hours.

Students will be introduced to the identification of annual landscape plants and their use in private, public and commercial gardens. Vegetables, their identification, use and culture will also be covered.

Prerequisites: HRT 101 or BIO 124 and Reading Proficiency.

HRT 241. Greenhouse Management. 3 Credit Hours.

Students will learn techniques for producing a variety of ornamental crops. Greenhouse structures, and greenhouse environmental factors and their effect on plant growth will also be studied. Wholesale production and retail marketing will be presented. Special attention will be paid to the St. Louis and Midwest markets. Additional lab hours required.

Prerequisites: HRT 101 or BIO 124 and Reading Proficiency.

HRT 242. Urban Tree Management. 3 Credit Hours.

This course will introduce students to the management of urban forest greenspaces emphasizing the social value of urban trees, street and park tree inventories, tree ordinances and program administration. Tree selection, site evaluation, soil, planting, pruning and hazard tree evaluation will be included.

Prerequisites: HRT 101 or BIO 124, HRT 206 and Reading Proficiency.

Hospitality and Tourism (HTM)

HTM 100. Introduction to the Hospitality Industry. 3 Credit Hours.

This course introduces the student to the business of hospitality and presents the exciting career opportunities available in one of the world's largest and most dynamic industries. It focuses on defining hospitality, introducing its various service segments, and presenting possible career paths within each segment. Entry test requirement Test into ENG 101.

Prerequisites: ENG 030 with a minimum grade of "C" or Reading Proficiency.

HTM 105. Professionalism in the Hospitality Industry. 1 Credit Hour.

This course will assist potential and current hospitality employees in developing the personal qualifications, interpersonal skills, and professional values that are in demand in the workplace. Prerequisite: Reading Proficiency

HTM 110. Negotiations in the Hospitality Industry. 2 Credit Hours.

This course provides practical experience in negotiation within a hospitality context. Through the use of hospitality industry specific role-plays, discussions, and writing exercises, students will develop effective and ethical negotiating skills. Students will learn how to adjust their own personal negotiating style to respond appropriately to different personalities and negotiation tactics.

Prerequisite: Reading Proficiency.

HTM 115. Hospitality Customer Service and Guest Relations. 3 Credit Hours.

This course provides the student with the basic knowledge of "service" and how it applies to managing guest relations in the hospitality industry. Service will be examined from the perspective of those who deliver it and those who manage it.

Prerequisites: HTM 100 or HRM 134, and Reading Proficiency.

HTM 120. Supervision and Leadership in the Hospitality Industry. 3 Credit Hours.

This course offers insight into the various aspects of supervision and leadership in the hospitality industry. Students are introduced to the functions of supervision and how it relates to all stakeholders within a hospitality organization. Supervisory roles, responsibilities, and essential supervisory skills are presented through study and practical applications.

Prerequisites: HTM 100 or HRM 134, and Reading Proficiency.

HTM 125. Nutrition for the Culinarian. 3 Credit Hours.

This course is an introduction to the study of nutrients in food and their effects on the human body. It explores nutrition and health, sources and functions of nutrients, food habits and customs, menu planning and food preparation.

Prerequisite: Reading Proficiency.

HTM 200. Procurement in the Hospitality Industry. 3 Credit Hours.

This course will prepare students to employ the principles of effective food, beverage, and supply purchasing necessary to support food preparation and service departments of hospitality operations. Students will be exposed to product specifications, food grading, comparative buying, and procedures associated with purchasing, receiving, issuing and inventory control using current industry technology and software.

Prerequisites: HTM 100 or HRM 134, MTH 108 or Higher, and Reading Proficiency.

HTM 205. Legal Aspects of Hospitality. 3 Credit Hours.

This course is a comprehensive study of the legal issues encountered in hospitality management. Prevention and compliance are stressed to reduce potential liability in hospitality organizations. Areas of emphasis include government regulations, employment, contractual agreements, insurance, property, safety and security, food and beverage management, and guest liability.

Prerequisites: HTM 100 or HRM 134, and Reading Proficiency.

HTM 210. Hospitality Financial Planning and Cost Control. 3 Credit Hours.

This course introduces students to common methods of operational cost control found in the hospitality industry. Students will develop operational standards and will determine daily operational levels and break-even points. Costs of food, beverage, labor, and direct expenses are examined. Budgeting, Forecasting, Analysis and Decision Making are examined.

Prerequisites: HTM 100 or HRM 134, MTH 108 or higher, and Reading Proficiency.

HTM 215. Hospitality Sales and Marketing. 3 Credit Hours.

This course introduces students to fundamental marketing terms, theory, and concepts that are found within the hospitality and tourism industry. Marketing is emphasized as a management philosophy that guides the design and delivery of guest services; a way of doing business. Both short and long-term marketing plans are examined with a focus on how marketing impacts every facet of the organization.

Prerequisites: HTM 100 or HRM 134, and Reading Proficiency.

HTM 220. Hotel Facilities Management. 3 Credit Hours.

This course covers the fundamental duties and responsibilities of a hotel's housekeeping and maintenance departments. Topics include personnel, cleaning, purchasing, equipment, textiles, maintenance, safety, and basic systems for hotel facility management.

Prerequisites: HTM 100 or HRM 134, and Reading Proficiency.

HTM 225. Hotel Operations. 3 Credit Hours.

This course examines the organization and management of hotel operations. It focuses on the interdependent nature of the major departments within a hotel/resort operation; rooms division, food and beverage, sales and marketing, housekeeping and maintenance, and general administration. There is a concentrated focus on front office operations and procedures.

Prerequisites: HTM 100 or HRM 134, and Reading Proficiency.

HTM 230. Bar and Beverage Management. 3 Credit Hours.

This course is a study of beverage service and management in a hospitality establishment. Topics include beverage knowledge, purchasing, control, marketing, legislation, staffing, service, and pairing with food. The concept of responsible alcohol beverage service is also covered and offers the student the opportunity to earn the ServSafe Alcohol certification through the National Restaurant Association.

Prerequisites: HTM 100 or HRM 134, and Reading Proficiency.

HTM 235. Foodservice Design and Layout. 3 Credit Hours.

This course is a survey of the basic essentials necessary for the successful layout and design of a foodservice establishment. Topics to be covered include planning, design, selection, operation, maintenance, and layout of equipment used in various types of foodservice operations.

Prerequisites: HTM 100 or HRM 134, and Reading Proficiency.

HTM 240. Workplace Learning: Hospitality. 2 Credit Hours.

This experiential course provides the student opportunity to apply theory and skills learned in the classroom, learn new skills, and explore career possibilities while supervised by a professional in the field and a faculty member. Student will observe and participate in the functions of the Hospitality industry to enhance their preparation for entering the field. Student is required to complete a minimum of 100 hours of supervised work experience in a position related to their academic or career goal and complete six personally developed learning objectives. Be able to obtain a position related to student's academic or career goals (student's present job may qualify); or permission of instructor. Corequisite: Must be concurrently enrolled in at least one class which is related to student's Major or career interest or with permission of the instructor.

Prerequisites: HTM 100 or HRM 134, and Reading Proficiency.

HTM 245. Event Planning I. 3 Credit Hours.

This course provides students with a practical overview of the many factors that must be considered in the planning and execution of successful meetings and special events. Students will be exposed to program goals and objectives; basic budget questions; destination options and venue considerations; transportation options; food and beverage decisions; speaker and entertainment selection; and other critical aspects of event planning.

Prerequisite: Reading Proficiency.

HTM 250. Event Planning II. 3 Credit Hours.

This course exposes students to the business side of special events including concepts and strategies. Students will examine how to leverage suppliers and vendors, process written proposals, determine management fees, negotiate contracts, encompass safety and security factors, and utilize state-of-the-art technologies that will enhance the meeting or event's effectiveness and enjoyment.

Prerequisites: HTM 245 or HRM 261 with minimum grades of "C", and Reading Proficiency.

HTM 255. Event Planning III. 3 Credit Hours.

This course utilizes the acquired knowledge from Event Planning I and II by requiring students to research, plan, design, and construct a mock event from start to finish. Students will have a hands-on opportunity to develop sound skills and abilities in the compilation of a presentation representing a realistic meeting or special event.

Prerequisites: HTM 250 or HRM 262 with minimum grades of "C", and Reading Proficiency.

HTM 260. Travel and Tourism Foundations. 6 Credit Hours.

This course is designed to provide non-automated, foundational knowledge for those entering the travel and tourism industry. Students will learn the codes, terms, definitions, organizations, resources, and important concepts that pertain to the various segments of the industry.

Prerequisite: Reading Proficiency.

HTM 265. Travel and Tourism Destination Geography. 3 Credit Hours.

This course explores common destinations from a travel and tourism perspective. Students will study the physical environment, climate, people, manmade and natural attractions, traveler preparation, transportation, and accommodations associated with these destinations.

Prerequisites: GEG 106 with a minimum grade of "C", and Reading Proficiency.

HTM 270. Travel and Tourism Computer Systems. 5 Credit Hours.

This course is designed to provide automated, foundational knowledge for those entering the travel and tourism industry. Students will learn the basics of using select computer systems and the Internet for the acquisition of travel information, the construction of travel arrangements, and the collection and use of customer data for marketing purposes.

Prerequisites: HTM 260 or TUR 104 with minimum grades of "C", IS 123 with a minimum grade of "C" or equivalent experience, and Reading Proficiency.

Human Services (HMS)

HMS 100. Introduction to Human Services. 3 Credit Hours.

A survey course to introduce students to human and community needs and to the concepts of the helping profession. Students examine community resources, the relationship of agencies and bureaucracies to the total community, and the worker's role and responsibility in the helping profession.

Prerequisite: Reading Proficiency.

HMS 101. Human Services: Theories and Skills. 3 Credit Hours.

An overview of methodology used in the helping profession. Course will include an analysis of helping relationships, a study of interpersonal skills and practice techniques. A process-oriented approach to solving individual, family and community problems will be stressed.

Prerequisite: Reading Proficiency.

HMS 102. Human Services: Policy and Politics. 3 Credit Hours.

An analysis of the political process involved in the formulation of social welfare policies from a historical point of view. Federal, state and local programs will be examined in terms of skills and knowledge to affect program planning and delivery.

Prerequisite: Reading Proficiency.

HMS 111. Group Practice in Human Services. 3 Credit Hours.

This course will focus on the basic issues of group work in Human Services settings. The theory behind group work practice, a study of the various types of groups, ethical issues, group leadership and the process of forming and working with groups will be covered.

Prerequisites: HMS 100 recommended and Reading Proficiency.

HMS 118. Aging and Disabilities. 3 Credit Hours.

This course will focus on the aging process and the manifestations of aging in persons with congenital or acquired disabilities. Current habitation, rehabilitation programs and recent technologies will be explored. Discussions will also center on aging care providers and their concerns and needs.

Prerequisite: Reading Proficiency.

HMS 119. Introduction to the Field of Disabilities. 3 Credit Hours.

A course designed to provide an overview of issues in the field of disabilities. Discussions focus on the service delivery system and ways in which current legislation, inclusionary models, and other trends impact the lives of persons with disabilities and their care givers. Resources and careers in disabilities will be explored.

Prerequisite: Reading Proficiency.

HMS 120. Team Building: Working with Care Givers. 3 Credit Hours.

Focus is on communication, cooperation, and collaboration with care givers of persons with disabilities. Presented will be choices, decision-making, support systems, which aid persons with disabilities and their care givers with full inclusion into society.

Prerequisite: Reading Proficiency.

HMS 121. Working with Challenging Behaviors. 3 Credit Hours.

This course provides students with the learning and application of intervention skills to assist individuals with disabilities to achieve their full potential. Focus is on providing support in community settings to persons with disabilities whose behaviors pose challenges.

Prerequisite: Reading Proficiency.

HMS 122. Health Issues and Persons with Disabilities. 3 Credit Hours.

Introduction to the basic principles of the health, etiology, and prognosis of specific disabilities. First aid, CPR, medicine administration and other emergency concerns will be explored. Experiences focusing on personal care assistance, positioning, transferring, feeding, etc. for disabled will be learned.

Prerequisite: Reading Proficiency.

HMS 123. Inclusion in the Community. 3 Credit Hours.

Designed to help care givers and/or paraprofessionals prepare individuals with disabilities for maximum empowerment and self-advocacy in their respective communities. Introduction to and discussion of alternative living situations and supports needed for inclusion. Staff career competencies explored.

Prerequisite: Reading Proficiency.

HMS 201. Workplace Learning I: Human Services. 3 Credit Hours.

This workplace-based course provides the student the opportunity to apply theory and skills learned in the classroom, learn new skills, and explore career possibilities while supervised by a professional in the field and a faculty member. Students will observe and participate in the function of the organization to enhance their preparation for entering the Human Services field. Minimum 50 hours per credit hour in the workplace throughout the term. Concurrent enrollment in HMS 203 required.

Prerequisites: HMS 100 and HMS 101 with grades of "C" or better and Reading Proficiency.

HMS 202. Workplace Learning II: Human Services. 3 Credit Hours.

This workplace-based course provides the student the opportunity to apply theory and skills learned in the classroom, learn new skills, and explore career possibilities while supervised by a professional in the field and a faculty member. Students will observe and participate in the function of the organization to enhance their preparation for entering the Human Services field. Minimum 50 hours per credit hour in the workplace throughout the term. Concurrent enrollment in HMS 204 required.

Prerequisites: HMS 201 and HMS 203 with grades of "C" or better and Reading Proficiency.

HMS 203. Human Services Workplace Learning Seminar I. 3 Credit Hours.

Discussion and analysis in small groups of the human services practicum experience. There will be special learning objectives related to the kind of work the student will do in an organization after completion of the program.

Corequisite: HMS 201.

Prerequisites: HMS 100 and HMS 101 with grades of "C" or better and Reading Proficiency.

HMS 204. Human Services Workplace Learning Seminar II. 3 Credit Hours.

This course builds on the learning objectives of HMS 203. These objectives will be related to the work the student will do after completion of the program.

Corequisite: HMS 202.

Prerequisites: HMS 100, HMS 101, HMS 201 and HMS 203 all with grades of "C" or better and Reading Proficiency.

HMS 205. Crisis Intervention. 3 Credit Hours.

Course designed as a beginning training unit for people who anticipate or are presently working with individuals in crisis situations such as suicide, rape, spouse abuse, death and drugs. Will focus on theory and practical application of crisis intervention techniques.

Prerequisite: Reading Proficiency.

Humanities (HUM)

HUM 101. Humanities: Pre-History to 1600. 4 Credit Hours.

This course explores the development of Western culture from its beginnings to the early modern period. Its focus is on the basic attitudes, feelings and ideas expressed in art music, literature, philosophy, and religion. A major objective of the course is to help students to understand and appreciate some of the iconic literature, art and music of Western culture.

Prerequisite: Reading Proficiency.

HUM 102. Humanities: 1600 to the Present. 4 Credit Hours.

This course explores the development of Western culture from the Early Modern Era (circa 1600) to the present. The focus of the course is the attitudes, emotions and ideas manifested in or expressed by the art, architecture, music, philosophy, literature and religion as they develop from the 17th century to the present. The course will trace the development of classical and popular music, art, literature and philosophy, and especially the growing impact of science on the arts, music and ideas of the last 150 years. Throughout the course, special attention is given to the social and historical context in which the art, music and ideas were/are created.

Prerequisite: Reading Proficiency.

HUM 106. Black Humanities. 3 Credit Hours.

This course is an examination of the development of ideas expressed in art, music, literature, philosophy, education, psychology, sociology, and religion of the African Diaspora. Several academic areas will be explored from an Afrocentric perspective to stimulate an interest and kindle a passion for further study. Cultural styles of the African diaspora are explored in the local, global, and intercultural contexts.

Prerequisite: Reading Proficiency.

HUM 109. Arts and Ideas in the Ancient World. 3 Credit Hours.

This humanities course uses the visual arts and literature to trace the development of belief systems from the earliest expressions found in prehistoric remains through the rise of the great civilizations of Egypt, Greece and Rome.

Prerequisite: Reading Proficiency.

HUM 110. The Middle Ages and the Renaissance. 3 Credit Hours.

This humanities course explores the arts and ideas, including philosophies and religions, that infused and created the cultural periods known as the Middle Ages and Renaissance in Western Europe, and the ways in which these arts and ideas represented the visible and/or audible expression of the human condition.

Prerequisite: Reading Proficiency.

HUM 112. Creative Thinking. 3 Credit Hours.

This interdisciplinary course helps students develop their capacities to observe clearly, to generate ideas and alternatives, to overcome blocks to recognize and solve problems, and to assess results. The skills taught apply to all arts and sciences, to business, and to personal interests.

Prerequisite: Reading Proficiency.

HUM 113. Introduction to Irish Studies. 3 Credit Hours.

This course is a survey of Irish history, literature, and culture from prehistoric times to the present. The role of the arts in the struggle for independence and the outstanding achievements of Irish writers and poets as well as the global importance of the Irish diaspora is emphasized.

Prerequisite: Reading Proficiency.

HUM 115. Life and Death During the Nazi Era. 3 Credit Hours.

An interdisciplinary approach to the study of life in Nazi Germany. Literary, psychological and historical texts on such topics as education, racial prejudice and propaganda are read and interpreted in class. Supplementary slides and documentary films are used.

Prerequisite: Reading Proficiency.

HUM 208. Liberal Arts Seminar: Themes in the Liberal Arts. 3 Credit Hours.

The seminar will draw together the main themes of a liberal arts education the consideration of the impact of science, technology and the humanities on societies over time, values and ethics appropriate to a new age, the future consequences of present policies, the enjoyment and importance of both the arts and the sciences. The theme may change semester by semester. Prerequisite: 32 hours or consent of Liberal Arts coordinator/instructor and Reading Proficiency.

Information Reporting Technlgy (IRT)

IRT 101. Principles of Judicial Reporting I. 3 Credit Hours.

This course introduces the student to the role of the reporter in trials, depositions, and administrative hearings. All phases of format and design are taught as it pertains to the production of trials, depositions, and administrative hearings. The student will receive instruction in reference materials, related jobs, NCRA Code of Professional Conduct, and basic proofreading techniques. Prerequisites: IRT 170 and Reading Proficiency.

IRT 138. Introduction to Computer-Aided Transcription. 3 Credit Hours.

This course introduces the student to the Computer-Aided Transcription (CAT) software and gives instruction in the operation of a computer hardware data input device for the creation of a legal document and the development of the dictionaries for their use. Prerequisites: IRT 170, IS 123 and Reading Proficiency.

IRT 140. Legal Terminology. 3 Credit Hours.

This course will teach the student the meaning of legal and Latin terms. It will also cover instruction on civil and criminal law, the judicial system (including discovery, trial, and appellate processes), the legislative process, hearings, and arbitrations, research and citations, and the notary public law. Prerequisite: Reading Proficiency.

IRT 142. Editing of Legal Documents. 3 Credit Hours.

This course covers the basic rules of English grammar, punctuation, spelling, numbers, capitalization, vocabulary development, proofreading of the spoken word, and the transcription of legal documents. Prerequisites: IRT 170 and Reading Proficiency.

IRT 169. Information Reporting I. 3 Credit Hours.

This course introduces the student to the basic computer-compatible theory for writing on the stenotype machine. The student will develop the ability to write words and sentences. Prerequisites: IS 102 or 30 wpm typing and Reading Proficiency.

IRT 170. Information Reporting II. 3 Credit Hours.

This course completes the introduction of the computer-compatible theory for writing on the stenotype machine. The student will continue to develop their ability to write testimony material up to speeds of 60 wpm with 95% accuracy. Prerequisites: IRT 169 and Reading Proficiency.

IRT 171. Information Reporting III. 3 Credit Hours.

This course covers speedbuilding of literary, testimony, and jury charge material with emphasis on accurate transcription. The student will build speed to 100 wpm on testimony, 80 wpm on jury charge, and 60 wpm on literary. Prerequisites: IRT 170 and Reading Proficiency.

IRT 172. Information Reporting IV. 3 Credit Hours.

This course continues to cover speedbuilding of literary, testimony, and jury charge material with emphasis on accurate transcription. The student will build speed to 140 wpm on testimony, 120 wpm on jury charge, and 100 wpm on literary. Prerequisites: IRT 171 and Reading Proficiency.

IRT 173. Information Reporting V. 3 Credit Hours.

This course continues to cover speedbuilding on literary, testimony, medical testimony, and jury charge material with emphasis on accurate transcription. The student will build speed to 180 wpm on testimony, 160 wpm on medical testimony, 160 wpm on jury charge, and 120 wpm on literary. Prerequisites: IRT 172 and Reading Proficiency.

IRT 174. Information Reporting VI. 3 Credit Hours.

This course continues to cover speedbuilding on literary, testimony, medical testimony, and jury charge material with emphasis on accurate transcription. The student will build speed to 225 wpm on testimony, 200 wpm on medical testimony, 200 wpm on jury charge and 180 wpm on literary. Prerequisites: IRT 173 and Reading Proficiency.

IRT 201. Principles of Judicial Reporting II. 3 Credit Hours.

This course covers advanced phases of formatting, design, and creating include pages to be inserted in trial, deposition and administrative hearing. The student will receive advanced instruction on developing and using parenthetical phrases, punctuating the spoken word and proofreading techniques. This course will prepare students to be able to produce transcripts for civil, criminal, worker's compensation and federal court. Prerequisites: IRT 101, IRT 172 and Reading Proficiency.

IRT 253. Workplace Learning: Judicial Reporting. 1 Credit Hour.

This experiential course provides the student the opportunity to apply theory and skills learned in the classroom, learn new skills, and explore career possibilities while supervised by a professional in the field and a faculty member. Students will observe and participate in the function of the Judicial reporter to enhance the preparation for entering the field. The student shall complete 50 verified hours of actual writing time during the internship. Prerequisites: IRT 174 or one test at 200 wpm testimony and Reading Proficiency.

IRT 257. Advanced Computer-Aided Transcription. 3 Credit Hours.

This course will introduce the student to the advanced applications of the Computer-Aided Transcription (CAT) software for information reporting technology. The student will learn about videotaping in depositions for trial purposes and litigation support. Prerequisites: IRT 138 and Reading Proficiency.

Information Systems (IS)

IS 101. Keyboarding. 1 Credit Hour.

This course is designed for the beginning student to develop touch control of the keyboard, to use proper techniques, to build skill to a minimum of 25 words per minute for one minute. Emphasis is on learning the alphabet, numeric, and symbol keys and on building basic skill. Satisfactory/Unsatisfactory grading. Additional practice hours may be required.

IS 102. Keyboarding and Formatting. 3 Credit Hours.

Students learn to develop touch control of the keyboard, proper keyboarding techniques, and to apply basic formatting skills to letters, memos, reports, and tables.

IS 103. Information Systems for Business. 3 Credit Hours.

A study of computers and information systems for business functions. Topics include computer technology and its impact on business organization, role of people in an information system environment, programming fundamentals, information systems and the computer in solving business management problems. Credit not allowed for this course if credit is given for IS 100. Prerequisite: Reading Proficiency.

IS 109. Proofreading and Editing. 1 Credit Hour.

Students learn to produce high-quality business communications through proofreading for accuracy in mechanics, format, and content as well as edit documents for correctness, conciseness, and clarity.

Prerequisites: IS 101 or IS 102 and Reading Proficiency.

IS 112. Software and Hardware Concepts. 3 Credit Hours.

This course is a survey of technical topics related to computer systems with emphasis on the relationships between hardware architecture and systems software. Binary and hexadecimal number systems, data representation, data structures, processor architecture, and operating systems functions and methods will be explored. Basic computer literacy is expected.

Prerequisites: MTH 140, Reading Proficiency.

IS 116. Computer Literacy. 3 Credit Hours.

This course explores the terminology and concepts of computers including file management, Internet browsers, and web page development. Students gain proficiency using productivity tools such as word processors, presentation software, electronic spreadsheets and electronic mail to solve problems, communicate, and manage information to make informed decisions. Students will also develop a computer application.

Prerequisite: Reading Proficiency.

IS 118. Computer Applications-Databases. 1 Credit Hour.

This course focuses on the use of a relational database system on the computer with business and personal applications. Additional lab time may be required.

Prerequisite: IS 123 or equivalent experience.

IS 119. Computer Applications-Word Processing. 1 Credit Hour.

This class is an introduction to word processing using a current software program. Included in this course are the basic functions of creating, formatting, editing, and printing documents. Additional lab hours may be required.

Prerequisite: IS 123 or equivalent experience.

IS 122. Windows. 3 Credit Hours.

Terminology and concepts of the Windows interface will be covered. File management and organization, managing programs, and installing and uninstalling applications are also covered.

Prerequisite: Reading Proficiency.

IS 123. Introduction to Windows. 1 Credit Hour.

Students learn the basic concepts of the Windows environment and how to create and manage files within the organizational structure of that environment. The desktop, accessories, and navigational tools will also be covered.

IS 124. Windows-Advanced. 1 Credit Hour.

Students learn about the Windows operating system in-depth. Installing, running, and uninstalling Windows applications and optimizing performance of the Windows operating system will be covered.

Prerequisites: IS 132 and Reading Proficiency.

IS 125. Excel for Windows. 2 Credit Hours.

This course introduces the use of Excel for applications in business, involving topics which include formatting worksheets, calculating data with formulas and functions, analyzing financial data, designing tables and charts, and working with macros.

Prerequisites: IS 122 or IS 123.

IS 129. HTML. 1 Credit Hour.

This course covers the essentials of creating web pages using Hypertext Markup Language (HTML) and Cascading Style Sheets (CSS). Students will create and edit basic pages which include text, links, and images. HTML and CSS will be used to control page appearance and layout. Recommended preparation IS 123 or equivalent experience.

Prerequisite: Reading Proficiency.

IS 130. Hardware and Software Support. 3 Credit Hours.

This course covers the theory and hands-on skills necessary to pass the CompTIA A+ exam. Topics covered include hardware fundamentals, networking and security. Students will learn basic operating system functionality and troubleshooting methodology, the practice of proper safety procedures, and how to effectively interact with customers and co-workers. Basic computer literacy is expected.

Prerequisite: Reading Proficiency.

IS 131. Advanced HTML. 2 Credit Hours.

This course covers advanced web page creation in this continuation of IS 129, Hypertext Markup Language (HTML). The student is introduced to advanced techniques of HTML and Cascading Style Sheets (CSS). Students will create and edit web pages which include forms, imagemaps, audio, video, and Application Program Interfaces (API). Additional advanced topics identified by industry and World Wide Web Consortium (W3C) standards may be explored. HTML editors and converters will be presented and may be utilized.

Prerequisites: IS 129 and Reading Proficiency.

IS 132. Windows-Intermediate. 1 Credit Hour.

This course is a continuation of Introduction to Windows. Students will become more familiar with the Windows interface and will learn how to manage and manipulate programs, files, folders and objects.

Prerequisite: IS 123.

IS 136. Internet Fundamentals. 1 Credit Hour.

This course provides practical information regarding Internet practices and safety. Searching, validating, and securely passing information to and from the Internet are emphasized. Identifying and mitigating common threats such as spyware, viruses, Trojan Horses, and identity theft are covered.

Prerequisites: IS 122 or IS 123 and Reading Proficiency.

IS 139. Web Publishing. 3 Credit Hours.

This course introduces current industry standards for web development and design techniques that include the use of Hypertext Markup Language (HTML), Cascading Style Sheets (CSS), and an introduction to JavaScript. Topics such as web development process, accessibility standards, platform standards, HTML editors and converters, Web 2.0 Technologies, performance issues, tables, forms, dynamic content, and web site management issues will be presented.

Prerequisite: Reading Proficiency.

IS 141. Graphics for the Web. 3 Credit Hours.

This course focuses on generating graphics that can be utilized within the context of the Internet. Topics will include use of graphics at the appropriate times, performance issues, button creation, animated graphics, and multimedia tools.

Prerequisites: IS 139 and Reading Proficiency.

IS 142. Web Development I. 3 Credit Hours.

This course is an in-depth study of the development and implementation of engaging websites using current industry production tools. Accessibility, security, and website management issues will be addressed. Topics such as file formats, platform standards, user-centered navigation, dynamic content such as streaming video/audio, and search engine concepts will be presented.

Prerequisites: IS 139 and Reading Proficiency.

IS 151. Computer Applications in Business. 4 Credit Hours.

This course covers software programs frequently used in the business environment. Word processing, spreadsheets, database management, and presentation software will be introduced.

Prerequisites: IS 122 or IS 123 or IT 102 or equivalent experience.

IS 152. Computer Applications in Business-Intermediate. 3 Credit Hours.

This class is a continuation of Computer Applications in Business (IS 151).

Software packages from these categories will be studied: spreadsheets, database management, word processing, and presentation software.

Prerequisites: IS 151 and Reading Proficiency.

IS 153. C# Programming I. 4 Credit Hours.

This course emphasizes software development problem-solving methodologies utilizing current software design and development tools and techniques. Topics include data structures, program design, pseudocode, language control structures, procedures and functions, error handling and Object Oriented design using classes. Assignments will be developed in the C# language using the current development environment.

Prerequisite: Reading Proficiency.

IS 154. Web-Based Productivity Applications. 2 Credit Hours.

Learn to use web-based applications utilized to enter, retrieve, and update data. Web-based collaboration tools, online file management, and cloud computing will also be covered.

Prerequisites: IS 151 and Reading Proficiency.

IS 156. Computer Applications-Intermediate Databases. 1 Credit Hour.

This course is a continuation of IS 118. Student will learn about action queries, inner/outer joins, mail merge, importing and exporting specifications, queries that "prompt" for criteria, and additional formatting techniques for reports. Macros will also be introduced.

Prerequisites: IS 118 or IS 151 and Reading Proficiency.

IS 157. Computer Applications-Intermediate Word Processing. 1 Credit Hour.

This class is a continuation of IS 119. The students will merge documents, create and sort tables, insert images, utilize drawing objects, use special formatting features, and prepare charts and web pages. In addition, students will create basic macros and integrate/import other applications into documents.

Prerequisite: IS 119 or IS 151.

IS 161. Computer Applications: Advanced Word Processing. 1 Credit Hour.

This class is a continuation of IS 157. Additional emphasis will be placed on advanced word processing features. Students will create advanced macros, style sheets, outlines, master documents, fill-in forms, table of contents, and shared documents.

Prerequisites: IS 157 and Reading Proficiency.

IS 165. Computer Applications-Microsoft Project. 1 Credit Hour.

This course introduces students to the Microsoft Project software application. Microsoft Project allows students, professionals, volunteers, or an individual managing or working on a project to organize all the details of a project into one central repository.

Prerequisite: Reading Proficiency.

IS 167. C++ Programming I. 4 Credit Hours.

C++ Programming I introduces software development problem-solving methodologies utilizing current software design and development tools and techniques. Topics include data structures, program design, pseudocode, language control structures, system and user defined functions, error handling, pointers, arrays, and Object-Oriented design using classes. Assignments are developed in C++ using a current integrated development environment (IDE). Basic computer literacy expected.

Prerequisite: Reading Proficiency.

IS 187. Java Programming I. 4 Credit Hours.

In this course students learn software development problem-solving methodologies utilizing current software design and development tools and techniques and also receive an introduction to the Java programming language. Topics include data structures, program design, pseudocode, language control structures, procedures and functions, error handling and Object Oriented design using classes. Assignments are developed in Java using a current integrated development environment (IDE). Basic computer literacy expected.

Prerequisite: Reading Proficiency.

IS 200. Electronic Records Management. 2 Credit Hours.

Students learn database management and records management procedures from creation through processing, maintenance, retention, retrieval, protection, and disposition. Electronic and manual filing rules are covered and alphabetic, numeric, subject, and geographic filing methods are emphasized.

Prerequisites: IS 118 or IS 151 and Reading Proficiency.

IS 205. Medical Terminology. 4 Credit Hours.

This course provides a broad survey of the language of medicine and health technologies. Students learn to accurately spell and define common medical terms related to major disease processes, diagnostic procedures, laboratory tests, abbreviations, drugs, and treatment modalities. Emphasis is placed on formation, definition and pronunciation. (Same as HIT 101).

Prerequisite: Reading Proficiency.

IS 209. Computer Applications - Advanced. 3 Credit Hours.

This course covers integration techniques used to share information between computer applications. Templates, workgroup features, scripting, and other time-saving techniques are explored to enable students to work with greater efficiency. Case studies and independent projects provide practical experience in the development and implementation of business models.

Prerequisites: IS 152 and Reading Proficiency.

IS 210. Office Technology and Procedures. 3 Credit Hours.

Students learn effective business communication techniques, processing of information via technology, and coordination of office information. Human relations skills and computer-based tools are emphasized.

Prerequisites: IS 165, IS 209 and Reading Proficiency.

IS 214. Spreadsheet Macros and Advanced Topics. 1 Credit Hour.

This course will cover more complex functions of spreadsheets including financial tools and analysis, connecting to external data sets, database functions and queries, and collaboration.

Prerequisites: IS 125 and Reading Proficiency.

IS 225. Database Management. 4 Credit Hours.

This course will cover the concepts, skills, methodology, and database technology necessary to design and implement a relational database management system. Topics include relational databases, data structures, relational data modeling and design using current industry techniques and tools. This course emphasizes Structures Query Language (SQL) commands to create a relational database.

Prerequisite: Reading Proficiency.

IS 229. Unix/Linux I. 3 Credit Hours.

This course introduces the Unix/Linux operating system with special focus on the organization and maintenance of the file system. Students are also introduced to basic installation and configuration of the operating system and will build and troubleshoot a stand-alone Unix/Linux machine. Course objectives align with the Linux Professional Institute Level 1 certification and emphasize command line process. Basic computer literacy is expected.

Prerequisite: Reading Proficiency.

IS 237. Fundamentals of Information Assurance/Security. 3 Credit Hours.

This course examines fundamentals of network security involved in creating and managing secure computer network environments. Both hardware and software topics are considered, including authentication methods, remote access, network security architectures and devices, cryptography, forensics and disaster recovery plans. This course serves as a preparation basis for CompTIA Security+ exam.

Prerequisites: IT 102 or IS 229 and Reading Proficiency.

IS 240. SQL and Database Development. 3 Credit Hours.

This course covers the concepts of Structured Query Language (SQL) and database development. Students learn how to create tables, views and indexes. Managing and formatting data, developing queries and sub-queries and advanced reporting are presented. Students learn how to develop, manage and implement database control and connectivity techniques.

Prerequisites: IS 225 and Reading Proficiency.

IS 241. Systems Analysis and Design. 3 Credit Hours.

This course covers the concepts, skills, methodologies, techniques and perspectives essential to analyze and design information systems. Visual and emerging development tools are used to focus on object-oriented and visual development of information systems. Additional lab time may be required.

Prerequisites: IS 153 or IS 187 and Reading Proficiency.

IS 253. C# Programming II. 4 Credit Hours.

This course focuses on broadening and deepening the student's understanding of Object Oriented Programming (OOP) as implemented in the C# language. Core elements include creating and deploying Windows programs, form application basics, building user interfaces using basic techniques, .NET fundamentals, basic coding with the .NET framework, design and development of classes, overloading and overriding methods and constructors, inheritance, encapsulation and interfaces. Course objectives align with the Microsoft Certified Technical Specialist (MCTS) .NET Framework, Windows Applications certification.

Prerequisites: IS 153 or IS 187 with minimum grades of "C" and Reading Proficiency.

IS 256. C++ Programming. 3 Credit Hours.

This course introduces the C++ programming language. Topics include language syntax, logic and flow control, data types and structures, files, pointers, system and user defined functions, arrays, recursion, and the use of libraries. Object-oriented principles are emphasized, including the design and coding of classes and class objects.

Prerequisites: IS 153 or IS 187 with a minimum grade of "C", or MTH 160A or MTH 160B or MTH 160C, and MTH 170 or MTH 185 with a minimum grade of "C" or satisfactory score on placement test, and Reading Proficiency.

IS 257. Advanced Database Design. 3 Credit Hours.

This course is a continuation of the database design course covering implementation concepts such as n-tier architectures, middleware, SQL functionality, distributed databases, data warehousing and cloud computing. The course focusses on application of both theory and practice. Additional lab time may be required.

Prerequisites: IS 225 and Reading Proficiency.

IS 264. Unix/Linux II. 3 Credit Hours.

This course prepares students to perform basic Unix/Linux systems administration and network installation tasks. Students will be introduced to the design, configuration, and installation of system services along with management and automation of those services through shell scripting. System security will also be covered. Course objectives align with the Linux Professional Institute Level 1 certification.

Prerequisites: IS 229 and Reading Proficiency.

IS 265. Web Scripting Technologies. 3 Credit Hours.

This course presents current and emerging scripting technologies used for development of state-of-the-art websites and other applications. The primary focus is on client-side technologies. Students will use a variety of technologies in this project-oriented class.

Prerequisites: IS 139 and Reading Proficiency.

IS 268. SQL Server Programming. 3 Credit Hours.

This course is an in-depth study of Microsoft SQL Server programming. Students learn the advanced features of SQL Server to interact with the database and other applications. Advanced techniques such as database cursors, triggers and stored procedures, SQL Server Data Tools and SQL Server Reporting Services are presented. In addition, students gain the essential knowledge and skills in collecting, analyzing, interpreting and presenting information obtained from multiple data sources.

Prerequisites: IS 240 with a minimum grade of "C" and Reading Proficiency.

IS 269. SQL Server Applications Programming. 3 Credit Hours.

This course covers the development of Graphical User Interface (GUI) database applications in Microsoft Visual Studio and SQL Server environment. Students learn to use Microsoft Visual Studio and professional .NET developer tools to develop web-based data-driven applications. Practical solutions for typical business situations are presented, demonstrated and developed in a lab environment.

Prerequisites: IS 240 with a minimum grade of "C" and Reading Proficiency.

IS 273. Oracle Design and Implementation. 3 Credit Hours.

This course covers the concepts, fundamental issues and techniques for the design and development of an Oracle database. Students will be exposed to all the phases and tasks of the design process, including business modeling, conceptual and physical modeling strategies in developing application systems in Oracle. Requirements of data warehouse design and implementation will be discussed along with design methods for distributed database and Web-based applications. Students will gain hands-on experience in Oracle designer tools.

Prerequisites: IS 225 or equivalent business experience and Reading Proficiency.

IS 275. Advanced C++ Programming. 3 Credit Hours.

This course is a continuation of IS 256, covering database connectivity, object-oriented data structures, sorting, searching, exception handling, and the Standard Template Library. The creation and use of classes will be emphasized including the principles of inheritance and polymorphism. GUI technologies will be explored, including the development of web interfaces.

Prerequisites: IS 256 and Reading Proficiency.

IS 276. Oracle Programming. 3 Credit Hours.

This course is an in-depth study of Oracle structured query language (SQL) and procedural language (PL/SQL). Students will learn the advanced features of SQL and PL/SQL to interact with the database and other applications. Advanced techniques such as control structures, cursors, database triggers, functions, stored procedures and packaging will be presented.

Prerequisites: IS 225 with minimum grade of "C" and Reading Proficiency.

IS 277. Oracle Applications Programming. 3 Credit Hours.

This course covers the development of data-driven web-based applications in Oracle. Students will learn the Oracle data-centric rapid application development tools such as Oracle Application Express (APEX) to develop and deploy fast and secure web applications. Practical solutions for typical business situations will be discussed, demonstrated and developed in a lab environment.

Prerequisites: IS 225 with a minimum grade of "C" and Reading Proficiency.

IS 278. Oracle Database Security and Administration. 3 Credit Hours.

This course covers the activities performed while administering an Oracle database. Students install and customize the Oracle database, configure the Oracle Network environment, manage database storage structures, perform database backup and recovery, monitor transactions and resolve locking conflicts, administer users and implement database security. Additional lab hours may be required.

Prerequisites: IS 225 with a minimum grade of "C" and Reading Proficiency.

IS 279. Oracle Tuning and Performance. 3 Credit Hours.

This course is designed to provide an in-depth overview of Oracle's internal structures and show how to tune Oracle's internal structures for maximum high performance. Students learn how to use a variety of Oracle tools and automatic tuning features to diagnose and tune the Oracle Instance components.

Additional lab hours may be required.

Prerequisites: IS 225 with a minimum grade of "C" and Reading Proficiency.

IS 283. C# Programming III. 4 Credit Hours.

Students in this course focus on completing the acquisition of the knowledge and skills for developing applications using Windows Forms, Windows Presentation Foundation (WPF) and the .NET Framework 4 in preparation for Microsoft's Microsoft Certified Technology Specialist (MCTS) .NET Framework 4, Windows Applications certification. Coursework will include developing Windows applications using the C# programming language to access data in Windows forms applications, create Windows services, utilize advanced user interface techniques, implement n-tier applications and implement web applications.

Prerequisites: IS 253 with a minimum grade of "C" and Reading Proficiency.

IS 287. Java Programming II. 4 Credit Hours.

This course focuses on broadening and deepening the student's understanding of Object Oriented Programming (OOP) as implemented in the Java language. Core elements include design and development of classes, overloading and overriding methods and constructors, inheritance, encapsulation, and interfaces. Course objectives align with Oracle's Certified Professional, Java SE Programmer certification.

Prerequisites: IS 153 or IS 187 with minimum grades of "C" and Reading Proficiency.

IS 288. Java Programming III. 4 Credit Hours.

Students in this course complete their understanding of core java concepts required for Oracle's Java SE Programmer certification. Java web development utilizing the Model-View-Controller (MVC) pattern with Java Server Pages (JSP) and Servlets is also examined. Mobile access to web applications is introduced, and secure coding principles are emphasized.

Prerequisites: IS 287 with a minimum grade of "C" and Reading Proficiency.

IS 290. C# Frameworks: .NET Web App Framework. 3 Credit Hours.

Students expand their C# development skills and gain the knowledge and skills required to design and develop Web applications by using the latest version of the Microsoft .NET framework and Microsoft Visual Studio. This course aligns with the Designing and Developing Web Applications by using Microsoft .NET framework certification.

Prerequisites: IS 283 with a minimum grade of "C" and Reading Proficiency.

IS 291. Workplace Learning: Information Systems. 3 Credit Hours.

This course consists of a workplace assignment with an employer or agency (minimum of 150 hours during the semester), which allows the student to apply skills learned in the classroom. Students will have the opportunity to learn new skills and to explore career possibilities while supervised by the employer and a faculty member. This course is appropriate for students nearing completion of their IS degree program.

Prerequisites: Enrollment in an IS program, department approval, and Reading Proficiency.

IS 294. Java Frameworks: Struts and Hibernate. 3 Credit Hours.

In this course student expand their Java development skills by learning popular Java frameworks and tools for rapid application development of enterprise-level systems. The main focus is on Struts, the Java Persistence Interface (JPA) using Hibernate, and Enterprise Java Beans (EJB). This course aligns with the Oracle Certified Expert - Java EE Enterprise Javabeans certification.

Prerequisites: IS 288 with a minimum grade of "C" and Reading Proficiency.

IS 295. Java Mobile Applications Development. 3 Credit Hours.

This course focuses on java technologies and techniques for developing mobile applications for cell phones and other "smart" devices. The course aligns with Oracle's Java ME Mobile Application Developer certification.

Prerequisites: IS 287 with a minimum grade of "C" and Reading Proficiency.

IS 296. Java Frameworks: Spring. 3 Credit Hours.

This course focuses on the popular Java Spring Framework as a tool for rapid development of enterprise level systems. The integration of Spring with other frameworks such as Struts and Hibernate will also be examined. This course aligns with the SpringSource certification for the Core Spring Developer exam.

Prerequisites: IS 294 with a minimum grade of "C" and Reading Proficiency.

Information Technology (IT)

IT 100. Introduction to Cybersecurity. 1 Credit Hour.

This course introduces the people, products, and processes that protect electronic data from those with malicious intent. This course will introduce students to various experts who discuss the concepts of cybersecurity including what it is, why it is important, and some of the products and processes that they use to secure data. Connections between the required courses in the Cybersecurity Program will be explored. The opportunities within this growing field will be covered. This course is not intended to teach students to implement security products and processes, but rather to make students aware of the global need for cybersecurity and the advancement in this industry. Cybersecurity requires a basic understanding of networking concepts. Supplemental information and activities for specific networking concepts are included where needed throughout the course.

Prerequisite: Reading Proficiency.

IT 101. Cisco Networking Academy I: Introduction to Networks. 5 Credit Hours.

This course focuses on learning the fundamentals of networking. Practical and conceptual skills that build the foundation for understanding basic networking will be covered. This is the first of four (4) courses as preparation for the Cisco Certified Network Associate (CCNA) certification as well as the first of two (2) courses as preparation for the Cisco Certified Entry Networking Technician (CCENT).

Prerequisite: Reading Proficiency.

IT 102. Desktop Client Support. 3 Credit Hours.

This course prepares students to take the Microsoft Certified Technology Specialist exam for Windows Configuration, 70-680. Students will learn to implement, administer, and troubleshoot the Microsoft Windows client operating system. Topics include installation, upgrades, restoration, user profiles and accounts, and the TCP/IP protocol. Basic computer literacy is expected.

Prerequisite: Reading Proficiency.

IT 103. Help Desk Principles. 3 Credit Hours.

This course focuses on key information and skills for user support professionals, including troubleshooting and problem solving, communicating successfully with clients, performing end-user needs analysis and assessment, and training end-users. With balanced coverage of both people skills and technical skills, this course is an excellent resource for those in or preparing for the technical support field.

Prerequisite: Reading Proficiency.

IT 120. Enterprise Security Management. 3 Credit Hours.

This course examines managerial aspects of computer security and assurance for enterprises. Topics include risk management, contingency planning, access control models, and information security governance including FISMA compliance, program assessment and metrics. The student will acquire knowledge of accreditation, certification, procurement and operating principles for secure computing systems.

Prerequisites: IS 237 and Reading Proficiency.

IT 121. Secure E-Commerce and E-Government. 3 Credit Hours.

This course examines the principles and techniques for secure electronic commerce and secure electronic government. Topics include cryptography, certification authorities, public key infrastructure, biometrics, digital signatures, and legal and national policy issues surrounding e-commerce and e-government. Students also develop an e-commerce website using current industry tools.

Prerequisites: IS 229 and IS 237, both with a minimum grade of "C" and Reading Proficiency.

IT 201. Cisco Networking Academy II: Routing and Switching Essentials. 5 Credit Hours.

This course focuses on the architecture, components and operations of routers and switches in a small network. Configuration and troubleshooting routers and switches for basic functionality will be covered. This is the second of four (4) courses offered as preparation for the Cisco Certified Network Associate (CCNA) certification exam as well as the second of two (2) courses as preparation for the Cisco Certified Entry Networking Technician (CCENT).

Prerequisites: IT 101 with a minimum grade of "C" and Reading Proficiency.

IT 202. Cisco Networking Academy III: Scaling Networks. 5 Credit Hours.

This course focuses on hierarchical network design, redundant network implementation, first-hop redundancy protocols, and enhanced-switching technologies, spanning tree protocols, IPv4/IPv6 OSPF and EIGRP routing. Basic wireless configuration and concepts are introduced. This is the third of four (4) courses as preparation for the Cisco Certified Network Associate (CCNA) certification.

Prerequisites: IT 201 with a minimum grade of "C" and Reading Proficiency.

IT 203. Cisco Networking Academy IV: Connecting Networks. 5 Credit Hours.

The course focuses on WAN technologies including PPP, Frame Relay, broadband links, WAN security concepts, and mitigation of common security threats. The course explains the principles of traffic control and access control lists (ACLs), and describes the implementation of IP addressing services (NAT, DHCP), and IPv6 addressing concepts. During the course, students learn how to detect, troubleshoot, and correct common Enterprise network implementation issues. This is the fourth of four (4) courses as preparation for the Cisco Certified Network Associate (CCNA) certification.

Prerequisites: IT 202 with a minimum grade of "C" and Reading Proficiency.

IT 204. Cisco CCNP: R&S ROUTE. 5 Credit Hours.

This course provides preparation for students seeking the Cisco Certified Network Professional (CCNP) certification. Knowledge and skills necessary to implement scalable and highly secure Cisco routers will be covered. Course activities and assignments will help students to prepare for the current Cisco Certified Network Professional (CCNP)-R&S ROUTE and the Cisco Certified Design Professional (CCDP) certifications.

Prerequisites: IT 203 or CCNA certification or department approval and Reading Proficiency.

IT 206. Cisco CCNP: R&S SWITCH. 5 Credit Hours.

This course provides preparation for students seeking the Cisco Certified Network Professional (CCNP) certification. Knowledge and skills necessary to plan, configure and verify the implementation of complex enterprise switching solutions will be covered. Course activities and assignments will help students to prepare for the current Cisco Certified Network Professional (CCNP) - R&S SWITCH and the Cisco Certified Design Professional (CCDP) certifications.

Prerequisites: IT 203 or CCNA certification or department approval and Reading Proficiency.

IT 207. Cisco CCNP: R&S TSHOOT. 5 Credit Hours.

This course provides preparation for students seeking the Cisco Certified Network Professional (CCNP) certification. Knowledge and skills necessary to troubleshoot and maintain complex enterprise routed and switched Cisco IP Networks will be covered. Course activities and assignments will help students to prepare for the current Cisco Certified Network Professional (CCNP) - R&S TSHOOT and the Cisco Certified Design Professional (CCDP) certifications.

Prerequisites: IT 203 or CCNA certification, IT 204 and IT 206 and Reading Proficiency.

IT 208. Cisco Networking Academy: CCNA Security. 5 Credit Hours.

This course focuses on network security processes emphasizing hands-on skills for security policy design and management, security technologies, security products and solutions, firewall and secure router design, installation, configuration, maintenance, Authentication, Authorization, and Accounting (AAA) implementation using routers and firewalls, securing the network at the Open Systems Interconnection (OSI) layers 2 and 3, stressing documentation, design, and installation.

Prerequisites: IT 201 with a minimum grade of "C" or CCENT certification and Reading Proficiency.

IT 210. Firewall and VPN Security. 3 Credit Hours.

This course focuses on security solutions and processes in a network with emphasis on practical skills in the following areas firewall, Intrusion Prevention (IPS) and VPN design, implementation, configuration and maintenance using ASA and PIX Security Appliance.

Prerequisites: IS 237, IT 201 with a minimum grade of "C" and Reading Proficiency.

IT 211. Introduction to Virtualization and Cloud Computing. 4 Credit Hours.

This course explores the installation, configuration and management of virtualization tools, including VMware vSphere using ESX/ESXi and vCenterServer and/or other leading virtualization solutions. Completion of this hands-on course prepares students to obtain recognized industry certifications, including the VMWare Certified Associate and VMWare Certified Professional.

Prerequisites: IT 201 and IT 246 with minimum grades of "C", and Reading Proficiency.

IT 212. Ethical Hacking. 3 Credit Hours.

This course examines the background, history, and theory of ethical hacking. Hands-on activities using practical applications and real-life simulations to practice hacking techniques and methodologies will be used to find and attempt to exploit vulnerabilities of an organization's network infrastructure. Best countermeasures will be determined to improve security policies to protect information resources in an effort to minimize or eliminate any potential attacks. Communication skills and techniques for the cybersecurity workplace are emphasized throughout the course. This course serves as preparation for the EC-Council Ethical Hacking certification exam.

Prerequisites: IS 237 and Reading Proficiency.

IT 214. Systems Security Engineering. 3 Credit Hours.

This course prepares the student to identify, evaluate, and prioritize potential threats, and manage and mitigate threats through risk management concepts, assessment activities, and monitoring terminology, techniques, and systems. Students will gain skills to properly respond to a security incident or forensic investigation with incident handling processes and procedures such as Business Continuity Planning (BPC) and Disaster Recovery Planning (DRP).
Prerequisites: IS 237 and Reading Proficiency.

IT 216. Digital Forensics. 3 Credit Hours.

Digital crime scene investigation practices and digital evidence capture, documentation, validation and preservation techniques are taught through in-depth participatory exercises. Steganography, mobile data acquisition, network monitoring, decryption, manual and automated file and password recovery techniques are taught.

Prerequisites: IS 112, IS 229, IS 237 and Reading Proficiency.

IT 235. Network Infrastructure Design. 3 Credit Hours.

This course covers the skills and knowledge necessary for network design engineers. Topics include design of routed and switched network infrastructures and services involving LAN, WAN, and broadband access for organizations, including service virtualization. The Enterprise Composite Model facilitates planning, design, implementation, operation and optimization (PDIOO) through modular design and the relations between modules.

Prerequisites: IT 201 with a minimum grade of "C" and Reading Proficiency.

IT 240. Windows Server: Installation and Configuration. 3 Credit Hours.

This course is part one in a series of three courses that provides the skills and knowledge necessary to implement a core Windows Server Infrastructure in an enterprise environment. Students will get hands-on instruction and practice installing and configuring Windows Server. This course maps to the Microsoft Certified Solutions Associate Windows Server 2012 certification exam 70-410.

Prerequisites: Prior or concurrent enrollment in IT:102 and Reading Proficiency.

IT 241. Windows Server: Administration. 3 Credit Hours.

This course is part two in a series of three courses that provides the skills and knowledge necessary to implement a core Windows Server infrastructure in an enterprise environment. Students will get hands-on instruction and practice administering Windows Server. This course maps to the Microsoft Certified Solutions Associate Windows Server 2012 certification exam 70-411.

Prerequisites: IT 240 with a minimum grade of "C" and Reading Proficiency.

IT 242. Windows Server: Advanced Services Configuration. 3 Credit Hours.

This course is part three in a series of three courses that provides the skills and knowledge necessary to implement a core Windows Server infrastructure in an enterprise environment. Students will get hands-on instruction and practice configuring advanced services in Windows Server. This course maps to the Microsoft Certified Solutions Associate Windows Server 2012 certification exam 70-412.

Prerequisites: IT 241 with a minimum grade of "C" and Reading Proficiency.

Interdisciplinary Studies (IDS)

IDS 102. Urban Legends and American Society. 3 Credit Hours.

This course allows students to explore and study urban legends in American society as well as the various contexts in which these myths are placed. Students have the opportunity to interpret the symbolic and social significance of urban legends as well as analyze its shaping and criticism of American Society.

Prerequisite: Reading Proficiency.

IDS 103. Topics in Arab Culture. 3 Credit Hours.

Fiction and non-fiction literature is examined to analyze current issues, evaluate scenarios and propose creative solutions to educational, social and political events in Arab countries and the Arab diaspora. Multiple roles, concepts and expectations of citizenship are introduced. The roots of Arab educational, social and current political issues are examined to establish context.

Prerequisite: Reading Proficiency.

IDS 104. Equity in Education. 3 Credit Hours.

Fiction and non-fiction texts are examined to explore the U.S. education experience in past and present educational settings. Equity in educational settings and experiences is examined. Teaching and learning theory and leading educational philosophies are introduced and compared to literature-based interpretations. Prerequisites Reading Proficiency.

IDS 105. Law Goes to the Movies. 3 Credit Hours.

This interdisciplinary course explores important themes in the study of law by comparing scholarly/quantitative work, against representations of these themes in cinema. The course explores legal themes through multiple perspectives, including comparison of scholarly research, communication methods, and psychology. These approaches will provide opportunities for students to gain insight into how films are a cultural vehicle for representation or misrepresentation of lawyers and the legal process.

Prerequisite: Reading Proficiency.

IDS 106. The Artist in Society. 3 Credit Hours.

This course focuses on cultivating habits of mind by examining significant developments in western thought through the lenses of the artists who have reflected those developments and/or contributed to them. Through integration and exploration of the arts within historical contexts, development of culture, and communication theory, students examine the impact of the arts on the beliefs, values, and behaviors of individuals and society.

Prerequisite: Reading Proficiency.

IDS 107. Representations of Race, Class, Gender, and Sexuality in U.S. Society. 3 Credit Hours.

Students will explore representation of race, class, gender, sexuality, and disability in American films, television programs, animation, music, journalism, advertisements, and other mediated culture products, from the early 20th century to the present. Students will analyze the ideological functions of mediated communication and rhetorical methods present in mediated representations of people and ideas. Students will also examine theories concerning the formation and maintenance of social hierarchies, and the ways individuals interact with media images.

Prerequisite: Reading Proficiency.

IDS 108. Movement Culture of 1960s America. 3 Credit Hours.

This course explores and analyzes the various aspects of politics and culture from multiple perspectives during the period surrounding and including the 1960s. Through research, exploration and analysis, this course focuses on politics, literature, history, film, and music and the various themes which characterized those years and the ways in which that decade shaped and changed American society.

Prerequisite: Reading Proficiency.

IDS 109. Global Dimensions of Race, Ethnicity and Religion in America. 3 Credit Hours.

This course introduces students to global processes influencing and shaping race/ethnicity, gender and religion in the American experience. Students will study the historical layers of cultural, economic and political interaction between the continents of Africa, Asia, Europe, South America, and North America that have influenced and shaped the role of race/ethnicity, gender, and religion in American history and in the modern nation.

Prerequisite: Reading Proficiency.

IDS 112. Sex Trafficking in Global Perspective. 3 Credit Hours.

Sex trafficking is a complex social problem with multiple contributing factors both in the United States and on a global level. Interrelated inequities in gender, sex, power, class, opportunity, education, culture politics, race and sexual objectification are among the social phenomena that contribute to sex trafficking. This course examines dynamics of sex trafficking on a local and global level, drawing from interdisciplinary sources and presenting a variety of perspectives.

Prerequisite: Reading Proficiency.

IDS 113. Global Encounters in the Visual Arts. 3 Credit Hours.

This course explores how globalization is manifest in contemporary art and visual culture from around the world. It examines connections between globalization and political, economic, cultural and aesthetic theories in the name of building an awareness of contemporary art as a facet of today's global society.

Prerequisite: Reading Proficiency.

IDS 114. Leadership in the 21st Century. 3 Credit Hours.

This course offers students the unique opportunity to explore the complex concept of leadership from multiple perspectives, from understanding personal values to understanding the responsibilities of being a global citizen. This interdisciplinary course will include the detailed study of the leadership theories, concepts and skills.

Prerequisite: Reading Proficiency.

IDS 115. The Science and Value of Happiness. 3 Credit Hours.

What makes people happy and why? Through counseling, psychological and biological approaches to the study of happiness, this course examines personal values, the values of others, and how those values influence choice, lifestyle and behavior. The ability to critique the cultural, moral and ethical implications of being happy and how this relates to overall well-being, citizenship and personal growth is developed.

Prerequisite: Reading Proficiency.

IDS 116. Historical, Social, and Cultural Constructions of Youth. 3 Credit Hours.

This course examines historical, social, and cultural constructions of youth in discourse, including texts created about, for, and by girls, boys, and teens. This course also exposes students to the primary theoretical frameworks and methodological approaches developed by Youth Studies scholars to analyze media texts and youth cultures, focusing primarily on research in the social sciences, gender studies, literary criticism, and cultural studies.

Prerequisite: Reading Proficiency.

IDS 117. Sport and Society. 3 Credit Hours.

This course focuses on the many ways the problems in sports reflect larger issues of culture, socializations, capitalism, race and gender within society. These topics are opportunities for students to utilize academic research, examine effective rhetorical strategies, and argue positions.

Prerequisites: ENG 030 with a minimum grade of "C" and Reading Proficiency.

IDS 118. Environmental Conflicts and Consequences. 3 Credit Hours.

This course explores systemic causes and implications of environmental threats. This course examines the roles of government, industry, and community in addressing environmental problems, with particular emphasis on environmental justice. It devotes particular attention to sociological and historical perspectives.

Prerequisite: Reading Proficiency.

IDS 119. Reel Life vs. Real Life: Movies, History, and Historical Truth. 3 Credit Hours.

In this course, students analyze and evaluate how films communicate historical personalities and events, and compare that expression with the presentation of history through written accounts. Through multiple perspectives, and discipline specific criteria, student ultimately consider how history and film attempt to illuminate both the past and the "truth" for "audiences" of the present.

Prerequisite: Reading Proficiency.

IDS 120. Science, Sci-Fi, Society and Cinema. 3 Credit Hours.

In this course, students utilize the basic language and analytical criteria of both Science and Cinema to investigate the portrayal of science and scientist in cinema. Portrayals real and imagined are explored to investigate dualities and how the quest for knowledge can lead to consequences and catalyst not so "scientifically detached" - at least not on film.

Prerequisite: Reading Proficiency.

International Business (IB)

IB 100. International Business. 3 Credit Hours.

An introduction to various facets of international business, from marketing to the completion of shipment. Emphasis is placed on terminology and the importance of understanding cross-cultural differences.

Prerequisite: Reading Proficiency.

Italian (ITL)

ITL 103. Elementary Italian I. 4 Credit Hours.

Students in this beginning course develop the grammatical knowledge and communicative skills necessary to participate in elementary Italian conversation and to read short passages. Students also explore the richness of historical and contemporary Italian culture.

Prerequisite: Reading Proficiency.

ITL 104. Elementary Italian II. 4 Credit Hours.

In this continuation of ITL 103, students continue their study of the basic elements of Italian grammar, increase their vocabulary and enhance their ability to read and communicate in Italian. Students enhance their global and intercultural competency through increased fluency in the language and a deeper exploration of historical and contemporary Italian culture.

Prerequisites: ITL 103 and Reading Proficiency.

Japanese (JPN)

JPN 101. Modern Japanese I. 4 Credit Hours.

This course focuses on the construction and practice of fundamental vocabulary, basic sentence structures and social conventions necessary for simple interpersonal communication in Japanese. The emphasis is on the using the Japanese language in everyday situations.

Prerequisite: Reading Proficiency.

JPN 102. Modern Japanese II. 4 Credit Hours.

This course increases students' vocabulary, grammar, and cultural knowledge necessary to become proficient in Japanese. This course gives students the opportunity to reflect on their own linguistic system and cultural milieu and acquaints them with a different approach to communication and with a different view of the world. The knowledge gained in this course establishes the foundation for further inquiry into the Japanese language, which can happen both in and out of the classroom.

Prerequisites: JPN 101 and Reading Proficiency.

Legal Studies (LGL)

LGL 104. Introduction to Civil Trial Procedures. 3 Credit Hours.

This course includes study of composition, location and jurisdiction of all courts, examination of all aspects of trial preparation and process, and some legal drafting and writing.

Prerequisites: LGL 108 and Reading Proficiency.

LGL 106. Computers and the Law. 3 Credit Hours.

This course will help the Paralegal become familiar with the possible applications of the computers in law offices of different sizes and provide a general introduction to the varieties of hardware and software available and the creation of appropriate systems for a law office.

Prerequisite: Reading Proficiency.

LGL 107. Alternative Dispute Resolution. 1 Credit Hour.

Alternative dispute resolution is a method for using out-of-court alternative forums to resolve disputes. This course will examine the historical, statutory, and economic basis of ADR. Topics to be covered in both business and dissolution of marriage are mediation, arbitration, mini trials, and summary jury trials.

Prerequisites: LGL 108 and Reading Proficiency.

LGL 108. Introduction to Law for the Paralegal. 3 Credit Hours.

This course includes a general discourse on the training and purpose of Paralegals, examines the role of the law in modern society, the ethical and professional practice standards applicable to lawyers and paralegals, surveys the various fields of law and examines legal resource materials and the processes of legal research.

Prerequisite: Reading Proficiency.

LGL 202. Wills, Trusts and Probate Administration. 3 Credit Hours.

Study of the more common forms of wills and trusts and a survey of the fundamental principles of law applicable to each; a study of the organization and jurisdiction of a Missouri Probate Court; a detailed analysis of the administration of estates in Missouri Probate; a review of estate and inheritance taxes applicable to such estates.

Prerequisites: LGL 108 and Reading Proficiency.

LGL 205. Law of Real Property and Real Estate Transactions. 3 Credit Hours.

A study of the law of real property and in-depth survey of the more common types of real estate transaction and conveyances, such as deeds, contracts, leases, deeds of trust; drafting problems involving various of these instruments; and special research projects related to the subject matter; study of the system of recording and search of public documents.

Prerequisites: LGL 108 and Reading Proficiency.

LGL 206. Business Organization and Government Regulation. 3 Credit Hours.

A study of the formation and operation of corporations, partnerships, business trusts and other business vehicles, including a survey of the fundamental principles of law applicable to each; special research projects related to the subject matter; a study of the impact and regulation of taxation and other forms of government regulation of business.

Prerequisites: LGL 108 and Reading Proficiency.

LGL 211. Torts. 3 Credit Hours.

A study of the fundamental principles of the law of torts including special research assignments related to the subject matter, consideration of the techniques of investigation involved in the lawyer's handling of tort claims; a study of the various forms of pleadings involved in commencing such claims in court actions.

Prerequisites: LGL 108 and Reading Proficiency.

LGL 216. Advanced Civil Trial Procedures. 3 Credit Hours.

This course is designed as an advanced course for those students who have completed Introduction to Civil Trial Procedures. The focus will be a detailed examination of court rules pertaining to discovery, intervention, interpleading in trial procedures and appellate procedures.

Prerequisites: LGL 104, LGL 108 and Reading Proficiency.

LGL 217. Legal Research. 3 Credit Hours.

This course is designed as an introduction to the process of legal research, and an introduction to the connection between research and legal writing. The course involves several research projects to be completed both in the lab (Internet, CD-ROM and CALR) and in a law library. A moderate amount of legal writing will be integrated into the course assignments. This course is a Prerequisite to LGL 218, Legal Writing. Both courses are required courses in the Paralegal program. This course requires students to travel off campus to a local law library.

Prerequisites: LGL 108 and Reading Proficiency.

LGL 218. Legal Writing. 3 Credit Hours.

This course is designed as a continuation of LGL 217, Legal Research, and is intended to expand on all principles involved in legal reasoning as it relates to legal analysis and the preparation of legal memoranda. Students will be responsible for completing several writing projects which involve a legal research component. This course requires students to travel off campus to a local law library.

Prerequisites: ENG 101 or equivalent, LGL 108, LGL 217 and Reading Proficiency.

LGL 219. Workplace Learning: Paralegal. 3 Credit Hours.

This experiential course provides the student the opportunity to apply theory and skills learned in the classroom, learn new skills, and explore career possibilities while supervised by a professional in the field and a faculty member. Students will observe and participate in the functions of the business to enhance their preparation for entering the field. Minimum 150 hours in the workplace throughout the term.

Prerequisites: Student must have completed nine credit hours in paralegal courses and have the approval of the campus program coordinator and Reading Proficiency.

LGL 220. Criminal Law and Procedure for the Paralegal. 1 Credit Hour.

This course will cover the substantive elements of major crimes, the requisite intent and defenses. The criminal procedures will be discussed and the role of the paralegal in the criminal process analyzed.

Prerequisites: LGL 108 and Reading Proficiency.

LGL 222. Legal Research on the Internet. 1 Credit Hour.

This course will demonstrate the use of the Internet as a legal research tool. Using various browsers and search engines, students will learn basic Internet maneuvers. Students will learn the process of searching and retrieving information to build a file of relevant legal sites. Current legal issues on Internet use will be examined. Considerable time will be required on-line to meet the requirements of this class.

Prerequisites: LGL 108 and Reading Proficiency.

LGL 223. Evidence. 1 Credit Hour.

This course is the study of the gathering and admissibility of various types of evidence. The theories of relevance, materiality, hearsay, and competency that apply to all evidence will be explored in detail.

Prerequisites: LGL 108 and Reading Proficiency.

LGL 224. Environmental Law. 1 Credit Hour.

This course will explore the issues of business and consumer generated pollution, hazardous, and toxic waste. The student will learn how the federal and state governments are trying to contain levels of pollution and to clean up hazardous waste sites and examine the major environmental protection laws applicable to businesses and individuals.

Prerequisites: LGL 108 and Reading Proficiency.

LGL 225. Administrative Law. 1 Credit Hour.

An examination of the nature and scope of Administrative Law. The authority of administrative agencies, Administrative Procedures Act, rules and rule making, administrative hearings, and the role of the paralegal will be examined in this course.

Prerequisites: LGL 108 and Reading Proficiency.

LGL 226. Law Office Administration. 1 Credit Hour.

A study of the function, management, and administration of the law office or legal department. It includes office environment, structures, personnel supervision, financial management, records management, and management theories.

Prerequisites: LGL 108 and Reading Proficiency.

LGL 228. Family Law. 3 Credit Hours.

The student will become familiar with stature and case law regarding the dissolution of marriage action, termination of parental rights, adoption law, court appointment of guardians and guardian ad litem. The student will develop skills in client interviewing and counseling; learn in detail the preparation of necessary forms and documentation to be filed in court; and learn the discovery devices such as interrogatories and deposition and emphasize their utilization in family law matters.

Prerequisites: LGL 108 and Reading Proficiency.

LGL 230. Employment Law. 3 Credit Hours.

The study of the employer and employee relationship and the laws governing the employment agreement. This course will examine the specific areas of employment discrimination, Worker's Compensation, and regulation of union activity.

Prerequisites: LGL 108 and Reading Proficiency.

LGL 232. Contracts. 1 Credit Hour.

A study of the types and kinds of contracts and an in-depth analysis of the basic elements of contract law. The proper form and manner of entering into a lawful contract will be analyzed.

Prerequisite: Reading Proficiency.

LGL 233. Bankruptcy . 1 Credit Hour.

A study of the law of bankruptcy and the filing procedures. The elements of bankruptcy and completion of the debtor forms will be emphasis points.

Prerequisites: LGL 108, BLW 101 or LGL 232 and Reading Proficiency.

Library & Information Studies (LIB)

LIB 101. Introduction to Library and Online Research. 1 Credit Hour.

This course offers students instruction in using library resources, including the Internet, online databases, and the library catalog. Through a combination of hands-on practice and lectures, students will learn to locate, evaluate, and manage information efficiently and effectively.

Prerequisite: Reading Proficiency.

Management (MGT)

MGT 101. Introduction to Supervision. 3 Credit Hours.

This course is designed to provide the student with the latest leadership skills to function as a supervisor in today's modern organizations. Special emphasis is placed on coaching, motivation, positive reinforcement, achieving high productivity and the latest court decisions and laws that affect management decisions. This course will give the student confidence and skills needed to succeed in today's workplace.

Prerequisite: Reading Proficiency.

MGT 106. Human Resources Management. 3 Credit Hours.

The emphasis is on the development of knowledge, skills, attitudes of managers, supervisors and employees in resolving human problems and in developing effective employee motivation and productivity in both union and nonunion settings. Topics include sexual harassment, EEO, ethics, cultural diversity, grievance and conflict resolution, legal issues, compensation and benefits, turnover, employment and team building.

Prerequisite: Reading Proficiency.

MGT 120. Managerial Leadership. 3 Credit Hours.

This course introduces a balanced approach to leadership theory, critical thinking and development of skills. The student will apply leadership theories and concepts to develop critical thinking skills, differentiate between learning about leadership and learning to be a leader in the acquisition of skill.

Prerequisite: Reading Proficiency.

MGT 204. Business Organization and Management. 3 Credit Hours.

A study of basic concepts, functions, and the management process of planning, organization, staffing, directions, and control as they relate to modern business operations and problems.

Prerequisites: BUS 104 and Reading Proficiency.

Marketing (MKT)

MKT 104. Principles of Selling. 3 Credit Hours.

A course in creative, strategic, consultative and adaptive selling techniques applied to various kinds of products and services sold into and through industrial, trade, and retail markets. Emphasis on clear and adequate effectiveness of selling, utilizing presentation skills and a high degree of business ethics.

Prerequisite: Reading Proficiency.

MKT 203. Principles of Marketing. 3 Credit Hours.

This course introduces and examines the essential functions of the strategic marketing process, including the marketing analysis of business opportunities and subsequent development of marketing strategies.

Prerequisites: BUS 104 and Reading Proficiency.

Mass Communications (MCM)

MCM 101. Introduction to Mass Communications. 3 Credit Hours.

This course examines the nature and influence of mass media in our society. Students will analyze the impact media has throughout the world. Topics include mass media foundations, media's role in culture, ethics, influence on society, media methods, controls, gatekeeping, and world impact.

Prerequisite: Reading Proficiency.

MCM 102. Media Literacy. 3 Credit Hours.

This course focuses on approaches through which students can develop a sensitivity to media messages, as well as enhance their appreciation of media programming. This course devotes attention to the process and impact of media on the individual and society. The class analyzes applied media formats, including journalism, advertising, and political communication.
Prerequisite: Reading Proficiency.

MCM 110. Journalism I: Writing and Reporting. 3 Credit Hours.

Contemporary newspaper writing and reporting techniques will be covered in this introductory course through discussions, readings, and practical exercises. The concepts of news coverage in the American press will be emphasized. Students are required to write news stories on a regular basis and apply skills in multimedia concepts.
Prerequisites: ENG 100, ENG 101 or permission of instructor and Reading Proficiency.

MCM 112. Feature Writing. 3 Credit Hours.

Students will be exposed to the professional and marketing possibilities of feature writing. They will learn the theories and techniques of writing features for contemporary print and digital publications. Students are required to write and edit on a regular basis.
Prerequisites: ENG 100 or ENG 101 or permission of the instructor and Reading Proficiency.

MCM 113. Applied Journalism. 3 Credit Hours.

Students are given the opportunity to gain practical experience in journalistic concepts and techniques through work on available campus media outlets. Students are required to complete hands-on projects.
Prerequisites: ENG 100 or ENG 101 and MCM 110 or permission of the instructor and Reading Proficiency.

MCM 115. Acting for the Camera. 3 Credit Hours.

This course includes the following (1) exploration of the aesthetics and principles of acting for the camera; (2) analysis of diverse acting styles and outstanding performances in film and television; and (3) acting exercises for the camera. Some acting exercises will be videotaped and edited for analysis. (Same course as THT 115).
Prerequisite: Reading Proficiency.

MCM 120. Introduction to Broadcasting. 3 Credit Hours.

This course examines the background and operation of the broadcasting industry, including history, regulations, social and economic settings and the organization of radio and television stations. Newer technologies will also be a focus of this course. Some hands-on experience might be included.
Prerequisite: Reading Proficiency.

MCM 121. Television Production. 3 Credit Hours.

The course instructs the student in the effective and creative use of television equipment also providing students with practical experience in technical areas including lighting, graphics, and field production. Students will cooperate in producing projects such as a newscast, advertisement, interview, or investigative feature.
Prerequisite: Reading Proficiency.

MCM 122. Applied Broadcasting. 3 Credit Hours.

This is a skills-content course in which students will develop skills in broadcasting principles and practice. It may include the campus radio and/or television facilities.
Prerequisite: Reading Proficiency.

MCM 123. Broadcast Journalism. 3 Credit Hours.

Students in this course study the principles and skills of radio and television journalism, including work in the news operations of the campus radio or television facilities.
Prerequisites: ENG 100, ENG 101 or permission of the instructor and Reading Proficiency.

MCM 124. Radio Production. 3 Credit Hours.

The primary objectives of this course are to introduce students to basic professional concepts of radio broadcast theory and techniques and to provide students with hands-on experience. Some additional time in the lab or studio may be required.
Prerequisite: Reading Proficiency.

MCM 125. Scriptwriting for Television and Film. 3 Credit Hours.

This course is designed to provide practical instruction in writing short scripts for TV and film for the beginning student and the student interested in the creative aspects of scriptwriting. Basic terminology and script formats will be presented as well as analysis of a variety of scripts.
Prerequisites: ENG 100, ENG 101 and Reading Proficiency.

MCM 126. Video Production - Field. 3 Credit Hours.

Students will learn video skills in pre-production (concept development), production (camera shooting) and post-production (editing). On-location, single camera shooting will be emphasized. Class includes lectures, discussions, practical applications and evaluations.
Prerequisite: Reading Proficiency.

MCM 130. Film Appreciation. 3 Credit Hours.

Film Appreciation offers a serious, comprehensive introduction to the art, industry, culture and experience of movies. Students study a variety of films contemporary and classic, narrative and nonnarrative, animated and live action, American and international.
Prerequisite: Reading Proficiency.

MCM 131. History of Film. 3 Credit Hours.

Students study world film history from the magic lantern to contemporary films by examining technical, artistic, sociological, and economic factors in fiction and nonfiction, feature-length, and short works. Topics include various styles and movements as well as issues such as violence and politics.
Prerequisite: Reading Proficiency.

MCM 132. Major Themes in Film. 3 Credit Hours.

Each semester this course focuses on one film theme or type. Examples include Academy Award winning films, animation, comedy, musicals, westerns, and women in film. Classes include discussion, written analysis, and/or oral presentations, and in-class screenings or online viewings of films illustrating the semesters' topic. This course may be retaken for credit with different topics.
Prerequisite: Reading Proficiency.

MCM 134. Filmmaking. 3 Credit Hours.

Students learn the fundamentals of short filmmaking and editing. Topics include basic camera operation, lighting and exposure control, sound recording and creative sound use, digital postproduction, and how technique relates to aesthetic quality and the communication of ideas and emotion. Access to equipment is provided. Lectures, discussions, screenings, and hands-on, project based experience. Additional time in the editing lab is required.
Prerequisite: Reading Proficiency.

MCM 140. Introduction to Advertising. 3 Credit Hours.

Students learn about advertising theories and techniques by studying history, functions, the importance of marketing, behavioral science, and aesthetics. Topics include ad agency organization, campaign planning, and media placement and production (radio, television, print, point of purchase). This will be accomplished through lectures, discussions, and campaign analysis. Prerequisite: Reading Proficiency.

MCM 141. Public Relations. 3 Credit Hours.

This introductory course focuses on the work of the public relations practitioner as communications specialist. Topics include the techniques of effective public relations and the demands of the field. Students will explore the ways segments of the public form opinions and the ways public relations should influence that attitude building. Students also write press releases and examine field/case studies.

Prerequisite: Reading Proficiency.

MCM 142. Applied Advertising. 3 Credit Hours.

This course will further the student's knowledge of advertising practices, campaigns, strategies, and production. Along with lectures, discussions, and other activities, this course includes scripting, storyboarding and executing radio, television and/or print ads. Class involves lectures, discussions, and video production activities.

Prerequisites: MCM 140 and Reading Proficiency.

MCM 143. Convergence Media Production. 3 Credit Hours.

Students will study composition and delivery of commercial, educational and public new-media messages by surveying current outlets and producing messages for those outlets. Utilizing current authoring software, students will combine text, graphics, photos, video and audio to deliver messages for the web as well as other relevant outlets.

Prerequisite: Reading Proficiency.

MCM 201. Workplace Learning I: Media. 3 Credit Hours.

This experiential course provides the student the opportunity to apply theory and skills learned in the classroom, learn new skills, and explore career possibilities while supervised by a professional in the field and a faculty member. Students will gain practical experience through selected media outlets. Minimum 150 hours in the workplace throughout the term.

Prerequisites: Any 100-level MCM course related to the discipline of the workplace learning or permission of the instructor and Reading Proficiency.

MCM 202. Workplace Learning II: Media. 3 Credit Hours.

This experiential course provides the student the opportunity to apply theory and skills learned in the classroom, learn new skills, and explore career possibilities while supervised by a professional in the field and a faculty member. Students will gain continued practical experience through selected media outlets. Minimum 150 hours in the workplace throughout the term.

Prerequisites: MCM 201, permission of the instructor and Reading Proficiency.

MCM 209. Black Cinema. 3 Credit Hours.

This course examines the historical and social evolution of African-Americans in the film industry. It traces the impact of African-Americans as actors, technicians, directors, producers, and audience of short and feature-length films. (Students who want Mass Communications credit should enroll in MCM 209).

Prerequisites: ENG 101 and Reading Proficiency.

MCM 211. Applied Public Relations. 3 Credit Hours.

Applied Public Relations provides for the integration and application of public relations theories and practices studied in the prerequisite public relations course. Through further study and practical application the student will develop a greater understanding of the purpose, function and importance of effective public relations activity in today's increasingly complex society.

Prerequisites: MCM 141 and Reading Proficiency.

MCM 215. Major Film Directors. 3 Credit Hours.

Students study a major director's landmark films. Topics include consideration of the selected director's style, themes, cinematography, stars, and social as well as other artistic factors that have made this an influential director. Class includes lectures, discussion, written analysis, and in-class screenings of films. Prerequisite: Reading Proficiency.

MCM 217. Publications Writing. 3 Credit Hours.

This course focuses on the specialized and distinctive writing skills employed in technical and corporate publications. Students will master the basic skills needed to write simple reports, product descriptions and price lists. In the corporate area, students will research and write news and feature stories for newsletters, as well as press release and brochure copy. All writing requires basic word processing skills.

Prerequisites: ENG 102, ENG 103 or equivalent work experience and Reading Proficiency.

MCM 218. Advanced Filmmaking. 3 Credit Hours.

Students enhance their short filmmaking skills and learn advanced techniques.

Topics include advanced camera operation, lighting and exposure control, sync sound and creative sound use, scriptwriting, working with actors, enhanced digital editing, and how technique relates to aesthetic quality and the communication of ideas and emotion. Access to equipment is provided. Lectures, discussions, screenings, and hands-on, project based experience. Additional time in the editing lab is required.

Prerequisites: MCM 134 or permission of instructor and Reading Proficiency.

MCM 219. Multimedia Applications. 1-3 Credit Hours.

This course covers selected topics in multimedia production. Students use state-of-the-art equipment to produce beginning, intermediate or advanced projects in the area emphasized. Topics may include, but are not limited to, nonlinear video editing, video animation, digital audio production, etc. Course may be retaken for credit with different topics.

Prerequisite: Reading Proficiency.

MCM 220. Advanced Audio Production. 3 Credit Hours.

Students will develop their skills in Audio Production through usage of computer based digital audio editing systems. This course will include concept development and scripting, recording techniques, and advanced editing techniques. Class includes lectures, discussion, and audio production activities.

Prerequisites: MCM 124 or permission of instructor and Reading Proficiency.

MCM 221. Media Portfolio Review. 1 Credit Hour.

Preparing effective presentations of creative work within current digital formats is the focus of this course. Students will learn to edit, record and prepare material toward the development of an effective portfolio, aiding the completion of their studies in the Mass Communications program. Reading Proficiency.

Prerequisites: MCM 143 or ART 125 or permissions of instructor.

Mathematics (MTH)

MTH 004. Hands-On Arithmetic Workshop. 3 Credit Hours.

Hands-On Arithmetic Workshop is designed to help students experiencing difficulty with mathematics in general and arithmetic in particular. Students progress at their own pace using manipulatives in a guided discovery mode to gain an understanding of numbers, arithmetic operations (on whole numbers, integers, fractions, decimals, and involving percents) and metric measurement. Additional lab hours required.

Prerequisites: RDG 020 and ENG 020.

MTH 020. Pre Algebra. 3 Credit Hours.

This course is for students who need to review the basic fundamentals of mathematics. Topics include operations on whole numbers, fractions, decimals, percents, signed numbers, word problem applications and an introduction to algebra.

MTH 025. Hands-On Algebra Workshop. 3 Credit Hours.

The purpose of Hands-On Algebra Workshop is to help students who have experienced great difficulty with mathematics in general and algebra in particular. Working individually and in small groups, students use various mathematics manipulatives in a guided discovery mode to explore algebraic concepts in order to gain an understanding of integers, linear equations, polynomials, graphing, and functions. In this hands-on lab course, students proceed at their own pace. This course does not replace Elementary Algebra. All prerequisite courses must have been completed within the last 3 years. Prerequisites: MTH 020 with grade of "C" or better or satisfactory score on the placement test and an appropriate score in Reading and English on the placement test.

MTH 030. Elementary Algebra. 3 Credit Hours.

This course covers basic algebra. Topics include operations on polynomials, factoring polynomials, linear equations and their applications, graphing lines and solving equations. All prerequisite courses must have been completed within the last 3 years.

Prerequisites: MTH 020 with grade of "C" or better or satisfactory score on placement test, and RDG 020 with a grade of "C" or better or satisfactory score on placement test.

MTH 040. Elementary Algebra and Basic Math. 5 Credit Hours.

This course covers the basics of fundamental mathematics and algebra. Topics include operations on whole numbers, fractions, decimals, percents, signed numbers, word problem applications, operations on polynomials, factoring polynomials, linear equations and their applications, graphing lines and solving equations.

Prerequisite: RDG 020.

MTH 108. Elementary Applied Mathematics. 3 Credit Hours.

This course will include a review of fractions, decimals and percents. Topics may include ratios, proportions, measurements, metrics, powers, roots, simple equations, estimation, graphs, and applications relevant to many Associate in Applied Science programs. All prerequisite courses must have been completed within the last 3 years.

Prerequisites: MTH 020 with a grade of "C" or better or satisfactory score on placement test and Reading Proficiency.

MTH 123. Introduction to the Texas Instruments Graphing Calculator. 1 Credit Hour.

This course is designed for students who will be using a graphing calculator in their math and science course work. Students will be introduced to the use of the TI-83 plus graphing calculator. Students will learn to perform basic computations, graph functions, create tables and use stat plots to graph data. All prerequisite courses must have been completed within the last 3 years.

Prerequisites: Placement into MTH 140 or completion of MTH 030 with a grade of "C" or better and Reading Proficiency.

MTH 124. Technical Mathematics I. 3 Credit Hours.

This course includes operations on algebraic expressions, solving linear equations, the Cartesian coordinate system in two dimensions, slope of a line, and graphing techniques. All prerequisite courses must have been completed within the last 3 years.

Prerequisites: MTH 030 with a grade of "C" or better or satisfactory score on placement test and Reading Proficiency.

MTH 137. Bridges to Intermediate Algebra. 1 Credit Hour.

This course is designed for students who qualify for Intermediate Algebra. Completion of this course will greatly enhance a student's chance for success in Intermediate Algebra. This course offers a brief review of linear equations and inequalities. Also included is an intense review of exponential properties, polynomials, factoring, rational expressions, the rectangular coordinate system and basic linear graphs. All prerequisite courses must have been completed within the last 3 years.

Prerequisites: Placement into MTH 140, MTH 030 or MTH 007 with a grade of "C" or better and Reading Proficiency.

MTH 140. Intermediate Algebra. 3 Credit Hours.

This course will provide the transition from elementary algebra into college-level math courses. Operations on rational expressions, operations on radicals, solving quadratic equations, and the rectangular coordinate system are among the topics covered. All prerequisite courses must have been completed within the last 3 years.

Prerequisites: MTH 030 or MTH 040 with grades of "C" or better or satisfactory score on placement test and Reading Proficiency.

MTH 160. College Algebra. 4 Credit Hours.

This college algebra course includes the following topics theory of equations; systems of equations; functions and graphs including polynomial, rational, exponential, and logarithmic; matrices; sequences and series; and the binomial theorem. Applications will be primarily from science and business. Credit will be granted for only one of the following MTH 160, MTH 160A, MTH 160B, MTH 160C or MTH 185. Reading Proficiency. All prerequisite courses must have been completed within the last 3 years.

Prerequisites: MTH 140 with a grade of "C" or better or satisfactory score on placement test.

MTH 161. Applications of College Mathematics. 4 Credit Hours.

This college-level mathematics course is offered for students pursuing non-STEM (Science, Technology, Engineering, and Mathematics) degrees and career paths. The course focuses on mathematical reasoning and the solving of real-life problems. The following six topics will be covered sets, logic, consumer mathematics, probability, statistics, and modeling with global data. This course is designed to fulfill general education requirements. All prerequisite courses must have been completed within the last 3 years.

Prerequisites: MTH 140 with a minimum grade of "C" or satisfactory scores on placement test, and Reading Proficiency.

MTH 165. Structures of Mathematical Systems I. 3 Credit Hours.

Introduction to problem solving and logic. A study of the development and construction of mathematical systems, including whole numbers, integers, and rational numbers. Suggested for students planning to transfer into early childhood education, elementary education, or special education programs. All prerequisite courses must have been completed within the last 3 years.

Prerequisites: MTH 160, MTH 160A, MTH 160B or MTH 160C with a grade of "C" or better or satisfactory score on placement test and Reading Proficiency.

MTH 166. Structures of Mathematical Systems II. 3 Credit Hours.

Continuation of MTH 165. Includes an intuitive study of elementary geometry, the deductive theory of geometry, graphing, probability and statistics, with applications in the area of elementary education. Suggested for students planning to transfer into early childhood, elementary education, or special education programs. All prerequisite courses must have been completed within the last 3 years.

Prerequisites: MTH 165 with a grade of "C" or better and Reading Proficiency.

MTH 170. Trigonometry. 3 Credit Hours.

This course uses an analytic approach to the definitions and graphs of the functions of an angle. It includes formulas and identities, trigonometric functions, inverse functions, and radian measure. Note Credit will not be granted for both MTH 170 and MTH 185. All prerequisite courses must have been completed within the last 3 years.
Prerequisites: MTH 160, MTH 160A, MTH 160B or MTH 160C with grade of "C" or better or satisfactory score on placement test and Reading Proficiency.

MTH 177. Finite Mathematics. 4 Credit Hours.

This course includes a study of matrices, linear programming, and probability, along with several types of applications. All prerequisite courses must have been completed within the last 3 years.
Prerequisites: MTH 160, MTH 160A, MTH 160B or MTH 160C with grade of "C" or better and Reading Proficiency.

MTH 180. Introductory Statistics. 4 Credit Hours.

This course introduces the student to the elementary mathematics of descriptive statistics, probability, and statistical inference. Topics include methods of data collection, organization, and representation, measures of center and variation, elementary probability theory, probability distributions, the central limit theorem, confidence intervals, hypothesis testing, ANOVA, correlation, and regression analysis. All prerequisite courses must have been completed within the last 3 years.
Prerequisites: MTH 140 with a minimum grade of "C" and Reading Proficiency.

MTH 185. Precalculus. 5 Credit Hours.

Precalculus is a unified study of college algebra and trigonometry. Emphasis is placed on the development of algebraic and trigonometric concepts. The topics include Algebraic, exponential, logarithmic and trigonometric functions and graphs; the solving of equations; systems of equations; trigonometric identities; sequences and series; and the binomial theorem. Note Students will be granted credit for either MTH 185, or MTH 160 and MTH 170. All prerequisite courses must have been completed within the last 3 years.
Prerequisites: MTH 140 with a grade of "C" or better or satisfactory score on placement test and Reading Proficiency.

MTH 186. Survey of Calculus. 4 Credit Hours.

Topics included are limits and continuity of functions of a single variable; derivatives and antiderivatives of algebraic, exponential, and logarithmic functions; and business oriented applications. All prerequisite courses must have been completed within the last 3 years.
Prerequisites: MTH 160, MTH 160A, MTH 160B or MTH 160C with grade of "C" or better and Reading Proficiency.

MTH 210. Analytic Geometry and Calculus I. 5 Credit Hours.

This course is the first part of a three semester sequence of Calculus. Topics included are limits and continuity of functions of a single variable, derivatives and antiderivatives of algebraic functions and trigonometric functions, and applications. All prerequisite courses must have been completed within the last 3 years.
Prerequisites: MTH 185 or (MTH 160, MTH 160A, MTH 160B or MTH 160C and MTH 170) with grades of "C" or better or satisfactory score on placement test and Reading Proficiency.

MTH 212. Discrete Mathematics. 3 Credit Hours.

Students will learn topics in discrete mathematics that are particularly relevant to computer science. Topics include logic, elementary number theory, modular arithmetic, methods of proof, sets, probability and combinatorics, recurrence relations, algorithmic efficiency, elementary graph theory, and trees. All prerequisite courses must have been completed within the last 3 years.
Prerequisites: MTH 210 or equivalent with a grade of "C" or better and Reading Proficiency.

MTH 215. Linear Algebra. 3 Credit Hours.

This course covers systems of linear equations, properties of matrices and determinants, vector spaces, linear transformations, inner products, and eigenvalues, as well as selected applications. All prerequisite courses must have been completed within the last 3 years.
Prerequisites: MTH 210 with a grade of "C" or better and Reading Proficiency.

MTH 220. Analytic Geometry and Calculus II. 5 Credit Hours.

This course is the second part of a three sequence of Calculus. Differentiation and integration of transcendental functions, techniques of integration, improper integrals, parametric equations, polar coordinates, and infinite and power series are among the topics covered. All prerequisite courses must have been completed within the last 3 years.
Prerequisites: MTH 210 with a grade of "C" or better and Reading Proficiency.

MTH 230. Analytic Geometry and Calculus III. 5 Credit Hours.

This course is the third part of a three semester sequence of Calculus. Topics covered include solid analytic geometry, vectors in two and three dimensions, differential calculus of multivariate functions, partial derivatives, directional derivatives, gradients, multiple integration, and an introduction to the calculus of vector fields. All prerequisite courses must have been completed within the last 3 years.
Prerequisites: MTH 220 with a grade of "C" or better and Reading Proficiency.

MTH 240. Differential Equations. 3 Credit Hours.

This course introduces methods of solving ordinary differential equations. Topics included are first order differential equations, higher order differential equations, LaPlace transform methods, systems of differential equations, and applications. All prerequisite courses must have been completed within the last 3 years.
Prerequisites: MTH 230 with a grade of "C" or better and Reading Proficiency.

Mechanical Engineering Tech (ME)

ME 100. Measurement, Materials and Safety. 3 Credit Hours.

This course prepares students for the National Institute of Metalworking Skills (NIMS) Measurement, Materials and Safety credentialing examination. Students will learn foundational skills for the metalworking industry including the basics of metal cutting, measurement, safety and shop math. Additional hours required.
Corequisite: ME 154.

Prerequisites: Departmental approval or Work Keys Applied Mathematics Level 4, or, Reading Proficiency or Work Keys Reading for Information Level 4.

ME 101. Welding Technology. 3 Credit Hours.

The major objective of this course is to provide a comprehensive coverage of current welding practices. A variety of welding processes will be covered including shielded metal-arc, gas shielded-arc, resistance and other special techniques intended specifically for welding sophisticated metals. Additional lab hours required.
Prerequisite: Reading Proficiency.

ME 108. Principles of Plumbing/Pipefitting. 3 Credit Hours.

The principles of water supplies and sewage systems are presented. The course covers alteration, repair, and maintenance methods of commercial and domestic plumbing systems. Nomenclature of the various connecting devices for metal and plastic pipe and proper assembly such as soldering, threading, and gluing are included. Laboratory exercises and assembly projects provide the practice and methodology required to successfully repair and maintain fixtures and systems. Additional lab hours required.
Prerequisite: Reading Proficiency.

ME 110. HVAC Operator I. 3 Credit Hours.

A practical course dealing with the basic operation, maintenance and troubleshooting of heating, ventilating and air conditioning equipment including air, closed water stream and control systems. The dynamic equipment components of various systems will be studied with special emphasis upon preventive maintenance.
Prerequisite: Reading Proficiency.

ME 111. Job Planning, Benchwork & Layout. 3 Credit Hours.

This course prepares students for the National Institute of Metalworking Skills (NIMS) Job Planning, Benchwork & Layout credentialing examination. Students will build upon skills learned in the Measurement, Materials & Safety class. They will learn additional foundational skills for the metalworking industry including the basics of benchwork, layout, hole making operations, grinding, shop trigonometry and inductory geometric dimensioning and tolerancing. Additional hours required.
Corequisite: ME 100.
Prerequisites: Reading Proficiency or departmental approval.

ME 120. Manual Machining I. 3 Credit Hours.

This course prepares students for the National Institute for Metalworking Skills (NIMS) level 1 milling, grinding and drill press skills examinations. Students will build upon skills learned in the Measurement, Materials & Safety class and the Job Planning, Benchwork & Layout course. They will learn additional skills for the metalworking industry including the safe set up and operation of milling machines, drill presses and grinders. Some of the projects required for NIMS credentialing will be incorporated as lab projects. Additional hours required.
Prerequisites: ME 111 and Reading Proficiency, or departmental approval.

ME 121. Computer Integrated Manufacturing. 3 Credit Hours.

This course applies principles of robotics and automation. Students will use CNC equipment to produce actual models of their three-dimensional designs. Fundamental concepts of robotics used in automated manufacturing and design analysis are included.
Prerequisites: EGR 145, EGR 147 or department approval.

ME 133. Production Control. 3 Credit Hours.

Students will gain an understanding of the tools, techniques and processes used to plan, schedule and track materials through the complete value chain in a manufacturing environment. Topics will include both manual and computer assisted methods including Materials Requirements Planning, Shop Floor control, Lean Manufacturing and "Just in Time" techniques.
Prerequisite: Reading Proficiency.

ME 135. Mechanics - Statics. 3 Credit Hours.

This is a study of forces and their effects on motionless objects. Applications to trusses, beams, frames, and other topics are presented. Basic theory for structural design in mechanical and civil programs is studied.
Prerequisites: MTH 140 or higher and Reading Proficiency.

ME 138. Mechanical Measurement. 3 Credit Hours.

This course is designed to provide the fundamentals of dimensional measurement for the technician. Measurement terms, equipment and tools will be explained and laboratory activities will provide the student an opportunity to master the basic skills of measuring devices. Scaled, vernier, micrometer instruments and dial indicators with gage blocks will be used. Measurement standards will be reviewed.
Prerequisite: Reading Proficiency.

ME 140. Introduction to Robotics. 3 Credit Hours.

This course is a historical overview of the use and development of robotics. Topics to be studied include specific types and application of industrial robots, the effects of industrial robots and technology on employers and employees, and the programming and functioning of robotic simulators. Additional lab hours required.
Prerequisite: Reading Proficiency.

ME 151. Manufacturing Processes I. 3 Credit Hours.

Teaching theory and manipulative skills in the basic processes of manufacturing lathes, milling machines, shapers, drill presses, welding, foundry, sheet metal, precision instrument reading, and hand tools. Additional lab hours required.
Prerequisite: Reading Proficiency.

ME 152. Manufacturing Processes II. 3 Credit Hours.

This course is a continuation of Manufacturing Processes I with emphasis in Flexible Manufacturing Systems (FMS). Instruction includes Computer Numerical Control (CNC) programming, Robotics applications of Programmable Logic Controls (PLC), and Computer Integrated Manufacturing (CIM). Students will develop a CIM cell project. Additional lab hours required.
Prerequisites: ME 151 and Reading Proficiency.

ME 153. Lathe and Mill Operations and Safety. 3 Credit Hours.

This course is designed to teach fundamental machining operations on a Lathe and Mill. The course will emphasize general shop safety practices and machine operating procedures that is safe for the operators and other workers.
Prerequisite: Reading Proficiency.

ME 154. Mechanical Blueprint Reading. 2 Credit Hours.

This course covers drawing understandings, sheet sizes, information in title blocks, revision blocks, and tolerance blocks. Students will learn how to use measuring instruments as they pertain to blueprints. Additional hours required.
Prerequisite: Reading Proficiency.

ME 200. Manual Machining II. 3 Credit Hours.

This course prepares student for the National Institute for Metal Working Skills (NIMS) level I Turning Between Centers and Chucking credentialing assessment. Students will build upon skills learned in the Measurement, Materials & Safety and the Job Planning, Benchwork & Layout courses. They will learn additional skills for the metalworking industry including fundamental operations performed on a lathe. Some of the projects required for NIMS credentialing will be incorporated as lab projects. Additional hours required.
Corequisite: ME 120.
Prerequisites: Reading Proficiency or departmental approval.

ME 210. Robotics Subsystems and Components. 3 Credit Hours.

A continuation of Introduction to Robotics (ME 140) covering more advanced programming on ROBOT simulators (i.e., application of motion, voice, light, and sound sensors). Typical robot subsystems and components such as electronic (feedback devices, controls, microprocessor interfacing), hydraulic, pneumatic and mechanical drive mechanisms are covered with regard to their functions and operational principles. Additional lab hours required.
Prerequisites: ME 140, EE 242 or department approval and Reading Proficiency.

ME 211. Programmable Logic Controllers. 3 Credit Hours.

This course presents the fundamentals of ladder logic (or relay logic) used on modern industrial controllers. Basic elements such as timers, counters, and sequences are studied, as well as traditional methods of applying them to machine control. Students will program and perform laboratory experiments with programmable logic controllers, such as the Allen Bradley SLC-100 controllers and interface them to various input and output devices. An industrial robot also is available in class for lab experiments. Use of IBM/Allen Bradley personal computer interface software will be covered as well. Additional lab hours required.
Prerequisites: ME 140 recommended and Reading Proficiency.

ME 212. Introduction to Computer Numerical Control (CNC) Machining. 3 Credit Hours.

This course prepares students for the National Institute for Metalworking Skills (NIMS) level 1 Computer Numeric Control (CNC) Milling examinations. Students will build upon skills learned in the Measurement, Materials & Safety class and the Job Planning, Benchwork & Layout course. They will learn additional skills for the metalworking industry including the safe set up, operation and basic programming of Computer Numeric Controlled milling machines. They will work on the project required for NIMS credentialing. Additional hours required. Corequisite: ME 120.

Prerequisites: Reading Proficiency or departmental approval.

ME 223. Basic Hydraulics I. 2 Credit Hours.

This course is arranged to give the student a general knowledge of the basic components of hydraulic systems, as well as a general understanding of the basic laws and formulas used in simple hydraulic calculations. It includes such topics as pumps, control valves, control assemblies, actuators, the use of standard hydraulic symbols, and maintenance procedures.

Prerequisite: Reading Proficiency.

ME 230. Introduction to 3-D Solid Modeling for Design. 4 Credit Hours.

This course is designed to teach the use of 3D solid modeling CAD packages. Instruction includes how to use a 3D CAD package to develop solid models in order to generate assemblies and 2D drawings. CAD package used in a particular semester or a section of this course may depend on the industry or student's demand. Some of the commonly used 3D solid modeling packages in the industry are SDRC'S I-Deas Master, SolidWorks, Pro-E, and Solid Edge. It is suggested that prior to registering for this course, students would inquire with the department as to which CAD will be emphasized in a given semester or a section of the course. Additional lab hours required.

Prerequisites: Department approval and Reading Proficiency.

ME 232. Geometric Dimensioning and Tolerancing. 2 Credit Hours.

Geometric Dimensioning and Tolerancing will provide an introduction to consistent and clear application of dimensions and tolerances as outlined in the ASME Y14.5-2009 standard. Complete documentation of product requirements will consist of symbols, feature control frames, geometric tolerances, datums, and material condition modifiers. The course will also include methods of tolerance verification and basic design considerations.

Prerequisites: EGR 100 or department approval and Reading Proficiency.

ME 237. Programmable Logic Controllers II. 3 Credit Hours.

This course is a continuation of the study of Programmable Logic Controllers. Students will cover topics including comparators, variables, subroutines, and human machine interfaces. Additional lab hours required. Reading Proficiency. Prerequisites: EE 236 or ME 236 both with minimum grades of "B" or department approval.

ME 241. Numerical Control Programming. 3 Credit Hours.

This course will include a brief summary of machine types and their application with movies and local field trips; also, basic CNC programming language and preparation of part programs. Students will program and operate three axis vertical mills with sequential and word address controls.

Prerequisites: ME 151 and Reading Proficiency.

ME 242. Mechanics-Dynamics. 3 Credit Hours.

Dynamics extends the study of mechanics from forces and their effects on motionless objects to motion and the forces required to produce motion. Energy, impulse and momentum are included.

Prerequisites: ME 135 and Reading Proficiency.

ME 243. Strength of Materials. 3 Credit Hours.

This course consists of the study of the reaction of materials to tension, compression torsion and flexure. Applications to the design of beams, columns, shafts and fasteners are presented. The students perform various materials tests in a fully-equipped laboratory. Additional lab hours required.

Prerequisites: ME 135 and Reading Proficiency.

ME 244. Mechanical Design I. 3 Credit Hours.

This course applies the principles of engineering graphics to problems dealing with the drawing and design of machines and parts. The emphasis is to produce accurate and complete detail and assembly drawings utilizing the latest industrial drafting procedures and practices which include GD&T methods. Additional lab hours required.

Prerequisites: EGR 100 and Reading Proficiency.

ME 249. Materials and Metallurgy. 3 Credit Hours.

This course is a survey of the sources, preparation, properties and uses of engineering materials. Topics include the following the iron-carbon system, ferrous metallurgy, nonferrous metallurgy, ceramics, plastics, elastomers, composites, and finishes. Practical laboratory activities are performed to clarify and enhance text material. Additional lab hours required.

Prerequisite: Reading Proficiency.

ME 254. Electricity and Controls. 3 Credit Hours.

A basic course in AC-DC electricity and controls for non-electrical students. Study of DC, AC and magnetic circuits used for electric motor drives and transformers introduction to solid state and electromagnetic controls. Laboratory experiments parallel classroom material covered. Additional lab hours required.

Prerequisite: Reading Proficiency.

ME 255. Fluid Power. 3 Credit Hours.

This course is that portion of fluid mechanics which deals with its application and has been termed "Fluid Power." It emphasizes the study of components of hydraulics and pneumatics systems as used for industrial power transmission and control purposes. Additional lab hours required.

Prerequisites: MTH 144 or equivalent and Reading Proficiency.

ME 262. Energy Impact of Mechanical Products. 3 Credit Hours.

This course will focus on the identification and energy impact of mechanical products utilized in residential and commercial building. Because energy-related equipment in buildings can vary in age and efficiency, this course will include reviewing a variety of products and their features as they relate to overall performance. Additional hours required.

Prerequisites: CE 116 and MTH 124 or MTH 140, all with a minimum grade of "C", and Reading Proficiency.

ME 263. Energy Control Systems. 3 Credit Hours.

This course provides an overview of basic electrical systems and examines overall building control systems and automation. Students will explore how control systems can effectively monitor and manipulate building systems to achieve maximum efficiency. Additional hours required.

Prerequisites: CE 116 and MTH 124 or MTH 140, all with a minimum grade of "C" and Reading Proficiency.

ME 264. Energy Conservation Measurement and Auditing. 3 Credit Hours.

This course is the culminating experience of the Sustainable Energy Technology Certificate Program integrating material learned in previous classes. A hands on approach will be taken, including Building Energy Auditing, and Testing and Balancing. Additional hours required. Prior or concurrent enrollment in GE 163, ME 162, ME 263 all with a minimum grade of "C". Reading Proficiency.

Prerequisites: ME 161 and MTH 124 or MTH 140 with minimum grades of "C".

Music (MUS)

MUS 101. Music Theory I. 4 Credit Hours.

An integrated course in musicianship. Diatonic harmony with reference to 18th-century style. Combines written and keyboard harmonization. Develops rhythm, pitch and harmony through sight-singing and dictation. Additional studio hours required.

Prerequisites: Experience in reading music notation is recommended and Reading Proficiency.

MUS 102. Music Theory II. 4 Credit Hours.

Continuation of MUS 101. Enlargement of vocabulary to comprise inversion of triads, non-harmonic tones, chord extensions, harmonic analysis and modulation. Additional studio hours required.

Prerequisites: MUS 101 or permission of instructor and Reading Proficiency.

MUS 103. Basic Music. 3 Credit Hours.

A course in the fundamentals of music including note reading, scales, keys, intervals, rhythmic activities and simple keyboard study.

MUS 113. History of Jazz. 3 Credit Hours.

This class is a review of artists, composers, and other influences associated with the art of Jazz. It will examine the relationship of Jazz on culture in the United States and the world.

Prerequisite: Reading Proficiency.

MUS 114. Music Appreciation. 3 Credit Hours.

This class is a survey of various aspects of music including the philosophy, science, theory, anthropology, sociology, history, and physical act of producing music. A wide variety of musical styles and associative composers will be used to explore these aspects of music.

Prerequisite: Reading Proficiency.

MUS 115. Voice I. 2 Credit Hours.

Introduction to the fundamentals of singing. Attention directed to tone production, breath control, diction, phrasing, rhythmic and melodic precision stage deportment.

Prerequisite: Reading Proficiency.

MUS 121. Class Piano I. 2 Credit Hours.

A course designed to develop basic skills and techniques in piano playing applicable to various types of music. For the student with no previous keyboard experience.

MUS 122. Class Piano II. 2 Credit Hours.

Continuation of MUS 121.

Prerequisites: MUS 121 or demonstrated proficiency and Reading Proficiency.

MUS 128. History of Rock and Roll. 3 Credit Hours.

This class is a review of the music, artists, composers, and other people associated with Rock and Roll and its impact on culture.

Prerequisite: Reading Proficiency.

MUS 130. Beginning Guitar. 2 Credit Hours.

Course objective is to acquire a classical playing technique. Emphasis on correct seating and hand positions, note reading, chording and basic music theory. Students must supply their own guitar (nylon string recommended).

Prerequisites: Ability to read music is recommended and Reading Proficiency.

MUS 131. Chorus. 1 Credit Hour.

Study and performance of representative choral literature. Emphasis on vocal technique and development. Additional studio hours required.

MUS 132. Orchestra. 1 Credit Hour.

Study and performance of representative chamber and symphonic literature. Additional studio hours required.

Prerequisites: Audition and Reading Proficiency.

MUS 134. Symphonic Band. 1 Credit Hour.

Study and performance of representative symphonic band literature.

Additional studio hours required.

Prerequisites: Experience in playing a band instrument and Reading Proficiency.

MUS 135. Choir. 1 Credit Hour.

A study of advanced choral literature. Emphasis on vocal technique and development. Additional studio hours required.

Prerequisite: Audition.

MUS 138. Jazz Improvisation I. 2 Credit Hours.

The study and application of beginning jazz theory and improvisation to the performance of jazz music in a combo setting with little emphasis on concert performance. Additional studio hours required.

Prerequisites: Performance ability, audition, permission to enroll and Reading Proficiency.

MUS 139. Jazz Improvisation II. 2 Credit Hours.

The study and application of intermediate jazz theory and improvisation to the performance of jazz music in a combo setting with greater emphasis on concert performance. Additional studio hours required.

Prerequisites: MUS 138 or equivalent and Reading Proficiency.

MUS 141. Applied Music I. 2 Credit Hours.

Individualized study of instrument or voice.

Prerequisites: Demonstrated proficiency and Reading Proficiency.

MUS 142. Applied Music II. 2 Credit Hours.

Continuation of MUS 141.

Prerequisites: MUS 141 and Reading Proficiency.

MUS 144. African Drum Ensemble. 1 Credit Hour.

Students will learn and perform the dance music of West African countries.

Special emphasis will be placed on the hand techniques of the djembe.

Students will, however, perform on many other instruments as well, including bells, dununs, and shekeres. Additional hours required.

Prerequisite: Reading Proficiency.

MUS 150. Fundamentals of Music Technology. 2 Credit Hours.

This course teaches the fundamentals of computer-based music and sound production. Topics covered include the computer operating system, file manipulation, basic MIDI sequencing, basic audio recording, data archiving and CD creation.

Prerequisite: Reading Proficiency.

MUS 152. Audio Engineering. 3 Credit Hours.

Students will learn how to run a recording session from set-up, to tracking, to tear-down. They will learn the theory of compressors, EQ, delays, reverbs, chorus, and other effects. Microphone design, selection, and placement are emphasized. This course combines theory with practical experience in digital audio.

Prerequisites: MUS 150 and Reading Proficiency.

MUS 153. Drum Machine Programming. 2 Credit Hours.

Students will learn to create drum patterns, beats, and loops using a variety of music software and hardware. Traditional drum instrumentation, experimental techniques, groove settings, and editing in a variety of styles will be explored.

Prerequisite: Reading Proficiency.

MUS 154. Music Recording with Pro Tools I. 2 Credit Hours.

In this course students will learn how to use the Pro Tools digital audio workstation to record music. They will learn to use plugin effects, mix automation, and studio hardware. The Audio Engineering class is helpful, but not required.

Prerequisites: MUS 150 and Reading Proficiency.

MUS 201. Music Theory III. 4 Credit Hours.

Continuation of MUS 102. Review of diatonic harmony, Chromatic harmony, 18th and 19th century practices. Analysis of written and keyboard harmonization. Development of rhythm, pitch and harmony through sight-singing and dictation. Additional studio hours required.

Prerequisites: MUS 102 or permission of instructor and Reading Proficiency.

MUS 202. Music Theory IV. 4 Credit Hours.

Continuation of MUS 201. Advanced chromatic harmony, 19th and 20th century practices. Analysis of written and keyboard harmonization. Development of rhythm, pitch and harmony through sight-singing and dictation. Additional studio hours required.

Prerequisites: MUS 201 or permission from instructor and Reading Proficiency.

MUS 211. Music History I. 3 Credit Hours.

The history of music in Western civilization from its origins to the Baroque era. Emphasis on listening to and analyzing the music with score.

Prerequisites: Ability to read music and Reading Proficiency.

MUS 212. Music History II. 3 Credit Hours.

The history of music in Western civilization from the Baroque era to the present. Emphasis on listening to and analyzing the music with score.

Prerequisites: Ability to read music and Reading Proficiency.

MUS 216. Jazz Improvisation III. 2 Credit Hours.

The study and application of advanced techniques in jazz improvisation in a combo setting with emphasis on concert performance. This course may be reelected for additional credit. Additional studio hours required.

Prerequisites: MUS 139 or equivalent and Reading Proficiency.

MUS 221. Class Piano III. 2 Credit Hours.

Continuation of MUS 122.

Prerequisites: MUS 122 or demonstrated proficiency and Reading Proficiency.

MUS 222. Class Piano IV. 2 Credit Hours.

Continuation of MUS 221.

Prerequisites: MUS 221 or demonstrated proficiency and Reading Proficiency.

MUS 241. Applied Music III. 2 Credit Hours.

Continuation of MUS 142.

Prerequisites: MUS 142 and Reading Proficiency.

MUS 242. Applied Music IV. 2 Credit Hours.

Continuation of MUS 241.

Prerequisites: MUS 241 and Reading Proficiency.

MUS 254. Music Recording with Pro Tools II. 2 Credit Hours.

Learn to use the Pro Tools digital audio workstation to record music. The second semester emphasizes an in-depth study of advanced mixing and mastering techniques used to complete digitally recorded projects. The Audio Engineering class is helpful, but not required.

Prerequisites: MUS 154 and Reading Proficiency.

Nursing (NUR)

NUR 151. Fundamentals of Nursing. 7 Credit Hours.

This course is an introduction to the role of the nurse in meeting needs common to all patients through knowledge, skill, and attitudes essential for the practice of nursing, based on principles of physical, biological, behavioral sciences, and nursing theory. Additional hours required. PSY 200, LIB 101, BIO 207, COM 200, ENG 101 all with grades of "C" or better, or concurrent enrollment in BIO 208 and PSY 205. Math Proficiency at or above the MTH 140 level and Reading Proficiency.

Corequisite: NUR 152.

Prerequisites: Enrollment in Nursing Program and passing of Dosage Calculation Test.

NUR 152. Nursing Laboratory Practicum I. 1 Credit Hour.

This course is designed to provide the student with the practice of nursing skills in the College Nursing Laboratory and to reinforce principles introduced in Fundamentals of Nursing. Additional lab hours required.

Corequisite: NUR 151.

Prerequisite: Reading Proficiency.

NUR 153. Nursing Adults and Children I. 9 Credit Hours.

This course is designed to assist the student to acquire knowledge and skills in meeting the needs of adults and children with an emphasis on adaptation to illness and hospitalization in medical-surgical nursing, and mothers and newborns during the maternity cycle. Additional hours required.

Corequisite: NUR 154.

Prerequisites: BIO 208, NUR 151, PSY 205 all with grades of "C" or better and Reading Proficiency.

NUR 154. Nursing Laboratory Practicum II. 1 Credit Hour.

This course is designed to provide the student with the practice of nursing skills in the College Nursing Laboratory and to reinforce nursing principles introduced in NUR 153. Additional hours required.

Corequisite: NUR 153.

Prerequisites: NUR 151, NUR 152 both with grades of "C" or better and Reading Proficiency.

NUR 160. LPN to RN Bridge Course. 7 Credit Hours.

This course is required to prepare the licensed practical nurse to enter the associate degree in nursing program. Emphasis is on assessing, reinforcing, and expanding competencies. Classroom content focuses on role change, communication, critical thinking, the nursing process, pharmacology, and nutrition. Includes a college laboratory and clinical component. Additional hours required. Prior or concurrent enrollment in BIO 208 with a grade of "C" or better, PSY 205, LIB 101, BIO 207 all with grades of "C" or better, and ENG 101 and Reading Proficiency.

Prerequisites: Enrollment in Nursing program and passing the Dosage Calculation Test.

NUR 161. LPN Experiential Credit I. 11 Credit Hours.

This course is designed to transcript LPN experiential credit for first semester nursing. LPN's must have successfully completed NUR 160.

Prerequisites: Enrolled in LPN Bridge Course and NUR 160 with a grade of "C" or better and Reading Proficiency.

NUR 251. Nursing of Adults and Children II. 10 Credit Hours.

This course is designed to assist the student to further develop knowledge and skills necessary to meet the needs of adults and children with selected medical-surgical problems and behavioral health problems. Additional hours required.

Prerequisites: NUR 153 or NUR 160 with grades of "C" or better, and BIO 203 with a grade of "C" or better and Reading Proficiency.

NUR 252. Nursing of Adults and Children III. 8 Credit Hours.

This course is designed to assist the student to further develop knowledge and skills necessary to meet the needs of adults and children with selected medical-surgical problems. Additional hours required.

Corequisite: NUR 253.

Prerequisites: NUR 251 with a grade of "C" or better and Reading Proficiency.

NUR 253. Management Skills in Nursing. 3 Credit Hours.

This course includes theory and practicum in principles of managing the care of a group of patients. The student will participate actively in the roll of a beginning staff nurse under the guidance of agency staff and instructor. Additional hours required.

Corequisite: NUR 252.

Prerequisites: NUR 251 with a grade of "C" or better and Reading Proficiency.

Occupational Therapy Assistant (OTA)

OTA 101. Fundamentals of Occupational Therapy Assistant I. 3 Credit Hours.

This course is an introduction to occupational therapy, its philosophy, goals and focus in relation to basic treatment in geriatrics, psychosocial dysfunction, physical disabilities and developmental pediatrics. Beginning skills in practice of occupational therapy are learned. (21 clock hours of clinical assignments to be arranged)

Prerequisites: Admission to the OTA program and Reading Proficiency.

OTA 102. Fundamentals of Occupational Therapy Assistant II. 4 Credit Hours.

This course provides students with beginning skills in occupational therapy treatment related to psycho-social dysfunction across the lifespan. Students learn basic psychiatric terms, diagnoses and behaviors as well as how occupational performance is affected. Practice with selecting and implementing group intervention, assessing areas of occupation and analyzing occupational performance as well as clinical experiences in a psychosocial setting are included.

Prerequisites: OTA 101, OTA 103, PSY 200, PSY 205, all with a minimum grade of "C" and Reading Proficiency.

OTA 103. Adaptive Activities I. 2 Credit Hours.

This course explores the use of activities in occupational therapy including those that address sensory motor, cognitive, and psycho-social performance components. The student is introduced to activity analysis, methods of instruction, goal setting and cost and supply factors.

Prerequisites: Admission to the OTA program and Reading Proficiency.

OTA 104. Adaptive Activities II. 2 Credit Hours.

This course is designed to teach students about assistive technology and adaptive devices related to the problem areas commonly seen in physical dysfunction across the lifespan. Students learn to select, design, fabricate, modify and recommend adaptive equipment, including, but not limited to seating, positioning, and splinting, to enable the completion of functional tasks, as well as, how to instruct others on the safe and proper use of adaptive devices. Additional lab hours required.

Prerequisites: OTA 101, OTA 103, PSY 200, PSY 205, all with a minimum grade of "C", and Reading Proficiency.

OTA 203. Fundamentals of Occupational Therapy III. 4 Credit Hours.

This course presents the principles of assessment, interpretation and intervention implementation for deficits and performance limitations associated with physical dysfunction due to various diagnoses. Students are provided a framework to treat clients with physical, sensorimotor, visual, perceptual, and cognitive dysfunction. Clinical reasoning skills necessary for good client-centered decision-making are taught in order to guide intervention that enhances performance in areas of occupation.

Corequisite: OTA 208.

Prerequisites: OTA 102, OTA 104, OTA 207 with minimum grades of "C" and Reading Proficiency.

OTA 204. Fundamentals of Occupational Therapy IV. 4 Credit Hours.

The purpose of this course is to provide the student with a foundation in motor development as a basis for selecting treatment techniques and outcomes for the pediatric population. Students are provided opportunities to integrate knowledge of normal development into treatment strategies.

Prerequisites: OTA 102, OTA 104, OTA 207 with minimum grades of "C" and Reading Proficiency.

OTA 207. Health and Disease. 4 Credit Hours.

This course is an overview of disease conditions typically encountered in occupational therapy practice. Etiology, symptoms and physical and psychological reactions to these conditions are reviewed as well as basic influences contributing to healthy living. Medical terminology along with the role and function of the OTA within the treatment process is emphasized.

Prerequisites: BIO 207, OTA 101, OTA 103, PSY 200, PSY 205, all with a minimum grade of "C" and Reading Proficiency.

OTA 208. Adaptive Living Skills. 2 Credit Hours.

The laboratory course presents intervention principles that are utilized in order to improve occupational performance. Students are trained to perform strategies for restoring skills, adaptive and compensatory techniques and methods of addressing activities for daily living for clients across the lifespan. Corequisite: OTA 203.

Prerequisites: BIO 208, BIO 209, OTA 102, OTA 104, OTA 207, SOC 201 all with minimum grades of "C" and Reading Proficiency.

OTA 213. Occupational Therapy Assistant Practicum I. 4 Credit Hours.

This full-time 8 week fieldwork practicum is designed to bridge the student from classroom to clinic in preparation for entry level practice as an occupational therapy assistant. Under the supervision of an experienced occupational therapy practitioner, the student participates in an in-depth experience providing occupational therapy services to clients, focusing on the application of purposeful and meaningful occupation. It is designed to promote problem-solving and clinical reasoning appropriate to the occupational therapy assistant role and to develop professionalism and competence in career responsibilities. Reading Proficiency.

Corequisite: OTA 216.

Prerequisites: OTA 203, OTA 204, OTA 208, OTA 215, all with a minimum grade of "C", and the completion of all general education requirements for the occupational therapy assistant program.

OTA 214. Occupational Therapy Assistant Practicum II. 4 Credit Hours.

This is the second of two full-time 8 week fieldwork practicum designed to bridge the student from classroom to clinic in preparation for entry level practice as an occupational therapy assistant. Under the supervision of an experienced occupational therapy practitioner, the student participates in an in-depth experience providing occupational therapy services to clients, focusing on the application of purposeful and meaningful occupation. It is designed to promote problem-solving and clinical reasoning appropriate to the occupational therapy assistant role and to develop professionalism and competence in career responsibilities. Reading Proficiency.

Corequisite: OTA 216.

Prerequisites: OTA 203, OTA 204, OTA 208, OTA 215, and the completion of all general education requirements for the occupational therapy assistant curriculum.

OTA 215. The Management of Occupational Therapy. 2 Credit Hours.

This course explores the roles of the occupational therapy assistant in health care delivery. Topics include current trends, documentation, reimbursement, credentialing, ethical standards, Total Quality Management, ethical issues, multicultural diversity, OTR/COTA collaboration and supervision, and evidence-based practice.

Prerequisites: OTA 102, OTA 104, OTA 207 with minimum grades of "C" and Reading Proficiency.

OTA 216. Level II Fieldwork Seminar. 1 Credit Hour.

This is a program culminating course designed to facilitate the transition from student to OTA practitioner. Basic knowledge and skills necessary to enter the workplace are reviewed. There is an emphasis on legal, ethical and professional issues. Certification and licensure preparation as well as job seeking skills are investigated.

Corequisites: OTA 213 and OTA 214.

Prerequisites: OTA 203, OTA 204, OTA 208, OTA 215, all with a minimum grade of "C", and Reading Proficiency.

Paramedic Technology (PAR)

PAR 201. Principles of Paramedic Technology I. 8 Credit Hours.

This course is an overview of Paramedic practice integrating the theory behind the use of advanced diagnostic and treatment procedures into the management of organic, life-threatening emergencies.

Corequisite: PAR 211.

Prerequisites: EMT 121, BIO 207, department approval and Reading Proficiency.

PAR 202. Principles of Paramedic Technology II. 8 Credit Hours.

This course serves as an overview of paramedic practice as well as integrating the theory behind the use of advanced diagnostic and treatment procedures in the management of organic, life-threatening emergencies. Topics include cardiovascular, cerebrovascular and other medical emergencies and their relationship to their respective disease processes.

Corequisite: PAR 212, PAR 222, PAR 224, PAR 226.

Prerequisites: PAR 201 and Reading Proficiency.

PAR 203. Pharmacology for Paramedics. 3 Credit Hours.

This course discusses drug theory and usage by paramedical personnel. Areas of emphasis are general principles of drug action, the mathematics of dosage calculation, the therapeutic effects, indications, contraindications, dosages, administration routes, and possible side effects of emergency drugs. Discussion of important prescription medications and their relationship to emergency treatment.

Corequisite: PAR 201.

Prerequisite: Reading Proficiency.

PAR 211. Paramedic Laboratory I. 1 Credit Hour.

This course covers the practical skills relating to PAR 201 including patient assessment and history taking techniques, parental infusion techniques, antishock trousers, oxygen administration, airway adjuncts to include endotracheal intubation and cricothyrotomy techniques.

Corequisites: PAR 201, PAR 221, PAR 223.

Prerequisites: Admission to the Paramedic program and Reading Proficiency.

PAR 212. Paramedic Laboratory II. 1 Credit Hour.

This course covers the practical skills relating to PAR 202 and PAR 226, including patient assessment and history taking techniques with emphasis on ECG interpretation as well as special OB/GYN techniques. At the completion of the semester all skills covered previously will be reviewed. Additional lab hours required.

Corequisites: PAR 202, PAR 226.

Prerequisite: Reading Proficiency.

PAR 221. Paramedic Clinical I. 1 Credit Hour.

Students provide advanced therapy to hospitalized patients under the supervision of licensed personnel. Additional hours required.

Corequisites: PAR 201, PAR 203, PAR 211, PAR 223.

Prerequisites: Admission to the Paramedic program and Reading Proficiency.

PAR 222. Paramedic Clinical II. 2 Credit Hours.

Student provides advanced therapy to hospitalized patients under the supervision of licensed personnel. Additional hours required.

Corequisites: PAR 202, PAR 212, PAR 224, PAR 226.

Prerequisites: PAR 201 and Reading Proficiency.

PAR 223. Paramedic Internship I. 1 Credit Hour.

This course is designed specifically for those students who are currently enrolled in Paramedic Technology. Arrangements are made for the student to work with a pre-hospital, advanced life support system under the supervision of licensed personnel. Students will observe and practice the application of paramedic skills. Additional hours required.

Corequisite: PAR 201.

Prerequisites: Admission to the Paramedic program and Reading Proficiency.

PAR 224. Paramedic Internship II. 1 Credit Hour.

This course is designed specifically for the student who is currently enrolled in PAR 202 and PAR 226. Arrangements are made for the student to work with a pre-hospital, advanced life support system under the supervision of licensed personnel. Student will observe and practice the application of paramedic skills. Additional lab hours required.

Corequisites: PAR 202, PAR 212, PAR 222, PAR 226.

Prerequisites: PAR 201 and Reading Proficiency.

PAR 225. Paramedic Internship III. 4 Credit Hours.

This course is designed specifically for the student who is currently enrolled in Paramedic Technology. Arrangements are made for the student to work with a pre-hospital advanced life support system under the supervision of licensed personnel. Student will observe and practice the application of paramedic skills. Additional hours required.

Corequisites: PAR 227, PAR 228.

Prerequisites: PAR 226 and Reading Proficiency.

PAR 226. Principles of Paramedic Technology III. 3 Credit Hours.

This course integrates the theory behind the use of advanced diagnostic treatment procedures into the practice of the paramedic. Areas of emphasis include infectious disease, OB/GYN, behavior, abuse, geriatrics, hematology and patients with special considerations.

Corequisites: PAR 202, PAR 212, PAR 222, PAR 224.

Prerequisites: PAR 201 and Reading Proficiency.

PAR 227. Principles of Paramedic Technology IV. 4 Credit Hours.

This course integrates the theory behind the use of advanced diagnostic treatment, assessment based management, counseling, rescue and communication procedures into the practice of the paramedic. Areas of emphasis include pediatrics, management of the chronically ill patient, extrication and rescue and communication techniques.

Corequisites: PAR 225, PAR 228.

Prerequisites: PAR 201, PAR 202, PAR 226 and Reading Proficiency.

PAR 228. Paramedic Clinical III. 1 Credit Hour.

Student provides advanced therapy to hospitalized patients under the supervision of licensed personnel. Additional hours required.

Corequisites: PAR 225, PAR 227.

Prerequisites: PAR 226 and Reading Proficiency.

Personal Development (PRD)

PRD 102. Career Exploration. 1 Credit Hour.

Career Exploration emphasizes students learning about themselves as well as about the world of work. Students will learn to identify accurate career information and resources. They will also learn a decision making model to assist them in their career selection process.

PRD 106. Relaxation Training. 1 Credit Hour.

This is a course for students who are dealing with increasing expectations and pressures. Participants will learn to identify when and how they experience stress in themselves. The material covered will include the causes of stress, individual assessments, relaxation techniques, methods of handling interpersonal stress, and audio tapes. Students will be asked to actively practice and utilize the techniques.

PRD 107. Explorations for Women I. 1 Credit Hour.

In a group setting women will be provided the opportunity to explore their self-concepts and expectations of themselves and of the world, as well as to experiment with new directions for their personal growth. The group will use a variety of activities to help each member to become aware of her strengths, her needs and her patterns of communication and behavior, and to formulate personal goals and experiment with programs to achieve them.

PRD 108. Personal Growth and Identity. 1-2 Credit Hours.

This course is designed to involve participants in the process of seeing themselves more clearly having more available alternatives in their interaction with others, together with a clear perception of their own uniqueness. This class will be organized with a group discussion format emphasizing self-exploration.

PRD 109. Habit Change. 1 Credit Hour.

Learn what the experts have discovered about changing a habit; use this information to overcome a self-defeating habit or develop a healthy habit. Possible goals quitting smoking or drinking, starting an exercise program, controlling overeating, etc. Topics will include the stages of change, twelve change processes, and rebounding from relapse.

PRD 110. Learning to Cope with Test Anxiety. 1 Credit Hour.

This course is designed to help students learn to desensitize themselves (systematically) to anxieties associated with the taking of tests. In the academic setting these "tests" may come in the form of quizzes, exams, oral reports, or contributions to class discussions. Students who will find this course beneficial are those who typically "freeze up" or "go blank" because of excessive anxiety leading up to and during testing situations, and as a result do not attain their level of competence.

PRD 114. Coping with Stress. 1 Credit Hour.

This course explores the physical and psychological nature of stress. Topics may include the practical application of various coping strategies, anxiety resolution, systematic desensitization and transferable skills necessary for student success.

PRD 121. Personal Success. 1 Credit Hour.

The focus of this course is the enhancement of the student's self-esteem. The opportunity is provided for students to review their self-esteem in a variety of life areas (family, work, friends, education) and consider ways in which they work to enhance it. A number of self-initiating behaviors that persons of all ages may adopt to enhance self-esteem will be explored.

PRD 122. Learning Through Service. 1 Credit Hour.

This course is designed for students who are seeking to expand leaning in a designated academic or personal development course they are taking, reinforce academic and career goals, continue previous Service-Learning Projects, enhance their level of civic engagement and to learn more about the world of work in a non-profit agency. Additional hours required.

PRD 126. Parenting. 1 Credit Hour.

This course will provide students with a forum for addressing a variety of parenting issues. In a structured group setting, students will explore and practice skills to increase parenting options and awareness. Topics include discipline, nutrition, social influences, and the role of parents, both in single and multiple parent households.
Prerequisite: Reading Proficiency.

PRD 128. Mental Health First Aid. 1 Credit Hour.

Mental Health First Aid is a certification course designed to assist participants in giving first aid to individuals experiencing a mental health crisis and/or who are in the early stages of a mental health disorder. The course teaches an appropriate response plan and the signs and symptoms of common health problems anxiety, depression, psychosis, eating disorders and substance use disorders.

Prerequisite: Reading Proficiency.

Philosophy (PHL)

PHL 101. Introduction to Philosophy. 3 Credit Hours.

This course is an introduction to philosophical inquiry through a study of such perennial problems as the nature of truth and the possibility of knowledge, the mind-body relation, the nature and basis of morality, the nature and possibility of free will and the nature and existence of God. The course incorporates both classical and contemporary readings.

Prerequisite: Reading Proficiency.

PHL 102. Introduction to Logic. 3 Credit Hours.

Introduction to Logic includes the methods for critically evaluating reasoning and constructing valid arguments. The course may include the techniques of both traditional (syllogistic) and symbolic logic. Informal logic (language definition and fallacies) is to be covered.

Prerequisite: Reading Proficiency.

PHL 103. World Religions. 3 Credit Hours.

This is an introductory course examining the nature and function of religion in human experience and culture and an introduction to the history, content and present status of selected world religions such as Hinduism, Buddhism, Taoism, Confucianism, Islam, Judaism and Christianity.

Prerequisite: Reading Proficiency.

PHL 104. Ethics. 3 Credit Hours.

This course is an introductory survey of the basic issues and approaches in the field of ethics, with the aim of showing the relevance of philosophical inquiry to contemporary moral concerns. Questions concerning the good life, the nature and content of morality, and the relation of the individual to the standards of society will be considered.

Prerequisite: Reading Proficiency.

PHL 109. Bio-Medical Ethics. 3 Credit Hours.

This course is an analysis of a range of moral issues related to the fields of medicine and biotechnical engineering from the standpoint of philosophical ethical theories.

Prerequisite: Reading Proficiency.

PHL 111. Environmental Ethics. 3 Credit Hours.

This introductory course examines human beings' ethical relationship with the natural environment. Topics include environmental ethical frameworks (e.g., biocentrism), animal rights, obligations to future generations, population and consumption, climate change and environmental justice. Some issues are viewed through various cultural and religious lenses. The course incorporates primarily contemporary readings.

Prerequisite: Reading Proficiency.

PHL 112. Business Ethics. 3 Credit Hours.

This course explores the ethical dimensions of the world of business are analyzed from a philosophical perspective. Using theories drawn from philosophy, students will evaluate business case studies with respect to such topics as personal and corporate responsibility and the obligations of justice.

Prerequisite: Reading Proficiency.

PHL 114. Philosophy of Religion. 3 Credit Hours.

This introductory course examines philosophical issues as they relate to Western religious thought. Topics may include arguments for the existence of God, the problem of evil, the relationship between faith and reason, the role of miracles and religious experience, and the religious foundations of morality. This course incorporates traditional and contemporary readings.
Prerequisite: Reading Proficiency.

Physical Education (PE)

PE 100. The National Council on Strength and Fitness Personal Trainer. 3 Credit Hours.

The National Council on Strength and Fitness Certified Personal Trainer course is designed to synthesize the knowledge acquired from an exercise science curriculum with practical application for successful job performance in the fitness industry. Students will be prepared to practice as personal trainers with a highly regarded, legally-defensible certification. Additional hours required.
Prerequisites: MTH 140 and BIO 111 with minimum grades of "C", DIT 115 and Reading Proficiency.

PE 104. Archery. 1 Credit Hour.

This is an introductory course that focuses on basic archery rules, skills, terminology, and equipment. Techniques of shooting including stance, draw, aim, release and follow through of a compound bow are introduced. Columbia rounds and intraclass competition are performed.

PE 105. Deep Water Exercise. 1 Credit Hour.

This course is designed to promote cardiovascular fitness. Assisted by flotation devices students will engage in warm-up, aerobic, and muscle toning exercises in a suspended state, thereby avoiding hard impact on joints. Recommended for individuals who have excess weight, knee or back problems. Additional hours required.

PE 106. Backpacking and Hiking. 1 Credit Hour.

This course is an introduction to leisure-time activities of hiking, backpacking, and camping skills. Food and hydration preparations, choice of proper hiking-camping apparel, campsite development, safety and sanitation are explored. This course requires two one-day trail hikes (roughly 10 miles) and one weekend camping trip. Each student is responsible for his/her own equipment and transportation to and from the campsite. Additional hours required.

PE 107. Baseball I. 1 Credit Hour.

Indoor/outdoor instruction in hitting, fielding, throwing, baserunning, conditioning, bunting, strategy, position play.

PE 109. Basic Fitness I. 1 Credit Hour.

This course is an introductory course that focuses on fitness principles and exercise techniques used to develop strength, muscular endurance, flexibility, and cardio-respiratory fitness. A variety of physical activities and exercises will be introduced.

PE 110. Basic Fitness II. 1 Credit Hour.

This course focuses on the development of strength and cardio-respiratory fitness. Fitness principles, various types of exercises, and the role of eating patterns are identified to enhance a healthy lifestyle. Focus will be placed on students designing their own workout routines.
Prerequisite: PE 109.

PE 111. Basketball I. 1 Credit Hour.

Basics of ball handling, shooting, offense, defense, team play, conditioning.

PE 116. Bowling I. 1 Credit Hour.

This course is an introduction of basic fundamentals and techniques including starting positions, the push away, footwork, and arm swing used in the approach and delivery. Instruction includes history, rules, safety, strategies, scoring, and handicapping. This course is held at a nearby bowling facility and there is an additional fee for equipment rental.

PE 117. Bowling II. 1 Credit Hour.

This course expands on skills including adjustments to lane conditions, approach, developing a strike ball, picking all spare and split combinations; individual and team competition. This course is held at a nearby bowling facility and there is an additional fee for equipment rental.
Prerequisite: PE 116 with a minimum grade of "C".

PE 118. Camping and Floating. 1 Credit Hour.

This course introduces the fundamentals of outdoor living including camping skills, cooking, campsite development, shelter, canoeing, and selection and care of equipment. The course includes and overnight float trip on Missouri Rivers.

PE 119. Care and Prevention of Athletic Injuries. 3 Credit Hours.

The course is designed to introduce the student to selected aspects of athletic training. Material of the course provides sufficient background in anatomy, physiology, and kinesiology for those new to the study. Student will observe and participate in the sequence of injury prevention, initial care, and treatment with use of therapeutic modalities, and therapeutic rehabilitation of athletic injuries.
Prerequisite: Reading Proficiency.

PE 120. Community Red Cross CPR. 1 Credit Hour.

This course provides physiological principles of cardio-pulmonary functions with practical application in administering this lifesaving technique and use of an automated external defibrillator. Certification through the American Red Cross adult, child and infant Cardiopulmonary Resuscitation (CPR) and Automated External Defibrillation (AED) available for those who meet course requirements. Addition fee is required to obtain certification.

PE 122. Dance Aerobics I. 1 Credit Hour.

This course is an introduction to continuous rhythmic movements and steps to encourage this enjoyable physical activity to be part of a healthy lifestyle. Workout sessions incorporate various genres of music designed for all fitness levels to improve cardio-respiratory fitness, flexibility, muscle toning and strengthening, and coordination.

PE 123. Dance Aerobics II. 1 Credit Hour.

This course is a continuation of Dance Aerobics I (PE 122) with emphasis on strengthening the cardio-respiratory system, improving muscle tone and flexibility, and promoting weight loss through rhythmic movements and steps. Various genres of music accompany workouts, which include floor aerobics, step aerobics, and low-and high-impact movements.
Prerequisite: PE 122.

PE 126. Fencing I. 1 Credit Hour.

This is an introductory course that focuses on basic fencing rules and skills including attacks, parries, strategy, and rules. Intraclass competition is performed.

PE 127. Fencing II. 1 Credit Hour.

This course is a refinement of techniques learned in Fencing I. Foil and Epee, advanced parries, attacks and electric equipment are introduced. Intraclass competition is performed.
Prerequisite: PE 126.

PE 128. Fencing III. 1 Credit Hour.

This course focuses on the development of offensive and defensive techniques for Sabre fencing. Rules, terminology and etiquette are addressed. Basic strategies of bouting are introduced.

Prerequisite: PE 126.

PE 129. First Aid. 2 Credit Hours.

This course includes emergency recognition and first aid treatment for sudden illness and injuries with adult cardiopulmonary resuscitation (CPR) and automated external defibrillator (AED). First Aid and CPR/AED certification is available through the one of the following certifying agencies: American Red Cross, National Safety Council, or American Heart Association. This course may be taken to satisfy one credit hour of the physical education requirement.

Prerequisite: Reading Proficiency.

PE 130. Fitness Center I. 1 Credit Hour.

This course provides basic fitness principles, awareness of healthy food choices, and physical activities for students to improve health and well-being. Active participation in physical activities for the development of muscular strength and endurance, flexibility, and cardiorespiratory fitness is required.

PE 131. Fitness Center II. 1 Credit Hour.

This course is a continuation of PE 130 with consideration given to concepts of body composition and weight management through healthy food selection and physical activities. Active participation in self-guided physical activities to improve muscular strength and endurance, cardiorespiratory fitness, and flexibility is required.

Prerequisite: PE 130.

PE 132. Total Fitness. 1 Credit Hour.

This course is a continuation of PE 131 with consideration given to self-directed lifetime fitness for health and well-being. Performance of physical activities is required. Advanced training techniques for improving muscular strength and endurance, cardiorespiratory fitness, and flexibility are explored. Additional hours required.

Prerequisites: PE 130 and PE 131.

PE 133. Golf. 1 Credit Hour.

Basic fundamentals such as swing, club selection, putting, rules and etiquette are covered. Clubs are not provided.

PE 135. Health and Personal Hygiene. 3 Credit Hours.

This is an introduction to the concept of health being a foundation for positive movement throughout the life cycle. The course will explore the inter-relatedness of the body systems, the nature and communication of disease and the recovery process. Course topics will include healthy eating, fitness, sexuality, drugs, stress, and wellness.

Prerequisite: Reading Proficiency.

PE 136. Ice Skating. 1 Credit Hour.

This is an introductory course on basic skills and techniques of ice skating including attire and equipment. Course is held at local skating rink and there is an additional fee for skate rental.

PE 137. Judo I. 1 Credit Hour.

This course (translated as "gentle way") is designed to introduce students to the Olympic sport. Focus on fundamental skills and techniques of falling, throwing, grappling, holding, and recognition of choking, and arm locks. Students will explore basic terminology, etiquette, and history and rules of the sport. Emphasis will be placed on safety and controlled execution of techniques.

PE 138. Judo II. 1 Credit Hour.

This course is a continuation of Judo I (translated as "gentle way"). Introduction to intermediate and advanced skills and techniques of falling, throwing (Nage Waza), grappling (Katame Waza or Ne Waza), holding (Osaekomi Waza), choking (Shime Waza), and joint locks (Kansetsu Waza). Students will explore advanced terminology, rules of competitive Judo, match scoring system and strategies for scoring points in Judo competition. Emphasis will be placed on safety and controlled execution of techniques.

Prerequisite: PE 137 with a minimum grade of "C".

PE 139. Karate I. 1 Credit Hour.

This course focuses on basic techniques of blocking, striking, and kicking. Combined techniques with emphasis on form, correct timing, distance, and focus will be introduced. Emphasis will be placed on safety and controlled execution of techniques.

PE 140. Karate II. 1 Credit Hour.

This course is continued study of Karate I techniques. Advanced Japanese terms and dojo (Karate environment) rules are introduced. Emphasis on advanced skills including combination techniques of punching, striking, blocking, and kicking for offensive and defense situations. Advanced Katas and Kumite are introduced.

Prerequisite: PE 139.

PE 142. Lifeguard Training. 1 Credit Hour.

This course is designed to provide knowledge and skills to recognize and demonstrate appropriate response to an aquatic emergency. Techniques and skills of proper pool sanitation and maintenance will be introduced. Successful completion of this course provides an opportunity to complete American Red Cross Lifeguard Certification. First Aid/CPR for the professional rescuer is included. Additional hours required.

Prerequisites: Swimming proficiency in an endurance swim, student must be at least 15 years of age and Reading Proficiency.

PE 145. Personal Defense I. 1 Credit Hour.

Basic techniques of hand-to-hand defense including jujitsu and karate. Basic throws, attacks, blocks and releases. General rules of safety and prevention of attack situations are covered.

PE 158. Soccer. 1 Credit Hour.

This is an introductory course that focuses on the principles and basic skills of soccer including ball handling, dribbling, trapping, passing, shooting, heading, throwing, goal tending, position play, team play, and rules of the game. Interclass competition is performed.

PE 161. Stress Management. 3 Credit Hours.

This course includes an overview of stress and its impact on physical, mental, emotional, and spiritual health and wellness. Coping strategies, relaxation techniques, healthy eating behaviors, and physical activities for stress reduction will be explored.

Prerequisite: Reading Proficiency.

PE 162. Swimming I (Beginning/Elementary). 1 Credit Hour.

This course is designed to promote comfort in an aquatic environment and to introduce skills and techniques of swimming and basic water safety. Each skill will be demonstrated, explained, and evaluated. Strokes taught include front crawl, back crawl, side stroke, elementary back, breast stroke, and butterfly. Additional hours may be required.

PE 163. Swimming II (All Levels). 1 Credit Hour.

Intermediate course in swimming includes all strokes survival swimming, endurance, elementary rescues, plus recreational water games.

PE 165. Tai Chi I. 1 Credit Hour.

Tai Chi I is an introduction to the history, philosophy, and movements of the soft form of ancient Chinese martial arts. This low-impact activity is comprised of slow, full-body movements using all muscle groups throughout the full joint range of motion. Active participation is required in this course. Tai Chi will improve posture and balance, muscle strength, cardiovascular fitness, kinesthetics (body awareness), and concentration. Various styles may be introduced to promote physical and mental well-being.

PE 166. Tai Chi II. 1 Credit Hour.

Tai Chi II is a continuation of Tai Chi I. Meditation, breathing techniques, and Chinese terms for advanced movements and postures of Hun Yuan Chen style will be introduced. Emphasis will be placed on advanced Tai Chi movements through active participation.

PE 167. Team Sports I. 1 Credit Hour.

This course is designed to emphasize the importance of team play in sports activities. Indoor and outdoor activities include: flag football, kickball, volleyball, softball, soccer, basketball, and ultimate frisbee.

PE 169. Tennis I. 1 Credit Hour.

This course is an introduction to the game of tennis. Physical skills (e.g., racket grip, serves, shots, and footwork) and strategic play for "singles" and "doubles" play will be introduced.

PE 170. Tennis II. 1 Credit Hour.

This course is an extension of Tennis I. Continued emphasis on physical skills and strategy will be examined and practiced.
Prerequisite: PE 169.

PE 171. Volleyball I. 1 Credit Hour.

This is an introductory course that focuses on basic volleyball rules and skills including passing, serving, setting, spiking, and scoring. Interclass competition is performed.

PE 172. Volleyball II. 1 Credit Hour.

This course focuses on the continuation and progression from Volleyball I including history, rules, advanced skills, and strategies. Competitive team play is performed.
Prerequisite: PE 171.

PE 173. Walking for Fitness. 1 Credit Hour.

This course focuses on the proper technique and attire, and the importance of cardiovascular fitness, weight control, and safety.

PE 174. Water Aerobics. 1 Credit Hour.

This course is designed to promote cardiovascular fitness, improve muscle strength, muscle endurance, and flexibility. A variety of water exercises are introduced to meet the needs of the student. Non-swimmers can participate in this course. Additional hours may be required.

PE 177. Weight Training I. 1 Credit Hour.

This course is designed to introduce the beginner to a variety of basic weight training skills. Techniques focus on safe execution of weight lifting using pin-select weight equipment and free weights to develop strength, size, endurance, and flexibility of major muscle groups. Circuit training is introduced.

PE 178. Weight Training II. 1 Credit Hour.

This course focuses on advanced weight lifting techniques utilizing pin-select machines and free weights. Advanced level training programs for increased muscular development are designed. Circuit training is utilized.
Prerequisite: PE 177 with a minimum grade of "C".

PE 180. Wellness and Fitness Concepts. 3 Credit Hours.

This course focuses on the impact physical activity, healthy eating behaviors, weight management, stress management, substance abuse, sexually transmitted diseases and other relevant topics have on health and wellness. The development of an individualized wellness program enhances understanding of course concepts. Additional hours required.
Prerequisite: Reading Proficiency.

PE 181. Yoga I (Beginning). 1 Credit Hour.

This course is an introduction to Hatha Yoga (the Yoga of physical wellbeing), which includes basic poses (asanas), breathing techniques, meditation, and yoga philosophy. Active participation in these activities is designed to increase flexibility and balance, strengthen and tone muscles, and energize the body to reduce stress and enhance physical and mental health.

PE 182. Yoga II (All Levels/Intermediate). 1 Credit Hour.

This course is a continuation of PE 181, which is an introduction to Hatha Yoga (the Yoga of physical well-being). Active participation and emphasis on awareness and internal focus while practicing advanced yoga asanas (poses), pranayama (controlled breath), and meditation. Performance of these skills and techniques will increase muscle strength and endurance, increase flexibility and balance, improve body posture, reduce stress, and enhance relaxation.
Prerequisite: PE 181.

PE 191. Body Contouring. 1 Credit Hour.

This course is an exercise class using resistance in the form of free weights and elastic bands to develop the figure, posture, flexibility and muscle tone. Nutrition strategies will be discussed.

PE 192. Cardio-Flex. 1 Credit Hour.

Emphasis in cardiovascular fitness, techniques of walking, low impact movement patterns set to music, weight control, and conditioning stretches to improve flexibility.

PE 220. American Heart Association Cardiopulmonary Resuscitation (CPR) for Healthcare Providers. 1 Credit Hour.

This course is designed to prepare students in healthcare professions with basic life support and cardiopulmonary resuscitation (CPR). Students will learn how to recognize cardiac arrest, give chest compressions, deliver ventilations, and provide early use of an automated external defibrillator (AED) individually and with a partner. Adult, child, and infant rescue techniques including choking will be part of this course. American Heart Association Basic Life Support (BLS) for Healthcare Providers certification is available for those who meet the course requirements. Additional fee is required to obtain certification.
Prerequisite: Reading Proficiency.

Physical Education (PED)

PED 116. Pilates. 1 Credit Hour.

Pilates, a form of physical conditioning for all fitness levels, is introduced as well as an introduction to the history of Pilates and basic concepts of alignment, centering, breathing, stabilization, and balance. Active participation is required for non-impact floor exercises using specialized equipment to develop muscle strength, flexibility, posture, and inner awareness.

PED 140. Beginning Rock Climbing. 1 Credit Hour.

This course provides students with the necessary information and skills required to rock climb indoors safely and effectively. Students will gain knowledge in climbing equipment and its proper usage, climbing terminology, warm-up and stretching exercises, basic climbing techniques and mental and physical training specifically for climbing. Additional fees apply. Additional hours required.

PED 201. Psychological Perspective in Exercise and Sport. 3 Credit Hours.
Sport and exercise psychology is the scientific study of people and behaviors in sport and exercise activities and the practical application of that knowledge.

This course focuses on two areas of study: (1) learning how psychological factors affect an individual's physical performance and (2) understanding how participation in sport and exercise affects a person's psychological development, health, and well-being.

Prerequisites: PSY 200 and Reading Proficiency.

Physical Science (PSI)

PSI 101. Physical Science. 3 Credit Hours.

This course is a survey of the fundamental principles of physics and chemistry with applications to geology, astronomy and meteorology. The course is designed for students in non-science and career curricula.

Prerequisites: MTH 030 with a minimum grade of "C" and Reading Proficiency.

PSI 105. Physical Science I. 3 Credit Hours.

A lecture/laboratory introduction to science with special subject adaptations for students in non-science and career programs. Additional lab hours required.

Prerequisite: Reading Proficiency.

PSI 111. Introduction to Astronomy I. 3 Credit Hours.

This course introduces the fundamental concepts and principles of our knowledge of the Universe. The topics covered include the Earth, Solar System, stars, galaxies and evolution of the Universe. The course is designed for students in non-science and career curricula.

Prerequisites: MTH 030 or test into MTH 140 and Reading Proficiency.

PSI 115. Observational Astronomy. 1 Credit Hour.

An introduction to astronomical observations, techniques and instruments, which may accompany PSI 111 or PSI 112 (Introduction to Astronomy I or II) or may be taken independently. No prior knowledge of astronomy is assumed. Additional lab hours required.

Prerequisite: Reading Proficiency.

PSI 123. Meteorology. 3 Credit Hours.

This physical science course introduces the student to the basic concepts involved in the analysis of weather phenomena on the global and local scale. Topics include, heat balance, atmospheric stability, precipitation processes, pressure systems, air masses, fronts, clouds, the jet stream, air-ocean interaction (El Nino and La Nina), thunderstorm and severe weather, hurricanes, and an introduction to weather forecasting. Particular attention devoted to current weather analysis.

Prerequisite: Reading Proficiency.

PSI 125. Introduction to Atmospheric Science. 4 Credit Hours.

Introduction to Atmospheric Science covers the basic principles of atmospheric processes. This course involves working with current weather maps and analyzing real-time weather information. The basic physical principles of atmospheric conditions are stressed through the study of weather data. Labs integrated throughout the course allows students to apply the scientific method by formulating a hypothesis, interpreting data, and deriving a conclusion based on scientific data. The course is designed for students in non-science and career curricula.

Prerequisites: MTH 020 and Reading Proficiency.

Physical Therapist Assistant (PTA)

PTA 100. Introduction to Physical Therapist Assistant. 2 Credit Hours.

This course provides an introduction to the professional field of physical therapy and the role of the physical therapist assistant in the health care system. Legal and ethical questions are discussed as well as interpersonal communication skills, personality types, and the importance of empathy and respect for all patients. Students are introduced to medical terminology, documentation, and case studies in PT. A semester long service learning project is included to improve active listening skills and personal awareness.

Prerequisite: Reading Proficiency.

PTA 104. Clinical Experience I. 2 Credit Hours.

Students will have the opportunity to practice communication, interpersonal, technical and administrative skills acquired in the first year of study in a clinical facility under the direction and supervision of a licensed clinical instructor for three weeks.

Prerequisites: PTA 105 with a grade of "C" or better and Reading Proficiency.

PTA 105. Fundamentals of Patient Care for the PTA. 4 Credit Hours.

This course is an introduction to the basic patient care skills in physical therapy. Treatment procedures include patient positioning, transfer techniques, massage, gait with and without assistive devices, wheelchair management and architectural barriers. Emphasis throughout is on safety, the preparation of the patient physically and psychologically, appropriate PTA/patient interaction, and patient/caregiver teaching. Additional lab hours required.

Prerequisites: PTA 214 with a grade of "C" or better and Reading Proficiency.

PTA 208. Health Occupation Seminar. 2 Credit Hours.

This course is a study of the health care system and the role of PTA within it. Topics include health care organizations; department policies and procedures; evidence based research; professionalism; legal and ethical issues, community resources, documentation, billing, and coding; and application for licensure and work.

Prerequisites: PTA 104 with a grade of "C" or better and Reading Proficiency.

PTA 211. Physical Agents. 3 Credit Hours.

This course provides PTA students with scientific knowledge and clinical application skills required to safely and efficiently provide treatment under the direction of a PT with the following physical agents thermal agents, compression therapies, traction, cryotherapy, hydrotherapy, light and sound agents, and electrotherapeutic modalities. Additional lab hours required.

Prerequisites: PTA 105 with a grade of "C" or better and Reading Proficiency.

PTA 212. Therapeutic Exercise and Rehabilitation Concepts I. 7 Credit Hours.

This course covers data collection and intervention techniques used by the PTA under the direction and supervision of the PT in the treatment of arthritis, postural abnormalities, extremity and spinal dysfunctions, abnormal gait, cardiopulmonary conditions, and amputations. The principles and application of prosthetic and orthotic devices will also be included. Additional hours required.

Prerequisites: PTA 105 with a grade of "C" or better and Reading Proficiency.

PTA 213. Therapeutic Exercise and Rehabilitation Concepts II. 2 Credit Hours.

This course includes data collection and treatment intervention techniques performed by the PTA under the direction and supervision of the PT for pediatric and neurological conditions. The role of the PTA in assisting the PT to identify community integration barriers for clients with physical disabilities will also be discussed. Additional lab hours required.

Prerequisites: PTA 212 with a grade of "C" or better and Reading Proficiency.

PTA 214. Data Collection and Intervention Techniques for the PTA. 4 Credit Hours.

An introductory course on data collection and intervention techniques used by the PTA which includes vital signs, sterile techniques, dressing changes, emergency procedures, goniometry, muscle testing, cardiovascular response to exercise, and gait. In addition the basic concepts of exercise and techniques to develop flexibility, strength, power, and endurance will be taught. Additional lab hours required.

Prerequisites: BIO 209 with a grade of "C" or better or concurrent enrollment in BIO 209 and Reading Proficiency.

PTA 215. Medical Conditions in Rehabilitation. 3 Credit Hours.

This course is an overview of disease conditions commonly seen for treatment in physical therapy departments.

Prerequisites: BIO 207 with a grade of "C" or better and Reading Proficiency.

PTA 216. Clinical Education IIA. 4 Credit Hours.

Students will have the opportunity to practice skills acquired in the first and second year of the program in a clinical facility under the direction and supervision of a clinical instructor for 6 weeks.

Prerequisites: PTA 213 with a grade of "C" or better and Reading Proficiency.

PTA 217. Clinical Education IIB. 4 Credit Hours.

Students will have the opportunity to practice skills acquired in the first and second year of the program in clinical facility under the direction and supervision of a clinical instructor 6 weeks.

Prerequisites: PTA 216 with a grade of "C" or better and Reading Proficiency.

Physics (PHY)

PHY 111. College Physics I. 4 Credit Hours.

This course is the first semester of a two-semester non-calculus physics sequence. The entire sequence covers topics in mechanics, heat, sound, electricity, magnetism, optics and modern physics. Additional lab hours required.

Prerequisites: MTH 144 or prior or concurrent enrollment in MTH 160, MTH 160A, MTH 160B or MTH 160C and Reading Proficiency.

PHY 112. College Physics II. 4 Credit Hours.

This course is the second semester of a two-semester non-calculus physics sequence. The entire sequence covers topics in mechanics, heat, sound, electricity, magnetism, optics and modern physics. Additional lab hours required.

Prerequisites: PHY 111 and Reading Proficiency.

PHY 122. Engineering Physics I. 5 Credit Hours.

This course is the first semester of a two-semester calculus-level physics sequence. The entire sequence covers topics in mechanics, heat and thermodynamics, optics, electricity and magnetism, with mechanics being one of the topics covered in the first semester. Additional lab hours required.

Prerequisites: MTH 210 with a minimum grade of C and Reading Proficiency.

PHY 223. Engineering Physics II. 5 Credit Hours.

This course is the second semester of a two-semester calculus-level physics sequence. The entire sequence covers topics in mechanics, heat and thermodynamics, optics, electricity and magnetism, with electricity, magnetism, and optics being among the topics included in the second semester. Additional lab hours required.

Prerequisites: PHY 122 and MTH 220 both with a minimum grade of C and Reading Proficiency.

PHY 224. Engineering Physics III. 3 Credit Hours.

The third semester of a three-semester, calculus-level physics sequence. The entire sequence covers topics in mechanics, heat and thermodynamics optics, electricity and magnetism, and nuclear and atomic physics, with modern (nuclear and atomic) physics being the primary topics included in the third semester. Additional lab hours required.

Prerequisites: PHY 223 and prior or concurrent enrollment in MTH 240 and Reading Proficiency.

Political Science (PSC)

PSC 101. Introduction to American Politics. 3 Credit Hours.

Introduction to American Politics surveys the American political system. Basic values, past and current Constitutional issues, government processes and institutions, and citizen rights are discussed in a modern framework. National, state, and local political issues are covered.

Prerequisite: Reading Proficiency.

PSC 103. State and Local Politics. 3 Credit Hours.

State and Local Politics is a study of the political patterns of the American states and their formal and informal relationships to local governments. Special emphasis is placed on urban, suburban, and metropolitan politics.

Prerequisite: Reading Proficiency.

PSC 104. British Politics and Society. 3 Credit Hours.

This course introduces students to some of the main institutions and issues of contemporary British politics and society. Through lectures, videos, text assignments, and field trips, students will explore government in 21st-century Britain.

Prerequisite: Reading Proficiency.

PSC 201. International Relations. 3 Credit Hours.

International Relations looks at the politics and policies among nations. Topics discussed include theories of international politics, levels of foreign policy analysis, conflict and peace, terrorism, globalization, international political economy, and the specific foreign policies of great, middle, and small states.

Prerequisite: Reading Proficiency.

PSC 205. Constitutional Issues. 3 Credit Hours.

Constitutional Issues covers the concepts of American federalism, civil liberties, civil rights, and the responsibilities of citizenship. Basic values, current constitutional controversies, and citizen rights are discussed in a modern framework with particular emphasis upon important U.S. case law.

Prerequisite: Reading Proficiency.

PSC 211. United States Foreign Policy, 1898 to Present. 3 Credit Hours.

Surveying developments from the late nineteenth century to present, United State Foreign Policy explore the historical and theoretical context of how U.S. observers have improvised a national relationship with the world. Topics addressed will include, among other, the origin and aftermath of two world wars, the Cold War and its demise, and the development of security, economic, and humanitarian crises in the post-Cole War Period.

Prerequisite: Reading Proficiency.

Psychology (PSY)

PSY 125. Human Sexuality. 3 Credit Hours.

Human sexuality includes not only the biological component of male and female sexuality, but also attitudes, values and feelings about one's own gender and sex role. Consequently, in dealing with sex as a natural biological function, the expression of which is a dimension of psychosocial behavior, the sexual development and/or differentiation of men and women from conception to maturity will be stressed. Same course as BIO 122.

Prerequisite: Reading Proficiency.

PSY 200. General Psychology. 3 Credit Hours.

This course is an introduction to the scientific study of human behavior. It attempts to help students gain insights into their own and others' behavior. A variety of topics (such as personality, learning, emotion, motivation, human growth and development, abnormal behavior and psychotherapy) relating to psychological development will be covered.

Prerequisite: Reading Proficiency.

PSY 203. Child Psychology. 3 Credit Hours.

This course is an overview of child psychology the scientific study of the psychological basis of child growth and development. Emotional, mental, physical and social needs and developmental processes of infancy, childhood and adolescence are covered; nature and nurture interactions and processes during prenatal development and pregnancy are also covered. This course includes an analysis of a variety of home, school and community factors as they interact to influence behavior, personality, and development.

Prerequisites: PSY 200 and Reading Proficiency.

PSY 205. Human Growth and Development. 3 Credit Hours.

This course is a survey of the basis of human growth and development. Biological, cognitive and socioemotional needs of children, adolescents and adults are reviewed. The multiple factors which influence and shape behavior and personality are analyzed.

Prerequisites: PSY 200 and Reading Proficiency.

PSY 206. Introduction to Social Psychology. 3 Credit Hours.

This course is an overview of social psychology, the scientific study of how people think about, influence, and relate to one another. Specifically this course explores social thinking, social influence, social relations, and the application of social psychological processes. Specific topics include conformity, obedience, persuasion, group influence, prejudice, attraction, aggression, and prosocial behavior.

Prerequisites: PSY 200 and Reading Proficiency.

PSY 208. Abnormal Psychology. 3 Credit Hours.

This course is a survey of mental disorders as categorized in the American Psychological Association's Diagnostic and Statistical Manual of Mental Disorders. The symptoms, causes and treatments of various mental disorders will be covered. This includes anxiety disorders, mood disorders, eating disorders, somatic complaint related disorders, dissociative disorders, substance abuse disorders, sexual dysfunctions and disorders and schizophrenia.

Prerequisites: PSY 200 and Reading Proficiency.

PSY 210. Personality and Adjustment. 3 Credit Hours.

An examination of the contributions of the major schools of human personality and its expression in patterns of adjustment and growth as well as in dysfunctional behavioral patterns. Theories surveyed will represent dynamic, humanistic, cognitive and behavioral perspectives. Adjustment issues include self concept, social environment and role adaptation, self-management, maladjustment, remediation and treatment.

Prerequisites: PSY 200 and Reading Proficiency.

PSY 213. Psychology of Aging. 3 Credit Hours.

An examination of normal and pathological aging changes in personality, sensory mechanisms, intelligence, creativity, and sexuality with some emphasis on methods of treatment.

Prerequisites: PSY 200 and Reading Proficiency.

PSY 214. Adolescent Psychology. 3 Credit Hours.

This course is an overview of adolescent psychology, the study of the individual from puberty to young adulthood. The course explores the physiological, cognitive, social, and emotional changes in adolescence, specifically examining the biological basis and environmental contributions to adolescent thought and behavior. Issues facing adolescents will also be discussed including gender, self, family, peers, sexuality, education, work, and problems in adolescence.

Prerequisites: PSY 200 and Reading Proficiency.

PSY 215. Brain and Behavior. 3 Credit Hours.

This course examines the basic mechanisms of neuronal structure, function and communication. Behavioral functions studied include sensations and perception, emotion and drives, learning and memory, vision, sleep and dreams, stress, addiction, language, aging effects, sex differences, and disorders.

Prerequisites: PSY 200 and Reading Proficiency.

PSY 218. Addiction and Compulsive Behavior. 3 Credit Hours.

This course explores the dynamics and scope of addiction and compulsive behavior in human experience. Unlike a course strictly devoted to substance abuse, this course examines the extent to which a chemical dependency model of addiction is applicable to other forms of compulsive behavior.

Prerequisites: PSY 200 and Reading Proficiency.

PSY 219. Freud and Psychoanalysis. 3 Credit Hours.

This course examines the life and thought of Sigmund Freud, the founder of psychoanalysis, as the necessary background for understanding the major developments in psychoanalytic theory. The goal is to provide students with an introductory overview of the central concepts of psychoanalytic theory and practice.

Prerequisites: PSY 200 and Reading Proficiency.

PSY 220. The Psychology of Homicide and Crime. 3 Credit Hours.

This course is an introduction to the psychological study of various types of homicide and crime. A variety of topics related to the psychological signature of serial killing, mass murder and spree killing will be analyzed, including cases such as the Green River Serial Killings and the Boston Marathon bombing.

Prerequisites: PSY 200 and Reading Proficiency

Quality Control (QC)

QC 102. Quality Cost Analysis. 3 Credit Hours.

A survey course on the elements of product costs as they relate to quality.

Direct quality cost, prevention, appraisal and failure and indirect quality cost consumer incurred, customer dissatisfaction will be discussed in detail. The collection and evaluation of cost data as related to quality will be developed on a measurement base that is sensitive to change.

Prerequisite: Reading Proficiency.

QC 200. Quality Assurance. 3 Credit Hours.

Advanced course on the scope and function of quality assurance. Topics covered include vendor selection, records, procurement methods and data analysis. The subject of quality standards will be covered and students will be instructed in quality audit techniques.

Prerequisite: Reading Proficiency.

QC 202. Inspection Methods. 3 Credit Hours.

This course will introduce the subject of inspection as it relates to the product or process specification. The location of various inspection functions, type of inspection plans, the inspection standard and inspection organization will be discussed. Inspection records keeping and tool calibration will be developed for a typical inspection function.

Prerequisite: Reading Proficiency.

QC 206. Statistical Quality Control I. 3 Credit Hours.

Introduction to frequency distributions and the normal curve. Concepts of variation, statistical process control and process capability. Pre-control, control charts for variables and attributes, and SPC techniques for short runs will be discussed.

Prerequisites: MTH 124 or QC 204 and Reading Proficiency.

QC 208. Statistical Quality Control II. 3 Credit Hours.

Fundamentals of probability and probability distributions. Development and use of acceptance sampling plans and operating characteristic curves. Introduction of a wide assortment of sampling strategies and hypothesis testing.

Prerequisites: QC 206 and Reading Proficiency.

QC 212. Quality Tools for Advanced Manufacturing. 3 Credit Hours.

This advanced course covers tools used in a manufacturing environment. Topics covered include quality attitude, quality statistics, probability, the tools of quality, process improvement, metrology, and computer generated charts and graphs.

Prerequisites: MTH 124 or MTH 140, and Reading Proficiency.

Radiologic Technology (XRT)

XRT 101. Radiographic Procedures I. 4 Credit Hours.

This course covers radiographic anatomy, positioning and examination procedures for the chest, abdomen, urinary system, gastrointestinal systems, selected portions of the upper extremity (limb) and mobile radiography. Basic radiation protection, patient care procedures and radiographic terminology are presented. Additional lab hours required.

Corequisites: XRT 104, XRT 111.

Prerequisites: Current enrollment in the Radiologic Technology program and Reading Proficiency.

XRT 102. Radiographic Procedures II. 3 Credit Hours.

This course covers radiographic anatomy, positioning, and examination procedures for the humerus, shoulder girdle, lower extremity (limb), femur, pelvic girdle, vertebral column, bony thorax and pediatric radiography. Additional lab hours required.

Corequisites: XRT 105, XRT 107, XRT 112.

Prerequisites: XRT 101 and Reading Proficiency.

XRT 103. Radiographic Procedures III. 3 Credit Hours.

This course covers radiographic positioning, anatomy and examination procedures of the cranium and sinuses. The procedures and principles of surgical and trauma radiography are presented. The student will be introduced to various patient care and management considerations and pharmacology principles. Additional lab hours required.

Corequisites: XRT 108, XRT 122, XRT 213.

Prerequisites: Current enrollment in the Radiologic Technology program, XRT 102 and XRT 116 and Reading Proficiency.

XRT 104. Principles of Radiographic Exposure I. 3 Credit Hours.

This course will give students a foundation in radiographic image acquisition and evaluation of image quality. An in-depth coverage of technical factors and image characteristics will be presented. Additional lab hours required.

Corequisites: XRT 101, XRT 111.

Prerequisites: Reading Proficiency.

XRT 105. Principles of Radiographic Exposure II. 3 Credit Hours.

This course is an in-depth coverage of image acquisition technologies, accessories, advanced technical factor selection and effects on image quality and patient exposure. Additional lab hours required.

Corequisites: XRT 102, XRT 107, XRT 112.

Prerequisites: XRT 104 and Reading Proficiency.

XRT 107. Radiologic Physics I. 2 Credit Hours.

This course covers the fundamental principles of radiation physics and equipment to include the study of x-ray tubes, rating charts, radiation control devices and automatic processing.

Corequisites: XRT 102, XRT 105, XRT 112.

Prerequisites: XRT 104, XRT 111 and Reading Proficiency.

XRT 108. Radiologic Physics II. 2 Credit Hours.

This course examines the x-ray machine through discussion of basic electrical concepts and circuit design. The course also examines x-ray tubes, high voltage sources and exposure timers.

Corequisites: XRT 103, XRT 122, XRT 213.

Prerequisites: XRT 105, XRT 107, XRT 116 and Reading Proficiency.

XRT 111. Clinical Education I. 2 Credit Hours.

This course is designed to provide the student with an overview of all aspects of the radiology department and responsibilities of a radiologic technologist. Additional hours required.

Corequisites: XRT 101, XRT 104.

Prerequisites: Current enrollment in Radiologic Technology program and Reading Proficiency.

XRT 112. Clinical Education II. 2 Credit Hours.

This course is designed to provide the student with the clinical applications of basic radiographic positioning, radiation protection, patient care, radiographic exposure factors and image processing. Additional hours required.

Corequisites: XRT 102, XRT 105, XRT 107.

Prerequisites: XRT 111 and Reading Proficiency.

XRT 116. Clinical Education III. 3 Credit Hours.

This course is designed to provide the student with an introduction to pediatric radiography and development of critical thinking skills in radiographic procedures. Additional hours required.

Prerequisites: XRT 112 and Reading Proficiency.

XRT 121. Radiographic Image Evaluation I. 2 Credit Hours.

This course provides a critical analysis of radiographic images in the examination of the respiratory, abdominal, digestive, and urinary systems.

Prerequisites: XRT 102, XRT 112 and Reading Proficiency.

XRT 122. Radiographic Image Evaluation II. 2 Credit Hours.

This course provides a critical analysis involving radiographic images of the upper and lower extremities, the shoulder and pelvic girdles, bony thorax and vertebral column.

Corequisites: XRT 103, XRT 108, XRT 213.

Prerequisites: XRT 121, XRT 116 and Reading Proficiency.

XRT 207. Radiologic Pathology. 2 Credit Hours.

This course is a presentation of the more commonly encountered lesions of the human body as seen through the medium of x-ray. Anatomy and physiology of pathologic processes are presented by body systems as a means of exploring the rationale of many intricate radiologic examinations.

Corequisites: XRT 208, XRT 209, XRT 214.

Prerequisites: XRT 103, XRT 122, XRT 213 and Reading Proficiency.

XRT 208. Advanced Imaging Modalities. 2 Credit Hours.

This course presents advanced imaging modalities with an emphasis on computed tomography. Additional modalities introduced are digital radiography, magnetic resonance, sonography, nuclear medicine, radiation therapy, mammography, bone densitometry, fluoroscopy, linear tomography and fusion technology. The procedures and principles of interventional radiography are presented.

Corequisites: XRT 207, XRT 209, XRT 214.

Prerequisites: XRT 105 and Reading Proficiency.

XRT 209. Radiobiology. 2 Credit Hours.

This course is designed to explore the biological consequences of radiation exposure on the human body. The principles of radiation protection will be examined.

Corequisites: XRT 207, XRT 208, XRT 214.

Prerequisites: XRT 103, XRT 108, Reading Proficiency.

XRT 211. Radiologic Technology Review. 3 Credit Hours.

This course is designed to provide a comprehensive review of the major components of radiologic technology in preparation for the American Registry of Radiologic Technologist (ARRT) national certification exam.

Corequisites: XRT 212, XRT 215.

Prerequisites: XRT 207, XRT 208, XRT 209, XRT 214 and Reading Proficiency.

XRT 212. Professional Development in Radiography. 2 Credit Hours.

This course explores topics in the field of radiologic technology. Those topics include current trends in the imaging profession, career options, the importance of continuing education to the profession and professional traits of a registered Radiologic Technologist.

Corequisites: XRT 211, XRT 215.

Prerequisites: XRT 207, XRT 208, XRT 209, XRT 214, Reading Proficiency.

XRT 213. Clinical Education IV. 3 Credit Hours.

This course is designed to provide the student with an introduction to the specialized areas of the operating room and trauma radiography.

Corequisites: XRT 103, XRT 108, XRT 122.

Prerequisites: XRT 116 and Reading Proficiency.

XRT 214. Clinical Education V. 3 Credit Hours.

This course is designed to provide the student with an overview of interventional radiography, computed tomography (CT), diagnostic medical sonography (DMS), magnetic resonance imaging (MRI), nuclear medicine (NM) and radiation therapy (RT).

Corequisites: XRT 207, XRT 208, XRT 209.

Prerequisites: XRT 213 and Reading Proficiency.

XRT 215. Clinical Education VI. 2 Credit Hours.

This course is designed to provide the student with the opportunity to complete all American Registry of Radiologic Technologists (ARRT) and Radiography program remaining clinical competency requirements.

Corequisites: XRT 211, XRT 212.

Prerequisites: XRT 214 and Reading Proficiency.

Reading (RDG)

RDG 016. Developmental Reading. 2 Credit Hours.

This course is designed to help students expand the range of their reading comprehension and vocabulary skills.

Prerequisite: Concurrent enrollment in RDG 017.

RDG 017. Developmental Reading Lab. 1 Credit Hour.

This is an individualized course designed to develop reading comprehension and vocabulary. Additional lab hours required.

Prerequisite: Concurrent enrollment in RDG 016.

RDG 020. Reading Improvement. 3 Credit Hours.

This course is designed to help students gain greater understanding of written material and to improve reading vocabulary. Prior or concurrent enrollment in STR 050 with a minimum grade of "C".

Prerequisites: RDG 016 and RDG 017 with grades of "C" or better or appropriate score on placement test.

RDG 021. Reading Improvement Lab. 1 Credit Hour.

This course provides individualized practice under the supervision of a reading instructor. Additional lab hours required.

RDG 030. Introduction to College Reading. 3 Credit Hours.

This course is designed to develop college-level reading comprehension, vocabulary and study skills. Prior or concurrent enrollment in STR 050 with minimum grade of "C".

Prerequisites: RDG 020 with a grade of "C" or better, or appropriate score on placement test.

RDG 031. Introduction to College Reading Lab. 1 Credit Hour.

This course provides individualized practice under the supervision of a reading instructor. Additional lab hours required.

RDG 052. Vocabulary Improvement. 1 Credit Hour.

This course will promote vocabulary growth through the study of word parts, understanding words in context and specific development of specialized vocabularies.

RDG 053. Vocabulary Improvement Lab. 1 Credit Hour.

This course will promote vocabulary growth through the study of word parts, understanding words in context and specific development of specialized vocabularies. In this class, the instruction is individualized. Students are allowed to progress at their own rates. Additional lab hours required.

RDG 054. Study Skills and Notetaking. 1 Credit Hour.

This course is designed as an introduction to general study skills.

RDG 055. Study Skills and Notetaking Lab. 1 Credit Hour.

This course is designed as an introduction to general study skills. In this class, the instruction is individualized. Students are allowed to progress at their own rates. Additional lab hours required.

RDG 100. College Reading and Study Skills. 3 Credit Hours.

This is an advanced course emphasizing reading in the content areas. The major focus is on study techniques applicable to transfer level courses.

Prerequisite: Reading Proficiency.

Respiratory Therapy (RTH)

RTH 120. Introduction to Respiratory Care and Respiratory Physics. 5 Credit Hours.

This course is an introduction to the field of Respiratory Care. Instruction includes; the historical perspective of respiratory care professional organizations, and the principles of physics, as they apply to respiratory care. The theory and laboratory applications for; cylinders, regulators, flowmeters, analyzers, blenders, oxygen administration devices, aerosol and humidity therapy and nebulizers will be presented. A programmed presentation for medical terminology, mathematics, and computer applications are also presented.

Prerequisites: BIO 207, CHM 101, MTH 124 or higher and Reading Proficiency.

RTH 121. Orientation to the Hospital. 2 Credit Hours.

Topics to be covered in this course include hospital and departmental organization, medical ethics, patient's rights, legal responsibilities, and hospital visitation. Theory, application and equipment for patient assessment and life vital signs.

Prerequisites: Admission to the program and Reading Proficiency.

RTH 125. Airway Management. 3 Credit Hours.

Anatomy and physiology of the upper and lower airway. Theory, application and equipment for the management of the airway for the conscious and unconscious patient. Topics to include artificial airways, resuscitation devices, chest physiotherapy, and secretion removal. Additional lab hours required.

Prerequisites: RTH 120 and Reading Proficiency.

RTH 126. Introduction to Mechanical Ventilation. 3 Credit Hours.

This course will present information relevant to positive pressure techniques, and how they applied in mechanical ventilatory support. Basic indications and hazards of positive pressure therapies will be presented along with the technical components of intermittent positive pressure breathing, non-invasive positive pressure support, adult and pediatric mechanical ventilators. A two-hour per week laboratory session will enable the learner to observe and practice the principles of operation of mechanical ventilators prior to their hospital experience. Practice in the patient simulator laboratory is also included.

Prerequisites: RTH 120, RTH 121 and Reading Proficiency.

RTH 127. Respiratory Pharmacology. 2 Credit Hours.

Basic pharmacologic principles, classification of drugs, the effects, side-effects, and hazards of the medications used in cardiopulmonary medicine.

Prerequisites: Admission to program, must hold a certificate or degree from an allied health program or waiver from program director and Reading Proficiency.

RTH 128. Arterial Blood Gases. 2 Credit Hours.

The theory and application of Henderson-Hasselbach Equation, oxygen dissociation curve, oxygen uptake, transport, and consumption, oxygen and carbon exchange, renal physiology, and arterial and venous gas tensions. Clinical application of obtaining arterial samples, and interpretation of results.

Prerequisites: Admission to program, must hold a certificate or degree from an allied health program or waiver from program director and Reading Proficiency.

RTH 131. Pediatric Respiratory Care. 3 Credit Hours.

This course provides a presentation on pediatric and neonatal respiratory care to include; embryonic development of the cardiopulmonary system, cardiopulmonary malformations, and lung disease. The course will also cover the technical aspects of assessment, equipment, and maintenance of pediatric neonatal respiratory care devices, including mechanical ventilator systems. A two-hour per week laboratory session will enable the learner to observe and demonstrate the skills essential to pediatric and neonatal respiratory care. Additional lab hours required.

Prerequisites: RTH 128, RTH 140, BIO 208 and Reading Proficiency.

RTH 140. Respiratory Care Clinical I. 1 Credit Hour.

Application of respiratory care principles in the hospital setting. Additional hours required.

Prerequisites: RTH 120, RTH 121 and Reading Proficiency.

RTH 146. Clinical Level II. 3 Credit Hours.

Application of respiratory care principles in the hospital. Additional hours required.

Prerequisites: RTH 126, RTH 128, RTH 140 and Reading Proficiency.

RTH 220. Pulmonary Pathophysiology. 3 Credit Hours.

The etiology, pathology, symptomology, and treatment of various lung diseases, to include C.O.P.D., asthma, restrictive lung disorders, infectious lung diseases, occupational lung diseases, pulmonary neoplasms, and pulmonary manifestations of other disease states.

Prerequisites: Admission to the program, must hold certificate or degree from an allied health program or waiver from program director and Reading Proficiency.

RTH 221. Critical Care Monitoring . 2 Credit Hours.

The theory and clinical aspects of invasive and noninvasive hemodynamic monitoring to include anatomy and physiology of the heart and vascular systems, equipment, procedures, and interpretation of results, the theory, application, and interpretation of basic electrocardiography.

Prerequisites: RTH 126 or waiver from program director and Reading Proficiency.

RTH 222. Cardiopulmonary Physiology. 2 Credit Hours.

A detailed discussion of the normal physiologic principles utilized by the cardiopulmonary system, to include neurogenesis of breathing, reflexes governing respiration, properties of elastance, resistance, compliance, and conductance, the physiologic properties of the pulmonary and systemic vascular systems.

Prerequisites: Admission to program, must hold a certificate or degree from an allied health program or waiver by program director and Reading Proficiency.

RTH 223. Mechanical Ventilation: A Clinical Approach. 4 Credit Hours.

This course will cover the clinical applications of mechanical ventilation, to include; ventilator commitment, discontinuance and weaning techniques, the maintenance of a patient on a mechanical ventilator. The hazards and side effects of positive and negative pressure mechanical ventilation, and the management of chronic ventilator-dependent patients is also covered. Recent development in mechanical ventilation such as inverse-ratio ventilation, APRV, and the interpretation of waveforms graphics will be covered. Demonstrations in the patient simulator laboratory are mandatory. Additional lab hours required.

Prerequisites: RTH 126, RTH 128 and Reading Proficiency.

RTH 225. Pulmonary Function Testing. 3 Credit Hours.

The theory application and equipment for the purpose of diagnosing respiratory pathologies through the measurement of lung gas volumes, capacities, and flows. Includes evaluation through stress (exercise) testing and pulmonary rehabilitation. Additional lab hours required.

Prerequisites: RTH 220, RTH 222 and Reading Proficiency.

RTH 228. N.B.R.C. Review. 2 Credit Hours.

A comprehensive review of the major components of respiratory care as they apply to the N.B.R.C. matrix for the entry-level and advanced practitioner exams. Including testing methodologies, strategies, evaluations, and simulated testing experiences; extensive simulated testing for entry-level, written and clinical simulations.

Prerequisites: Admission to program and Reading Proficiency.

RTH 240. Respiratory Care Clinical III. 2 Credit Hours.

Application of respiratory care principles in the hospital setting. Additional hours required.

Prerequisites: RTH 146 and Reading Proficiency.

RTH 245. Respiratory Care Clinical IV. 2 Credit Hours.

Application of respiratory care principles in the hospital setting. Additional hours required.

Prerequisites: RTH 220, RTH 221, RTH 222, RTH 223, RTH 240 and Reading Proficiency.

Russian (RUS)

RUS 101. Elementary Russian I. 4 Credit Hours.

This course introduces students to basic vocabulary and structures necessary to participate in elementary Russian conversations. Students also begin reading short Russian passages and learn about Russian culture. Emphasis is on using the Russian language in everyday situations.

Prerequisite: Reading Proficiency.

Skilled Trades (SKT)

SKT 102. Aerospace Assembly - Sheet Metal I. 4 Credit Hours.

This course is designed to prepare students for entry into the fabrication of sheet metal assemblies for the aircraft production industry. The course provides entry-level skills in hole preparation and installation of fasteners, including rivets, lockbolts, nutplate installation and removal procedures, and safe practices related to manufacturing aircraft metal structures. Additional lab hours required.

Prerequisites: ME 154, SKT 101 with a minimum grade of B, and Reading Proficiency.

SKT 103. Aerospace Assembly - Sheet Metal II. 3 Credit Hours.

This is the second course in a series to prepare students for entry into the fabrication of sheet metal assemblies for the aircraft production industry. It covers topics in aerospace metal structures including gap, shim and sealing requirements and procedures. Additional lab hours required.

Prerequisites: SKT 102 with a minimum grade of B and Reading Proficiency.

SKT 104. Aerospace Assembly - Mechanical Components. 3 Credit Hours.

This course prepares students for entry into the aircraft production industry by providing skills in mechanical assemblies including safe practices, safetying practices, oxygen systems, hydraulics and line installation. Additional lab hours required.

Prerequisites: SKT 101 with a minimum grade of B, and Reading Proficiency.

SKT 105. Aerospace Assembly - Electrical Components. 5 Credit Hours.

This course prepares students for entry into the aircraft production industry by providing entry-level skills in aircraft electrical assemblies including bonding, grounding, terminals, splices, connectors and shield termination. Additional lab hours required.

Prerequisites: SKT 104 with a minimum grade of B, and Reading Proficiency.

SKT 106. Electrical Training Alliance: Introduction to Electrical Profession. 2 Credit Hours.

This is the introductory course to the Electrical Joint Apprenticeship and Training Committee. This course covers the International Brotherhood of Electrical Workers (IBEW) Constitution and local union by-laws, the structure and heritage of the IBEW and National Electrical Contractors Association. Topics include workplace safety and leadership factors. Students identify tools of the trade; proper safety techniques; proper uses of ladders; and proper measurement and alignment techniques.

SKT 107. Carpenter Joint Apprenticeship Program: Introduction to Carpentry. 2 Credit Hours.

Introduction to Carpentry presents an overview of the Carpenters Joint Apprenticeship Program (CJAP) as well as the role of the carpenter on construction sites and the safety measures that are critical to the job. Specific equipment studied includes power tools, lifts, and scaffolds. Additionally, students will learn basic blueprint reading skills including the ability to distinguish the difference between different styles of drawings. Additional lab hours may be required.

SKT 108. Carpenter Joint Apprenticeship Program: Workplace Learning I. 2 Credit Hours.

Workplace Learning I is the component of on-the-job training experience of the First Year Carpenter Joint Apprenticeship Training Program. Students in this course will gain important workplace learning experience based on concepts learned in the first semester curriculum. Additional lab hours may be required.

SKT 109. Carpenter Joint Apprenticeship Program: Concrete Form Building. 3 Credit Hours.

This course, Carpenter Joint Apprenticeship Program: Concrete Form Building, is a continuation of the Carpenter's Joint Apprenticeship Training program, and will introduce students to basic concrete forming applications and systems, hardware identification, multiple anchoring procedures, concrete terminology, and provide the skills needed for competency in concrete construction. Students will learn to read detailed construction plans, basic building layout procedures, how to establish evaluations and install footings. Students will be given an opportunity to read forming diagrams and apply hands-on construction of concrete forms. Additional lab hours may be required.

SKT 110. Carpenter Joint Apprenticeship Program: Interior Trim. 3 Credit Hours.

Interior Trim is a continuation of the Joint Carpenter Training Council Apprenticeship curriculum. This course is designed with an emphasis on the commercial building aspects of construction. The class offers students extensive instruction in rough and finish commercial applications using metal studs, reading and understanding commercial blueprints, International Building Codes (IBC) and applying proper layout techniques. The course covers crown-molding trim, wall framing, and the use of construction lasers for plumbing, squaring, straightening, and leveling. Additional lab hours may be required.

SKT 111. Electrical Training Alliance: Electrical Conduit Fabrication. 2 Credit Hours.

Electrical Conduit Fabrication is part of the first year core Joint Electrical Training Council curriculum for new apprentices. This course introduces the basic concepts of conduit building. Students will identify and use proper tools, methods, and mathematical calculations to perform different types of bending for residential and commercial conduit assemblies. Additional lab hours may be required.

SKT 112. Electrical Training Alliance: Workplace Learning I. 6 Credit Hours.

Workplace Learning I is the component of "on-the-job training" experience of the First Semester Electrical Training Alliance Curriculum. Students will reinforce and apply concepts previously learned in coursework and in the workplace. Additional hours may be required.

SKT 113. Carpenter Joint Apprenticeship Program: Basic Blueprint Reading. 2 Credit Hours.

Basic Blueprint Reading is a continuation of the Carpenter's Joint Apprenticeship Training program and is designed to introduce students to the basic skills needed to read construction blueprints. Class time will be used to discuss different types of construction drawings, details and specifications used in the construction industry. The course provides hands-on opportunities for students to use basic residential and light commercial blueprints to layout exterior and interior wall plating.

SKT 114. Carpenter Joint Apprenticeship Program: Workplace Learning II. 4 Credit Hours.

Carpenter Joint Apprenticeship Program: Workplace Learning II is the component of "on-the-job training" experience of the First Year Carpenter Joint Apprenticeship Training Program. Students in this course will gain important workplace learning experience based on concepts learned in the first year curriculum.

Prerequisite: SKT 108.

SKT 115. Carpenter Joint Apprenticeship Program: Health and Safety I. 3 Credit Hours.

Carpenter Joint Apprenticeship Program: Health and Safety I is a continuation of the Carpenter's Joint Apprenticeship Training Program and will introduce students to basic health and safety practices on the worksite. Particular focus in this course will be on crane signals, aerial lifts, STI Scaffolds and fall protection. Upon completion of this course students will be eligible to attempt the Crane Signal Person Qualification Exam, Aerial Lift Operator Qualification Exam, STI Scaffold User Qualification Exam, Fall Protection Residential Qualification Exam.

SKT 116. Carpenter Joint Apprenticeship Program: Residential Framing. 4 Credit Hours.

Carpenter Joint Apprenticeship Program: Residential Framing is a continuation of the Carpenter's Joint Apprenticeship Training program and will provide students a hands-on opportunity to construct a residential structure on foundation walls. Students will layout and frame a subfloor system, construct and erect exterior walls, build interior walls, frame bay windows, layout and build stairs, and prepare the building for subcontractors. The course covers layout procedures, the use of construction math, cutting list development, material estimating, work performance and safe job-site operations. Upon completion of this course the student will have a better understanding of how to build a subfloor, wall framing, roof framing and stair building.

SKT 117. Carpenter Joint Apprenticeship Program: Welding Basics. 3 Credit Hours.

Carpenter Joint Apprenticeship Program: Welding Basics is designed to introduce students to basic hands on cutting and welding processes. The course will cover welding qualification, certification, American Welder Society (AWS) testing procedures and standards. The course will introduce students to current welding and cutting practices performed in the construction industry developing skills to safely use Arc Welding, oxy-acetylene and plasma cutting equipment.

SKT 118. Carpenter Joint Apprenticeship Program: Millwright Basics. 4 Credit Hours.

Carpenter Joint Apprenticeship Program: Millwright Basics is a continuation of the Carpenter's Joint Apprenticeship Training program, and is designed to provide an overview of the industrial job site for Millwrights in construction. Upon completion of this class students will know how to recognize and eliminate safety concerns associated with gas turbines. Students will be able to identify conveyor parts and installation procedures and explain the operations of an automotive assembly plant. Students will demonstrate an understanding of proper tool usage, and workplace safety.

SKT 119. Carpenter Joint Apprenticeship Program: Workplace Learning III. 4 Credit Hours.

Carpenter Joint Apprenticeship Program: Workplace Learning III is the component on-the-job training experience of the First Year Carpenter Joint Apprenticeship Training Program. Students in this course will gain important workplace learning experience based on concepts learned in the first year curriculum.

SKT 120. Carpenter Joint Apprenticeship Program: Health and Safety II. 2 Credit Hours.

Carpenter Joint Apprenticeship Program: Health and Safety II is a continuation of the Carpenter's Joint Apprenticeship Training Program, and will introduce students to basic health and safety practices on the worksite. Particular focus in this course will address Occupation Safety and Health Administration (OSHA) safety regulations for scaffolding, scaffolding introduction, and the specific procedures for the scaffold erector-user.

SKT 121. Carpenter Joint Apprenticeship Program: Health and Safety III. 2 Credit Hours.

Carpenter Joint Apprenticeship Program: Health and Safety III is a continuation of the Carpenter's Joint Apprenticeship Training Program for students who are interested in gaining rigging and hoisting skills necessary on all construction sites.

Prerequisite: SKT 120.

SKT 122. Carpenter Joint Apprenticeship Training: Workplace Learning IV. 4 Credit Hours.

Carpenter Joint Apprenticeship Training: Workplace Learning IV is "on-the-job training" experience for the Carpenter Joint Apprenticeship Training Program. Students in this course will gain important workplace learning experience based on concepts learned in the second year curriculum.

Prerequisite: SKT 119.

SKT 123. Carpenter Joint Apprenticeship Training: Workplace Learning V. 4 Credit Hours.

Carpenter Joint Apprenticeship Training: Workplace Learning V is "on-the-job training" experience for the Second Year Carpenter Joint Apprenticeship Training Program. Students in this course will gain important workplace learning experience based on concepts learned in the second year curriculum.

Prerequisite: SKT 122.

SKT 130. Electrical Training Alliance: Direct Current Theory. 3 Credit Hours.

Electrical Training Alliance: Direct Current Theory is a continuation of the First Year Core Curriculum of the Electrical Joint Apprenticeship and Training Committee. Students in this course will receive comprehensive training on the basics of electricity as it relates to direct current (DC) series circuits. Students will study Ohm's law and electrical circuits, current and voltage characteristics in DC series circuits. Students will be asked to create DC circuits through lab exercises by correctly applying National Electric Code (NEC) requirements.

SKT 131. Electrical Training Alliance: Workplace Learning II. 7 Credit Hours.

Electrical Training Alliance: Workplace Learning II is the "on-the-job training" experience of the First Year Electrical Training Alliance Curriculum. Students in this course will gain important workplace learning experience based on concepts learned in the first year curriculum. Student training in the following areas: wiring, circuits, switches, insulation, conductors, current and voltage.

Prerequisite: SKT 112.

SKT 132. Electrical Training Alliance: Workplace Learning III. 7 Credit Hours.

Electrical Training Alliance: Workplace Learning III is "on-the-job training" experience for the Electrical Training Alliance Curriculum. Students in this course will gain important workplace learning experience based on concepts learned in the first year curriculum. Students will receive "on the job training" in the following areas: AC Systems; Control System Installation, blueprint reading.

Prerequisite: SKT 131.

SKT 133. Electrical Training Alliance: Workplace Learning IV. 7 Credit Hours.

Electrical Training Alliance: Workplace Learning IV is "on-the-job training" experience for the Electrical Training Alliance Curriculum. Students in this course will gain important workplace learning experience based on concepts learned in the first year curriculum. Students will receive "on the job training" in the following areas: installing and terminating transformers, service and troubleshooting. Training also includes installing, splicing & terminating wires and cables.

Prerequisite: SKT 132.

SKT 134. Electrical Training Alliance: Transformers. 2 Credit Hours.

Electrical Training Alliance: Transformers is a continuation of the Electrical Training Alliance, Second Year Core Curriculum. Students in this course will be exposed to the fundamentals of transformers and the different types of transformers.

SKT 135. Electrical Training Alliance: Electrical Blueprint Reading. 2 Credit Hours.

Electrical Training Alliance: Electrical Blueprint Reading is a continuation of the Electrical Training Alliance, Second Year Core Curriculum. Students in this course will be exposed to various methods and processes for evaluating and implementing electrical blueprints on residential worksites. Students will be exposed to blueprint reading, math, electrical and mechanical symbols, and how to create architectural views.

SKT 136. Electrical Training Alliance: Electrical Training Code and Practices I. 2 Credit Hours.

Electrical Training Alliance: Electrical Training Code and Practices I is a continuation of the First Year Core Curriculum of the Electrical Joint Apprenticeship and Training Committee. Students will be introduced to the National Electric Code (NEC) and the basics for interpreting the language of the NEC in order to correctly apply its requirements. Students will learn proper installation requirements for devices and switches used in residential and industrial buildings.

SKT 137. Electrical Training Alliance: Electrical Code and Practices II. 2 Credit Hours.

Electrical Training Alliance: Electrical Code and Practices II is a continuation of the Electrical Training Alliance, Second Year Core Curriculum. Students in this course will be exposed to the principles involved in sizing building wire, calculate conductor ampacity, and demonstrate the National Electrical Code (NEC) requirements for cable assemblies.

SKT 138. Electrical Training Alliance: AC Systems and Theory. 3 Credit Hours.

Electrical Training Alliance: AC Systems and Theory is a continuation of the Electrical Training Alliance, Second Year Core Curriculum. Students in this course will be exposed to a complete overview of Direct Current (DC) Theory, the use of trigonometry and vector math in circuit analysis, the concepts of resistive, inductive, and capacitive effects as they interact in series, parallel and combination AC circuits, polyphase power, AC and DC power generation, filters, resonance, and power factor.

SKT 140. Laborer Joint Apprenticeship Program: Cutting Torch. 2 Credit Hours.

Cutting Torch is the introductory course in the Laborer's AGC Training Council Apprenticeship program. This course will focus on the safe and effective uses of cutting systems, with a particular focus on different types of oxygen/gas cutting techniques. Student's will also learn safety procedures related to cutting including Occupational Health and Safety procedures.

SKT 141. Laborer Joint Apprenticeship Program: Laborer Workplace Learning I. 6 Credit Hours.

Laborer Workplace Learning I is the on-the-job training experience of the First Year Laborer's AGC Training Council Apprenticeship program. Students in this course will gain important workplace learning experience based on concepts learned in the first year curriculum.

SKT 142. Laborer Joint Apprenticeship Program: Hoisting, Rigging, Signaling. 3 Credit Hours.

Hoisting, Rigging, Signaling is a course in the First Year Laborer's AGC Training Council Apprenticeship program. This course will focus on the safe and effective uses of hoisting, rigging and signaling. Students will demonstrate the proper use of hand signals, calculated weights of loads, learn the proper use of knots and hitches, and the proper use of straps, slings and wire rope rigging.

SKT 143. Laborer Joint Apprenticeship Program: Power Tools I. 3 Credit Hours.

Laborer Joint Apprenticeship Program: Power Tools I is the introductory course for using these tools in the Laborer's AGC Training Council Apprenticeship program. This course will focus on the proper use of air and electrical tools.

Smart Start (STR)

STR 050. Smart Start: Student Success. 3 Credit Hours.

This course is designed to enhance students' knowledge, behaviors, and skills needed for successful transition to college.

Prerequisites: RDG 016 and RDG 017 with minimum grades of "C", or placement scores into RDG 020 or RDG 030, or ENG 020 or ENG 030.

STR 100. Smart Start College Success. 1 Credit Hour.

This course provides all students with opportunities to learn college success strategies in an active learning environment. Topics will be relevant to individual student needs and goals.

Prerequisite: Reading Proficiency.

Sociology (SOC)

SOC 100. The Sociology of Human Relations. 3 Credit Hours.

The study of sociology provides a framework for understanding the ways in which social institutions influence how people think about themselves and how they behave with others. This course applies this human relations framework to questions about how to build effective communities in diverse environments. Topics may include developing open-mindedness toward cultural variations, working in diverse environments, adjusting to change, social responsibility for behavior, and conflict management.

Prerequisite: Reading Proficiency.

SOC 101. Introduction to Sociology. 3 Credit Hours.

This course is a general survey of the discipline of sociology. The course explores the reciprocal relationship between individuals and social institutions. Specifically it examines how social forces both shape and are shaped by beliefs and behaviors regarding ourselves and others.

Prerequisite: Reading Proficiency.

SOC 103. Human Behavior at Work and in Business. 3 Credit Hours.

Course framework will be the organization and what people must do to become more effective within it. Focus will be in five major areas self-concept development, listening skills, expression, conflict resolution, and interpersonal skills.

Prerequisite: Reading Proficiency.

SOC 126. Study of Psychodynamic Substances. 3 Credit Hours.

This course will focus on the properties of drugs as chemicals and their impact on the body and mind. The history of drug use and abuse, issues surrounding addiction, factors that indicate a high risk to addiction and the interaction of drugs with each other will be examined.

Prerequisite: Reading Proficiency.

SOC 201. Aspects of Aging. 3 Credit Hours.

Aspects of Aging examines sociological forces that affect life quality in the later years. Social, psychological, and physiological aspects of aging will be considered, emphasizing influences in the socio-cultural context that enhance and impede continued growth of the person.

Prerequisites: SOC 101, PSY 200 or HMS 100 and Reading Proficiency.

SOC 202. Social Problems. 3 Credit Hours.

A survey course that offers a sociological examination of select global social problems. Topics of examination may include poverty, delinquency and crime, education, population, racial inequality, healthcare, gender inequality, alcohol and drugs, and environmental degradation, among others. The course also emphasizes research methodologies used to examine these problems as well as theoretical perspectives which can be used to understand the problems and, in turn, to create social change.

Prerequisites: SOC 101 and Reading Proficiency, or permissions of instructor.

SOC 203. Crime and Society. 3 Credit Hours.

This course examines the relationship between crime and various aspects of society. The course will critically analyze crime from multiple sociological perspectives, and will compare various types of crime and crime policy globally. The course will also examine the major substantive areas of crime and society.

Prerequisites: SOC 101 or SOC 102 or permission of instructor and Reading Proficiency.

SOC 204. Family and Society. 3 Credit Hours.

This course examines the interaction between marriage, family, and society. Specifically, the course investigates how wider social forces influence marriages and families in historical and contemporary times. The course will critically analyze traditional conceptualizations of marriage and family, and examine the various forms contemporary families take. The course will also examine dynamics within families, such as parenting, violence and abuse, remarriage, divorce, aging, communication, and dealing with conflicts and crises.

Prerequisites: SOC 101 or SOC 102 and Reading Proficiency.

SOC 211. Alcoholism and Drug Abuse. 3 Credit Hours.

Course focuses on nature, causes, treatment and prevention of alcoholism and drug abuse. Strategies of education and treatment will be reviewed. Course designed to deal with problems encountered either personally or professionally. Course also looks at social and cultural factors in alcoholism and drug abuse.

Prerequisite: Reading Proficiency.

SOC 212. Race and Ethnicity. 3 Credit Hours.

This course explores the social and historical processes that shape race and ethnicity, focusing on the consequences for students' everyday lives. Students investigate how each are embedded in societal systems of privilege and oppression. The course ultimately challenges common definitions of race and offers students the opportunity to understand their lives within the context of racial injustice, ethnic diversity, and socially created difference.

Prerequisites: SOC 101 or permission of instructor, and Reading Proficiency.

Spanish (SPA)

SPA 101. Elementary Spanish I. 4 Credit Hours.

This course is a beginning course that presents the basic sentence structure and vocabulary necessary to participate in elementary Spanish conversations. Students also begin reading short Spanish passages.

Prerequisite: Reading Proficiency.

SPA 102. Elementary Spanish II. 4 Credit Hours.

In this continuation of SPA 101, students continue their study of the basic elements of Spanish grammar, increase their vocabulary and enhance their ability to read and communicate in Spanish. Students enhance their global and intercultural competency through increased fluency in the language and a deeper exploration of historical and contemporary Hispanic culture.

Prerequisites: SPA 101 or 2 years of high school Spanish and Reading Proficiency.

SPA 201. Intermediate Spanish I. 4 Credit Hours.

In this continuation of SPA 102, students review and build grammar and vocabulary to enhance comprehension and communication. A variety of literary and cultural selections are presented to reinforce the student's understanding of global/intercultural themes.

Prerequisites: SPA 102 or 3 or more years of high school Spanish, and Reading Proficiency.

SPA 202. Intermediate Spanish II. 4 Credit Hours.

A continuation of SPA 201. Emphasis remains on the spoken language. A variety of literary and cultural selections are read and discussed in class in Spanish. Additional lab hours required.

Prerequisites: SPA 201 or 4 or more years of high school Spanish and Reading Proficiency.

Surgical Technology (ST)

ST 104. Pharmacology for Surgical Technologists. 2 Credit Hours.

The course is designed to provide the student with learning opportunities which will enable him to apply scientific principles of the biologic science of pharmacology. Emphasis is placed on the relationship of drugs to the surgical patient.

Prerequisites: Must be enrolled in Surgical Technology program and Reading Proficiency.

ST 105. Fundamentals of Surgical Technology. 4 Credit Hours.

This course provides the student with skills necessary to function as a surgical technologist. Laboratory experience is focused so the student will achieve a satisfactory level of performance in gowning and gloving, surgical scrub, establishing and maintaining asepsis, draping, instrumentation, and proper care of the surgical patient. Students learn to work with and care for surgical equipment and supplies in both scrub and circulating roles. Students spend five hours per week at clinical site. Course will correlate with ST 101 so student may apply principles of theory and practicum. Must be enrolled in the Surgical Technology program and Reading Proficiency. 155 lab/clinical hours. 64 open lab hours.

Prerequisites: ST 108 to be taken concurrently with ST 105.

ST 108. Introduction to Surgical Technology. 6 Credit Hours.

This course will introduce the student to the field of surgical technology. Topics will include principles of aseptic technique and patient care in the operating room. Responsibilities and functions of the surgical technologists in the pre, intra-, and post operative phases will be discussed.

Corequisite: ST 105.

Prerequisites: Must be enrolled in the Surgical Technology program and Reading Proficiency.

ST 109. Principles of Operating Room Communication. 2 Credit Hours.

This course will address the modes of communication in the operating room, specifically focusing on medical/surgical terminology and computer technology utilization.

Corequisite: ST 108.

Prerequisites: Must be enrolled in Surgical Technology program and Reading Proficiency.

ST 110. Surgical Procedures I. 4 Credit Hours.

This course will introduce the surgical technology student to the principles of surgical intervention and patient care considerations in multiple specialty areas. Pathophysiology, diagnostics, prognosis and complications of procedures will be addressed.

Corequisite: ST 111.

Prerequisites: ST 108 and must be enrolled in the Surgical Technology program and Reading Proficiency.

ST 111. Surgical Technology Clinical I. 8 Credit Hours.

This course involves application of surgical technology principles in the hospital setting. Additional hours required.

Corequisite: ST 110.

Prerequisites: ST 108, ST 105 and Reading Proficiency.

ST 120. Principles of Surgical Technology. 3 Credit Hours.

Principles of Surgical Technology is an introduction to the field of surgical technology. Concepts related to the professional healthcare environment, patient care, basic instrumentation and communication skills will be discussed.

Corequisite: ST 122.

Prerequisites: Current enrollment in the Surgical Technology Program or permission of the program director and Reading Proficiency.

ST 122. Medical/Surgical Terminology. 3 Credit Hours.

Medical/Surgical Terminology addresses the medical language used in the operating room environment. Emphasis is placed on medical terms related to general and surgical medicine including disease processes, diagnostics, surgical procedures, treatment modalities and abbreviations. The formation, definition and pronunciation of medical terms will be discussed.

Corequisite: ST 120.

Prerequisites: Current enrollment in the Surgical Technology Program or permissions of program director.

ST 124. Clinical Foundations. 3 Credit Hours.

Clinical Foundations is a laboratory course which provides an introduction to the practical aspects of case management responsibilities for the surgical technologist in the scrub role. Topics covered will include basic case set-ups, gowning and gloving, instrumentation, maintenance of sterile technique, and sequence of surgical procedural tasks. Additional lab hours required. BIO 207 with a minimum grade of "C" or permission of program director. Reading Proficiency.

Corequisite: ST 128.

Prerequisites: ST 120, ST 128 with minimum grades of "C".

ST 126. Surgical Equipment and Technological Concepts. 2 Credit Hours.

Surgical Equipment and Technological Concepts provides the learner with technological information on the utilization and care of surgical equipment and instrumentation. Environmental disinfection and sterilization techniques will be addressed.

Prerequisites: Current enrollment in the Surgical Technology Program, ST 120, ST 122 and BIO 203 all with minimum grades of "C", and Reading Proficiency.

ST 128. Perioperative Case Management. 3 Credit Hours.

Perioperative Case Management will cover preoperative, intraoperative and postoperative case management information for the surgical technologist. Sterile technique, procedural responsibilities, environmental controls and patient care issues will be addressed.

Corequisites: ST 124, ST 126.

Prerequisites: ST 120 and ST 122, both with minimum grades of "C" and Reading Proficiency.

ST 210. Surgical Procedures II. 2 Credit Hours.

This course is a continuation of Surgical Procedures I. Surgical procedures in advanced specialty areas will be introduced to the student. Content will include related pathophysiology, diagnostics, prognosis and complications.

Corequisite: ST 211.

Prerequisites: ST 110 and must be enrolled in the Surgical Technology program and Reading Proficiency.

ST 211. Surgical Technology Clinical II. 4 Credit Hours.

This course involves advanced application of surgical technology principles in the hospital setting. Additional hours required.

Corequisite: ST 210.

Prerequisites: ST 110, ST 111 and Reading Proficiency.

ST 215. Surgical Pharmacology. 2 Credit Hours.

Surgical Pharmacology is designed to introduce the student to the use, preparation and handling of medications in the surgical environment. Related terminology, common dosages, and principles of anesthesia administration will be covered. ST 120 with a minimum grade of "C" and Reading Proficiency. Prerequisites: Current enrollment in the Surgical Technology Program.

ST 220. Procedures I. 3 Credit Hours.

Procedures I introduces the principles of surgical intervention and patient care considerations in multiple specialty areas. Anatomy, pathophysiology, diagnostics, prognosis and complications of procedures will be addressed. Reading Proficiency.

Corequisite: ST 229.

Prerequisites: ST 124, ST 126, ST 128, ST 215, BIO 208, all with minimum grades of "C".

ST 224. Clinical Practice I. 6 Credit Hours.

Clinical Practice I involves application of surgical technology principles in the laboratory and hospital setting. Laboratory practice will involve instruction of advanced techniques in preparation for clinical experience. Students will gain experience by performing learned clinical skills in a hospital surgical department. Additional hours required.

Corequisite: ST 220, ST 228.

Prerequisite: Reading Proficiency.

ST 228. Clinical Seminar. 1 Credit Hour.

Clinical Seminar will provide discussion of student issues encountered in clinical practice. Students will provide critical analysis of procedural experiences in clinical case presentations.

Corequisite: ST 224.

Prerequisite: Reading Proficiency.

ST 230. Procedures II. 3 Credit Hours.

Procedures, a continuation of Procedures I, covers principles of surgical intervention and patient care considerations in advanced surgical specialty areas. Anatomy, pathophysiology, diagnostics, prognosis and complications of surgical procedures will be addressed.

Corequisites: ST 234, ST 238.

Prerequisites: ST 220, ST 224 with minimum grades of "C" and Reading Proficiency.

ST 234. Clinical Practice II. 6 Credit Hours.

Clinical Practice II is a continuation of Clinical Practice I. Students will further develop and refine their clinical skills by performing duties in the surgical technologist role in the hospital setting. Additional hours required.

Corequisite: ST 230.

Prerequisites: ST 228 with a minimum grade of "C" and Reading Proficiency.

ST 238. Professional Issues. 2 Credit Hours.

Professional Issues will provide discussion on topics pertaining to professional skills benefitting the entry-level surgical technologist. Resume building, interview techniques, and career opportunities will be explored. Testing methodologies, strategies and simulated testing experiences for the Certified Surgical Technologist National Board Examination will be covered.

Prerequisites: ST 220 and ST 224 with minimum grades of "C" and Reading Proficiency.

Theatre (THT)

THT 101. Introduction to Theatre. 3 Credit Hours.

Introduction to Theatre is designed to enhance the enjoyment and appreciation of theatre. Students study theatre as a collaborative art form by examining the roles and functions of playwrights, actors, directors, and designers in both traditional and contemporary contexts.

Prerequisite: Reading Proficiency.

THT 102. Stagecraft. 3 Credit Hours.

The purpose of this course is to study the technical areas of theatre production emphasis will be on scenery construction and rigging; paints and the painting of scenery; stage lighting; costume design; and construction. Included will be a survey of terminology and equipment for the stage.

Prerequisite: Reading Proficiency.

THT 104. Theatre Practicum. 1 Credit Hour.

Practical application of acting (when cast) and production techniques.

Assignments are made on an individual basis.

Prerequisite: Reading Proficiency.

THT 105. Theatre Practicum. 2 Credit Hours.

Practical application of acting (when cast) and production techniques.

Assignments are made on an individual basis.

Prerequisite: Reading Proficiency.

THT 106. Theatre Practicum. 3 Credit Hours.

Practical application of acting (when cast) and production techniques.

Assignments are made on an individual basis.

Prerequisites: Permission of instructor required and Reading Proficiency.

THT 107. Playwriting. 3 Credit Hours.

This course explores the fundamental processes of playwriting. It will provide the beginning student with opportunities to investigate the concepts of dialogue, plot, characterization, mood, conflict and setting as they relate to writing for the theatre.

Prerequisite: Reading Proficiency.

THT 108. Acting I. 3 Credit Hours.

Emphasis on application of principles of theory of creative acting. Exercises in movement and voice are integrated with improvisational technique.

Prerequisite: Reading Proficiency.

THT 109. Acting II. 3 Credit Hours.

Continuation of THT 108. Performance of scenes from both classical and contemporary plays is required in class. Emphasis is on individual development in the use of principles and styles of acting.

Prerequisite: Reading Proficiency.

THT 110. History of Theatre. 3 Credit Hours.

This course explores the development of the art of theatre from its beginnings to the present. Periods of history of greatest significance in the evolution of theatre will be emphasized. Elements of the theatre will be examined including theatre artists, plays, technical aspects and performance styles within diverse geographical, socio-cultural and historical contexts.

Prerequisite: Reading Proficiency.

THT 115. Acting for the Camera. 3 Credit Hours.

This course includes the following (1) exploration of the aesthetics and principles of acting for the camera; (2) analysis of diverse acting styles and outstanding performances in film and television; and (3) acting exercises for the camera. Some acting exercises will be videotaped and edited for analysis. (Same course as MCM 115).

Prerequisite: Reading Proficiency.

THT 201. Directing. 3 Credit Hours.

This course focuses on the process of directing for the stage. Emphasis is placed on the role of the director as the interpretive artist, collaborator, and stager. Importance will be given to leadership skills and time management.

Prerequisites: THT 101, THT 108 and Reading Proficiency.

Women's Studies (WMS)

WMS 100. Introduction to Women's Studies. 3 Credit Hours.

This course is an introduction into the field of Women's Studies. Women's issues are explored from a variety of disciplines. An emphasis will be placed on personal experience and its relationship to larger social structures. The focus of this course is to develop a sense of empowerment and critical thinking in students.

Prerequisite: Reading Proficiency.

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Davis Moore, M.Ed., Manager, Career and Employment Services

Hester Owens, B.S., Specialist

Counseling

Brenda F. French, Ed.D., LPC, NCC, Professor

Bella Hafezi, M.Ed., Instructor II

Reginald Johnson, M.A., LPC, Associate Professor

Sandra Knight, M.Ed., Professor

Scott Queener, Ph.D., NCC, Professor, Chair

Kathleen Swyers, M.Ed., LPC, CRC, Professor

Enrollment Services

Glenn Marshall, M.A., Manager, Enrollment Services

Yolanda Bell, M.B.A., Project Associate

Glenda Doss, M.S., Coordinator

Vicki A. Hopkins, Recruiter

Deborah Logan, Recruiter

Financial Aid

Donna Turner, A.A., Lead Financial Aid Counselor/Manager on Campus

Student Assistance Program

Donna Dowell-Foster, M.Ed., Coordinator, Student Assistance Program
 Tamala C. Turner, M.A., Student Assistance Specialist

TRiO/Upward Bound

Carolyn Jackson, M.A., Manager, Upward Bound and TRiO
 Jamie Bolar, M.A., Advising and Transfer Specialist
 James Bratcher, Jr., MACM, Counselor/Project Associate II, Upward Bound
 Collin Robinson, B.A., Project Associate I, UB Counsenlor
 Kim Walker, M.A., Project Director, Student Support Services

Faculty

Art

Matt Isaacson, M.F.A., Associate Professor
 Jamie Kreher, M.F.A., Associate Professor, Chair, Fine and Performing Arts
 Yingxue Zuo, M.F.A., Professor

Automotive Technology

Rick Anthes, B.S., Associate Professor, Chair
 Steven Goessling, A.A.S., A.S., B.S., Assistant Professor
 Joseph Jackson, B.S., M.Ed., Assistant Professor
 Josh Walker, B.S., Assistant Professor

Biology

Teresa Alvarez, Ed.D., Professor, Chair, Science
 Thomas Frison, M.A., M.S., Assistant Professor
 William Huber, M.S., D.C., Professor
 Michelle LaPorte, M.S., Instructor II
 Angela NewMyer, M.S., Associate Professor

Business Administration and Economics

Jeffrey Jones, M.B.A., Professor
 David A. Juriga, CPA, M.B.A., Professor
 Nicholas Peppes, B.S., M.B.A., Professor
 Aaron Reeves Jr., M.B.A., Professor

Chemistry

Venugopal Talkad, Ph.D., Assistant Professor
 Joe Wilson, Ph.D., Professor

Clinical Laboratory Technology

Angela C. Njoku, M.S., M.T., (ASCP), Professor, Program Coordinator

Communications

Kara Boyd, M.A., M.B.A., Assistant Professor
 Carla Moody, M.A., Instructor II
 Sandra Osburn, Ed.D., Professor
 Mariah Richardson, M.F.A., Assistant Professor

Criminal Justice

William E. Tucker, M.A., J.D., Assistant Professor

Dental Assisting

Deborah Bush-Munson, M.S., CDA, Associate Professor/Program Coordinator
 Marjorie Stoeker, B.S., CDA, Instructor II

Dental Hygiene

Kim K. Polk, M.Ed., R.D.H., Assistant Professor/Program Coordinator
 Phyllis Ring, M.S., R.D.H., Professor

Melany Thien, M.A.E., R.D.H., Instructor II

Deborah Trunk, M.A., R.D.H., Professor

Diagnostic Medical Sonography

Patti Rudick M.Ed., R.D.M.S., RT(R), Associate Professor
 James Wendling, M.Ed., R.D.C.S., Instructor II / Program Coordinator

Emergency Medical Services & Fire Protection

Mark Christopher, M.B.A., EMT-P, Program Coordinator

English

Zita M. Casey, M.B.A., Assistant Professor
 Jeremy K. Dennis, M.A., M.Ed., Professor/Chair, Humanities
 Eve Fonseca, M.A.T., Professor
 Melody Gee, M.A., Instructor II
 Layla Goushey, M.F.A., Associate Professor
 Ronald Hughes, M.A., M.F.A., Associate Professor
 Keith C. Hulse, M.A., TESL, Professor
 Marita Jason, Ph.D., Professor, Coordinator, Honors Program
 Karen Malouf-Ostlund, M.F.A., Professor
 Michelle Parinello-Cason, Ph.D., Assistant Professor
 Sharon Person, M.A., Professor
 Angela Warfield, Ph.D., Professor
 Hilary Wilson, M.A., Instructor II
 Wei Yan, M.A., Associate Professor/Assistant Chair, Humanities

Foreign Language

Antonia Perez-Franco, Ph.D., Associate Professor

Funeral Service Education

David Coughran, M.A.T., Assistant Professor, Program Coordinator
 Joseph Pugel, M.D., M.S., B.S., R.N., Associate Professor

Health and Wellness (formerly Physical Education)

Mark Applegate, M.S.Ed., NSCA-CSCS and C-PT, Assistant Professor/Chair
 Susan Martin, Ed.D., A.T.C., LAT, Professor

History

Dorian A. Brown, M.A., Professor
 Deborah Henry, Ph.D., Associate Professor
 Louis Williams, Ph.D., Professor

Hospitality Studies

Michael Downey, M.S.Ed., CCA, CCC, CCE, FMP, Professor
 Clarke Griffin, B.S., Associate Professor
 Rob Hertel, M.B.A., CEC, CCE, AAC, FMP, CFE, Professor
 Jeffrey P. Ivory, M.S.Ed., CHE, Professor
 Craig Mueller, M.Ed., CTC, CTA, Associate Professor, Program Coordinator
 Ellen Piazza, M.A.T., A.C.A, FMP, C.M.P, C.F.P.P, Associate Professor, Program Coordinator, Chair
 Casey Shiller, B.S., CEPC, CCE, AAC Associate Professor, Program Coordinator

Humanities

Mark Kruger, J.D., Ph.D., Professor

Human Services

Angela Roffle, M.S.W., Associate Professor, Chair

Information Systems and Health Information Technology

Gustav Adamecz, B.S., M.A., CompTIA (A+, Network+, Security+), CCNA, CCNP, CCDP, CCAI, CCAIT (IT Essentials, CCNA), Professor

Abdelouahab Amor, M.A., M.S., CCNA-S, CCNP, CCDP, CCAI, Professor
Janet Ayres, J.D., RHIA, CHPS, Associate Professor
Craig Chott, B.S., CISSP, Associate Professor
Paul T. Daniel, B.S., B.A., Associate Professor
Terri Grote, B.S., CompTIA A+, MCDST, Assistant Professor
William Hocker, B.A., CompTIA (Network +, Storage +) CCNA, CCAI, CCSI, CCAN Voice, CCNP Voice, Instructor I
Brenda Kahan, A.A.S., B.S., M.A., M.S., Professor, Chair
Patricia Sherman, M.Ed., RHIA, Assistant Professor, Program Coordinator
Library Services
Neil Das, M.L.I.S., Assistant Professor
Jeffrey Papier, M.L.S., Assistant Professor
Mass Communications
Sandra Osburn, Ed.D., Associate Professor/Chair, Communications and Mass Communications
Mathematics
Brian D. Carter, M.S., Assistant Professor
Deborah Char, M.A.T., Assistant Professor
Judy V. Clark, M.S., Instructor II
Evelyn Corich, M.A.T., Associate Professor
Seth Daugherty, M.S., Assistant Professor
Lynda K. Fish, M.S., M.B.A., Professor
Nita Graham, M.S., Associate Professor
Sandra Irons, M.A.T., Instructor II
Arabela Koric, M.A., Instructor II
Michael Lueke, Ph.D., Assistant Professor
James Munden, Ph.D., Associate Professor, Chair
Efrem Negash, M.Sc., Assistant Professor
Sharon Pemberton, M.A., Associate Professor
Music
Thomas A. Zirkle, D.M.A., Professor
Nursing
Janis Aiello, R.N., M.S.N., Professor
Gwen Breed, R.N., M.S.N., Professor
Carolyn Godfrey, R.N., M.S.N., Professor
Sandra Hall, R.N., M.S.N., Associate Professor
Patrick Mayfield, R.N., M.S.N., Assistant Professor
Lisa Moreland, R.N., M.S.N., Professor
Esther Otto, R.N., M.S.N., Assistant Professor, Program Coordinator
Stephen Pitchford, R.N., M.S.N., Instructor II
Kathleen Rizzo, R.N., M.S.N., Professor
James Shockley, R.N., M.S.N., Associate Professor
Cheryl Swallow, R.N., M.S.N., Professor
Philosophy
William Hartmann, M.A., Professor
Physical Science and Physics
Jonathan Morris, Ph.D., Professor
Political Science
Ssebunya (Edward) Kasule, Ph.D., Assistant Professor
Psychology and Sociology
Donald Cusumano, Ph.D., Professor/Chair, Social and Behavioral Science

Gary Forde, M.A., Associate Professor
Bruce Munson, M.A., Instructor II
Andrea Nichols, Ph.D., Professor
Jessica Hottle-Sippy, M.A., Professor
Radiologic Technology
Dean Brake, M.Ed., R.T. (R), Professor
Ashley Brown, B.A., R.T.(R), Instructor
Rebecca Northern, D.C., R.T., (R), Assistant Professor, Program Coordinator
Sally Polta, B.A., R.T. (R)(M), Associate Professor
Reading
Tracy Barron, M.A., Instructor II
Nicole Myers, M.Ed., Assistant Professor
Kathy Petroff, M.A., Professor
Adrienne Smith, M.A., M.S., Assistant Professor
Respiratory Care
Joe Fackelman, B.A., Assistant Professor
Lindsay Fox, M.Ed., RRT-NPS, Assistant Professor, Program Coordinator
Oscar Schwartz, M.D., Medical Director
Surgical Technology
Stacey Boedeker, M.A.Ed., CST, Associate Professor
Diane Gerardot, M.A.Ed., CST, Professor, Program Coordinator
Teacher Education
Lori Orlando, Ed.D., Associate Professor
Theatre
Alex Saccavino, M.A., Manager

William J. Harrison Education Center Administrators/Professional Staff

Stacy M. Edwards, M.B.A., Manager and Community Outreach
Amber Howlett, M.A., Coordinator, Student Services
Susan Imbeah, M.B.A., Student Support Specialist
Mavis Stone, M.B.A., Student Assistance Program

Meramec

Academic/Professional Staff (p.) Student Affairs (p.) Faculty (p.)

Academic/Professional Staff

Chief Campus Academic Officer
Carol Lupardus, Ph.D., Provost
Academic Deans
Ame Mead, Ed.D., Dean, Arts and Communications
Patrick Mallory, Ph.D., Dean, Human Services and Business, Management & Technology
Janet Walsh, Ed.D., R.N., Dean, Science and Science Technology and Engineering & Industrial Technology and Trades
Campus Auxiliary Services
Paula Savarino, B.A., Acting Manager, Campus Auxiliary Services
Campus Police
Facilities
Sam Guth, Manager, Facilities

Instructional Resources**Student Affairs****Dean**

Kimberly Fitzgerald, M.Ed., Dean of Student Development and Enrollment Management

Academic Advising

Julie Massey, M.A., Manager, Academic Advising

Dana Austin-Cooper, B.A., Academic Advisor

Mysha Clincy, M.B.A., Academic Advisor

Sebrina Colvin, M.A. Academic Advisor

Johna Grier, B.S., Academic Advisor

Elizabeth Higgins, B.S., Academic Advisor

Suzzie Huff, B.A., Academic Advisor

Jean Kennedy, B.A., Academic Advisor

Tracy Lampkins, M.S., Academic Advisor

Lynne Ludens, B.A., Academic Advisor

Lorri Milward, M.Ed., Academic Advisor

Christy Niles, M.Ed., Academic Advisor

Tracy Rankin, B.S., Academic Advisor

Access Office

Linda Nissenbaum, M.A.T., Manager, Access Office disAbility Support Services

Joseph Bryant, Ed.D., J.D., Specialist, Services for Students with disAbilities

Renee Dingman, M.S.V.R., Specialist, Services for Students with disAbilities

Theresa Smythe, M. Ed., Specialist, Services for Students with disAbilities

Assessment Center

Ray Eberle-Mayse, M.A., Manager, Assessment

Ruth Davenport, B.A., Assessment Specialist

Campus Life

Carolyn O’Laughlin, M.A., Manager, Campus Life

Phillip Campbell, M.S.Ed., Coordinator of Orientation and Transition

Career and Employment Services

Jacqueline Meaders-Booth, Ed.D., Manager, Career and Employment Services

Sherita Reinhardt, M.A., Career Specialist

Counseling

Rhonda Adams, M.Ed., Assistant Professor/Counselor, Counseling Chair

Jason Duchinsky, M.A., Assistant Professor/Counselor

Claire Martin, M.A., Senior Project Associate for Student Assistance Program

Harold Salmon, Ph.D., Professor/Counselor

Hope E. Steiner, M.Ed., Professor/Counselor

Donna Zumwinkel, M.Ed., Professor

Enrollment Services

Mike Cundiff, D.Mgt., Manager, Enrollment Services

Bertha Moreland, M.S., Enrollment Center Coordinator

Financial Aid

Nicole Moore, M.B.A., Lead Counselor

TRIO

Sanela Mesic, M.A., Project Director

Stephen Anderson, M.Ed., Advisor

Faculty**Accounting/Legal Studies**

Markus Ahrens, M.B.A., C.P.A., Professor

Robyn Barrett, M.B.A., C.P.A., Professor

Jeff Hsu, M.B.A., Professor

Amy Monson, M.S., C.P.A., Assistant Professor

Anne Wessely, M.B.A., C.P.A., Professor

Barbara Wiseheart, J.D., M.Ed., Associate Professor

Biological Science/Horticulture/Chemistry

Jason Allen, M.S., Associate Professor

Matthew Bast, M.S., Assistant Professor

Jeff Baumstark, M.S., Assistant Professor

Elizabeth Granier, Ph.D., Associate Professor

Robert Harms, Ph.D., Professor

Reni Joseph, Professor

Jody Martin de Camilo, Ph.D., Professor

Jerald Pence, B.S., Assistant Professor

Tom Peters, Ph.D., Assistant Professor

Kelli Roberts, M.S., Assistant Professor

Business/Information Systems

Margaret Hvatum, M.S., Professor

Pam McElligott, M.B.A., Professor

June Mercer, M.B.A., M.S., Professor

Robert Oberst, M.S., Assistant Professor

Steven Schamber, J.D., M.S., Professor

Mark Tulley, M.B.A., Associate Professor

Communications

Jacqueline Barker, M.A., Professor

Dennis Dufer, M.A., Associate Professor

Christaan Eayrs, M.A., Associate Professor

Robert Hahn, M.F.A., Associate Professor

Susan Hunt-Bradford, M.A., Professor

Douglas Hurst, J.D., Professor

Amber Schmisser, M.A., Assistant Professor

Christopher Smejkal, M.A., Associate Professor

Denise Sperruzza, M.A., Professor

Design, Visual and Performing Arts

Joseph Chesla, M.F.A., Professor

Bradley Fratello, Ph.D., Professor

Gary Gackstatter, M.M.P., Assistant Professor

Charles Groth, B.F.A., Associate Professor

David Hanlon, M.F.A., Professor

Virginia Heisler, M.A., Associate Professor

Gary Hesse, M.F.A., Manager DATA

James Ibur, M.F.A., Professor

Margaret Keller, M.F.A., Professor

Erin LeClerc, M.A., Associate Professor

Timothy Linder, Ph.D., Professor

Michael Lorenz, M.ARCH., Associate Professor

Betsy Morris, M.F.A., Professor

Gerald Myers, D.M.A., Professor

Keith Oliver, M.F.A., Associate Professor

Michelle Rebollo, M.A., Associate Professor

Michael Swoboda, M.F.A., Associate Professor

Ken Wood, M.F.A., Professor

English

Shamim Ansari, Ph.D., Associate Professor

Elva Maxine Beach, M.F.A., Assistant Professor

Sandra Brady, M.A., Associate Professor

Michael Burke, M.A., Associate Professor

Rebecca Burns, M.A., Associate Professor

Christine Carter, M.Ed., Professor

Victoria Cernich, M.A., Assistant Professor

Jean Dempsey, M.A., Instructor II

Pamela Garvey, M.F.A., Professor

Angela Hamilton, M.F.A., Associate Professor

Trevin Jones, M.A., Associate Professor

Timothy Little, M.A., Assistant Professor

Richard Long, Ed.D., Professor

Eric Meyer, M.A., Associate Professor

Lisa Mizes, M.Ed., Assistant Professor

Richard Peraud, M.A., Assistant Professor

Shannon Philpott, M.A., Assistant Professor

Shaun Reno, M.A., Associate Professor

Todd Rohman, Ph.D., Associate Professor

Juliet Scherer, M.S., Professor

Jeffrey Schneider, Ph.D., Professor

Francine Sigmund, M.A., Instructor II

David Taylor, Ph.D., Professor

Michaela Thornton, M.F.A., Instructor II

Kelly Wavering, M.A., Associate Professor

Lisa Wilkinson, M.A., Associate Professor

Rebecca Winter, M.A., Assistant Professor

Health and Wellness (formerly Physical Education)

Anthony Dattoli, M.A., Instructor II

Michelle Ethridge, M.A.Ed., Assistant Professor

Ronald Mirikitani, M.S., Professor

Humanities

Kay Blalock, Ph.D., Professor

Jay Campbell, Ph.D., Professor

Aaron Champene, Ph.D., Assistant Professor

Steve Collins, Ph.D., Professor

John Hughes, Ph.D., Professor

Robert Lee, Ph.D., Professor

John Messmer, Ph.D., Professor

Emily Neal, Ph.D., Associate Professor

Karl Dirk Voss, Ph.D., Professor

Donna Werner, Ph.D., Professor

Instructional Resources

Rebecca Helbling, M.L.S., M.A.T., Professor

Janice Hovis, M.A.L.S., M.A.T., Professor

Damaris Schmitt, M.A., L.I.S., M.A.I., Professor

Katy Smith, M.A.L.S., Professor

Mathematics

Kelly Ballard, M.A., Professor

John Elliott, M.S., Professor

James Frost, M.S., Professor

Karen Gaines, M.S., Professor

Ronald Goetz, M.A., Associate Professor

Teri Graville, Professor

Lisa Harden, M.S., Associate Professor

Sarah Henry, M.A., Instructor II

Melissa Leech, M.A., Assistant Professor

Cora Marty-Farmer, M.A., Assistant Professor

Laurie McManus, Ph.D., Professor

Nancy Molik, M.A., Assistant Professor

Russell Murray, M.S., Professor

Lynne Nisbet, M.A., Instructor II

Rick Pescarino, M.S., Professor

Aletta Speegle, Ph.D., Professor

Connie Stocker, M.A., Assistant Professor

Julie Tucker, M.S., M.A., Associate Professor

Nathan Wilson, M.A., Associate Professor

Nursing

Faith Caster, R.N., M.S.N., Assistant Professor

Deborah Chanasue, R.N., M.S.N., Professor

Sarah Clark, R.N., M.S.N., Assistant Professor

Mary Kay Dorsey, R.N., M.S.N., Professor

Stephanie Franks, R.N., M.S.N., Professor

Cindy Hartwig, R.N., M.S.N., Associate Professor

Lacee Kaufmann, R.N., M.S.N., Assistant Professor

Debra Knickerbocker, R.N., M.S.N., Associate Professor

Lisa Kokotovich, R.N., M.S.N., Professor

Joyce Rebore, R.N., M.S.N., Associate Professor

Cheryl Strahm, R.N., M.S.N., Professor

Emily Yale, R.N., M.S.N., Professor

Occupational Therapy Assistant

Cynthia Ballentine, MSOT, Associate Professor

Physical and Engineering Sciences

Carl Campbell, M.A., Instructor II

Nancy Collier, Ph.D., Professor

Joachim Dorsch, Ph.D., Professor

Tony Frost, M.S., Professor

Michael Hauser, M.S., Professor

Reni Joseph, Ph.D., Associate Professor

Kwan Lee, Ph.D., Professor

Craig Lincoln, Ph.D., Professor

Timothy Pedersen, Ph.D., Professor

Joseph Schneider, M.S., Instructor II

Vidyullata Waghulde, Ph.D., Professor

Physical Therapist Assistant

Christie Cohoon, Ph.D., Associate Professor

Julie High, M.S., P.T., Professor

Social and Behavioral Sciences

Maryam Arabshahi, Ph.D., Assistant Professor

Terry Cooper, Ed.D., Ph.D., Professor

Ana Cruz, Ph.D., Professor

Cynthia Epperson, Ph.D., Professor

Gail Heyne Hafer, Ph.D., Professor

Patty Keller, Ed.D., Professor

Lisa Martino-Taylor, Ph.D., Associate Professor

Eric Nielsen, M.A., Assistant Professor

Sophia Pierrousakos, Ph.D., Professor

Diane Pisacreta, M.A., Professor

Vicki Ritts, Ph.D., Professor

David Shields, Ph.D., Assistant Professor

Amanda White, Ph.D., Professor

South County Administrators/Professional Staff

Julie Loyet, M.A., Manager

Kathleen Pritchard, M.A., Coordinator, Student Services

Mike Buda, Student Support Specialist

Marybeth Overby, M.S.Ed., Student Support Specialist

Wildwood

Academic/Professional Staff (p.) Student Affairs (p.) Faculty (p.)

Academic / Professional Staff

Chief Campus Academic Officer

Mike Dreith, Ed.D., Associate Provost

Campus Auxiliary Services

Ellen Gough, B.A., Manager

Instructional Resources

Susan Townsend, M.A., M.L.S., Manager, Instructional Resources and Academic Resources

K-12 Initiatives

Rebecca Emerson, M.A., Executive Director

Amanda Bair, B.A., Coordinator

Erica Malone, M.Ed., Coordinator

Marketing and Communications

Gina Tarte, M. A., Coordinator, Marketing and Communications

Physical Facilities

Samuel Guth, BSM, BSLGS, Manager

Student Affairs

Academic Advising

Anthony Steele, M.Ed., Coordinator

Campus Life and College Transition

Stephanie Church Graham, M.F.A., Coordinator

Counseling

Jenna Mueller, M.A., LPC, NCC, Instructor II/Counselor

disAbility Support Services

Krista Sucher, M.Ed., Coordinator

Enrollment Management

Britni Fischer, B.S., B.A., Recruiter

Financial Aid

Helen Nauman, M.A., Lead Financial Aid Counselor

Student Development and Enrollment Management

Laura Davidson, M.Ed., Associate Dean of Student Development and Enrollment Management

Faculty

Arts and Humanities

Mark Weber, M.F.A., Professor

Gwendolyn Verhoff, Ph.D., Assistant Professor

English/Reading/Foreign Languages/ Interdisciplinary Studies/ Communications/Mass Communications/Business Administration

Ellen McCloskey, M.A., Professor, Department Chair

Dusty Sweet, Ph.D., Assistant Professor, Coordinator of Economics and Statistics

Monica Swindle, M.A., Assistant Professor, Coordinator of English

Daniel Yezbick, Ph.D., Professor

Mathematics

Kimberlyann Tsai Granger, Ed.D., Professor, Interim Coordinator

Christopher L. Mahan, M.A., Assistant Professor

Sciences/Social Sciences/Health and Wellness

Syed Chowdhury, Ph.D., Professor, Interim Coordinator of Science and Health and Wellness

Kimberlee Vaughn, M.S., Assistant Professor, Interim Coordinator of Social Sciences

Teacher Education Program

David Shields, Ph.D., Professor, Coordinator of Teacher Education