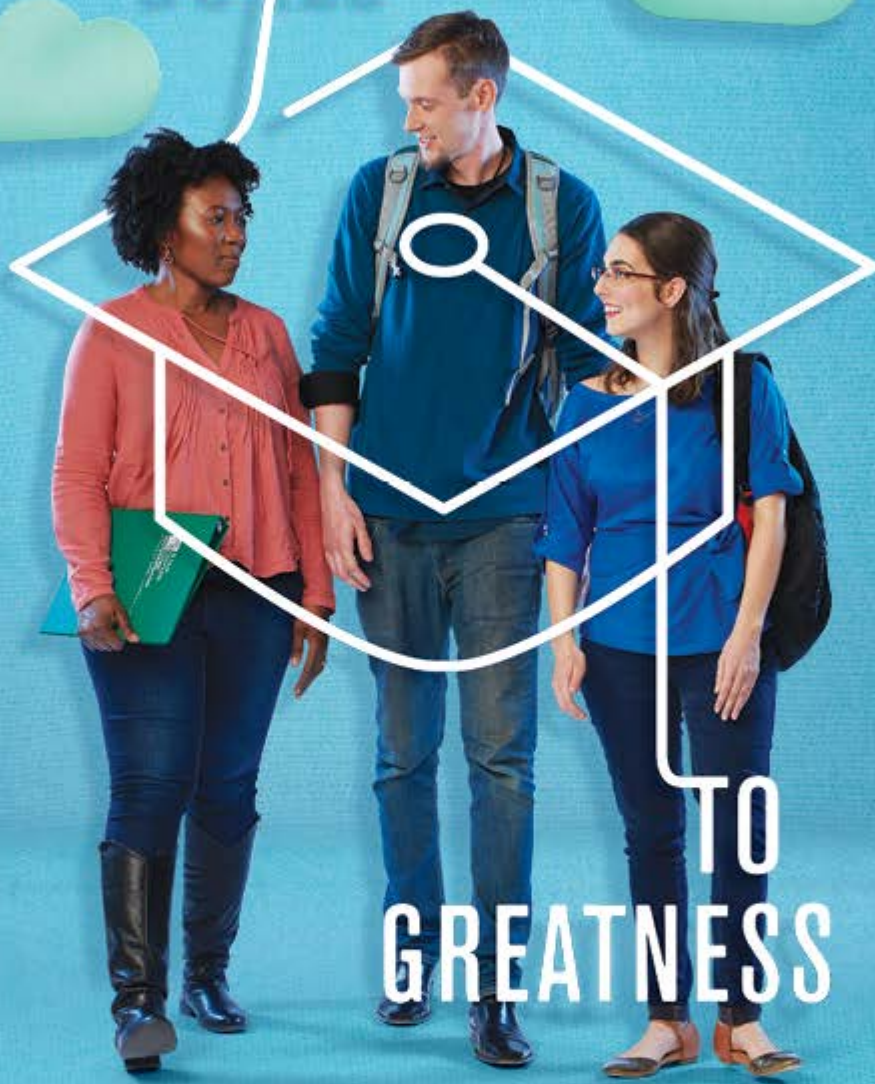


GOALS



TO  
GREATNESS

# SPRING 2019 CATALOG

PROGRAMS AND COURSES AT STLCC



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# WELCOME

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## 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

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# GENERAL INFORMATION

## About this Catalog

The St. Louis Community College 2018/19 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://stlcc.edu/schedule) ([http://classes.stlcc.edu/ClassSchedule/Term\\_Courses.asp](http://classes.stlcc.edu/ClassSchedule/Term_Courses.asp)).

The information in this catalog is current as of October 2018. 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 (<https://www.stlcc.edu/docs/policies-and-procedures/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 (<https://www.stlcc.edu/student-support/disability-services>) 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 Coordinator, 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 <https://www.stlcc.edu/student-support/disability-services/getting-started.aspx> 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 21<sup>st</sup> 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, Forest Park, and Meramec campuses are fully approved 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 October for the next spring and fall term; and December for the next summer term. Applications may be completed and submitted online or in person at any campus kiosk. Visit Apply to STLCC (<https://www.stlcc.edu/admissions/apply-to-stlcc>) 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 GED or HiSET test scores. Students with 15 or more credit hours of transferable college credit from another college or university 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. 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. Submit the Dual Enrollment Consent Form.
- 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.
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 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](http://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.

Students may not pursue their former program if it has been deactivated or is no longer accepting students.

Files for students who have not attended within five years will be destroyed. Transcribed grades earned at STLCC are retained. Students will 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 GED or HiSET test scores. Students with 15 or more credit hours of transferable college credit from another college or university need not send a high school transcript unless requested by the Enrollment Services office. See Admission Classifications (<https://www.stlcc.edu/admissions/apply-to-stlcc>).

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

## Calendar

### Academic Calendar 2018-19

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 2018

##### August

13-17	Service Days
20	Semester classes begin

##### September

1-3	Labor Day holiday (college closed)
17	First Day of 12-Week Classes

##### October

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

##### November

16	Withdrawal deadline <sup>1</sup>
21	Fall Semester Break (no classes)
22-25	Thanksgiving holiday (college closed)

##### December

9	Last day of semester classes
10-16	Final exams
17	Grades due
20	Official degree conferral date
21	Last day college open until Jan. 2, 2018

## Spring Semester 2019

### January

2	College opens
14-18	Service days
21	Martin Luther King, Jr. holiday (college closed)
22	Semester begins

### February

11	First day of 12-week classes
18	Presidents' Day holiday (college closed)

### March

15	Midterm
18	Midterm grades due
18-24	Spring break (no classes)
19	Spring Staff Development Day (selected offices closed)
22-24	Spring holiday (college closed)
25	First day of 2nd 8-week classes

### April

19	Withdrawal deadline <sup>1</sup>
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### May

10	Commencement
12	Last day of semester classes
13-19	Final exams
20	Grades due
23	Official degree conferral date

## Summer Session 2019

### May

21	First day of 3-week Classes
27	Memorial Day holiday (college closed)

### June

9	Grades due for 3-week classes
10	First day of summer classes

### July

4	Independence Day holiday (college closed)
5	Summer Break (No classes)

### August

4	Last Day of Summer Term
5	Grades Due for Summer Classes
8	Official degree conferral date

<sup>1</sup> 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 314-644-9687 (<http://catalog.stlcc.edu/general-information/community-programs/> tel:3146449687).

## Workforce Solutions Group

The Workforce Solutions Group (WSG) 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. WSG 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 located at the Corporate College, a state of the art facility dedicated to corporate education and professional development. To learn more visit us online at [stlcc.edu/workforce](https://stlcc.edu/workforce) or on Twitter (@STLCCworkforce (<https://twitter.com/stlccworkforce>)) and Facebook (STLCCworkforce (<https://www.facebook.com/STLCCworkforce>)).

### Advancing People Continuing Education

Continuing Education (CE) advances people by enrolling over 30,000 participants annually in professional development and personal enrichment courses. More than 40 percent of individuals complete professional development training including CEUs (Continuing Education Units) toward a license or certification, while 60 percent seek personal enrichment opportunities.

Each year, CE offers over 2,500 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](https://stlcc.edu/ce) (<https://stlcc.edu/programs-academics/continuing-education>) or on Twitter (@STLCCce (<https://twitter.com/stlccce>)) and Facebook (STLCCce (<https://www.facebook.com/STLCCce>)).

### Advancing Businesses

#### Corporate Services

Corporate Services offers comprehensive 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 also offers enterprise-wide solutions for organizations with national and international footprints. In addition, Corporate Services coordinates the onsite services available at the Corporate College through the Testing and Assessment Center, WorkKeys Solution Center and Meeting and Event Services. Visit [stlcc.edu/corporate](https://stlcc.edu/corporate) (<https://www.stlcc.edu/workforce/for-employers>) to learn more.

### Advancing Communities Community Services

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

Community Services 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 throughout the St. Louis region. Visit Community Services (<https://www.stlcc.edu/workforce/for-the-community>) to learn more. And discover more on the available Accelerated Job Training

opportunities at [stlcc.edu/accelerated](https://stlcc.edu/accelerated) (<https://www.stlcc.edu/programs-academics/accelerated-job-training>).

## 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 domicile lease/deed
- Missouri driver's license with current address
- Missouri personal property tax receipt

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](mailto: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 T ([http://www.stlcc.edu/Admissions/Tuition\\_and\\_Ways\\_to\\_Pay/Index.html](http://www.stlcc.edu/Admissions/Tuition_and_Ways_to_Pay/Index.html)) tuition and Fees (<https://www.stlcc.edu/admissions/tuition-and-fees>) 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 <sup>1</sup>

The college offers an automatic payment plan for all term 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.

<sup>1</sup> Details of the payment plan are subject to change. For the latest information, go to <https://www.stlcc.edu/admissions/tuition-and-fees/payment-plan.aspx>.

## Withdrawing from a Class

If a student withdraws from all classes, 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.

For more information on registration and medical appeals, go to <https://www.stlcc.edu/college-policy-procedures/registration-medical-appeals/>.

## 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 <https://www.stlcc.edu/admissions/apply-to-stlcc/veterans.aspx>.

## 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 <sup>1</sup>	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

<sup>1</sup> 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:

<https://www.stlcc.edu/admissions/financial-aid/financial-aid-return-of-federal-funds.aspx>.

## 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 programs, as well as those from other scholarships, 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://stlcc.edu/financialaid) (<https://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 <https://fafsa.ed.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 <https://www.stlcc.edu/departments/information-technology/banner-selfservice/>. Information about financial aid, scholarships, federal grants, loans, work study and Missouri state programs is available at <https://www.stlcc.edu/admissions/financial-aid/>.

## Maintain Satisfactory Academic Progress

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. Students are allowed a maximum time frame of 150% of the required hours for their degree to receive federal financial assistance.

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 it to the campus Financial Aid office. Students must document any extenuating circumstances that prevented them from maintaining the required standards. All committee appeal decisions are final.

## 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: <https://www.stlcc.edu/admissions/financial-aid/a-plus.aspx>.

## 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 <https://www.stlcc.edu/college-policy-procedures/student-conduct-rights-and-responsibilities/>.

## 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 <https://www.stlcc.edu/college-policy-procedures/consumer-information/>.

## 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. Therefore, students enrolled for 15 credit hours 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 who are officially listed on the roster 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 dropped. Classes less than a full semester in length may have different administrative drop 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 student will not be automatically dropped. 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. After withdrawal students are not allowed to attend class. 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 <sup>1</sup>
F	0	failure

<sup>1</sup> 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. This type of credit does not meet the residency requirement for graduation.

**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. Auditing students are expected to meet the prerequisites and pay the required fees as credit status students.

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

**U<sup>1</sup>—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.



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

## Health and Safety

### STLCC Alerts

All STLCC students and employees are automatically set up to receive STLCC Alerts. However, to ensure you receive STLCC Alerts on your cell, work, and/or home phone, be sure to verify your emergency notification information in Banner Self-Service. Email notifications are automatically sent to your STLCC account.

STLCC Alerts will send direct messages in case of:

- Closing and delays
- Inclement weather and natural disasters
- Emergency and threats to personal safety
- STLCC safety drills

STLCC encourages all students, employees, and individuals who frequently visit STLCC campuses to keep text notifications enabled. However, data rates do apply to text messages sent through STLCC Alerts. To unsubscribe from texts via mobile, text "STOP" to 51664 to opt out of emergency alerts.

You can resume emergency text messages at any time by texting "RESUME" to 51664.

### 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>).

### 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 <https://www.stlcc.edu/college-policy-procedures/title-ix/>.

### 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 <https://www.stlcc.edu/college-policy-procedures/consumer-information/drug-and-alcohol-abuse-prevention.aspx>.

### 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 may 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 to gain 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 completing a program/major change form available from the Enrollment Services office. Students may change their major up to the Friday of week 3 for the fall or spring term, and one business day prior to the summer session.

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 declared associate degree intended for graduation 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: One of the following courses is required to meet the Missouri Civics requirement.

Code	Title	Credit Hours
HST 101	United States History to 1865 (MOTR HIST 101)	3
HST 102	United States History from 1865 to the Present (MOTR HIST 102)	3
PSC 101	Introduction to American Politics (MOTR POSC 101)	3

6. 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 applicable to the second degree 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 or no longer accepting new students 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 during the fall or spring terms 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.

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  
5600 Oakland Ave.  
St. Louis, MO 63110

314-539-5159

Transcripts may be requested by completing a transcript request at [getmytranscript.org](https://secure.studentclearinghouse.org/tsorder/faces/TOBridge) (<https://secure.studentclearinghouse.org/tsorder/faces/TOBridge>).

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 <https://www.stlcc.edu/departments/information-technology/banner-selfservice/>.

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/) (<http://www.studentclearinghouse.org/>).

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 (<https://www.stlcc.edu/docs/policies-and-procedures/admin-procedures.pdf>).

## 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 <https://www.stlcc.edu/student-support/disability-services/> 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.

## 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.

## Reading and English

STLCC may waive the reading and/or the English portions of the placement test if students provide documentation of one of the following:

- 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 college transcript or grade report documenting successful completion (with a grade of C or higher) or reading and writing course prerequisites.
- College credit from an accredited institution will waive the reading test.

## Math

STLCC may waive the mathematics portion of the placement test if students provide documentation of one of the following:

- An ACT math score of 19 or above.
- A GPA and ACT math score that places the student in a college level math course using the placement tool.

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 (<https://www.stlcc.edu/admissions/assessment/>) for testing schedule, or visit <https://www.stlcc.edu/admissions/assessment/>.

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:

## 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 <https://www.stlcc.edu/departments/information-technology/banner-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 [https://blackboard.stlcc.edu/webapps/portal/execute/tabs/tabAction?tab\\_tab\\_group\\_id=\\_43\\_1](https://blackboard.stlcc.edu/webapps/portal/execute/tabs/tabAction?tab_tab_group_id=_43_1). 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 [https://blackboard.stlcc.edu/webapps/portal/execute/tabs/tabAction?tab\\_tab\\_group\\_id=\\_32\\_1](https://blackboard.stlcc.edu/webapps/portal/execute/tabs/tabAction?tab_tab_group_id=_32_1).

## 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, visit <https://www.stlcc.edu/student-support/personal-support/child-care.aspx>.

## 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 districtwide 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 learning 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 <https://www.stlcc.edu/student-support/campus-technology/get-connected.aspx>. STLCC uses the Blackboard learning management system for online coursework. For Blackboard assistance and tutorials, go to [https://blackboard.stlcc.edu/webapps/portal/execute/tabs/tabAction?tab\\_tab\\_group\\_id=\\_43\\_1](https://blackboard.stlcc.edu/webapps/portal/execute/tabs/tabAction?tab_tab_group_id=_43_1).

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](mailto: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 <https://www.stlcc.edu/college-policy-procedures/consumer-information/copyright-information.aspx>.

## 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 314-644-9671 (<http://catalog.stlcc.edu/general-information/policies/student-success/tel:3146449671>).

## 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](https://www.stlcc.edu/SAP) (<https://www.stlcc.edu/student-support/personal-support/student-assistance-program.aspx>).

## 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) (<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 (<https://www.stlcc.edu/student-support/personal-support/trio.aspx>) 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 Program<sup>1</sup>
  - 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, MS(N)

### University of Missouri-St. Louis

- Art Education, AFA/BFA
- Biochemistry, BS
- Biotechnology, BS
- Drawing
- Dual Admission Program<sup>1</sup>
  - 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 Program<sup>1</sup>: Nursing
- Management, BA
- Nursing, BSN

### William Woods University

- Deaf Communication Studies/Interpreter Training

<sup>1</sup> 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.

To learn more, visit the St. Louis Community College Foundation (<https://www.stlcc.edu/about/foundation>) page on the STLCC website.

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](mailto:foundation@stlcc.edu).

# 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. All associate in applied science graduates must complete a minimum of 15 credit hours of general education courses.

### 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. 23) for a list of all signed articulation agreements with four-year colleges and universities.

## Transfer Programs

### Associate in Arts

- General Transfer Studies (p. 28)

### Associate in Fine Arts

- General Fine Arts (p. 52)
- Graphic Communications (p. 54)
- Photography (p. 68)

### Associate in Science

- Engineering Science (p. 49)

### Associate of Arts in Teaching

- Teaching (p. 32)

## Career and Technical Education

### Associate in Applied Science

- Accounting (p. 30)
- Automotive Technology (p. 33)
- Baking and Pastry Arts (p. 33)
- Behavioral Health Support (p. 34)
- Biotechnology (p. 35)
- Business Administration (p. 35)
- Child and Family Development (p. 35)
- Clinical Laboratory Technology (p. 36)
- Computer Integrated Manufacturing (p. 38)
- Criminal Justice – Law Enforcement (p. 39)
- Culinary Arts (p. 39)
- Cybersecurity (p. 40)
- Deaf Communication Studies: Interpreter Education (p. 42)
- Dental Hygiene (p. 43)
- Diesel Technology (p. 45)
- Electrical/Electronic Engineering Technology (p. 48)
- Funeral Services Education (p. 51)
- Graphic Communications (p. 52)
- Health Information Technology (p. 54)
- Horticulture (p. 55)
- Hospitality Management (p. 57)
- Human Services (p. 58)
- Interior Design (p. 58)
- Legal Studies for the Paralegal (p. 60)
- Network Engineering (p. 63)
- Nursing (p. 64)
- Occupational Therapy Assistant (p. 65)
- Office Information Systems (p. 66)
- Paramedic Technology (p. 66)
- Physical Therapist Assistant (p. 69)
- Radiologic Technology (p. 70)
- Respiratory Care (p. 71)
- Skilled Trades Industrial Occupations Technology (p. 72)

- Software Developer (p. 73)
- Surgical Technology (p. 74)

### Certificate of Proficiency

- Accounting (p. 31)
- Automotive Technology (p. 33)
- Business Administration (p. 35)
- Criminal Justice: Law Enforcement (p. 39)
- Cybersecurity (p. 40)
- Database Developer (p. 41)
- Dental Assisting (p. 42)
- Diagnostic Medical Sonography (p. 44)
- Diesel Technology (p. 46)
- Early Care and Education (p. 48)
- Horticulture (p. 56)
- Kitchen and Bath Design (p. 60)
- Legal Studies for the Paralegal (p. 61)
- Medical Billing and Coding (p. 62)
- Network Engineering (p. 64)
- Network Security (p. 64)
- Paramedic Technology (p. 67)
- Surgical Technology (p. 75)

### Certificate of Specialization

- Addictions Study (p. 31)
- Automotive Technology (p. 33)
- Biomedical Electronics Technology (p. 34)
- Biotechnology (p. 35)
- Business Administration (p. 35)
- Cisco Networking Academy: CCNA (p. 36)
- Computer Accounting Technology (p. 37)
- Computer Aided Design (p. 37)
- Computer Applications (p. 38)
- Deaf Communications Studies: American Sign Language (p. 41)
- Diesel Technology (p. 46)
- Digital Media--Digital Photography (p. 46)
- Digital Media--Interactive and Graphic Design (p. 47)
- Digital Media--Video Editing and Animation (p. 47)
- Emergency Medical Technology (p. 49)
- Funeral Directing (p. 50)
- Interior Design Professional (p. 59)
- IT Help Desk/End User Support (p. 58)
- Life Science Laboratory Assistant (p. 62)
- Precision Machining Technology (p. 70)
- Robotics and Automation (p. 72)
- Skilled Trades Industrial Occupations Technology (p. 73)
- Web Developer (p. 75)

# 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. 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. 77). 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 "CORE 42" 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. Students wishing to transfer to a four-year institution 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, students will select 18 credit hours to complete the 60-credit hour Associate in Arts degree. Students should work closely with an 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.

**Interested in this program?** Start the enrollment process by visiting the Apply to STLCC (<https://www.stlcc.edu/admissions/apply-to-stlcc>) page.

## At the completion of the program, students are expected to:

1. explore and integrate ideas and concepts from diverse fields of academic study to further academic, personal, and professional inquiry.
2. use quantitative, qualitative, and communication skills to define problems and propose solutions.
3. identify and apply contributions from a range of academic disciplines to conceptualize and explain enduring and contemporary issues.
4. analyze the ethical implications of choices that reflect diversity of cultural, religious, economic, or historic perspectives or experiences.

Program of Study

Code	Title	Credit Hours
<b>General Education</b> <sup>1</sup>		
ENG 101	College Composition I (MOTR ENGL 100)	3
ENG 102	College Composition II (MOTR ENGL 200)	3
COM 101	Oral Communication I (MOTR COMM 100)	3
or COM 107	Public Speaking (MOTR COMM 110)	
MTH 160	Precalculus Algebra (MOTR MATH 130)	4
or MTH 161	Quantitative Reasoning (MOTR MATH 120)	
or MTH 180	Introductory Statistics (MOTR MATH 110)	
or MTH 185	Precalculus (MOTR MATH 150)	
XXX xxx	Social and Behavioral Sciences (including 3 credit hours that satisfy the Civics requirement)	9
XXX xxx	Humanities and Fine Arts	9
XXX xxx	Natural Sciences (One lab course required)	7
XXX xxx	CORE 42 Elective (Any course designated with a MOTR number to reach 42 credit hours)	4

<b>Electives</b>		
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. Students should consult their transfer institution and/or work with an advisor for best course options.		18
<b>Total Credit Hours</b>		<b>60</b>

<sup>1</sup> Students who complete the 42-credit hour general education block will have "CORE 42" noted on their transcript.

## 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.

Code	Title	Credit Hours
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		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

Code	Title	Credit Hours
COM 104	Persuasion	3
COM 107	Public Speaking (MOTR COMM 110)	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 (MOTR COMM 120)	3

## Film Studies

Code	Title	Credit Hours
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

Code	Title	Credit Hours
BIO 140	Principles of Biology I (MOTR BIOL 150L)	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 (MOTR PHYS 150L)	4
PHY 112	College Physics II	4

## Mathematics

Code	Title	Credit Hours
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:<sup>1</sup>

CHM 105	General Chemistry I (MOTR CHEM 150L)
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 (MOTR PHYS 200L)
PHY 223	Engineering Physics II

<sup>1</sup> Please see most current list of courses accepted for general education credit.

## Media Communications

Code	Title	Credit Hours
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

Code	Title	Credit Hours
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

Code	Title	Credit Hours
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

Code	Title	Credit Hours
THT 101	Introduction to Theatre (MOTR THEA 100A)	3
THT 102	Stagecraft	3
THT 106	Theatre Practicum	3
THT 107		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

## Accounting, Associate of Applied Science

### Florissant Valley, Forest Park and Meramec

The Associate of Applied Science in Accounting degree is designed to provide students with the skills and knowledge that are necessary to obtain entry-level employment into the accounting job market. The AAS degree 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 the Apply to STLCC (<https://www.stlcc.edu/admissions/apply-to-stlcc>) page.

### At the completion of the program, students are expected to:

- utilize the basic accounting terminology and the accounting cycle.
- classify business transactions using basic accounting concepts (manually and with the use of computer technology).
- record business transactions using basic accounting concepts (manually and with the use of computer technology).
- compute business transactions using basic accounting concepts (manually and with the use of computer technology).
- verify business transactions using basic accounting concepts (manually and with the use of computer technology).
- prepare the four basic financial statements according to GAAP (Income Statement, Equity Statement, Balance Sheet, and Cash Flows).
- create professional documents about the financial condition of a business entity.
- make financial decisions about the four basic financial statements.
- communicate orally useful information about the financial condition of a business entity.
- interpret financial information while working in teams consisting of individuals with diverse backgrounds.
- identify the various uses of technology as it applies to the Accounting field.
- demonstrate technical proficiency for an entry-level junior accountant with the use of Quickbooks software and Microsoft Excel.
- identify the different types of ethical issues that are encountered in a business environment.
- apply the Accounting code of ethical conduct that relates to business organizations.
- apply high ethical standards as it relates to contacts with fellow students, instructors, and employers.
- apply the basic principles of law with our judicial system while addressing legal dilemmas. This includes legal ethics, constitutional law, contracts, torts, intellectual property, and business crime.
- write responses addressing a legal dilemma using the various sources of law.

- distinguish between the legal and ethical responses to a business dilemma.
- apply statistical techniques with predicting costs of a business entity.

### Program of Study

Code	Title	Credit Hours
<b>Career General Education</b>		
ENG 100	Career English	3
or ENG 101	College Composition I (MOTR ENGL 100)	
ENG 103	Report Writing	3
or ENG 102	College Composition II (MOTR ENGL 200)	
ECO 151	Principles of Macroeconomics (MOTR ECON 101)	3
ECO 152	Principles of Microeconomics (MOTR ECON 102)	3
MTH xxx	Mathematics (140 level or higher)	3
BUS 103	Business Mathematics	3
XXX xxx	Social & Behavioral Sciences: Civics Requirement	3
<b>Physical Education Activity</b>		
Select 2 credit hours		2
<b>Program Requirements</b>		
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
<b>Technology Core Courses</b>		
ACC 120	Computer Accounting Applications for Business	3
ACC 122	Computer Accounting Applications - Spreadsheets	3
ACC 124	Computer Accounting Applications - Databases	3
<b>Area of Concentration</b>		
Select one of the following options:		6
Accounting Associate Option		
ACC 203	Cost Accounting	
ACC 206	Auditing	
ACC 209	Intermediate Accounting II	
ACC 211	Current Topics in Accounting	
ACC 212	Nonprofit Accounting	
ACC 215	Fraud and Forensic Accounting	
ACC 291	Accounting Internship	
ACC 293	Accounting Internship III	
Tax Emphasis Option		
ACC 204	Income Tax Accounting	
ACC 214	Business Taxes: Research and Planning	
ACC 292	Accounting Internship II	
<b>Business Electives</b>		
Select two of the following:		6
ACC xxx		
IS 116 or IS 151		
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 Accounting Certificate of Proficiency degree program is designed to provide students with the knowledge and skills to meet the changing needs required in today's job market. The accountant's role has changed dramatically with the dominant role of computers and the Certificate of Proficiency degree provides a strong foundation with commercial computer applications in Accounting. The Certificate of Proficiency also provides currently employed persons the opportunity to acquire an extensive accounting background and the necessary skills and proficiencies to attain employment in the accounting field.

**Interested in this program?** Start the enrollment process by visiting the Apply to STLCC (<https://www.stlcc.edu/admissions/apply-to-stlcc>) page.

### At the completion of the program, students are expected to:

- utilize the basic accounting terminology and the accounting cycle.
- classify business transactions using basic accounting concepts (manually and with the use of computer technology).
- record business transactions using basic accounting concepts (manually and with the use of computer technology).
- compute business transactions using basic accounting concepts (manually and with the use of computer technology).
- verify business transactions using basic accounting concepts (manually and with the use of computer technology).
- prepare the four basic financial statements according to GAAP (Income Statement, Equity Statement, Balance Sheet, and Cash Flows Statement).
- create professional documents about the financial condition of a business entity.
- make financial decisions about the four basic financial statements.
- communicate orally useful information about the financial condition of a business entity.
- interpret financial information while working in teams consisting of individuals with diverse backgrounds.
- identify the various uses of technology as it applies to the Accounting field.
- demonstrate technical proficiency for an entry-level junior accountant with the use of Quickbooks software and Microsoft Excel.
- identify the different types of ethical issues that are encountered in a business environment.
- apply the Accounting code of ethical conduct that relates to business organizations.
- apply high ethical standards as it relates to contacts with fellow students, instructors, and employers.
- apply the basic principles of law with our judicial system while addressing legal dilemmas. This includes legal ethics, constitutional law, contracts, torts, intellectual property, and business crime.
- write responses addressing a legal dilemma using the various sources of law.
- distinguish between the legal and ethical responses to a business dilemma.

### Program of Study

Code	Title	Credit Hours
<b>Required Courses</b>		
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
<b>Business Electives</b>		
Select one of the following:		3
ACC xxx		
IS 116 or IS 151		
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 the Apply to STLCC (<https://www.stlcc.edu/admissions/apply-to-stlcc>) page.

Code	Title	Credit Hours
<b>Required Courses</b>		
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
<b>Electives</b>		
Select one of the following:		3
PSY 200	General Psychology (MOTR PSYC 100)	
PSY 205	Human Growth and Development (MOTR PSYC 200)	
PSY 208	Abnormal Psychology	
SOC 204	Family and Society	
Total Credit Hours		27



# Associate of Arts in Teaching Degree Program

Florissant Valley, Forest Park, Meramec and Wildwood

The Associate of Arts in Teaching degree program contains an area of concentration that includes four core Teacher Education courses and one education elective; it is consistent with other Missouri community colleges. This is an effort to promote a more seamless transfer to four-year colleges and universities. This degree 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 degree program meets the Missouri Initial Professional Education Competencies (MIPEC) 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 the Apply to STLCC (<https://www.stlcc.edu/admissions/apply-to-stlcc>) page.

## At the completion of the program, students are expected to:

1. identify the central concepts, structures, and tools of inquiry of the discipline(s).
2. create learning experiences that make aspects of subject matter meaningful and engaging for learners.
3. explain how students learn, develop, and differ in their approaches to learning.
4. identify how teachers use long-range planning to develop, implement, and evaluate curriculum based upon student data, as well as district and state standards.
5. design learning opportunities that are adapted to diverse learners and support the intellectual, social, and personal development of all learners.

6. describe a variety of instructional strategies and resources to encourage k-12 students' critical thinking, problem solving, and performance skills.
7. describe individual/group motivation and behavior to create a learning environment that encourages active engagement in learning, positive social interaction, and self-motivation.
8. model effective verbal, nonverbal, and media communication techniques to foster active inquiry, collaboration, and supportive interaction in classroom settings.
9. describe how assessment data (formative, summative, classroom, and standardized) is used to plan ongoing instruction.
10. articulate the importance of reflective practice and continual professional growth.
11. identify strategies for fostering appropriate relationships with peers and school personnel.

### Program of Study

Code	Title	Credit Hours
<b>General Education</b>		
ENG 101	College Composition I (MOTR ENGL 100)	3
ENG 102	College Composition II (MOTR ENGL 200)	3
MTH 160	Precalculus Algebra (MOTR MATH 130) (or higher)	4
COM 101	Oral Communication I (MOTR COMM 100)	3
or COM 107	Public Speaking (MOTR COMM 110)	
PSC 101	Introduction to American Politics (MOTR POSC 101)	3
HST 101	United States History to 1865 (MOTR HIST 101) <sup>1</sup>	3
or HST 102	United States History from 1865 to the Present (MOTR HIST 102)	
PSY 200	General Psychology (MOTR PSYC 100)	3
XXX xxx	Humanities and Fine Arts <sup>2</sup>	9
<b>Select one of the following pathways:</b>		<b>11</b>
<b>Elementary Education Pathway</b>		
Natural Sciences CORE 42 course with laboratory		
Natural Sciences CORE 42 course with laboratory		
CORE 42 Elective (any course to reach 42 MOTR credits)		
<b>Secondary Education Pathway</b>		
Natural Science CORE 42 course		
Natural Science CORE 42 course with laboratory		
CORE 42 Elective (any course to reach 42 MOTR credits)		
<b>Program Requirements</b>		
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
PSY 205	Human Growth and Development (MOTR PSYC 200)	3
or PSY 203	Child Psychology	
or PSY 214	Adolescent Psychology	
<b>Education Electives (One of the following must be completed):</b>		<b>3</b>
EDU 219	Education of Exceptional Learners	
EDU 228	Multicultural Education	
XXX xxx	Elective <sup>3</sup>	2-3
<b>Total Credit Hours</b>		<b>62-63</b>

- <sup>1</sup> Courses (HST 101 and HST 102) meet Missouri State Requirement
- <sup>2</sup> Non-studio art or music class recommended for Elementary Certification
- <sup>3</sup> 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.

## Automotive Technology, Associate in Applied Science

This program is currently going through a revision. Please see an advisor for more information, or visit the Automotive Technology (<https://www.stlcc.edu/programs-academics/pathways/engineering-trades/automotive-tech>) page on the STLCC website.

## Automotive Technology, Certificate of Proficiency

This program is currently going through a revision. Please see an advisor for more information, or visit the Automotive Technology (<https://www.stlcc.edu/programs-academics/pathways/engineering-trades/automotive-tech>) page on the STLCC website.

## Automotive Technology, Certificate of Specialization

This program is currently going through a revision. Please see an advisor for more information, or visit the Automotive Technology (<https://www.stlcc.edu/programs-academics/pathways/engineering-trades/automotive-tech>) page on the STLCC website.

## 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; 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; chocolate candies and showpieces; plated desserts; and sugar candies and showpieces 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, while preparing them to earn the Certified Pastry Culinarian certification from the American Culinary Federation.

**Interested in this program?** Start the enrollment process by visiting the Apply to STLCC (<https://www.stlcc.edu/admissions/apply-to-stlcc>) page.

## At the completion of the program, students are expected to:

1. work within established guidelines for safety and sanitation at all times.
2. demonstrate a basic understanding of basic baking and pastry cooking techniques.
3. prepare numerous benchmark formulations for bakery and pastry staples outlined by the American Culinary Federation's Certified Pastry Culinarian certification standards.
4. interpret numerical data that will influence financial decisions in bakeshop operations including calculation of food, recipe, and labor costs.
5. prepare savory food products, using standards defined by the American Culinary Federation.
6. project a level of professionalism appropriate to hospitality industry standards.
7. describe functions and food sources of the major nutrients in food preparation and storage.
8. utilize artistic concepts in presenting pastry goods and showpieces.

### Program of Study

Code	Title	Credit Hours
<b>General Education</b>		
ENG 101	College Composition I (MOTR ENGL 100)	3
COM 101	Oral Communication I (MOTR COMM 100)	3
MTH 108	Elementary Applied Mathematics (or Higher Level Mathematics)	3
BIO 177	Food Science	3
SOC 101	Introduction to Sociology (MOTR SOCI 101)	3
HST 102	United States History from 1865 to the Present (MOTR HIST 102)	3
<b>Area of Concentration</b>		
HTM 100	Introduction to the Hospitality Industry	3
CUL 101	Safety and Sanitation	1
DIT 115	Principles of Nutrition	3
HTM 120	Supervision and Leadership in the Hospitality Industry	3
HTM 200	Procurement in the Hospitality Industry	3
HTM 210	Hospitality Financial Planning and Cost Control	3
<b>Baking and Pastry Arts Option</b>		
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
BAP 160	Artistic Concepts in Pastry (Artistic Concepts in Pastry)	3
BAP 201	Artisan and Decorative Bread	2
CUL 150	Culinary Essentials	3
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

## Behavioral Health Support, Associate in Applied Science

### Florissant Valley and Wildwood

The Behavioral Health Support AAS provides a pathway for entry-level positions within the helping professions. This program includes hands-on practicum experiences in community settings and prepares students for support positions in mental health settings while assisting clients with behavioral and mental health diagnoses. Graduates of this program are qualified for entry-level positions in state, county and local human service agencies, substance use disorder facilities, community mental health centers, hospitals, schools and other identified agencies.

Admission to this program is contingent on meeting the established guidelines, which include a cumulative GPA of 2.5 or higher on a 4.0 scale, letter of reference, criminal background check and personal interview.

**Interested in this program?** Start the enrollment process by visiting the Apply to STLCC (<https://www.stlcc.edu/admissions/apply-to-stlcc>) page.

### At the completion of the program, students are expected to:

1. collaborate in the development, revision and execution of an individualized treatment plan that identifies specific, measurable, time-limited goals and interventions.
2. obtain certification in Mental Health First Aid.
3. communicate with clients regarding internal and external resources for recovery.
4. create documentation to support client and treatment plan.
5. assist clients with various mental health needs within practical settings.
6. analyze potential legal and ethical issues as they relate to targeted populations.
7. synthesize foundational knowledge of risk factors, treatment options and recovery techniques to assist clients with a variety of mental illnesses.
8. demonstrate an appropriate helping response for individuals in mental health crisis and/or with suicidal ideation.

### Program of Study

Code	Title	Credit Hours
<b>General Education</b>		
ENG 101	College Composition I (MOTR ENGL 100)	3
ENG 103	Report Writing	3
COM 201	Interpersonal Communication	3
MTH 108	Elementary Applied Mathematics (or higher)	3
PSY 200	General Psychology (MOTR PSYC 100)	3
PSC 101	Introduction to American Politics (MOTR POSC 101) (or other designated Civics course)	3
<b>Area of Concentration</b>		
IS 116	Computer Literacy	3
PSY 205	Human Growth and Development (MOTR PSYC 200)	3
PSY 208	Abnormal Psychology	3
SOC 211	Substance Use, Abuse and Dependence	3
PRD 128	Mental Health First Aid	1
BHS 101	Introduction to Behavioral Health Support	3
BHS 102	Legal and Ethical Issues in Behavioral Health Support	3

BHS 103	Systems of Care	3
BHS 104	Clinical Encounters I: Interviewing and Assessment	3
BHS 105	Integrated Health	3
BHS 201	Clinical Encounters II: Crisis and Interventions	3
BHS 203	Evidence Based Treatment	4
BHS 202	Behavioral Health Support Practicum I	4
BHS 204	Behavioral Health Support Practicum II	4
Total Credit Hours		61

## 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 the Apply to STLCC (<https://www.stlcc.edu/admissions/apply-to-stlcc>) page.

### At the completion of the program, students are expected to:

1. understand human anatomy and physiology basics, relative to patient measuring, recording and monitoring, patient therapeutic equipment, and the analysis of basic human physiological parameters.
2. operate basic medical imaging systems and computer networking systems as related to medical devices.
3. analyze and troubleshoot common problems and issues with equipment.
4. have a full understanding of the regulatory requirements that govern a hospital's or clinic's ability to provide a safe environment for patients and employees.
5. evaluate medical equipment for electrical safety (including electrostatic discharge, ESD).
6. read schematic diagrams and understand service manuals in order to address issues with complex equipment.
7. identify and analyze electronic circuits, both AC and DC, along with the proper use of instruments, meters, and analyzers to troubleshoot circuits and circuit boards.
8. maintain an awareness of future trends in medical instrumentation and patient care technology, including computer systems and integration with network systems.

9. generate research, test analysis, and recommendation reports or memos to communicate issues and needs to staff, supervisors, and vendor representatives to resolve issues.
10. understand the capital equipment selection process and the role the biomedical electronics technician provides in this process.

Code	Title	Credit Hours
<b>Program Requirements</b>		
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
<b>Life Science Requirement</b>		
Select at least one of the following (Human Biology is preferred):		3-4
BIO 109	Human Biology (MOTR LIFS 100)	
BIO 111	Introductory Biology I (MOTR BIOL 100L)	
BIO 207	Anatomy and Physiology I	
Total Credit Hours		25-26

## Biotechnology, Associate in Applied Science

This program is currently going through a revision. Please see an advisor for more information, or visit the Biotechnology (<https://www.stlcc.edu/programs-academics/pathways/science-and-science-tech/biotechnology.aspx>) page on the STLCC website.

**Interested in this program?** Start the enrollment process by visiting the Apply to STLCC (<https://www.stlcc.edu/admissions/apply-to-stlcc>) page.

## Biotechnology, Certificate of Specialization

This program is currently going through a revision. Please see an advisor for more information, or visit the Biotechnology (<https://www.stlcc.edu/programs-academics/pathways/science-and-science-tech/biotechnology.aspx>) page on the STLCC website.

**Interested in this program?** Start the enrollment process by visiting the Apply to STLCC (<https://www.stlcc.edu/admissions/apply-to-stlcc>) page.

## Business Administration, Associate in Applied Science

This program is currently going through a revision. Please see an advisor for more information, or visit the Business Administration (<https://www.stlcc.edu/programs-academics/pathways/business-management-tech/business-administration.aspx>) page on the STLCC website.

**Interested in this program?** Start the enrollment process by visiting the Apply to STLCC (<https://www.stlcc.edu/admissions/apply-to-stlcc>) page.

## Business Administration, Certificate of Proficiency

This program is currently going through a revision. Please see an advisor for more information, or visit the Business Administration (<https://www.stlcc.edu/programs-academics/pathways/business-management-tech/business-administration.aspx>) page on the STLCC website.

**Interested in this program?** Start the enrollment process by visiting the Apply to STLCC (<https://www.stlcc.edu/admissions/apply-to-stlcc>) page.

## Business Administration, Certificate of Specialization

This program is currently going through a revision. Please see an advisor for more information, or visit the Business Administration (<https://www.stlcc.edu/programs-academics/pathways/business-management-tech/business-administration.aspx>) page on the STLCC website.

**Interested in this program?** Start the enrollment process by visiting the Apply to STLCC (<https://www.stlcc.edu/admissions/apply-to-stlcc>) page.

## Child and Family Development, Associate in Applied Science

### Florissant Valley, Forest Park and Meramec

The Child and Family Development 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 in the best practices designed for the study of young children and their families.

The Child and Family Development program is aligned with education standards for Associate Degree programs set forth by the National Association for the Education of Young Children (NAEYC). St. Louis Community College prepares students to work with young children from infancy through age eight.

The Associate in Applied Science (AAS) degree is a two-year program with a concentration of coursework in child development and family studies. AAS degree candidates can find employment as teachers, parent educators, community service workers, youth development program workers, administrators, program planners, managers or directors in early childhood settings. Environments for teaching young children include preschool programs, laboratory schools, elementary schools, and community nursery schools. With further study, students have the possibility of a variety of career options such as those in the legal system, hospital and medical settings, government agencies and therapy systems.

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 about this requirement.

**Interested in this program?** Start the enrollment process by visiting the Apply to STLCC (<https://www.stlcc.edu/admissions/apply-to-stlcc>) page.

## At the completion of the program, students are expected to:

1. exhibit knowledge of child development, including young children's characteristics and needs, influences on development and learning.
2. demonstrate an understanding of diverse family and community characteristics by developing positive relationships with family and community members.
3. develop evidence of appropriate child assessments, including observation, documentation, anecdotal records and other assessment tools.
4. reflect on effective strategies for teaching, learning and connecting with children and families..
5. organize content knowledge to create meaningful, individualized and challenging curricula for each child.
6. appraise his/her role as an ethical, collaborative, knowledgeable, reflective and informed early childhood professional and advocate.

## Program of Study

Code	Title	Credit Hours
<b>Career General Education</b>		
ENG 101	College Composition I (MOTR ENGL 100)	3
MTH 108	Elementary Applied Mathematics (or higher)	3
COM 101	Oral Communication I (MOTR COMM 100)	3
XXX xxx	Social & Behavioral Sciences: Civics Requirement	3
XXX xxx	Social Science Elective	3
PSI 101	Physical Science (MOTR PHYS 110)	3
<b>Program Requirements</b>		
CFD 101	Foundations of Child and Family Development	3
CFD 102	Child Growth and Development	3
CFD 103	Physical Development: Health, Safety and Well-Being	3
CFD 104	Creative Development: Art Experiences in Early Childhood	3
CFD 105	Professional Development Seminar I	1
CFD 106	Cognitive Development: Language and Literacy in Early Childhood	3
CFD 203	Professional Development Seminar II	1
CFD 108	Principles of Curriculum Design: Infants, Toddlers and Two-Year-Olds	3
CFD 109	Supervised Student Teaching Practicum: Infants, Toddlers and Two Year Olds	3
CFD 107	Family/Community Support and Engagement	3
CFD 201	Social and Emotional Development: Guidance and Discipline	3
CFD 202	Cognitive Development: Math, Science, and Engineering for Young Children	3
CFD 204	Principles of Curriculum Design: Preschool	3
CFD 205	Supervised Student Teaching Practicum: Preschool	3
CFD 206	Children With Special Abilities and Needs	3
CFD 207	Supporting Cultural Awareness and Diversity	3
CFD 208	Professional Development Seminar III	1
Total Credit Hours		63

## 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 the Apply to STLCC (<https://www.stlcc.edu/admissions/apply-to-stlcc>) page.

## At the completion of the program, students are expected to:

1. use current knowledge and skills based on industry standards to design network solutions.
2. develop designed network solutions as a member of a team.
3. demonstrate proficiency in the Cisco Networking Academy courses through successful performance on course final exams based on industry certification exam competencies.

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

## 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.

**Interested in this program?** Start the enrollment process by visiting the Apply to STLCC (<https://www.stlcc.edu/admissions/apply-to-stlcc>) page.

## At the completion of the program, students are expected to:

1. demonstrate knowledge and skills required to perform clinical laboratory tests to the satisfaction of the employer.
2. obtain a passing grade on a national certifying examination.
3. meet industry expectations with regards to skills, knowledge and safe work habits.
4. demonstrate effective interpersonal communication skills in professional settings.

### Program of Study

Code	Title	Credit Hours
<b>Career General Education</b>		
ENG 101	College Composition I (MOTR ENGL 100)	3
ENG 102	College Composition II (MOTR ENGL 200)	3
or ENG 103	Report Writing	
XXX xxx	Social & Behavioral Sciences: Civics Requirement	3
SOC 101	Introduction to Sociology (MOTR SOCI 101)	3
or PSY 200	General Psychology (MOTR PSYC 100)	
CHM 101	Fundamentals of Chemistry I (MOTR CHEM 100L)	5
BIO 207	Anatomy and Physiology I	4
BIO 208	Anatomy and Physiology II	4
MTH 140	Intermediate Algebra	3
<b>Physical Education Activity</b>		
Select 2 credit hours		2
<b>Program Requirements</b>		
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

This program is currently going through a revision. Please see an advisor for more information or visit the Accounting (<https://www.stlcc.edu/programs-academics/pathways/business-management-tech/accounting.aspx>) page on the STLCC website.

**Interested in this program?** Start the enrollment process by visiting the Apply to STLCC (<https://www.stlcc.edu/admissions/apply-to-stlcc>) page.

## Computer Aided Design (CAD), Certificate of Specialization

### Florissant Valley

The Computer Aided Design program prepares a CAD operator to interpret data from multiple sources, apply traditional drafting skills, utilize operating system software, and follow industrial practices and company procedures related to CAD work. Graduates will be able to efficiently perform all tasks related to producing final drawings and CAD models.

**Interested in this program?** Start the enrollment process by visiting the Apply to STLCC (<https://www.stlcc.edu/admissions/apply-to-stlcc>) page.

## At the completion of the program, students are expected to:

1. create 2D CAD drawings.
2. create 3D CAD models.
3. produce drawings that comply with industry standards.
4. incorporate and extract design properties in CAD files.
5. manage CAD files.

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	
<b>CAD Sequence</b>		
Select at least one course in each of the following areas for a total of at least 9 credit hours:		9
2-D CAD		
3-D CAD		
CAD Applications		
<b>Technical Elective</b>		
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 258	CAD Portfolio Preparation & Review	1

### 3-D CAD

Code	Title	Credit Hours
EGR 147	Introduction to Engineering Design	3
EGR 145	Computer Solids Modeling	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
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 the Apply to STLCC (<https://www.stlcc.edu/admissions/apply-to-stlcc>) page.

### At the completion of the program, students are expected to:

1. develop a professional high quality portfolio with items that are clearly introduced, well organized, creatively displayed, and show connection between items.
2. produce industry specific business documents, spreadsheets, databases, and presentations.
3. reflect on a critique of work, and suggest constructive practical alternatives.

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 the Apply to STLCC (<https://www.stlcc.edu/admissions/apply-to-stlcc>) page.

### At the completion of the program, students are expected to:

1. identify, clarify and solve technical problems using applied knowledge of math, science and engineering.
2. practice effective oral and written communication.
3. demonstrate ability to learn from and respond to rapidly occurring changes in automation, graphics and machine tool usage.

### Program of Study

Code	Title	Credit Hours
<b>Career General Education</b>		
ENG 101	College Composition I (MOTR ENGL 100)	3
COM 101	Oral Communication I (MOTR COMM 100)	3
MTH 140	Intermediate Algebra (or higher) <sup>1</sup>	3
XXX xxx	Social & Behavioral Sciences: Civics Requirement	3
XXX xxx	Social Science Elective	3
XXX xxx	Life or Physical Science elective	3
<b>Physical Education Activity</b>		
Select 2 credit hours		2
<b>Program Requirements</b>		
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
<b>3-D CAD Requirement</b>		
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	
<b>Fundamentals Course</b>		
Select one of the following:		3
ME 140	Introduction to Robotics	
ME 121	Computer Integrated Manufacturing	
GE 151	Introduction to Aerospace Engineering	
<b>Electives</b>		
Select 11 credit hours of the following elective areas:		11
ME XXX		
EGR XXX		
QC XXX		
GE XXX		
Total Credit Hours		63-66

<sup>1</sup> Except MTH 165 and MTH 166

## Criminal Justice: Law Enforcement Option, Associate in Applied Science

This program is currently going through a revision. Please see an advisor for more information, or visit the Criminal Justice (<https://www.stlcc.edu/programs-academics/pathways/human-studies/criminal-justice-law-enforcement.aspx>) page on the STLCC website.

## Criminal Justice: Law Enforcement Option, Certificate of Proficiency

This program is currently going through a revision. Please see an advisor for more information, or visit the Criminal Justice (<https://www.stlcc.edu/programs-academics/pathways/human-studies/criminal-justice-law-enforcement.aspx>) page on the STLCC website.

## 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 the Apply to STLCC (<https://www.stlcc.edu/admissions/apply-to-stlcc>) page.

## At the completion of the program, students are expected to:

1. work within established guidelines for safety and sanitation at all times.
2. prepare benchmark recipes demonstrating basic culinary techniques and understanding of equipment.
3. demonstrate a basic understanding of the various segments and career opportunities that comprise the expansive hospitality industry.
4. project a level of professionalism appropriate to hospitality industry standards.
5. interpret numerical data that will influence financial decisions in foodservice operations.
6. describe functions and food sources of the major nutrient in food preparation and storage.

## Program of Study

Code	Title	Credit Hours
<b>Career General Education</b>		
ENG 101	College Composition I (MOTR ENGL 100)	3
COM 101	Oral Communication I (MOTR COMM 100)	3
MTH 108	Elementary Applied Mathematics (or Higher Level Mathematics)	3
BIO 177	Food Science	3
SOC 101	Introduction to Sociology (MOTR SOCI 101)	3
HST 102	United States History from 1865 to the Present (MOTR HIST 102)	3
<b>Program Requirements</b>		
HTM 100	Introduction to the Hospitality Industry	3
CUL 101	Safety and Sanitation	1
DIT 115	Principles of Nutrition	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 230	Bar and Beverage Management	3
<b>Culinary Arts Courses</b>		
CUL 110	Food Preparation Practical I	3
CUL 115	Food Preparation Practical II	3
CUL 120	Food Preparation Practical III	3
BAP 150	Bakeshop Basics for Culinarians	3
CUL 201	Garde Manger	2
CUL 205	Global Cuisine	2
CUL 210	Nutritional Cooking	2
CUL 215	American Regional Cuisine	2
CUL 220	Introduction to a la Carte Cooking	2
CUL 250	Culinary Arts Capstone	6
Total Credit Hours		65



# 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 the Apply to STLCC (<https://www.stlcc.edu/admissions/apply-to-stlcc>) page.

## At the completion of the program, students are expected to:

1. apply current knowledge and skills based on industry standards to design cybersecurity solutions.
2. participate in the design and development of cybersecurity solutions as a member of a team.
3. demonstrate proficiency in the use of cybersecurity technologies using hands-on practical projects.
4. develop a business continuity plan using cybersecurity methodologies.
5. investigate, recover, document and analyze electronic evidence utilizing current tools and methodology.
6. develop a client-side browser interface.
7. employ methodologies for data validation and subsequent responses consistent with secure coding principles.
8. utilize permissions to control and secure access to files.
9. configure and activate operating system logging services for auditing purposes.
10. explain how data is securely moved across the network.
11. design, install, and configure a secure small business local area network solution.

Code	Title	Credit Hours
<b>Career General Education</b>		
ENG 101	College Composition I (MOTR ENGL 100)	3
ENG 102	College Composition II (MOTR ENGL 200)	3
or ENG 103	Report Writing	
MTH 186	Survey of Calculus (or higher)	4
XXX xxx	Natural Science/Mathematics Elective	3
XXX xxx	Social & Behavioral Sciences: Civics Requirement	3

XXX xxx	Social Science Elective	3
<b>Physical Education Activity</b>		
Select 2 credit hours		2
<b>Program Requirements</b>		
IT 100	Introduction to Cybersecurity	1
IS 112	Software and Hardware Architecture	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 the Apply to STLCC (<https://www.stlcc.edu/admissions/apply-to-stlcc>) page.

## At the completion of the program, students are expected to:

1. apply current knowledge and skills based on industry standards to design cybersecurity solutions.
2. participate in the design and development of cybersecurity solutions as a member of a team.

3. demonstrate proficiency in the use of cybersecurity technologies using hands-on practical projects.
4. develop a business continuity plan using cybersecurity methodologies.
5. investigate, recover, document and analyze electronic evidence utilizing current tools and methodology.
6. develop a client-side browser interface.
7. employ methodologies for data validation and subsequent responses consistent with secure coding principles.
8. utilize permissions to control and secure access to files.
9. configure and activate operating system logging services for auditing purposes.
10. explain how data is securely moved across the network.
11. design, install, and configure a secure small business local area network solution.

Code	Title	Credit Hours
MTH 140	Intermediate Algebra	3
IS 112	Software and Hardware Architecture	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 the Apply to STLCC (<https://www.stlcc.edu/admissions/apply-to-stlcc>) page.

## At the completion of the program, students are expected to:

1. design and implement database management systems that comply with current industry standards.
2. design and develop fast and secure data-centric applications using advanced SQL and reporting tools.
3. manage and maintain database systems for efficient storage, processing and data retrieval.
4. design and implement software that uses distributed large-scale data warehouse and cloud server systems.
5. document and mitigate against the common security vulnerabilities of databases.

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	
<b>Electives</b>		
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 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 and Wildwood

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 American mainstream culture.

Students in this program will learn to converse in American Sign Language, accurately expressing their own thoughts and accurately comprehending the thoughts of other signers on everyday topics.

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

**Interested in this program?** Start the enrollment process by visiting the Apply to STLCC (<https://www.stlcc.edu/admissions/apply-to-stlcc>) page.

## At the completion of the program, students are expected to:

1. converse for 5-to-10 minutes on everyday topics (introductions, self-care, home, family, daily activities, interests, and simple stories).
2. choose conceptually accurate basic-to-intermediate ASL vocabulary, including classifiers, to convey their ideas.
3. articulate signs on the hands, face, and body.
4. use ASL syntax to structure signs into a variety of sentence types.
5. fingerspell accurately and when appropriate; accurately decode receptive fingerspelling.
6. use standard terminology to discuss and explain ASL signs and syntax.
7. discuss basic information about the American Deaf community (origins of ASL, Deaf education, assistive technology, modes of Deaf communication, issues in Deafness).

Code	Title	Credit Hours
DCS 104	American Sign Language I (MOTR LANG 105)	5
DCS 105	American Sign Language II (MOTR LANG 106)	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

This program is currently going through a revision. Please see an advisor for more information, or visit the Deaf Communication Studies (<https://www.stlcc.edu/programs-academics/pathways/arts-communication/deaf-communication-studies-interpreter.aspx>) page on the STLCC website.

**Interested in this program?** Start the enrollment process by visiting the Apply to STLCC (<https://www.stlcc.edu/admissions/apply-to-stlcc>) page.

## Dental Assisting, Certificate of Proficiency

### Forest Park

The Dental Assisting 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. Expanded Functions Dental Assisting curriculum is offered to students. Graduates are certified to perform these functions and can assume expanded roles on the dental health care team as delegated by their employer (dentist). These highly skilled dental assistant professionals are 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.

**Interested in this program?** Start the enrollment process by visiting the Apply to STLCC (<https://www.stlcc.edu/admissions/apply-to-stlcc>) page.

## At the completion of the program, students are expected to:

1. demonstrate patient education and management skills.
2. perform general chair-side skills.
3. manage infection and hazard control protocol consistent with professional guidelines.
4. perform laboratory procedures.
5. perform radiographic procedures.

Code	Title	Credit Hours
BIO 207	Anatomy and Physiology I	4
ENG 101	College Composition I (MOTR ENGL 100)	3
COM 101	Oral Communication I (MOTR COMM 100)	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
DA 204	Expanded Functions IV	1
Total Credit Hours		45

# Dental Hygiene, Associate in Applied Science

## Forest Park

The dental hygiene program is a 2-year, full time program that begins each fall and is designed to prepare students for licensure and employment in the State of Missouri. The program includes a general education component as well as a concentration in dental hygiene. Graduates of this program may transfer to a four-year college or university to obtain a bachelor of science degree. Acceptance of credits earned is at the discretion of the receiving institution.

Students in this program get real life hands on experience at the public dental hygiene clinic at the Forest Park campus. The teaching environment covers classroom work, laboratory experience and actual clinical practice.

While enrolled in this program, students will learn how to conduct patient assessments, perform dental diagnostic tests including radiographs, administer local anesthesia, instruct patients in dental disease control procedures, scaling and polishing procedures for the removal of hard and soft deposits, dental health procedures and more. 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 (MOTR CHEM 100L)	5
BIO 203	General Microbiology I	4

These prerequisites must be satisfied prior to entry into the program. A minimum 3.0 GPA is required in these four science prerequisite courses. In addition, current CPR Basic Life Support with AED certification is required when starting the program and must be maintained throughout the course of the program.

**Interested in this program?** Start the enrollment process by visiting the Apply to STLCC (<https://www.stlcc.edu/admissions/apply-to-stlcc>) page.

## At the completion of the program, students are expected to:

1. apply an ethical code to behavior and decision-making in all aspects of the practice of dental hygiene, demonstrating integrity and honesty.
2. ensure the privacy and confidentiality of the patient/client for all dental hygiene encounters and accuracy of patient records.
3. provide care that is humane, empathetic and caring for all individuals and communities without discrimination.
4. comply with state and federal laws while providing the legal spectrum of dental hygiene care services.

5. take responsible dental hygiene actions using evidence-based dental hygiene interventions.
6. communicate professional knowledge effectively with diverse populations, both orally and in writing.
7. sustain lifelong learning and continuous self-assessment in order to provide contemporary clinical care and facilitate professional growth.
8. advance the profession through leadership, service activities and affiliation with professional organizations.
9. promote the values of the dental hygiene profession to the public, and to other health care professionals and organizations.
10. identify and evaluate opportunities for pursuing alternative dental hygiene career/practice pathways in non-traditional settings.
11. promote the values of oral and general health to the public and empower individuals/populations to accept responsibility for health by adopting and adhering to self-care regimens.
12. identify the oral health needs, and risk factors, of individuals/populations and facilitate the development of care strategies appropriate for their value/belief systems.
13. provide screening, referral and educational services that allow and encourage patients/clients to access the resources of the health care system.
14. identify services and agencies that promote oral health in order to facilitate access to care.
15. assess, plan implement and evaluate community-based oral-health programs.
16. provide oral health services in a variety of delivery settings within a community.
17. evaluate financing of the health care delivery system and its impact on access to oral health care.
18. obtain, review and update complete histories recognizing multicultural differences in populations.
19. recognize medications and health conditions that require modifications in treatment.
20. identify the patient/client at risk for a medical emergency, and be prepared to prevent, or manage such emergencies.
21. accurately perform a comprehensive dental hygiene examination, analyze and interpret assessment data, and formulate a dental hygiene diagnosis congruent with the diagnosis of the dentist and other health professionals.
22. identify the need for radiographic examination, expose and produce radiographs of diagnostic quality.
23. identify dental and/or medical risk factors that require dental hygiene interventions.
24. establish a sequential plan of education, preventive, and therapeutic care based on the dental hygiene diagnosis, using an evidence-based approach.
25. prioritize oral health goals in a thorough case presentation and obtain informed consent.
26. communicate the dental hygiene care plan to the dentist and other collaborative health care team members to determine its appropriateness with the overall plan for total oral health care.
27. evaluate and implement accepted methods of disease prevention transmission.
28. manage pain and anxiety using accepted clinical and behavior management methods.
29. perform basic scaling and advanced periodontal debridement procedures without causing trauma to hard and soft tissues.
30. select and administer appropriate preventive and/or therapeutic agents, providing pre- and post- treatment strategies.

31. review and incorporate work environment procedures to minimize the incidence of occupational hazards.
32. determine the outcomes of dental hygiene interventions and maintenance programs using appropriate Indices and evaluation methods.
33. evaluate patient/client satisfaction with care received and oral health status achieved.

Program of Study

Code	Title	Credit Hours
<b>Career General Education</b>		
COM 101	Oral Communication I (MOTR COMM 100)	3
ENG 101	College Composition I (MOTR ENGL 100)	3
PSY 200	General Psychology (MOTR PSYC 100)	3
SOC 101	Introduction to Sociology (MOTR SOCI 101)	3
XXX xxx	Social & Behavioral Sciences: Civics Requirement	3
<b>Program Requirements</b>		
DHY 150	Concepts in Clinical Dental Hygiene I: Pre-clinic	3
DHY 152	Clinical Dental Hygiene I: Pre-Clinic	3
DHY 154	Periodontics I	2
DHY 155	Dental Radiology	2
DHY 156	Dental Radiology Lab	1
DHY 157	Oral Anatomy	2
DHY 158	Biomedical Science for the Dental Hygienist	2
DHY 159	Dental Medical Emergencies	1
DHY 160	Concepts in Clinical Dental Hygiene II	3
DHY 162	Clinical Dental Hygiene II	5
DHY 164	Periodontics II	2
DHY 167	Anatomy & Embryology of the Head & Neck	3
DHY 168	General & Oral Pathology	2
DHY 169	Ethics in Dental Hygiene	1
DHY 172	Clinical Dental Hygiene: Summer Clinic	2
DHY 273	Pain Control	2
DHY 250	Concepts in Clinical Dental Hygiene III	2
DHY 251	Concepts in Clinical Dental Hygiene III: Lab	1
DHY 252	Clinical Dental Hygiene III	5
DHY 257	Dental Materials	1
DHY 258	Dental Pharmacology	2
DHY 259	Dental Nutrition & Biochemistry	2
DHY 260	Concepts IV: Transitioning into Professional Dental Hygiene Practice	2
DHY 262	Clinical Dental Hygiene IV	5
DHY 263	Dental Public Health	2
Total Credit Hours		73

## Diagnostic Medical Sonography, Certificate of Proficiency

### Forest Park

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.

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 I and II with lab (two semester course sequence of at least 8 credit hours)
  - Physics or Physical Science Lecture
  - Precalculus Algebra or Introductory Statistics
  - Medical Terminology
  - English Composition
  - Oral Communications
- Cumulative GPA: 3.0
- Cumulative GPA for Math and Sciences: 3.0 (Physics or Physical Science Lecture, Anatomy and Physiology I and II, Precalculus Algebra or Introductory Statistics)
- 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 the Apply to STLCC (<https://www.stlcc.edu/admissions/apply-to-stlcc>) page.

## At the completion of the program, students are expected to:

1. perform sonographic examinations of the abdomen, superficial structures, noncardiac chest, and the gravid and nongravid pelvis according to protocol guidelines established by national professional organizations.
2. identify the sonographic appearance of normal anatomic structures, including anatomic variants and normal Doppler patterns with vascular introduction.
3. identify and appropriately document the abnormal sonographic and Doppler patterns of disease processes, pathology, and pathophysiology of the abdomen, superficial structures, non-cardiac chest, and gravid and nongravid pelvis.
4. demonstrate proficiency in the performance of M-mode, two-dimensional, and Doppler (pulsed wave, continuous wave, color flow and power) echocardiographic studies.
5. identify the sonographic appearance of normal cardiac anatomy, including anatomic variants and normal Doppler patterns with vascular introduction.

6. identify and appropriately document the abnormal sonographic and Doppler patterns of cardiac disease\processes, pathology, and pathophysiology.
7. discuss basic principles in ultrasound, vascular ultrasound, and ultrasound physics and instrumentation.
8. identify sectional anatomy, hemodynamics, pathophysiologic principles, and pattern recognition as it relates to vascular sonography.

Program of Study

Code	Title	Credit Hours
<b>Core Curriculum</b>		
DMS 103	Ultrasound Physics and Instrumentation I	2
DMS 104	Ultrasound Physics and Instrumentation II	2
DMS 201	Ultrasound Physics and Instrumentation III	2
<b>Options</b>		
Select one of the following options:		37
Cardiac Sonography		
Medical Sonography		
Total Credit Hours		43

## 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	3
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		37

### 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	3
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		37

## 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 electronics, 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, transit maintenance facilities, fleet carriers, and miscellaneous other vehicle-based operations.

**Interested in this program?** Start the enrollment process by visiting the Apply to STLCC (<https://www.stlcc.edu/admissions/apply-to-stlcc>) page.

## At the completion of the program, students are expected to:

1. diagnose, service, and repair truck engines.
2. diagnose, service, and repair truck braking systems.
3. diagnose, service, and repair truck steering and suspension systems.
4. diagnose, service, and repair truck electrical and electronic systems.
5. diagnose, service, and repair truck HVAC systems.
6. perform truck preventive maintenance.
7. diagnose, service, and repair truck drivetrains and axles.

Program of Study

Code	Title	Credit Hours
<b>Career General Education</b>		
ENG 101	College Composition I (MOTR ENGL 100)	3
MTH 108	Elementary Applied Mathematics (or higher)	3
BUS 104	Introduction to Business Administration	3
COM 101	Oral Communication I (MOTR COMM 100)	3
PSI 101	Physical Science (MOTR PHYS 110)	3
XXX xxx	Social & Behavioral Sciences: Civics Requirement	3
<b>Program Requirements</b>		
DIE 100	Introduction to Diesel Technology	3
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 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		60

## Diesel Technology, Certificate of Proficiency

### Forest Park

The Diesel Technology Certificate of Proficiency 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 electronics, 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, transit maintenance facilities, fleet carriers, and miscellaneous other vehicle-based operations.

**Interested in this program?** Start the enrollment process by visiting the Apply to STLCC (<https://www.stlcc.edu/admissions/apply-to-stlcc>) page.

### At the completion of the program, students are expected to:

1. diagnose, service, and repair truck engines.
2. diagnose, service, and repair truck braking systems.
3. diagnose, service, and repair truck steering and suspension systems.
4. diagnose, service, and repair truck electrical and electronic systems.
5. diagnose, service, and repair truck HVAC systems.
6. perform truck preventive maintenance.
7. diagnose, service, and repair truck drivetrains and axles.

Code	Title	Credit Hours
<b>Program Requirements</b>		
DIE 100	Introduction to Diesel Technology	3
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 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		42

## Diesel Technology, Certificate of Specialization

### Forest Park

The Diesel Technology Certificate of Specialization 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: suspension and steering, brakes, electrical and electronics, and preventive maintenance. Graduates will be competent for entry-level positions in new vehicle dealerships, truck and bus leasing companies, street and highway departments, transit maintenance facilities, fleet carriers, and miscellaneous other vehicle-based operations.

**Interested in this program?** Start the enrollment process by visiting the Apply to STLCC (<https://www.stlcc.edu/admissions/apply-to-stlcc>) page.

### At the completion of the program, students are expected to:

1. diagnose, service, and repair truck steering and suspension systems.
2. diagnose, service, and repair truck electrical and electronic systems.
3. diagnose, service, and repair truck braking systems.
4. perform truck preventive maintenance.

Code	Title	Credit Hours
<b>Program Requirements</b>		
DIE 100	Introduction to Diesel Technology	3
DIE 102	Medium/Heavy Truck Suspension and Steering	3
DIE 103	Medium/Heavy Truck Electricity	3
DIE 106	Medium/Heavy Truck Brakes	3
DIE 107	Medium/Heavy Truck Electronics	3
DIE 201	Preventive Maintenance Inspection	3
Total Credit Hours		18

## Digital Media--Digital Photography, Certificate of Specialization

### Florissant Valley, Forest Park, and Meramec

This 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 the Apply to STLCC (<https://www.stlcc.edu/admissions/apply-to-stlcc>) page.

### At the completion of the program, students are expected to:

1. effectively utilize commercially applicable principles of digital photography.

- apply knowledge and demonstrate skills in contemporary digital imaging and editing software.
- understand the setup and management of computer hardware, software, peripherals and networks.
- utilize tools and methods of color management, color profiling, digital printing, and various substrates for digital output.
- undertake critical thinking and problem solving associated with digital and commercial photography.
- communicate ideas both visually and verbally through professional presentation of portfolio of photographic works and evaluated by outside experts.

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 or AT 106	Artificial Light Photography Motion Media Design	3
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 the Apply to STLCC (<https://www.stlcc.edu/admissions/apply-to-stlcc>) page.

### At the completion of the program, students are expected to:

- utilize the technical skills, creative abilities, and professional practices required in the areas of Interactive and Graphic Design.
- understand and employ classic design principles; such as scale, proportion, rhythm, contrast, emphasis and unity.
- identify media project scope and outcomes and be able to review and analyze technical requirements.
- be conversant in the language and terms of the industry.
- be skilled in the current computer-based software and hardware tools of the industry.
- communicate ideas both visually and verbally through professional presentation of a portfolio of Interactive and Graphic Design works and evaluated by outside experts.

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 or AT 106	Web Design II Motion Media Design	3
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 the Apply to STLCC (<https://www.stlcc.edu/admissions/apply-to-stlcc>) page.

### At the completion of the program, students are expected to:

- use technical skills, creative abilities, and professional practices required in the areas of Video Editing and Animation.
- identify media project scope and outcomes and be able to review and analyze technical requirements.
- be conversant in the language and terms of the industry.
- be skilled in the current computer-based software and hardware tools of the industry.
- build rapid prototypes and construct wire frames that specify the content of projects.
- communicate ideas both visually and verbally through professional presentation of a portfolio of video editing and animation works and evaluated by outside experts.

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 or ART 280	Motion Media Design Final Cut	3
AT 234	Fundamentals of Animation	3
AT 283	Digital Media Portfolio	2
Total Credit Hours		23

## 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 the Apply to STLCC (<https://www.stlcc.edu/admissions/apply-to-stlcc>) page.

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 (MOTR ENGL 100)	3
<b>Electives</b>		
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 the Apply to STLCC (<https://www.stlcc.edu/admissions/apply-to-stlcc>) page.

## At the completion of the program, students are expected to:

1. engage in analysis, synthesis, troubleshoot and solve problems of electrical, electronics and biomedical systems.
2. identify symbols and terminology of electrical/electronic engineering technology; draw and read schematics, block diagrams and wiring diagrams; understand the functions and applications of electrical components and circuits.
3. assemble, connect, and analyze breadboard and final assembly electronic circuits from schematic diagrams.
4. apply mathematics and modern computation methods in the solution and troubleshooting of electrical, electronic and digital circuits.
5. identify the thermal and mechanical effects in defining and troubleshooting form, fit and function in electrical/electronic prototyping.
6. properly use and care for instruments, set up test instruments, read, record and interpret test data.
7. meet industry's expectations with regard to skills, knowledge and safe work habits.
8. exhibit effective interpersonal and team skills, as well as effective oral and written communication skills in on-the-job situations.

## Program of Study

Code	Title	Credit Hours
<b>Career General Education</b>		
ENG 101	College Composition I (MOTR ENGL 100)	3
Select one of the following:		3
ENG 102	College Composition II (MOTR ENGL 200)	
ENG 103	Report Writing	
COM 101	Oral Communication I (MOTR COMM 100)	
XXX xxx	Social & Behavioral Sciences: Civics Requirement	3
XXX xxx	Social Science Requirement	3

### Physical Education Activity

Select 2 credit hours	2
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### Math Requirement

Select one of the following: 5-7

MTH 185	Precalculus (MOTR MATH 150)
MTH 160 & MTH 170	Precalculus Algebra (MOTR MATH 130) and Precalculus Trigonometry

**Science Requirement**

Select one of the following: 4-5

PHY 111	College Physics I
CHM 101	Fundamentals of Chemistry I (MOTR CHEM 100L)
BIO 111	Introductory Biology I (MOTR BIOL 100L)
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.

Total Credit Hours 64-67

# 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 the Apply to STLCC (<https://www.stlcc.edu/admissions/apply-to-stlcc>) page.

## At the completion of the program, students are expected to:

1. communicate with health care professionals using correct medical terminology while accurately documenting patient care information.
2. demonstrate proficiency in pre-hospital assessments and treatments, including using critical thinking skills to differentiate multiple causes and outcomes.
3. demonstrate airway management technique.
4. recognize special patient population emergencies and describe and demonstrate proper emergency care.
5. identify safety and health hazards and apply the correct precautions.
6. apply knowledge of anatomy and physiology, medical, trauma, special care patients, ambulance operations and medicolegal and ethical issues.

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 the Apply to STLCC (<https://www.stlcc.edu/admissions/apply-to-stlcc>) page.

Program of Study

Code	Title	Credit Hours
<b>General Education</b>		
ENG 101	College Composition I (MOTR ENGL 100)	3
ENG 102	College Composition II (MOTR ENGL 200)	3
or ENG 103	Report Writing	
MTH 210	Analytic Geometry and Calculus I (or higher)	5

CHM 105	General Chemistry I (MOTR CHEM 150L)	5
PHY 122	Engineering Physics I	5
XXX xxx	Social Science Requirement	3
XXX xxx	Social & Behavioral Sciences: Civics Requirement	3

#### Physical Education Activity

Select 2 credit hours		2
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#### 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 <sup>1</sup>	
ME 249	Materials and Metallurgy <sup>1</sup>	
CE 240	Surveying I <sup>1</sup>	
IS 256	C++ Programming	

##### Science and Mathematics Electives

BIO 117	Conservation and Ecology <sup>1</sup>	
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 (MOTR GEOL 100L) <sup>1</sup>	
MTH 215	Linear Algebra	

##### Recommended General Education Electives <sup>2</sup>

ART 133	Graphic Design I	
COM 101	Oral Communication I (MOTR COMM 100)	
ECO 151	Principles of Macroeconomics (MOTR ECON 101)	

HST 119	The Modern World	
PHL 111	Environmental Ethics	
PSC 201	International Relations (MOTR POSC 201)	
PSY 200	General Psychology (MOTR PSYC 100)	
PSY 206	Introduction to Social Psychology	
SOC 101	Introduction to Sociology (MOTR SOCI 101)	
SOC 202	Social Problems	

Total Credit Hours		69-71
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<sup>1</sup> Check with transfer institution to determine course acceptability.

<sup>2</sup> Substitutions may be made with permission from an advisor.

## 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 at the Forest Park campus. 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 helping 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 the Apply to STLCC (<https://www.stlcc.edu/admissions/apply-to-stlcc>) page.

## At the completion of the program, students are expected to:

1. demonstrate competency as a funeral director, as defined by state and nationally accepted standards.
2. explain how the treatment, handling, and disposition of the dead human body meets the sociological, psychological, theological, physical, and legal needs of the family and the community.
3. apply knowledge of the state and federal laws regulating funeral service practice.

- practice varieties of funeralization rites and ceremonies, as seen in major religious and ethnic subcultures, fraternal, and military groups in the United States.
- counsel families about funerals prior to a death, during the time of the funeral, and after the funeral.
- adhere to high standards of ethical conduct in order to promote the dignity of funeral service.
- utilize research to expand knowledge in the field of funeral service.

Code	Title	Credit Hours
COM 101	Oral Communication I (MOTR COMM 100)	3
PSY 200	General Psychology (MOTR PSYC 100)	3
ACC 100	Applied Accounting	3
IS 116	Computer Literacy	3
FSE 101	History and Sociology of Funeral Service	3
FSE 107	Funeral Service Merchandising	2
FSE 201	Funeral Home Management	3
FSE 106	Mortuary Law and Ethics	3
FSE 102	Dynamics of Grief Management	3
FSE 103	Funeral Directing	3
Total Credit Hours		29

## 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 prepares students for any entry level position as a funeral director and embalmer in a funeral home. The Funeral Service degree program at St. Louis Community College is accredited by the American Board of Funeral Service Education (ABFSE) 992 Mantua Pike, Suite 108, Woodbury Heights, NJ 08097 (816) 233-3747. Web: [www.absfe.org](http://www.absfe.org) (<http://catalog.stlcc.edu/programs/funeral-service-education-aas/www.absfe.org>). 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) (<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](mailto:dcoughran@stlcc.edu), or by telephone, 314-644-9327.

Please check the college website <https://www.stlcc.edu/programs-academics/pathways/human-studies/funeral-services-education.aspx> for student learning outcomes and additional updates and information regarding the accreditation status of the program.

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 in 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 the Apply to STLCC (<https://www.stlcc.edu/admissions/apply-to-stlcc>) page.

## At the completion of the program, students are expected to:

- demonstrate competency as a funeral director/embalmer, as defined by nationally accepted standards.
- explain how the treatment, handling, and disposition of the dead human body meet the sociological, psychological, theological, physical, and legal needs of the family and the community.
- apply knowledge of the state and federal laws regulating funeral service practice.
- complete successfully both national and state licensing examinations.
- practice varieties of funeralization rites and ceremonies, as seen in major religious and ethnic subcultures, fraternal, and military groups in the United States.
- counsel families about funerals prior to a death, during the time of the funeral, and continue to assist as long as needed.
- demonstrate an active role in the community to provide service and be a community resource to client families.
- interpret the role of funeral director as a guardian of public health and the safety measures that must be followed when dealing with dead human remains.
- describe the high standards of ethical conduct, which must be adhered to in order to promote the dignity of funeral service.
- utilize research to expand knowledge in the field of funeral service.
- establish an active role in promoting and attending continuing education programs offered in the profession.

### Program of Study

Code	Title	Credit Hours
<b>Career General Education</b>		
BIO 111	Introductory Biology I (MOTR BIOL 100L)	4
ENG 100	Career English	3
or ENG 101	College Composition I (MOTR ENGL 100)	
MTH 108	Elementary Applied Mathematics (or higher)	3
PSY 200	General Psychology (MOTR PSYC 100)	3
XXX xxx	Social & Behavioral Sciences: Civics Requirement	3
IS 116	Computer Literacy	3
COM 101	Oral Communication I (MOTR COMM 100)	3
ACC 100	Applied Accounting	3
<b>Program Requirements</b>		
FSE 101	History and Sociology of Funeral Service	3
BIO 103	Problems in Anatomy	3
FSE 102	Dynamics of Grief Management	3
FSE 103	Funeral Directing	3
FSE 104	Funeral Directing Practicum	2
FSE 105	Funeral Directing Practicum II	2
FSE 106	Mortuary Law and Ethics	3
FSE 107	Funeral Service Merchandising	2
FSE 201	Funeral Home Management	3
FSE 210	Embalming	3
FSE 203	Embalming Practicum I	2
FSE 205	Embalming Practicum II	2
FSE 206	Restorative Art	4
FSE 211	Microbiology for Funeral Service	3

FSE 209	Pathology for Funeral Service	3
FSE 208	Funeral Service Seminar	3
FSE 108	Embalming Chemistry	2
Total Credit Hours		71

## 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 the Apply to STLCC (<https://www.stlcc.edu/admissions/apply-to-stlcc>) page.

### At the completion of the program, students are expected to:

1. identify the elements of art and principles of design that are present in examples of fine and applied art.
2. articulate an aesthetic response using appropriate vocabulary to describe and analyze works of art they encounter.
3. create a personal portfolio of artwork that demonstrates competent use of materials and an understanding of relevant concepts.
4. explain what constitutes exhibition-worthy and/or professional caliber work.

### Program of Study

Code	Title	Credit Hours
<b>General Education</b>		
ENG 101	College Composition I (MOTR ENGL 100)	3
ENG 102	College Composition II (MOTR ENGL 200)	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 (MOTR ARTS 101)	3
ART 102	Art History II (MOTR ARTS 102)	3
XXX xxx	Science Elective	3
<b>Physical Education Activity</b>		
Select 2 credit hours		2
<b>Program Requirements</b>		
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 the Apply to STLCC (<https://www.stlcc.edu/admissions/apply-to-stlcc>) page.

## At the completion of the program, students are expected to:

1. be skilled in drawing.
2. understand design principles of scale, proportion, rhythm, contrast, emphasis and unity.
3. be conversant in the language of the design industry and use of basic artists tools.
4. apply design skills and use artists tools and techniques to generate visual design solutions and creative problem solve.
5. be skilled in the electronic software tools of the art and design industry.
6. communicate ideas both visually and verbally through professional presentation of the design concept and ideas.
7. prepare final designs for print or electronic publication as a traditional printed piece, a web site or an ipad application, or produce final art using appropriate software.

## Program of Study

Code	Title	Credit Hours
<b>Career General Education</b>		
ENG 101	College Composition I (MOTR ENGL 100)	3
ENG 102	College Composition II (MOTR ENGL 200)	3
or COM 101	Oral Communication I (MOTR COMM 100)	
or COM 107	Public Speaking (MOTR COMM 110)	
AT 242	History of Graphic Communications	3
XXX xxx	Social & Behavioral Sciences: Civics Requirement	3
XXX xxx	Science/Mathematics Requirement	6
<b>Physical Education Activity</b>		
Select 2 credit hours		2
<b>Program Requirements</b>		
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
<b>Focus Area</b>		
Select one focus area from the following:		14-15
Graphic and Interactive Design		
Illustration and animation design		
<b>Total Credit Hours</b>		<b>64-65</b>

## 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
<b>Total Credit Hours</b>		<b>15</b>

### 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)		
<b>Total Credit Hours</b>		<b>14</b>

### 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 239	Illustration I	3
ART 240	Illustration II	3
ART 249	Digital Photography II	3
ART 275	Photo Imaging I: Photoshop	3
ART 280	Final Cut	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

## 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 the Apply to STLCC (<https://www.stlcc.edu/admissions/apply-to-stlcc>) page.

### At the completion of the program, students are expected to:

- visually express themselves via drawing or illustration.
- use basic artist tools and converse in the language of the design industry.
- apply design principles of scale, proportion, rhythm, contrast, emphasis and unity to generate visual design solutions and creative problem solve.
- communicate ideas both visually and verbally through professional presentation of the design concept and ideas.
- develop and apply comprehensive design concepts across different materials.

## Program of Study

Code	Title	Credit Hours
<b>General Education</b>		
ENG 101	College Composition I (MOTR ENGL 100)	3
ENG 102	College Composition II (MOTR ENGL 200)	3
or COM 101	Oral Communication I (MOTR COMM 100)	
XXX xxx	Social & Behavioral Sciences: Civics Requirement	3
XXX xxx	Science Elective	3
Select one of the following:		3-4
MTH 140	Intermediate Algebra (140 level or higher) <sup>1</sup>	
Science Elective		
<b>Physical Education Activity</b>		
Select 2 credit hours		2
<b>Program Requirements</b>		
ART 107	Design I	2
ART 108	Design II	2
ART 109	Drawing I	3

<sup>1</sup> 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 the Apply to STLCC (<https://www.stlcc.edu/admissions/apply-to-stlcc>) page.

## At the completion of the program, students are expected to:

1. use current knowledge and skills based on industry standards to successfully manage information in the Health Information Technology field.
2. demonstrate proficiency in verifying completeness, accuracy, and quality of medical records information management.
3. develop a professional strategy in preparation to find employment in the Health Information Technology or related field.

### Program of Study

Code	Title	Credit Hours
<b>Career General Education</b>		
ENG 101	College Composition I (MOTR ENGL 100)	3
COM 101	Oral Communication I (MOTR COMM 100)	3
MTH 160	Precalculus Algebra (MOTR MATH 130) (or higher)	4
BIO 207 & BIO 208	Anatomy and Physiology I and Anatomy and Physiology II	8
XXX xxx	Social Science Elective	3
XXX xxx	Social & Behavioral Sciences: Civics Requirement	3
<b>Physical Education Activity</b>		
Select 2 credit hours		2
<b>Foundation Courses</b>		
HIT 101	Medical Terminology and Language	4
HIT 104	Basic Principles of Disease	2
HIT 105	Pharmacology for Health Information Technology Professionals	1
IS 116	Computer Literacy	3
<b>Area of Concentration</b>		
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

The Associate in Applied Science in Horticulture centers on 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 the Apply to STLCC (<https://www.stlcc.edu/admissions/apply-to-stlcc>) page.

## At the completion of the program, students are expected to:

1. identify, utilize and grow an array of plant material in a landscape, greenhouse or garden center setting.
2. gather accurate information for soil testing.
3. analyze soil test results for proper plant selection or changes to soil conditions.
4. manage landscape areas and gardens using proper and professional methods of pruning, planting and fertilizing learned and practiced in the classroom.
5. develop a landscape maintenance schedule that utilizes correct horticulture methods of management.
6. identify plant pests, insects, diseases and weeds using ethical and sustainable methods.
7. design, schedule and install a residential or commercial landscape.
8. develop a business plan for a small green industry related business.
9. apply the methods of propagating plant material using the latest technology available as practiced in a laboratory setting.
10. demonstrate the ability to collaborate with community landscape programs tending gardens and developing tree care programs.
11. maintain turf grass areas using up to date methods of seeding, installing, watering, fertilizing and mowing learned and practiced in the classroom.
12. operate a greenhouse using methods learned in the classroom and laboratory.

### Program of Study

Code	Title	Credit Hours
<b>Career General Education</b>		
ENG 100	Career English	3
or ENG 101	College Composition I (MOTR ENGL 100)	
COM 101	Oral Communication I (MOTR COMM 100)	3
CHM 109	Chemistry and the Environment (MOTR CHEM 100L)	4
MTH 140	Intermediate Algebra (or higher)	3
PSY 200	General Psychology (MOTR PSYC 100)	3
XXX xxx	Social & Behavioral Sciences: Civics Requirement	3
<b>Program Requirements</b>		
Select 6-7 credit hours of the following:		6-7
ACC 100	Applied Accounting	
or ACC 110	Financial Accounting I	
BLW 101	Business Law I	
BUS 101	Small Business Management	
MGT 101	Introduction to Supervision	



MKT 104	Principles of Selling	
<b>Horticulture Core</b>		
HRT 101 or BIO 124	Introductory Horticulture General Botany I (MOTR BIOL 100LB)	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
<b>Select one of the following focus areas:</b>		6-9
Turfgrass Management		
Landscape Design		
Plant Production and Marketing		
Landscape Management		
General Horticulture		
<b>Horticulture Electives</b>		6
HRT 235	Annuals and Vegetables	
Select 3-6 credit hours from Focus Areas		
Total Credit Hours		61-65

## 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

# Horticulture, Certificate of Proficiency

## 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 the Apply to STLCC (<https://www.stlcc.edu/admissions/apply-to-stlcc>) page.

## At the completion of the program, students are expected to:

- grow an array of plant material in a landscape, greenhouse, or garden center setting.
- utilize soil test results for proper plant selection or changes to soil conditions.
- manage landscape areas and gardens methods of pruning, planting, and fertilizing.
- develop a landscape maintenance schedule.
- manage plant pests, insects, diseases, and weeds using ethical and sustainable methods.
- identify the botanical components of plants and their contributions to the life cycle of a plant.

## Program of Study

Code	Title	Credit Hours
<b>Horticulture Core</b>		
HRT 101 or BIO 124	Introductory Horticulture General Botany I (MOTR BIOL 100LB)	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
<b>Select one of the following focus areas:</b>		6-9
Turfgrass Management		

Landscape Design	
Plant Production and Marketing	
Landscape Management	
General Horticulture	
<b>Horticulture Electives</b>	<b>6</b>
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 Management, Associate in Applied Science

## Forest Park

The Hospitality Management curriculum will prepare students for first-level management trainee positions in the hospitality industry. Coursework will introduce students to the hospitality industry segments of event planning, food and beverage, hotel, and travel 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 the Apply to STLCC (<https://www.stlcc.edu/admissions/apply-to-stlcc>) page.

## At the completion of the program, students are expected to:

- work within established guidelines for safety at all times.
- demonstrate a basic understanding of culinary skills and kitchen management.
- identify the various segments and career opportunities of the hospitality industry.
- describe the role of marketing, management, human resources, law, procurement, and customer service in the hospitality industry.
- communicate effectively in supervisory and leadership positions.
- demonstrate higher order thinking skills when solving problems in hospitality settings.
- interpret numerical data that will influence financial decisions in hospitality operations.
- apply appropriate business solutions to work-related situations in the hospitality industry.
- project a level of professionalism appropriate to hospitality industry standards.
- define the role of the hospitality professional in contemporary life.

## Program of Study

Code	Title	Credit Hours
<b>Career General Education</b>		
ENG 101	College Composition I (MOTR ENGL 100)	3
COM 101	Oral Communication I (MOTR COMM 100)	3
MTH 108	Elementary Applied Mathematics (or higher)	3
BIO 177	Food Science	3
SOC 101	Introduction to Sociology (MOTR SOCI 101)	3
HST 102	United States History from 1865 to the Present (MOTR HIST 102)	3

## Program Requirements

ACC 100	Applied Accounting	3
HTM 100	Introduction to the Hospitality Industry	3
CUL 101	Safety and Sanitation	1
CUL 150	Culinary Essentials	3
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
HTM 225	Hotel Operations	3
HTM 230	Bar and Beverage Management	3
HTM 240	Workplace Learning: Hospitality	4
HTM 245	Meetings and Event Planning	3
HTM 275	Travel and Tourism	3

HTM 280	Foodservice Management Lab	3
Total Credit Hours		65

## Human Services, Associate in Applied Science

This program is currently going through a revision. Please see an advisor for more information, or visit the Human Services (<https://www.stlcc.edu/programs-academics/pathways/human-studies/human-services.aspx>) page on the STLCC website.

**Interested in this program?** Start the enrollment process by visiting the Apply to STLCC (<https://www.stlcc.edu/admissions/apply-to-stlcc>) page.

## 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 the Apply to STLCC (<https://www.stlcc.edu/admissions/apply-to-stlcc>) page.

### At the completion of the program, students are expected to:

1. apply end-user communication skills.
2. exhibit good customer service skills.
3. troubleshoot computer problems.
4. apply best practices in help desk operations.
5. perform user needs analysis and assessment.
6. configure of end-user computer systems.
7. train computer users.
8. document problems and resolution.

Code	Title	Credit Hours
<b>Required Courses</b>		
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

## 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 the Apply to STLCC (<https://www.stlcc.edu/admissions/apply-to-stlcc>) page.

### At the completion of the program, students are expected to:

1. develop and apply free-hand drawing, hand drafting, computer drafting, rendering and oral presentation skills to successfully communicate design ideas.
2. develop creative projects using a systematic approach to the design processes.
3. successfully apply the principles and elements of design to design solutions.
4. gain and apply knowledge of interior construction, building systems, building codes, fire codes, and life safety codes to design solutions.
5. apply knowledge of architecture, interiors and art within a historical and cultural context.
6. apply knowledge of visual art skills in two dimensional and three dimensional design to design solutions.
7. apply knowledge of color and light and human response to design solutions.
8. the accepted ethical standards for the industry and the commitment of a professional interior designer to the built environment.
9. apply knowledge of the effects of behavioral science and human factors to design solutions.
10. successfully select interior finishes, furniture and equipment appropriate for the designed interior environment. Students will then successfully prepare interior finish, furniture and fixture specifications.
11. identify successful sustainable design solutions and apply them to studio coursework.

## Program of Study

Code	Title	Credit Hours
<b>Career General Education</b>		
ENG 101	College Composition I (MOTR ENGL 100)	3
ENG 102	College Composition II (MOTR ENGL 200)	3
or ENG 103	Report Writing	
PSY 200	General Psychology (MOTR PSYC 100)	3
XXX xxx	Social & Behavioral Sciences: Civics Requirement	3
XXX xxx	Science/Mathematics Requirement	6
<b>Physical Education Activity</b>		
Select 2 credit hours		2
<b>Program Requirements</b> <sup>1</sup>		
ART 102	Art History II (MOTR ARTS 102)	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
<b>Approved Elective</b> <sup>1</sup>		
Select one of the following:		3
ART 101	Art History I (MOTR ARTS 101)	
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

<sup>1</sup> 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 the Apply to STLCC (<https://www.stlcc.edu/admissions/apply-to-stlcc>) page.

## At the completion of the program, students are expected to:

1. apply the codes, standards, and federal regulations that impact the design of the built environment to interior design projects.
2. apply knowledge of common interior design business practices in the creation of interior design business documents.
3. analyze strategies and solutions to common ethical situations.
4. create presentation drawings, construction documents, schedules, and construction details for interior environments utilizing BIM software.
5. develop concept drawings into comprehensive detailed drawings to clearly communicate design choices in interior environments.
6. research interior design related topics and synthesize information into a comprehensive research project.
7. apply the knowledge and skills interior designers must acquire to protect the public health, safety, and welfare to successfully complete the Interior Design Fundamentals Exam (IDFX).

Code	Title	Credit Hours
<b>Electives</b>		
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 the Apply to STLCC (<https://www.stlcc.edu/admissions/apply-to-stlcc>) page.

## At the completion of the program, students are expected to:

1. be academically prepared for an entry level career in kitchen and bath design.
2. develop and apply free-hand drafting, hand drafting, computer drafting, rendering, and oral presentation skills to successfully communicate design ideas.
3. successfully apply the principles and elements of design to design solutions.
4. gain and apply knowledge of interior building construction and systems to design solutions.
5. apply knowledge of kitchen and bath historical styles and current design trends.
6. demonstrate the accepted ethical standards and business conduct of a professional kitchen and bath designer.
7. select appropriate cabinet styles, types, construction methods, materials, sizes, and hardware.
8. demonstrate application of skills necessary to bring projects from initial contact to successful completion.
9. demonstrates competence in reading, ordering, and selecting materials from specification sheets for kitchen and bath products as related to cost, size, client needs, energy, safety, and design.

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

# Legal Studies for the Paralegal, Associate in Applied Science

## Florissant Valley and Meramec

The Associate in Applied Science in Legal Studies for the Paralegal degree at St. Louis Community College is the oldest Paralegal degree program in the United States. It prepares and enhances student knowledge and skills for careers in the paralegal profession. Students develop a basic legal vocabulary and gain an understanding of Federal and Missouri statutes, cases, regulations and court systems. Students will be able to describe the legal process as well as study concepts from various specific areas of law. Students develop skills in analyzing legal problems, drafting/preparing legal documents and enhancing their professional development.

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, and other businesses.

**Interested in this program?** Start the enrollment process by visiting the Apply to STLCC (<https://www.stlcc.edu/admissions/apply-to-stlcc>) page.

## At the completion of the program, students are expected to:

1. draft legal documents while demonstrating appropriate grammar.
2. analyze legal documents as well as other case matter resources to identify and summarize relevant materials for the case.
3. examine case matter and identify appropriate research resources as well as analyze research results to support case matter while demonstrating appropriate grammar.
4. identify and assemble legal documents and court forms required for case matter.
5. implement appropriate management of clients and case matters including calendar control, file management and billing.
6. formulate an action plan to facilitate the resolution of the case matter and implement plan to conclusion of the case.
7. select opportunities to pursue professional development while demonstrating appropriate communication skills.
8. describe fundamental elements involved in the conduct of business.
9. demonstrate effective written and oral communication skills.

Program of Study

Code	Title	Credit Hours
<b>Career General Education</b>		
ENG 100 or ENG 101	Career English (recommended) College Composition I (MOTR ENGL 100)	3
ENG 103 or ENG 102	Report Writing (recommended) College Composition II (MOTR ENGL 200)	3
PSY 200 or SOC 103	General Psychology (MOTR PSYC 100) Work and Society	3
XXX xxx	Science or Math Elective <sup>1</sup>	3
XXX xxx	Social & Behavioral Sciences: Civics Requirement	3
BUS 101 or BUS 104	Small Business Management (recommended) Introduction to Business Administration	3
BUS xxx	Business Electives <sup>2</sup>	6
COM xxx	Communications Elective <sup>3</sup>	3
<b>Program Requirements</b>		
LGL 110	Introduction to Law	3
LGL 111	Law Office Management	3
LGL 113	Computers and the Law	3
LGL 217	Legal Research	3
LGL 218	Legal Writing	3
LGL 235	Civil Litigation	3
<b>LEGAL ELECTIVES</b>		
Select 15 credit hours of the following:		15
<b>Group I Electives (select at least two courses from the Group I Electives)</b>		
LGL 112	Contract Law	
LGL 202	Wills, Trusts, and Probate	
LGL 211	Tort Law	
LGL 228	Family Law	
<b>Group II Electives</b>		
LGL 205	Real Estate Law	
LGL 206	Administrative Law	
LGL 230	Employment Law	
LGL 236	Topics in Law	
LGL 240	Advanced Civil Litigation	
LGL 280	Paralegal Clinical Studies <sup>4</sup>	
LGL 290	Workplace Learning: Paralegal <sup>4</sup>	
Total Credit Hours		60

<sup>1</sup> Select from Astronomy, Biology, Chemistry, Geology, Geography, Math (140 or higher), Physical Science, or Physics.

<sup>2</sup> Select from ACC 100, IS 116, MGT 120, MKT 104 or MKT 203.

<sup>3</sup> Select from COM 101, COM 104, COM 107 or COM 201.

<sup>4</sup> Student cannot receive credit for both LGL 280 and LGL 290 (or LGL 219).

## Legal Studies for the Paralegal, Certificate of Proficiency

### Florissant Valley and Meramec

The Certificate of Proficiency in Legal Studies for the Paralegal prepares and enhances student knowledge and skills for careers in the paralegal profession.

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 (3 credit hours), Social Science (3 credit hours), Science/Mathematics (3 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.

Students develop a basic legal vocabulary and gain an understanding of Federal and Missouri statutes, cases, regulations and court systems. Students will be able to describe the legal process as well as study concepts from various specific areas of law. Students develop skills in analyzing legal problems, drafting/preparing legal documents and enhancing their professional development.

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 the Apply to STLCC (<https://www.stlcc.edu/admissions/apply-to-stlcc>) page.

## At the completion of the program, students are expected to:

1. draft legal documents.
2. analyze legal documents as well as other case matter resources to identify and summarize relevant materials for the case.
3. examine case matter and identify appropriate research resources as well as analyze research results to support case matter.
4. identify and assemble legal documents and court forms required for case matter.
5. implement appropriate management of clients and case matters including calendar control, file management and billing.
6. formulate an action plan to facilitate the resolution of the case matter and implement plan to conclusion of the case.
7. select opportunities to pursue professional development.

Code	Title	Credit Hours
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### Required Courses

ENG 100 or ENG 101	Career English College Composition I	3
LGL 110	Introduction to Law	3
LGL 111	Law Office Management	3
LGL 113	Computers and the Law	3
LGL 217	Legal Research	3
LGL 218	Legal Writing	3
LGL 235	Civil Litigation	3

### Legal Studies Electives

#### Group One Electives (select at least two courses from the Group One Electives)

LGL 112	Contract Law	
LGL 202	Wills, Trusts, and Probate	

LGL 211	Tort Law
LGL 228	Family Law
<b>Group Two Electives</b>	
LGL 205	Real Estate Law
LGL 206	Administrative Law
LGL 230	Employment Law
LGL 236	Topics in Law
LGL 240	Advanced Civil Litigation
LGL 280	Paralegal Clinical Studies <sup>1</sup>
LGL 290	Workplace Learning: Paralegal <sup>1</sup>
Total Credit Hours	
33	

<sup>1</sup> Student cannot receive credit for both LGL 280 and LGL 290 (or LGL 219).

## 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 the Apply to STLCC (<https://www.stlcc.edu/admissions/apply-to-stlcc>) page.

### At the completion of the program, students are expected to:

1. demonstrate an ability to perform routine technical duties and tasks in a life science research, development, or production setting using applied knowledge of science, math, and laboratory techniques.
2. practice effective oral, written, and electronic communication including keeping a laboratory notebook.
3. utilize laboratory protocols and standard operating procedures, including necessary calculations, to complete scientific work.
4. analyze the results of laboratory techniques performed and provide conclusions based on evidence obtained, including troubleshooting errors and improving methodology for future use.
5. articulate the importance of staying technically current and keeping pace with rapidly occurring changes in life science and its applications.
6. analyze how biotechnology impacts global issues such as ethics, societal, and environmental concerns.

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 (MOTR BIOL 100L)	4
MTH 140	Intermediate Algebra	3
COM 101	Oral Communication I (MOTR COMM 100)	3
Total Credit Hours		16

## 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, 9<sup>th</sup> revision, Clinical Modification (ICD-9-CM) and International Classification of Diseases, 10<sup>th</sup> Revision, Clinical Modification (ICD-10-CM) and the International Classification of Diseases, 10<sup>th</sup> 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 the Apply to STLCC (<https://www.stlcc.edu/admissions/apply-to-stlcc>) page.

### At the completion of the program, students are expected to:

1. use current knowledge and skills based on industry standards to successfully code medical records for diagnosis and procedures (in-patient/out-patient) using heritage and current classification systems in the Medical Billing and Coding field.
2. demonstrate proficiency in verifying completeness, accuracy, and quality of medical coding using various classification systems.
3. develop a professional strategy in preparation to find employment in the Health Information Technology or related field.

Code	Title	Credit Hours
<b>Foundation Courses</b>		
HIT 101	Medical Terminology and Language	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
<b>Area of Concentration</b>		
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
<b>Information Systems</b>		
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

The Associate in Applied Science degree in Network Engineering is a skill-oriented program that prepares students to design, implement, troubleshoot, maintain, and secure enterprise networks. Foundation 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 the Apply to STLCC (<https://www.stlcc.edu/admissions/apply-to-stlcc>) page.

### At the completion of the program, students are expected to:

1. design network solutions using current knowledge and skills based on industry standards.
2. design and development networking solutions following industry best practices as a member of a team.
3. demonstrate proficiency in one of the three focuses of study through successful performance on course final exams based on industry certification exam competencies.

### Program of Study

Code	Title	Credit Hours
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#### Career General Education

ENG 101	College Composition I (MOTR ENGL 100)	3
ENG 102	College Composition II (MOTR ENGL 200)	3
or ENG 103	Report Writing	
MTH 160	Precalculus Algebra (MOTR MATH 130) (or higher)	4
XXX xxx	Social & Behavioral Sciences: Civics Requirement	3
XXX xxx	Natural Science/Math Elective	3

#### Program Requirements

IS 112	Software and Hardware Architecture	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 60-61

### Focus Areas

#### Server Focus

Code	Title	Credit Hours
IT 211	Introduction to Virtualization and Cloud Computing	4
IT 240	Windows Server: Installation and Configuration	3
IT 241	Windows Server: Administration	3
IT 242	Windows Server: Advanced Services Configuration	3
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

Network Engineering Certificate of Proficiency is a skill-oriented program that prepares students to design, implement, troubleshoot, maintain, and secure enterprise network infrastructure. It starts with the foundation 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 the Apply to STLCC (<https://www.stlcc.edu/admissions/apply-to-stlcc>) page.

### At the completion of the program, students are expected to:

1. design network solutions using current knowledge and skills based on industry standards.
2. design and development networking solutions as a member of a team.

### Program of Study

Code	Title	Credit Hours
<b>Network Infrastructure</b>		
IS 130	Hardware Support	3
IS 229	Unix/Linux I	3
IS 237	Fundamentals of Information Assurance/Security	3
IS 264	Unix/Linux II	3
IT 102	Desktop Software Support	3
IT 101	Cisco Networking Academy I: Introduction to Networks	5
IT 201	Cisco Networking Academy II: Routing and Switching Essentials	5
IT 210	Firewall and VPN Security	3
Total Credit Hours		28

## 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 the Apply to STLCC (<https://www.stlcc.edu/admissions/apply-to-stlcc>) page.

### At the completion of the program, students are expected to:

1. apply current knowledge and skills based on industry standards to design network security solutions.
2. develop network security solutions following best practices as a member of a team.
3. demonstrate proficiency in use of network security technologies and methodologies through successful performance on course final exams based on industry certification exam competencies.
4. configure an installed workstation operating systems for IPv4 and IPv6 and other network security settings, network adapters, and appropriate firewall.
5. demonstrate proficiency in use of network security technologies and methodologies to protect an organization's information from threats by detecting and responding to security incidents.

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 (MOTR ENGL 100)	3
Math proficiency at or above the MTH 140 level		
PSY 200	General Psychology (MOTR PSYC 100)	3
LIB 101	Introduction to Library and Online Research	1

**Interested in this program?** Start the enrollment process by visiting the Apply to STLCC (<https://www.stlcc.edu/admissions/apply-to-stlcc>) page.

## At the completion of the program, students are expected to:

1. demonstrate the standards of professional practice as identified by the American Nurses Association Code of Ethics.
2. demonstrate effective verbal, non-verbal, and written communication with individuals, families, groups, and communities across the lifespan.
3. implement strategies to promote teaching and learning across the lifespan that facilitate health promotion and maintenance, and reduction of risks specific to individuals, families, and communities.
4. implement safe clinical decision-making skills using evidence-based practice and the nursing process to deliver safe nursing care for patients, families, groups, and communities across the lifespan.
5. deliver patient-centered care across the lifespan through collaboration with healthcare team members by demonstrating leadership skills in the clinical setting.

## Program of Study

Code	Title	Credit Hours
<b>Career General Education</b>		
ENG 100 or ENG 101	Career English College Composition I (MOTR ENGL 100)	3
COM 200	Communication Between Cultures	3
PSY 200	General Psychology (MOTR PSYC 100)	3

PSY 205	Human Growth and Development (MOTR PSYC 200)	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
<b>Physical Education Activity</b>		
Select 2 credit hours		2
<b>Program Requirements</b>		
NUR 151	Fundamentals of Nursing	7
NUR 152	Nursing Laboratory Practicum I	1
NUR 154	Nursing Laboratory Practicum II	1
NUR 153	Nursing of 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 the Apply to STLCC (<https://www.stlcc.edu/admissions/apply-to-stlcc>) page.

Program of Study

Code	Title	Credit Hours
<b>Career General Education</b>		
ENG 100 or ENG 101	Career English College Composition I (MOTR ENGL 100)	3
COM 101	Oral Communication I (MOTR COMM 100)	3
PSY 200	General Psychology (MOTR PSYC 100)	3
PSY 205	Human Growth and Development (MOTR PSYC 200)	3
SOC 201	Aspects of Aging	3
XXX xxx	Social & Behavioral Sciences: Civics Requirement	3
BIO 207	Anatomy and Physiology I	4
BIO 208	Anatomy and Physiology II	4
BIO 209	Kinesiology Fundamentals	3
<b>Physical Education Activity</b>		
Select 2 credit hours		2
<b>Program Requirements</b>		
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, Forest Park, Meramec, Wildwood, and Online

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 the Apply to STLCC (<https://www.stlcc.edu/admissions/apply-to-stlcc>) page.

### At the completion of the program, students are expected to:

1. develop a professional high-quality portfolio with items that are clearly introduced, well organized, creatively displayed, and show connection between items.
2. produce industry-specific business documents, spreadsheets, databases, and presentations.

3. deliver a highly professional presentation that demonstrates a high level of industry specific knowledge and skills, and a high level of preparedness for employment.
4. demonstrate a mastery of skills that clearly demonstrate supportive skills, which includes communication, problem solving, creativity, and critical thinking.
5. reflect on a critique of work, and suggest constructive practical alternatives.

Program of Study

Code	Title	Credit Hours
<b>Career General Education</b>		
ENG 101	College Composition I (MOTR ENGL 100)	3
COM 101	Oral Communication I (MOTR COMM 100)	3
XXX xxx	Natural Science/Mathematics Elective	3
BUS 103	Business Mathematics	3
XXX xxx	Social & Behavioral Sciences: Civics Requirement	3
SOC 101	Introduction to Sociology (MOTR SOCI 101)	3
<b>Physical Education Activity</b>		
Select 2 credit hours		2
<b>Program Requirements</b>		
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

Paramedic Technology, Associate of Applied Science 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](http://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) (<http://www.coaemsp.org>)

**Interested in this program?** Start the enrollment process by visiting the Apply to STLCC (<https://www.stlcc.edu/admissions/apply-to-stlcc>) page.

## At the completion of the program, students are expected to:

1. use Advanced Life Support equipment.
2. provide age appropriate care as it relates to emergency medicine.
3. administer proper patient care.
4. perform patient care assessments.
5. plan the patient's treatment based upon the assessment.
6. demonstrate competent entry level Paramedic skills in laboratory and scenario settings.

Program of Study

Code	Title	Credit Hours
<b>Career General Education</b>		
ENG 101 or ENG 100	College Composition I (MOTR ENGL 100) Career English	3
ENG 102 or ENG 103	College Composition II (MOTR ENGL 200) Report Writing	3
XXX xxx	Social & Behavioral Sciences: Civics Requirement	3

SOC 100 or PSY 200	The Sociology of Human Relations General Psychology (MOTR PSYC 100)	3
BIO 203	General Microbiology I	4
BIO 207	Anatomy and Physiology I	4
BIO 208	Anatomy and Physiology II	4
CHM 101 or CHM 105	Fundamentals of Chemistry I (MOTR CHEM 100L) General Chemistry I (MOTR CHEM 150L)	5
<b>Physical Education Activity</b>		
Select 2 credit hours		2
<b>Program Requirements</b>		
PAR 233	EMS Foundations	1
PAR 234	EMS Pharmacology	3
PAR 235	Paramedic Skills I	2
PAR 221	Paramedic Clinical I	3
PAR 236	EMS Pathophysiology	2
PAR 237	Pulmonology	2
PAR 238	Cardiology	4
PAR 239	Trauma	3
PAR 240	EMS Operations	2
PAR 222	Paramedic Clinical II	3
PAR 242	Medical Care	4
PAR 245	Paramedic Skills II	2
PAR 241	EMS Seminar	3
PAR 243	Field Internship	4
PAR 244	Special Patients	2
Total Credit Hours		71

## Paramedic Technology, Certificate of Proficiency

### Forest Park

Paramedic Technology 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](http://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-certificate-proficiency/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-certificate-proficiency/tel:2147038445>)  
Fax 214-703-8992 (<http://catalog.stlcc.edu/programs/paramedic-technology-certificate-proficiency/tel:2147038992>)  
[www.coaemsp.org](http://www.coaemsp.org) (<http://www.coaemsp.org>)

## At the completion of the program, students are expected to:

1. use of Advanced Life Support.
2. provide age appropriate care as it relates to emergency medicine.
3. administer proper patient care.
4. perform patient care assessments.
5. plan the patient's treatment based upon the assessment.
6. demonstrate competent entry level Paramedic skills in laboratory and scenario settings.

### Program of Study

Code	Title	Credit Hours
PAR 233	EMS Foundations	1
PAR 234	EMS Pharmacology	3
PAR 235	Paramedic Skills I	2
PAR 221	Paramedic Clinical I	3
PAR 236	EMS Pathophysiology	2
PAR 237	Pulmonology	2
PAR 238	Cardiology	4
PAR 239	Trauma	3
PAR 240	EMS Operations	2
PAR 222	Paramedic Clinical II	3
PAR 242	Medical Care	4
PAR 244	Special Patients	2
PAR 245	Paramedic Skills II	2
PAR 241	EMS Seminar	3
PAR 243	Field Internship	4
Total Credit Hours		40

## 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 the Apply to STLCC (<https://www.stlcc.edu/admissions/apply-to-stlcc>) page.

## At the completion of the program, students are expected to:

1. integrate a knowledge of the aesthetic and technical aspects of commercial photographic approaches with individual creativity, and demonstrate these skills through a successful portfolio.
2. discuss and successfully utilize the material aspects of the medium in the development of their own work or projects, as well as presenting a portfolio of prints that demonstrate their understanding of artistic theories.
3. demonstrate an understanding of the technical aspects of camera settings, image adjustment techniques and printing.
4. employ verbal and written interpretations and evaluations of contemporary and historic photographs.

### Program of Study

Code	Title	Credit Hours
<b>General Education</b>		
ENG 101	College Composition I (MOTR ENGL 100)	3
ENG 102	College Composition II (MOTR ENGL 200)	3
XXX xxx	Social & Behavioral Sciences: Civics 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 (MOTR ARTS 101)	
ART 102	Art History II (MOTR ARTS 102)	
ART 103	History of Modern Art	
ART 169	Visual Language	
<b>Physical Education Activity</b>		
Select 2 credit hours		2
<b>Program Requirements</b>		
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	
ART 167	Color Photography	

**Other Art Electives**

Select 4-6 credit hours of the following:		4-6
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 the Apply to STLCC (<https://www.stlcc.edu/admissions/apply-to-stlcc>) page.

## At the completion of the program, students are expected to:

1. pursue licensure and demonstrate employability.
2. promote contemporary physical therapy through lifelong learning and service.
3. communicate effectively with patients/clients, caregivers, and interprofessional team members.
4. identify and integrate appropriate evidence based resources to support clinical decision making.
5. identify career development and learning opportunities to improve knowledge, skills, and behaviors.

Program of Study

Code	Title	Credit Hours
<b>Career General Education</b>		
ENG 100	Career English	3
or ENG 101	College Composition I (MOTR ENGL 100)	
COM 101	Oral Communication I (MOTR COMM 100)	3
PSY 200	General Psychology (MOTR PSYC 100)	3
PSY 205	Human Growth and Development (MOTR PSYC 200)	3
or PSY 203	Child Psychology	

SOC 201	Aspects of Aging	3
XXX xxx	Social & Behavioral Sciences: Civics 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 the Apply to STLCC (<https://www.stlcc.edu/admissions/apply-to-stlcc>) page.

### At the completion of the program, students are expected to:

1. use technical drawings to determine what equipment and manufacturing approach will be necessary to create a component compliant with specifications in all respects.
2. demonstrate the safe setup and operation of standard, manual and CNC machine tools.
3. evaluate part compliance with specifications by selecting and accurately using appropriate precision measuring tools.
4. demonstrate understanding of nomenclature relating to the machine tool trade, industry work expectations and the role of quality conscious trades people towards the success of the enterprise.

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

The Radiologic Technology 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 050 Mathematical Literacy
- 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 the Apply to STLCC (<https://www.stlcc.edu/admissions/apply-to-stlcc>) page.

## At the completion of the program, students are expected to:

1. evaluate images for appropriate positioning and image quality.
2. demonstrate the ability to adapt to difficult and trauma exams.
3. position the patient and imaging system to perform acceptable radiographic examinations and procedures.
4. maintain a safe environment.
5. provide quality patient care.
6. demonstrate ethical and professional values.
7. exhibit professional traits expected of radiologic technologists.
8. demonstrate effective written communication.
9. demonstrate effective oral communication.

## Program of Study

Code	Title	Credit Hours
<b>General Education</b>		
ENG 101	College Composition I (MOTR ENGL 100)	3
COM 101	Oral Communication I (MOTR COMM 100)	3
MTH 140	Intermediate Algebra (or higher) <sup>1</sup>	3
BIO 207	Anatomy and Physiology I <sup>2</sup>	4
BIO 208	Anatomy and Physiology II	4
PSY 200	General Psychology (MOTR PSYC 100)	3
XXX xxx	Social & Behavioral Sciences: Civics Requirement	3
<b>Program Requirements</b>		
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		73

<sup>1</sup> Except MTH 161, MTH 165, MTH 166, MTH 180

<sup>2</sup> 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 evaluate, treat, and manage patients with cardiopulmonary disorders in a variety of settings. Persons interested in the program should be team-oriented, compassionate individuals who derive satisfaction from helping others in time of need. They also should be able to tolerate moderate physical activity and long hours of standing, and work effectively under stress.

Graduates are eligible to take the Therapist Multiple Choice and Clinical Simulation examinations offered through the National Board for Respiratory Care (<http://www.nbrc.org>) in order to obtain the Registered Respiratory Therapy (RRT) credential. Employment is available through hospitals, clinics, home care agencies, rehabilitation centers, education, and medical equipment sales.

The program includes courses in natural sciences, humanities, and respiratory care, in addition to clinical practice at area health facilities. This program has prerequisites based on professional standards. Contact an advisor at the Forest Park campus for further information.

The Respiratory Care Program at St. Louis Community College is **fully accredited** as an entry-level program by the Commission on Accreditation for Respiratory Care (CoARC) (<http://www.coarc.com>), 1248 Harwood Road, Bedford, TX 76021-4244, (817) 283-2835.

**Interested in this program?** Start the enrollment process by visiting the Apply to STLCC (<https://www.stlcc.edu/admissions/apply-to-stlcc>) page.

## At the completion of the program, students are expected to:

1. evaluate data to assess the cardiopulmonary status of a patient and appropriateness of prescribed respiratory care.
2. develop respiratory care plans in a variety of settings and modify if necessary.
3. initiate appropriate therapeutic interventions, monitor patient responses, and modify therapy to achieve goals.
4. promote cardiopulmonary wellness, disease prevention and management, and patient/family/community education.
5. perform diagnostic and therapeutic procedures in a safe and effective manner.
6. apply problem-solving strategies in the patient care setting.
7. demonstrate effective oral and written communication skills.
8. conduct themselves in an ethical and professional manner.



## Program of Study

Code	Title	Credit Hours
<b>Career General Education</b>		
BIO 207	Anatomy and Physiology I	4
BIO 208	Anatomy and Physiology II	4
ENG 101	College Composition I (MOTR ENGL 100)	3
XXX xxx	Social & Behavioral Sciences: Civics Requirement	3
Select one of the following:		
ENG 102	College Composition II (MOTR ENGL 200)	
COM 200	Communication Between Cultures	
COM 117	Health Communication	
PSY 200	General Psychology (MOTR PSYC 100)	3
<b>Program Requirements</b>		
RC 100	Foundations of Respiratory Care	3
RC 110	Cardiopulmonary Anatomy and Physiology	3
RC 120	Respiratory Care Practices I	5
RC 130	Patient Assessment	3
RC 140	Respiratory Pharmacology	2
RC 150	Respiratory Care Practices II	4
RC 160	Mechanical Ventilation I	4
RC 170	Respiratory Care Clinical Practice I	1
RC 180	Cardiopulmonary Diseases	3
RC 190	Respiratory Care Clinical Practice II	1
RC 200	Adult Critical Care	3
RC 210	Mechanical Ventilation II	4
RC 220	Neonatal and Pediatric Respiratory Care	3
RC 230	Respiratory Care Clinical Practice III	2
RC 240	Respiratory Care Specialties	3
RC 250	Respiratory Care Capstone	4
RC 260	Respiratory Care Clinical Practice IV	2
Total Credit Hours		70

## 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 the Apply to STLCC (<https://www.stlcc.edu/admissions/apply-to-stlcc>) page.

### At the completion of the program, students are expected to:

1. use variable and comparator operations in PLC and Robotics programs.
2. write and execute a pick and place routine for a robotic manipulator.
3. integrate pieces of robotics and automation equipment into a system.

4. discuss the major brands and components of PLCs.
5. discuss the major brands and components of robotic manipulators.
6. design basic fixturing for automation components.

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

Skilled Trades Industrial Occupations Technology 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.

**Interested in this program?** Start the enrollment process by visiting the Apply to STLCC (<https://www.stlcc.edu/admissions/apply-to-stlcc>) page.

### At the completion of the program, students are expected to:

1. use appropriate oral, written, and technological strategies to facilitate workplace communication.
2. demonstrate knowledge of basic industrial technical processes and procedures, including, when appropriate, knowledge of legal standards that promote public health, safety, and general welfare.
3. solve technical workplace problems using best practices to meet industry regulations and requirements.

## Program of Study

Code	Title	Credit Hours
<b>Career General Education</b>		
ENG 101	College Composition I (MOTR ENGL 100)	3
COM 101	Oral Communication I (MOTR COMM 100)	3
MTH 108	Elementary Applied Mathematics (or higher)	3
XXX xxx	Social & Behavioral Sciences: Civics Requirement	3
XXX xxx	Social Science Elective	3
Select one of the following focus areas:		45
Apprenticeship Program Agreement		

Technical Electives

Total Credit Hours 60

**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 courses 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: AVI, 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 the Apply to STLCC (<https://www.stlcc.edu/admissions/apply-to-stlcc>) page.

### At the completion of the program, students are expected to:

1. differentiate fact from opinion in regard to industrial technical subjects for occupational training or retraining.
2. complete occupational tasks at an entry-level proficiency for industrial training or retraining.

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 a software developer or to pursue advanced studies in software design and development.

**Interested in this program?** Start the enrollment process by visiting the Apply to STLCC (<https://www.stlcc.edu/admissions/apply-to-stlcc>) page.

### At the completion of the program, students are expected to:

1. use current knowledge and skills based on industry standards to design, write, implement, secure, and maintain business software systems.
2. analyze project specifications to develop software solutions that modify existing software incorporating new functions to support specific business goals.
3. design and development of software solutions following industry best practices as a member of a team.
4. demonstrate proficiency in selected focus area (Language, Web, or Database) by developing a portfolio of projects completed during courses related to the focus area.

Program of Study

Code	Title	Credit Hours
<b>Career General Education</b>		
ENG 101	College Composition I (MOTR ENGL 100)	3
ENG 102	College Composition II (MOTR ENGL 200)	3
	or ENG 103 Report Writing	
MTH 160	Precalculus Algebra (MOTR MATH 130)	4
XXX xxx	Natural Science/Math Elective	3
XXX xxx	Social & Behavioral Sciences: Civics Requirement	3
XXX xxx	Social Science Elective	3
<b>Physical Education Activity</b>		
Select 2 credit hours		2
<b>Program Requirements</b>		
IS 112	Software and Hardware Architecture	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

Persons interested in this program should possess a stable temperament, manual dexterity, physical stamina, and the ability to integrate and prioritize a variety of activities.

Students are required to complete a health history, immunization record, physical exam and a drug and criminal background check prior to attending hospital clinical education.

Employment opportunities include hospital surgical departments, outpatient surgery centers, organ procurement centers and central supply processing units.

This program is accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP) in cooperation with the Accreditation Review Council on Surgical Technology and Surgical Assisting (ARC-STSA).

Graduates of this program are qualified to take the National Board Exam offered by the National Board of Surgical Technology and Surgical Assisting (NBSTSA) to become a certified surgical technologist (CST).

**Interested in this program?** Start the enrollment process by visiting the Apply to STLCC (<https://www.stlcc.edu/admissions/apply-to-stlcc>) page.

## Focus Areas

### Language

Code	Title	Credit Hours
IS 290 or IS 294	C# Frameworks: .NET Web App Framework Java Frameworks: Struts and Hibernate	3
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

## At the completion of the program, students are expected to:

1. understand asepsis and sterile technique.
2. explain sterilization, disinfection, and antisepsis.
3. demonstrate knowledge of specialty surgical procedures.
4. understand the use of surgical pharmacology and anesthesia.
5. exhibit knowledge of equipment, supplies, and instrumentation.
6. discuss patient care concepts.
7. maintain a safe environment in the surgical technologist role.
8. demonstrate the ability to perform routine tasks in the preoperative, intraoperative and postoperative areas.
9. communicate effectively in the healthcare environment.
10. recognize the value of teamwork and function as a member of a team.
11. exhibit a strong sense of ethical behavior and surgical conscience.
12. respond calmly and effectively under pressure.
13. exhibit self-direction and responsibility for actions.

## Program of Study

Code	Title	Credit Hours
ENG 101	College Composition I (MOTR ENGL 100)	3
BIO 203	General Microbiology I	4
BIO 207	Anatomy and Physiology I	4
BIO 208	Anatomy and Physiology II	4
XXX xxx	Social & Behavioral Sciences: Civics Requirement	3
SOC 101 or PSY 200	Introduction to Sociology (MOTR SOCI 101) General Psychology (MOTR PSYC 100)	3
XXX xxx	Humanities or Communications Elective	3

### Physical Education Activity

Select 2 credit hours	2
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### Program Requirements

ST 120	Principles of Surgical Technology	3
ST 122	Medical/Surgical Terminology	3
ST 124	Clinical Foundations	3

# Surgical Technology, Associate in Applied Science

## Forest Park

The Surgical Technology Associate in Applied Science program prepares students for entry level positions as surgical technologists through classroom instruction, laboratory skill practice, and clinical experience.

Students will gain theoretical knowledge of the surgical environment and develop skills necessary to prepare supplies and equipment, to maintain aseptic conditions, and to assist surgeons and the surgical team by passing instrumentation during operations.

ST 126	Surgical Equipment and Technological Concepts	2
ST 128	Perioperative Case Management	3
ST 220	Procedures I	3
ST 230	Procedures II	3
ST 224	Clinical Practice I	6
ST 234	Clinical Practice II	6
ST 238	Professional Issues	2
ST 228	Clinical Seminar	1
ST 215	Surgical Pharmacology	2

**Prerequisites:**

The following courses must be completed with a grade of "C" or better prior to applying for admission into the program.

MTH 030 Elementary Algebra<sup>1</sup>  
or Two semesters of high school algebra

BIO 111 Introductory Biology I (MOTR BIOL 100L)<sup>1</sup>  
or One year of

Cumulative GPA of 2.5 or higher on a 4.0 scale.

Total Credit Hours 63

<sup>1</sup> Math and Science courses must be completed within five calendar years of entering the program or by permission of program director.

## Surgical Technology, Certificate of Proficiency

**This program is no longer accepting students.**

**Forest Park**

The Surgical Technology Program prepares students for entry-level positions as surgical technologists. Students learn aseptic technique, instrumentation, surgical procedures and patient care through classroom lecture, laboratory practice and experience 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  
25400 U.S. Highway 19 North, Suite 158  
Clearwater, FL 33763  
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) (<http://www.caahep.org>)

**Prerequisites**

The following courses must be completed prior to applying for the program.

Code	Title	Credit Hours
MTH 050	Mathematical Literacy	3
BIO 203	General Microbiology I	4
BIO 207	Anatomy and Physiology I	4

### At the completion of the program, students are expected to:

1. perform the tasks of an entry level surgical technologist.
2. demonstrate skills necessary in specialty surgical procedures.
3. explain anesthesia complications and interventions.
4. practice independent clinical judgement.
5. demonstrate knowledge of equipment, supplies, and instrumentation across multiple specialties.
6. practice effective oral and written communication in the healthcare environment.
7. complete the national board exam to become a Certified Surgical Technologist.

**This program is no longer accepting students.**

**Program of Study**

Code	Title	Credit Hours
BIO 208	Anatomy and Physiology II	4
ENG 101	College Composition I (MOTR ENGL 100)	3
PSY 200	General Psychology (MOTR PSYC 100)	3
or SOC 101	Introduction to Sociology (MOTR SOCI 101)	
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

## 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 the Apply to STLCC (<https://www.stlcc.edu/admissions/apply-to-stlcc>) page.

## At the completion of the program, students are expected to:

1. develop website designs that allow for various display devices.
2. design websites that incorporate current primary and secondary navigation features.
3. develop website designs that comply with industry standards and guidelines for content accessibility.
4. use current software to design front-end (browser-side) applications for data collection and retrieval over the Web.
5. maintain existing websites.
6. modify existing websites.
7. implement upgrades to existing websites.

Code	Title	Credit Hours
<b>Required Courses</b>		
IS 139	Web Publishing	3
IS 153	C# Programming I	4
or IS 187	Java Programming I	
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

Students who are completing the General Transfer Studies AA degree or the Associate of Arts in Teaching degree must complete 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 manage information 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 quantitative reasoning, science, social and behavioral sciences, and humanities serve to broaden each student's perspective in an increasingly complex world.

Missouri Senate Bill 997, signed into law in 2016 for implementation in fall 2018, ensures that all general education courses are fully transferable to all public colleges and universities in Missouri. This statewide framework is called CORE 42, and all courses that are included in this framework are identified in the catalog and in the course schedule with a Missouri Transfer (MOTR) number. Students who complete all 42-credit hours will have CORE 42 noted on their transcript.

In addition to the 42-credit hours of general education, students should select additional courses depending upon their intended program at their destination four-year university. Academic advisors are available on each campus to assist students in the selection of the best courses for transferability.

Code	Title	Credit Hours
<b>Social and Behavioral Sciences</b>		9
9 credit hours minimum, including at least one Civics course		
<b>Written and Oral Communications</b>		9
6 credit hours minimum from Written, 3 credit hours minimum from Oral		
<b>Natural Sciences</b>		7
7 credit hours minimum, from at least two disciplines, including one course with a lab component		
<b>Mathematical Sciences</b>		3-4
<b>Humanities and Fine Arts</b>		9
9 credit hours minimum, from at least two disciplines		
<b>MOTR Courses to reach 42 credit hours</b>		4-5

## Frequently Asked Questions

### What are the General Education Requirements for the AA and AAT degree?

STLCC, along with all other public colleges and universities in Missouri, has adopted the statewide general education framework that goes into effect for the AA and AAT degrees Fall 2018. This core transfer curriculum is commonly known as CORE 42.

The statewide general education framework is intended to ensure that all graduates possess a common core of college-level skills and knowledge. These courses are designated with a Missouri Transfer (MOTR) number, which guarantees the one-to-one transfer of these courses among all Missouri public institutions of higher education.

### What are the requirements of the CORE 42?

For the General Transfer Studies program, students must complete 42 credit hours of MOTR courses, distributed as follows: ENG 101 and ENG 102, COM 101 or COM 107, 9 credit hours of Social and Behavioral Science courses including at least one Civics course, 7 credit hours of Natural Science courses in at least two disciplines and including at least one laboratory course, one mathematics course (MTH 160, 161, 180, or 185), and 9 credit hours of Humanities and Fine Arts courses in at least two disciplines. Remaining credit hours must be satisfied through MOTR courses of the student's choosing.

### I started STLCC prior to Fall 2018, are my requirements the same?

Your requirements are determined by your catalog term. If your catalog term is prior to Fall 2018, then your requirements will be different. You should discuss your options with an [academic advisor](#). Many students will find it beneficial to switch to CORE 42 because the courses included in this framework are guaranteed to transfer to other public institutions in Missouri.

### What is the advantage of CORE 42?

The CORE 42 brings peace of mind to students when they transfer to other public institutions in Missouri, which are obligated to accept credit for these courses by law.

### Will there be more courses with MOTR numbers?

Committees of faculty from institutions across the state continue to work to identify courses to include in this framework. STLCC's Catalog will be updated with any changes.

### How will the CORE 42 and/or MOTR numbers appear on my transcript?

The MOTR numbers will be part of the course title on your transcript.

## Social & Behavioral Sciences

- 9 credit hours minimum, including at least one Civics course

Code	Title	Credit Hours
ANT 102	Introduction to Cultural Anthropology (MOTR ANTH 201)	3
ECO 140	Introduction to Economics (MOTR ECON 100)	3
ECO 151	Principles of Macroeconomics (MOTR ECON 101)	3
ECO 152	Principles of Microeconomics (MOTR ECON 102)	3
GEG 101	Regional Geography (MOTR GEOG 101)	3
PSC 201	International Relations (MOTR POSC 201)	3
PSY 200	General Psychology (MOTR PSYC 100)	3

PSY 205	Human Growth and Development (MOTR PSYC 200)	3
SOC 101	Introduction to Sociology (MOTR SOCI 101)	3

Civics Courses

Code	Title	Credit Hours
HST 101	United States History to 1865 (MOTR HIST 101)	3
HST 102	United States History from 1865 to the Present (MOTR HIST 102)	3
PSC 101	Introduction to American Politics (MOTR POSC 101)	3

## Written & Oral Communications

- 6 credit hours minimum from Written Communications
- 3 credit hours minimum from Oral Communications

### Written

Code	Title	Credit Hours
ENG 101	College Composition I (MOTR ENGL 100)	3
ENG 102	College Composition II (MOTR ENGL 200)	3
ENG 103	Report Writing (MOTR ENGL 110)	3

Oral

Code	Title	Credit Hours
COM 101	Oral Communication I (MOTR COMM 100)	3
COM 107	Public Speaking (MOTR COMM 110)	3
COM 201	Interpersonal Communication (MOTR COMM 120)	3

## Natural Sciences

- 7 credit hours minimum, from at least two disciplines, including one course with a lab component

### Non-lab Courses

Code	Title	Credit Hours
BIO 109	Human Biology (MOTR LIFS 100)	3
BIO 113	Modern Aspects of Biology (MOTR BIOL 100)	3
BIO 151	Biology of Human Health and Disease (MOTR LIFS 100D)	3
BIO 154	The Biology of Human Sex (MOTR LIFS 100R)	3
GEG 103	Physical Geography (MOTR GEOG 100)	3
GEO 100	Earth Science (MOTR PHYS 110ES)	3
GEO 103	Environmental Geology (MOTR GEOL 100)	3
PSI 101	Physical Science (MOTR PHYS 110)	3
PSI 111	Introduction to Astronomy I (MOTR ASTR 100)	3
PSI 123	Meteorology (MOTR PHYS 110AS)	3

### Lab Courses

Code	Title	Credit Hours
BIO 106	Human Heredity (MOTR LIFS 100LG)	4
BIO 110	General Zoology (MOTR BIOL 100LZ)	4
BIO 111	Introductory Biology I (MOTR BIOL 100L)	4
BIO 124	General Botany I (MOTR BIOL 100LB)	4

BIO 140	Principles of Biology I (MOTR BIOL 150L)	5
BIO 207	Anatomy and Physiology I (MOTR LIFS 150LAP)	4
CHM 101	Fundamentals of Chemistry I (MOTR CHEM 100L)	5
CHM 105	General Chemistry I (MOTR CHEM 150L)	5
CHM 109	Chemistry and the Environment (MOTR CHEM 100L)	4
GEO 101	Earth Science Laboratory (MOTR PHYS 110LES)	1
GEO 111	Physical Geology (MOTR GEOL 100L)	5
PHY 111	College Physics I (MOTR PHYS 150L)	4
PHY 122	Engineering Physics I (MOTR PHYS 200L)	5
PSI 115	Observational Astronomy (MOTR ASTR 100L)	1
PSI 125	Introduction to Atmospheric Science (MOTR PHYS 110LAS)	4

## Mathematical Sciences

- 3 credit hours minimum

Code	Title	Credit Hours
MTH 160	Precalculus Algebra (MOTR MATH 130)	4
MTH 161	Quantitative Reasoning (MOTR MATH 120)	4
MTH 165	Structures of Mathematical Systems I	3
MTH 166	Structures of Mathematical Systems II	3
MTH 170	Precalculus Trigonometry	3
MTH 177	Finite Mathematics	4
MTH 180	Introductory Statistics (MOTR MATH 110)	4
MTH 185	Precalculus (MOTR MATH 150)	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

\*\*Courses that use one of the pathway courses as a prerequisite will meet the general education credit for math. For example, Calculus meets the General Education math requirement since Pre-Calculus Algebra is a prerequisite.

## Humanities and Fine Arts

- 9 credit hours minimum, from at least two disciplines
- There is a limit of three (3) credit hours of Performance courses that can be applied to the Humanities and Fine Arts Knowledge Area and to the total CORE 42

Code	Title	Credit Hours
ARA 101	Modern Arabic I (MOTR LANG 105)	4
ART 100	Art Appreciation (MOTR ARTS 100)	3
ART 101	Art History I (MOTR ARTS 101)	3
ART 102	Art History II (MOTR ARTS 102)	3
CHI 101	Elementary Chinese I (MOTR LANG 105)	4
CHI 102	Elementary Chinese II (MOTR LANG 106)	4
DCS 104	American Sign Language I (MOTR LANG 105)	5
DCS 105	American Sign Language II (MOTR LANG 106)	5
ENG 201	Introduction to Fiction (MOTR LITR 100F)	3

General Education Requirements  
(12/04/18)

ENG 202	Introduction to Poetry and Plays (MOTR LITR 100)	3
ENG 204	American Literature I (MOTR LITR 101A)	3
ENG 205	American Literature II (MOTR LITR 101B)	3
ENG 211	British Literature II (MOTR LITR 102B)	3
ENG 216	Women in Literature (MOTR LITR 106)	3
ENG 217	Major Black Writers (MOTR LITR 105AA)	3
ENG 231	World Literature (MOTR LITR 200)	3
FRE 101	Elementary French I (MOTR LANG 101)	4
FRE 102	Elementary French II (MOTR LANG 102)	4
GER 101	Elementary German I (MOTR LANG 105)	4
GER 102	Elementary German II (MOTR LANG 106)	4
HST 115	Ancient and Medieval History to 1500 (MOTR WCIV 101)	3
HST 128	Western Civilization from 1500 to the Present (MOTR WCIV 102)	3
HUM 109	Arts and Ideas in the Ancient World (MOTR WCIV 101)	3
HUM 110	The Middle Ages and the Renaissance (MOTR WCIV 101)	3
ITL 103	Elementary Italian I (MOTR LANG 105)	4
ITL 104	Elementary Italian II (MOTR LANG 106)	4
JPN 101	Modern Japanese I (MOTR LANG 105)	4
JPN 102	Modern Japanese II (MOTR LANG 106)	4
MUS 103	Basic Music (MOTR MUSC 101)	3
MUS 113	History of Jazz (MOTR MUSC 100J)	3
MUS 114	Music Appreciation (MOTR MUSC 100)	3
MUS 128	History of Rock and Roll (MOTR MUSC 100RP)	3
MUS 211	Music History I	3
MUS 212	Music History II (MOTR MUSC 104)	3
PHL 101	Introduction to Philosophy (MOTR PHIL 100)	3
PHL 102	Introduction to Logic (MOTR PHIL 101)	3
PHL 103	World Religions (MOTR RELG 100)	3
PHL 104	Ethics (MOTR PHIL 102)	3
SPA 101	Elementary Spanish I (MOTR LANG 103)	4
SPA 102	Elementary Spanish II (MOTR LANG 104)	4
THT 101	Introduction to Theatre (MOTR THEA 100A)	3

Performance Options

Code	Title	Credit Hours
ART 109	Drawing I (MOTR PERF 105D)	3
MUS 131	Chorus (MOTR PERF 102C)	1
MUS 132	Orchestra (MOTR PERF 102O)	1
MUS 134	Symphonic Band (MOTR PERF 102B)	1
MUS 135	Choir (MOTR PERF 102C)	1



# 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 <https://www.stlcc.edu/programs-academics/>.

Not all of the courses listed in this section are 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) (<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:

Code	Title	Credit Hours
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

Code	Title	Credit Hours
ACC	Accounting	
ANT	Anthropology	
ARA	Arabic	
ARC	Architectural Technology	
ART/AT	Art	
AUT	Automotive Technology	
AVI	Aviation Technology	
BAP	Baking and Pastry Arts	
BHS	Behavioral Health Support	
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
RC	Respiratory Care
RTH	Respiratory Therapy
RUS	Russian
SKT	Skilled Trades
STR	Smart Start
SOC	Sociology
SPA	Spanish
ST	Surgical Technology
THT	Theatre
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 215. Fraud and Forensic Accounting. 3 Credit Hours.**

Fraud and Forensic Accounting introduces students to current methodologies and work performed by forensic accountants. The concentration of this course focuses on current fraud issues. In addition, this course will educate students about the causes of fraud and explore the methods of detection, investigation, and prevention. Prerequisite: ACC 208 and 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 (MOTR ANTH 201). 3 Credit Hours.**

Introduction to Cultural Anthropology introduces students to the diversity of human culture and the idea of humans as creators of culture and society. This course uses the concepts and theories of cultural anthropologists to examine and analyze societies of various degrees of complexity. The topics covered in this course include, but are not limited to, the creation of culture, cultural change, and economic, social, political, religious, and family systems as they appear in a variety of societies. Prerequisite: Reading Proficiency.

## Arabic (ARA)

**ARA 101. Modern Arabic I (MOTR LANG 105). 4 Credit Hours.**

Modern Arabic I is a practical, beginning course in speaking and understanding modern Arabic. It is designed for persons who want to learn Arabic, who want to travel to an Arabic-speaking country, or for those who have previous limited experience in Arabic. Attention is given to proper pronunciation, to practicing the words and basic structures most frequently used 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 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 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 (MOTR ARTS 100). 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 (MOTR ARTS 101). 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 (MOTR ARTS 102). 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 (MOTR PERF 105D). 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 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.**

Interior Design I will introduce students to interior space planning and the application of basic design principles and color theory to interior environments. Emphasis is placed on architectural drafting and the design and selection of interior finishes, furniture, and other interior components.

Prerequisite: Prior or concurrent enrollment in ARC 110 and Reading Proficiency.

**ART 152. Textiles. 3 Credit Hours.**

Textiles is 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.**

Computer-aided Interior Design introduces students to the computer-aided drafting software currently utilized in the interior design industry. Students will apply architectural graphic standards in the creation of floor plans, elevations, and construction documents utilizing computer-aided drafting software. Students will also create digital renderings of interior spaces utilizing 3D modeling software.

Prerequisites: Prior or concurrent enrollment in ARC 110 and ART 151, 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.**

Workplace Learning: Kitchen and Bath Design is an experiential learning course which 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. Minimum of 150 hours in the workplace throughout the term.

Prerequisites: ART 155, ART 156, AT 251, 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 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.

Prerequisites: ART 252 with a minimum grade of "C" and Reading Proficiency.

**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 (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.**

Digital Printing surveys and studies printing technologies that support the disciplines of photography, design, and the fine arts. Students will learn optimal and alternate ways to prepare and produce digital files for output on varied media. At the end of the semester, a portfolio of prints will be produced that demonstrate knowledge in: capture and file origination, color management, appropriate resolution and file preparation, and overall print quality.

Prerequisites: ART 275, ART 172, 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 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.**

Color Photography II provides advanced exploration in the materials associated with color photography and techniques of color printing. A portfolio of color prints will be developed and improved upon throughout the semester.

Prerequisites: ART 167 and Reading Proficiency.

**AT 275. Video Art II. 3 Credit Hours.**

Video Art II is a continued investigation into video art as a personal expressive medium and includes work with computers, software, video and 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. This course is specifically for the fine artist who wishes to use technology as a creative medium.

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 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.**

Student 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.

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 include 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.**

Introduction to Baking Theory 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.

Prerequisites: CUL 101, HTM 100, and Reading Proficiency.

**BAP 105. Breads, Rolls, and Bakeries. 3 Credit Hours.**

Breads, Rolls, and Bakeries introduces the techniques for 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.

Prerequisites: BAP 101 with a minimum grade of "C" and Reading Proficiency.

**BAP 110. Production Pastry Techniques. 3 Credit Hours.**

Production Pastry Techniques 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.

Prerequisites: BAP 105 with a minimum grade of "C" and Reading Proficiency.

**BAP 115. Cake Production and Decoration. 3 Credit Hours.**

Cake Production and Decoration exposes 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.

Prerequisites: BAP 110 with a minimum grade of "C" and Reading Proficiency.

**BAP 150. Bakeshop Basics for Culinarians. 3 Credit Hours.**

Bakeshop Basics for Culinarians 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.

Prerequisites: CUL 101, HTM 100, and Reading Proficiency.

**BAP 160. Artistic Concepts in Pastry. 3 Credit Hours.**

Artistic Concepts in Pastry introduces students to the basic principles of drawing, design, digital photography, and artistic media utilized in the baking and pastry industry. Students will work with two-dimensional and three-dimensional formats to create a series of assigned projects.

Prerequisite: Reading Proficiency.

**BAP 201. Artisan and Decorative Bread. 2 Credit Hours.**

Artisan and Decorative Bread 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.

Prerequisites: BAP 115 with a minimum grade of "C" and Reading Proficiency.

**BAP 205. Ice Cream and Frozen Desserts. 2 Credit Hours.**

Ice Cream and Frozen Desserts 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 be addressed during this class.

Prerequisites: BAP 201 with a minimum grade of "C" and Reading Proficiency.

**BAP 210. Chocolate Candies and Showpieces. 2 Credit Hours.**

Chocolate Candies and Showpieces teaches students the 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.

Prerequisites: BAP 205 with a minimum grade of "C" and Reading Proficiency.

**BAP 215. Plated Desserts. 2 Credit Hours.**

Plated Desserts 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.

Prerequisites: BAP 210 with a minimum grade of "C" and Reading Proficiency.

**BAP 220. Sugar Candies and Showpieces. 2 Credit Hours.**

Sugar Candies and Showpieces 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.

Prerequisites: BAP 215 with a minimum grade of "C" and Reading Proficiency.

**BAP 260. Baking and Pastry Arts Capstone. 3 Credit Hours.**

Baking and Pastry Arts Capstone is a culminating course that 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. This course will prepare students for this industry recognized examination.

Prerequisites: CUL 150 and BAP 220 with a minimum grade of "C", HTM 200, HTM 210, and Reading Proficiency.

## Behavioral Health Support (BHS)

**BHS 101. Introduction to Behavioral Health Support. 3 Credit Hours.**

Introduction to Behavioral Health Support will expose students to the programs and services offered by community mental health centers and other behavioral health facilities. Students will be introduced to trends in treatment, populations served, professional requirements, roles of the individual and family, and various settings within behavioral health care.

Prerequisites: Admission to Behavioral Health Support program and Reading Proficiency.

**BHS 102. Legal and Ethical Issues in Behavioral Health Support. 3 Credit Hours.**

Legal and Ethical Issues in Behavioral Health Support examines laws and regulations in Missouri related to behavioral health. Topics include ethical standards, personal and professional boundaries, and common legal matters facing individuals with mental health issues.

Prerequisites: Admission to the Behavioral Health Support program and Reading Proficiency.

**BHS 103. Systems of Care. 3 Credit Hours.**

Systems of Care will introduce students to different systems in which their clients are involved. Topics will include the family, mental health, medical, other social service agencies, and schools. Students will understand the community support specialist's role in helping the client navigate those systems, including techniques for helping clients.

Prerequisites: BHS 101 with a grade of 'C' or better and Reading Proficiency.

**BHS 104. Clinical Encounters I: Interviewing and Assessment. 3 Credit Hours.**

Clinical Encounters I will teach basic interviewing skills and expose students to various screenings and assessments to use with clients. Areas addressed are outreach, stages of change, how to build rapport, the recovery process, collaborative documentation, helping vs. 'doing for', crisis intervention, transitions of care and the diagnostic interview.

Prerequisites: BHS 101 with a grade of 'C' or better and Reading Proficiency.

**BHS 105. Integrated Health. 3 Credit Hours.**

Integrated Health exposes students to the kinds of chronic diseases and health care issues experienced by those within behavioral health settings. They will learn about signs and symptoms, best practices for management, challenges related to treatment of co-occurring conditions and chronic health issues. Topics related to overall client wellness and support worker self-care will also be covered.

Prerequisites: BHS 101 with a grade of 'C' or better and Reading Proficiency.

**BHS 201. Clinical Encounters II: Crisis and Interventions. 3 Credit Hours.**

Clinical Encounters II: Crisis and Interventions will help students understand basic crisis intervention, conflict resolution and de-escalation techniques. Course topics will include guardianship, involuntary detention, custody issues, and signs and symptoms of mental health diagnoses. Students will gain experience in documentation, assessment, screening tools and goal setting with clients.

Prerequisites: BHS 104 with a grade of 'C' or better and Reading Proficiency.

**BHS 202. Behavioral Health Support Practicum I. 4 Credit Hours.**

Behavioral Health Support Practicum I will give students the opportunity to gain practical experience and observation in a behavioral health setting, working with individuals, families and communities. Students will learn the structure and function of a mental health provider and integrate theory and practice. Students will complete 150 hours of observation and supervised activity in a behavioral health setting.

Prerequisites: BHS 101, BHS 102, BHS 103, BHS 104 with grades of 'C' or better and Reading Proficiency.

**BHS 203. Evidence Based Treatment. 4 Credit Hours.**

Evidence Based Treatment will expose future behavioral health support workers to commonly used mental health prevention and intervention approaches. Students will learn widely-used best practices including behavioral, supportive, talk-therapy and medication assisted treatments.

Prerequisites: BHS 201 with a grade of 'C' or better and Reading Proficiency.

**BHS 204. Behavioral Health Support Practicum II. 4 Credit Hours.**

Behavioral Health Support Practicum II offers students continued applied experience in a behavioral health setting. Students will engage in supervised interactions working with individuals, families and communities experiencing a variety of behavioral health issues. The students must complete 150 hours of observation and supervised experience in a behavioral health setting.

Prerequisites: BHS 202 with a grade of 'C' or better 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: MTH 030 or MTH 050, BIO 111, 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, MTH 040, or MTH 050 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 (MOTR LIFS 100LG). 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 (MOTR LIFS 100). 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 (MOTR BIOL 100LZ). 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 (MOTR BIOL 100L). 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 (MOTR BIOL 100). 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 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 (MOTR BIOL 100LB). 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 (MOTR BIOL 150L). 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 (MOTR LIFS 100D). 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 (MOTR LIFS 100R). 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 177. Food Science. 3 Credit Hours.**

Food Science introduces the fundamental biological, chemical, and physical scientific principles associated with the study of foods. Topics include food composition and nutrition, food additives, regulations, food safety, toxicology, food preservation, packaging, food biotechnology, product development, and sensory evaluation. Proper use of the scientific method will be utilized to conduct laboratory experiments.

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 (MOTR LIFS 150LAP). 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 Fundamentals 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 with a grade of C or better 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 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 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 (MOTR CHEM 100L). 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 or MTH 050 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 (MOTR CHEM 150L). 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 (MOTR CHEM 100L). 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 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.

## Child and Family Development (CFD)

**CFD 101. Foundations of Child and Family Development. 3 Credit Hours.**

Foundations of Child and Family Development introduces an overview of early childhood including curricula, history, trends, programs and career opportunities. Quality characteristics of the environment and the role of the professional are examined.

Prerequisites: Reading proficiency and eligibility for placement in ENG 101.

**CFD 102. Child Growth and Development. 3 Credit Hours.**

Child Growth and Development is a study of child development, including major theories, developmental domain milestones, and other factors that influence the typical development of children from conception through age 8. Development is explored in the context of multiple influences such as family, culture and society. 9 hours of child observation is required for this course. Prerequisites: Reading proficiency and eligibility for placement in ENG 101.

**CFD 103. Physical Development: Health, Safety and Well-Being. 3 Credit Hours.**

Physical Development: Health, Safety and Well-Being focuses on health, nutrition, safety and physical development issues in early childhood. Topics include nutrition, nutrition education and practices, menu planning, indoor and outdoor safety, childhood diseases and injuries, aspects of physical development and movement, and appropriate health, hygiene and well-being practices for children as well as the adults who care for them. This course requires 3 hours of observation with a focus on physical motor skills.

Prerequisites: Reading proficiency and eligibility for placement in ENG 101.

**CFD 104. Creative Development: Art Experiences in Early Childhood. 3 Credit Hours.**

Creative Development: Art Experiences in Early Childhood introduces the expressive philosophy of creativity and explores music, movement and visual arts as related to the interests and development of young children. Child development candidates will plan for integrating activities in diverse early childhood settings, addressing all developmental domains.

Prerequisites: Reading proficiency and eligibility for placement in ENG 101.

**CFD 105. Professional Development Seminar I. 1 Credit Hour.**

Professional Development Seminar I provides information and hands-on experiences with observation, documentation and formal and informal assessment tools and strategies for use with young children, ages birth through age eight. Legal and ethical issues related to data collection, research and assessment will also be included in the course.

Prerequisites: CFD 101, CFD 102, Reading proficiency and eligibility for placement in ENG 101.

**CFD 106. Cognitive Development: Language and Literacy in Early Childhood. 3 Credit Hours.**

In Cognitive Development: Language and Literacy in Early Childhood, students examine quality literature appropriate for young children, infancy through age eight. Appropriate literacy experiences of reading, writing and language learning are discussed and practiced. Students also examine methods of presentation and the creation of literacy-based environments.

Prerequisites: CFD 101, CFD 102, Reading proficiency and eligibility for placement in ENG 101.

**CFD 107. Family/Community Support and Engagement. 3 Credit Hours.**

In Family/Community Support and Engagement students will examine strategies and develop skills in effective communication with individual parents and families. Topics include: reflections on the contemporary American family, developing reciprocal partnerships, utilizing community resources, parent involvement, meetings and conferences, and home visiting.

Prerequisites: ENG 101, CFD 101, CFD 102, CFD 103, CFD 104 and Reading Proficiency.

**CFD 108. Principles of Curriculum Design: Infants, Toddlers and Two-Year-Olds. 3 Credit Hours.**

Principles of Curriculum Design: Infants, Toddlers and Two-Year-Olds is the study of infants, toddlers and two-year-olds and includes current theories of early child development. It also includes a variety of research-based caregiving practices and teaching strategies for both parents and teachers, with a focus on curriculum design.

Corequisite: CFD 109.

Prerequisites: CFD 101, CFD 102, CFD 104, CFD 106, Reading proficiency and eligibility for placement in ENG 101.

**CFD 109. Supervised Student Teaching Practicum: Infants, Toddlers and Two Year Olds. 3 Credit Hours.**

In Supervised Student Teaching Practicum: Infants, Toddlers and Two-Year-Olds students will actively participate in the daily operation of a quality early care and education Infant and Toddler setting for a total of 150 hours. A qualified supervisor will guide students through selecting, planning and organizing curriculum in developmentally appropriate ways. Students will design and implement learning experiences for infants, toddlers and/or two-year-olds.

Corequisite: CFD 108.

Prerequisites: ENG 101, CFD 101, CFD 102, CFD 104, CFD 106, and Reading Proficiency.

**CFD 201. Social and Emotional Development: Guidance and Discipline. 3 Credit Hours.**

Social and Emotional Development: Guidance and Discipline includes study of child guidance literature that includes research-based normative development, theory, and strategies for guiding children's behavior at home and in diverse settings. Observation and field study of young children from infancy through age eight will be the foundation for this course.

Prerequisites: ENG 101, CFD 101, CFD 102, CFD 104, CFD 106, and Reading Proficiency.

**CFD 202. Cognitive Development: Math, Science, and Engineering for Young Children. 3 Credit Hours.**

In Cognitive Development: Math, Science, and Engineering for Young Children students will design and implement developmentally appropriate experiences that enhance Math, Science, and Engineering concepts for children between birth and 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, appropriate use of technology, and discovery learning.

Prerequisites: ENG 030 or higher, CFD 101, CFD 102, CFD 104, CFD 106, PSI 101, and Reading Proficiency.

**CFD 203. Professional Development Seminar II. 1 Credit Hour.**

Professional Development Seminar II will provide a seminar experience in which students can develop their early childhood professional dispositions and practices. Learning to be an advocate for children and their families will be part of the class process, as will continued study of the NAEYC Code of Ethical Conduct and Standards.

Prerequisites: CFD 105 and Reading Proficiency.

**CFD 204. Principles of Curriculum Design: Preschool. 3 Credit Hours.**

Principles of Curriculum Design: Preschool focuses on designing curriculum that meets the diverse needs of each child in an early childhood program. Topics include establishing physical environments, facilitating play and learning, developing, and facilitating curriculum based upon each child's needs and interests, planning for classroom management of children, classroom management styles, and transitions.

Corequisite: CFD 205.

Prerequisites: CFD 101, CFD 102, CFD 104, CFD 106, Reading proficiency and eligibility for placement in ENG 101.

**CFD 205. Supervised Student Teaching Practicum: Preschool. 3 Credit Hours.**

In Supervised Student Teaching Practicum: Preschool students will demonstrate the ability to execute all teaching and caregiving aspects of the assigned early childhood preschool environment. Lesson planning and implementation and developmentally appropriate guidance methods are included in this course.

Corequisite: CFD 204.

Prerequisites: CFD 105, CFD 203, Reading proficiency and eligibility for placement in ENG 101.

**CFD 206. Children With Special Abilities and Needs. 3 Credit Hours.**

Children With Special Abilities and Needs presents information about children with special needs with a focus on early intervention and the role of the teacher. Topics include screening, assessment, working with families, universal design and developing and implementing individualized program planning.

Prerequisites: CFD 101, CFD 102, CFD 104, CFD 106, Reading proficiency and eligibility for placement in ENG 101.

**CFD 207. Supporting Cultural Awareness and Diversity. 3 Credit Hours.**

Supporting Cultural Awareness and Diversity addresses the impact of family, culture, ethnicity, political forces, context, community, and sociological systems on the development and growth of young children. Topics include diversity study, child and family advocacy, and the role of community resources in influencing children's optimal development.

Prerequisites: CFD 105, CFD 203, Reading Proficiency and eligibility for placement in ENG 101.

**CFD 208. Professional Development Seminar III. 1 Credit Hour.**

Professional Development Seminar III requires that child development candidates demonstrate a thorough understanding of early childhood professionalism, based on universal standards and expectations. Developmentally appropriate guidance and management, planning, implementation, personal presentation and dispositions will be addressed. Seminar meetings will include preparation for job interviews, resume and application completion, portfolio completion, issues and trends in early childhood, and other discourse as would be shown by beginning level professionals.

Prerequisites: CFD 105, CFD 203, and Reading Proficiency.

## Chinese (CHI)

**CHI 101. Elementary Chinese I (MOTR LANG 105). 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 (MOTR LANG 106). 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. Additional 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. Additional 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 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 (MOTR COMM 100). 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 or 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 107. Public Speaking (MOTR COMM 110). 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 (MOTR COMM 120). 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.

Corequisite: CRJ 211.

Prerequisites: Corrections Option--CRJ 122, CRJ 101 and CRJ 102 or Law Enforcement Option--CRJ 122, CRJ 124 and CRJ 111, and Reading Proficiency.

**CRJ 211. Criminal Justice Practicum Seminar. 3 Credit Hours.**

Discussion and analysis in small groups of the Criminal Justice Practicum experience.

Corequisite: CRJ 209.

Prerequisites: Corrections Option--CRJ 122, CRJ 101 and CRJ 102, or Law Enforcement Option--CRJ 122, CRJ 124 and CRJ 111, and Reading Proficiency.

**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).

Prerequisite: Reading Proficiency.

**CUL 110. Food Preparation Practical I. 3 Credit Hours.**

Food Preparation Practical I introduces competencies for tools and equipment, kitchen organization, converting and following recipes, applying safety and sanitation, vegetable cuts (American Culinary Federation competition cuts), stocks, sauces, and basic cooking methods.

Prerequisites: CUL 101, HTM 100, and Reading Proficiency.

**CUL 115. Food Preparation Practical II. 3 Credit Hours.**

Food Preparation Practical II 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.

Prerequisites: CUL 110 with a minimum grade of "C" and Reading Proficiency.

**CUL 120. Food Preparation Practical III. 3 Credit Hours.**

Food Preparation Practical III allows students to master the foundation of cooking techniques and theories from Food Preparation Practical I and II. Emphasis is placed on individual as well as team production. The focus is on cooking fundamentals, ratios, and formulas in a professional kitchen.

Prerequisites: CUL 115 with a minimum grade of "C" and Reading Proficiency.

**CUL 150. Culinary Essentials. 3 Credit Hours.**

Culinary Essentials will introduce students enrolled in non-Culinary Arts curricula 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.

Prerequisites: CUL 101, HTM 100, and Reading Proficiency.

**CUL 201. Garde Manger. 2 Credit Hours.**

Garde Manger is designed to allow the student to develop fundamental principles of the cold kitchen including methods of salad and sandwich preparation. Aspic gelee, chaud-froid, hors de oeuvres, canapes, and appetizers are prepared along with 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. Prerequisites: BAP 150 and CUL 120 with minimum grades of "C" and Reading Proficiency.

**CUL 205. Global Cuisine. 2 Credit Hours.**

In Global Cuisine, students prepare, taste, serve, and evaluate traditional, regional dishes of Europe, the Mediterranean, Asia, Africa, and Middle East. Emphasis will be placed on ingredients, flavor profiles, preparation, and techniques representative of various global cuisines. Prerequisites: BAP 150 and CUL 120 with minimum grades of "C" and Reading Proficiency.

**CUL 210. Nutritional Cooking. 2 Credit Hours.**

Nutritional Cooking focuses on evaluating and preparing foods for a healthy diet. Recipes will be prepared using a variety of high quality foods that provide balanced nutrition throughout the life cycle. Focus will be placed on modifications to standardized recipes tailored to dietary needs. Prerequisites: DIT 115, BAP 150, and CUL 120 with minimum grades of "C" and Reading Proficiency.

**CUL 215. American Regional Cuisine. 2 Credit Hours.**

American Regional Cuisine introduces the student to the foods from distinct culinary localities throughout the United States. Students will gain the opportunity to develop professional culinary skills using a diverse selection of high-quality ingredients indigenous to the United States. Preparation of selected recipes will showcase varied cooking methods and presentations. Prerequisites: CUL 120 and BAP 150 with minimum grades of "C" and Reading Proficiency.

**CUL 220. Introduction to a la Carte Cooking. 2 Credit Hours.**

Introduction to à la Carte Cooking introduces standard workstation organization used to execute food preparation for à la carte cooking service. Topics include menu and recipe interpretation and conversion, expedient cooking methods, plating design, and saucing principles. Students will prepare à la carte orders using various cooking methods and summarize food costs of composed plated meals. Coursework will follow standards outlined by the American Culinary Federation Certified Sous Chef certification. Prerequisites: BAP 150 and CUL 120 with minimum grades of "C", and Reading Proficiency.

**CUL 250. Culinary Arts Capstone. 6 Credit Hours.**

Culinary Arts Capstone requires the student to use both technical knowledge and managerial ability to organize and complete a commercial simulation of a full-service dining operation. Students will participate in food preparation, managerial tasks, and front-of-house serving duties. This culminating experience will ensure students meet all necessary requirements for obtaining the Certified Culinarian certification through the American Culinary Federation. Prerequisites: BAP 150, CUL 201, CUL 205, CUL 210, CUL 215, CUL 220 all with a minimum grade of "C", HTM 200, HTM 210, and Reading Proficiency

## Deaf Communication Studies (DCS)

**DCS 104. American Sign Language I (MOTR LANG 105). 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 (MOTR LANG 106). 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.**

Dental Assisting Practicum introduces the student to the dental office and provides an opportunity for the application of basic dental assisting skills and clinical support functions. Co-requisite: DA 164.

Prerequisites: DA 144, 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.**

Clinical Applications I addresses applications of theoretical knowledge to a clinical laboratory setting. Emphasis is on developing skills in assisting with restorative procedures and manipulating dental materials.

Corequisites: DA 143, DA 157, DA 161 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.**

Dental Assisting Practicum III requires the student to assume the roles 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.

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.

**DA 204. Expanded Functions IV. 1 Credit Hour.**

Expanded Functions IV will address techniques and concepts of restorative procedures delegated to dental assistants in the state of Missouri as specified in the rules and regulations set forth in the Missouri Practice Act. Procedures include placing, carving, and finishing Class I, II, III, IV, V and VI restorations.

Prerequisite: Reading Proficiency.

## Dental Hygiene (DHY)

### **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 150. Concepts in Clinical Dental Hygiene I: Pre-clinic. 3 Credit Hours.**

Concepts in Clinical Dental Hygiene I: Pre-clinic introduces the development of basic foundations for competent delivery of preventive, therapeutic, and educational dental hygiene services to the public. A solid knowledge base for assessment, planning, implementation, and evaluation of patient care is established. Theory and practical aspects of prevention of disease transmission in the dental setting and patient assessment skills such as health history, vital signs, oral inspections, principles of instrumentation, and treatment planning are emphasized.

Prerequisites: BIO 203, BIO 207, BIO 208, CHM 101, Current CPR-Basic Life Support with AED Certification, and Reading Proficiency.

### **DHY 152. Clinical Dental Hygiene I: Pre-Clinic. 3 Credit Hours.**

Clinical Dental Hygiene I: Pre-Clinic introduces students to the application of basic foundations for competent delivery of preventive, therapeutic, and educational dental hygiene services on dental manikins and peer partners. Skill development in areas of assessment, planning, implementation, and evaluation of patient care is achieved. The topics of health history, vital signs, oral inspections, application of instrumentation, and treatment planning are emphasized.

Prerequisites: BIO 203, BIO 207, BIO 208 and CHM 101; Current CPR-Basic Life Support with AED Certification, Reading Proficiency.

### **DHY 154. Periodontics I. 2 Credit Hours.**

Periodontics I is the study of the healthy periodontium and an introduction to gingival conditions and diseases. Acquired soft and hard deposits, the microbiology, and the etiologic factors of periodontal diseases are covered in depth. Methods of basic oral physiotherapy are introduced.

Prerequisites: BIO 203, BIO 207, BIO 208, CHM 101; Current CPR-Basic Life Support with AED Certification, Reading Proficiency.

### **DHY 155. Dental Radiology. 2 Credit Hours.**

Dental Radiology is the study of the production, effects, and uses of radiation in dentistry. Significant emphasis is given to the effects of variations in exposure control factors, personnel and patient safety measures, techniques in the exposing of dental radiographs and digital images, dental film and sensors, film processing and digital imaging. Radiographic presentation of important anatomical landmarks and structures are introduced. In addition, abnormalities such as periodontal disease, dental caries, traumatic and periapical lesions and other anatomical irregularities are covered.

Prerequisites: BIO 203, BIO 207, BIO 208, CHM 101, Current CPR-Basic Life Support with AED Certification, and Reading Proficiency.

### **DHY 156. Dental Radiology Lab. 1 Credit Hour.**

Dental Radiology Lab introduces the techniques for placement, exposing, processing, mounting, imaging, and analysis of dental radiographs. Application of the principles of ethical and safety reasoning is applied to the exposure of patient to x-radiation following the ALARA concept. Supplemental dental radiographic techniques and procedures used in contemporary dental practices and facilities are applied. Emphasis is also given to the extra oral panoramic digital techniques. Supplemental techniques for pediatric, transitional, and edentulous radiographs are presented.

Prerequisites: BIO 203, BIO 207, BIO 208, CHM 101; Current CPR-Basic Life Support with AED Certification, Reading Proficiency.

### **DHY 157. Oral Anatomy. 2 Credit Hours.**

Oral Anatomy is the introductory study of the teeth, as well as intraoral and perioral structures. Macroscopic and microscopic anatomical features of the oral cavity are covered in addition to the anatomy and identification of the primary, mixed and permanent dentitions. Processes and techniques for identifying and documenting oral conditions and occlusal relationships 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: BIO 203, BIO 207, BIO 208, CHM 101, Current CPR-Basic Life Support with AED Certification, and Reading Proficiency.

### **DHY 158. Biomedical Science for the Dental Hygienist. 2 Credit Hours.**

Biomedical Science for the Dental Hygienist 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. Patient evaluation and risk vs. benefit of providing dental care is discussed.

Prerequisites: BIO 203, BIO 207, BIO 208, CHM 101; Current CPR-Basic Life Support with AED Certification, Reading Proficiency.

### **DHY 159. Dental Medical Emergencies. 1 Credit Hour.**

Dental Medical Emergencies introduces elements of dental care as it relates to risk management of medically compromised patients. The major portion of the course deals with the prevention, recognition, and management of medical emergencies which occur in the dental office.

Prerequisites: BIO 203, BIO 207, BIO 208, CHM 101 and current CPR-Basic Life Support with AED Certification.

### **DHY 160. Concepts in Clinical Dental Hygiene II. 3 Credit Hours.**

Concepts in Clinical Dental Hygiene II is the continuation and further development of content from Concepts of Pre-clinical Dental Hygiene I DHY 150, with emphasis on didactic information regarding the clinician's assessment of the patient's medical status and dental conditions for the dental hygiene diagnosis. Learning theory as it relates to patient education is covered. Introduction to powered instrumentation theory and technique, dental stains and their removal, as well as fluoride therapies as a preventive measure for patients and the community are included.

Prerequisites: DHY 150, DHY 152, DHY 154, DHY 155, DHY 156, DHY 157, DHY 158, DHY 159, Current CPR-Basic Life Support with AED Certification, and Reading Proficiency.

### **DHY 162. Clinical Dental Hygiene II. 5 Credit Hours.**

Clinical Dental Hygiene II establishes patient contact which coordinates with application of the theories, principles, and responsibilities related to dental hygiene practice at the student's current level of knowledge. Patients of varying age groups with healthy or early periodontal involvement will be treated affording students instruction that will allow them to develop the instrumentation techniques taught in Preclinical Dental Hygiene I. Competency requirements for the completion of this clinical course include topics to help students incorporate skills learned in the laboratory and apply them at the clinical level. External clinical observations in the areas of endodontics, periodontics, orthodontics, general dentistry, and dental hygiene allow students to gain knowledge of a working dental office. Continued emphasis is placed on professionalism.

Prerequisites: DHY 150, DHY 152, DHY 154, DHY 155, DHY 156, DHY 157, DHY 158, DHY 159, Current CPR-Basic Life Support with AED Certification, and Reading Proficiency.

**DHY 164. Periodontics II. 2 Credit Hours.**

Periodontics II presents the advanced study of the periodontium in disease. Periodontitis and its various presentations are covered in depth, with emphasis on periodontal assessment methods, nonsurgical periodontal therapies, dental hygiene interventions and periodontal maintenance. Basic surgical and implant concepts are introduced.

Prerequisites: DHY 150, DHY 152, DHY 154, DHY 155, DHY 156, DHY 157, DHY 158, DHY 159, Current CPR-Basic Life Support with AED Certification, and Reading Proficiency.

**DHY 167. Anatomy & Embryology of the Head & Neck. 3 Credit Hours.**

Anatomy & Embryology of the Head and Neck covers the gross morphology and embryology of the structures of the head and neck. Emphasis is on the specific anatomy of the temporomandibular joint and associated disorders; cranial nerves with emphasis on the trigeminal and facial nerves, nerve basis for dental anesthesia; the muscles of mastication and facial expression, and the blood and lymphatic vessels of the head and neck. The principles of ethics is emphasized in the prevention of tissue damage during dental anesthesia procedures.

Prerequisites: DHY 150, DHY 152, DHY 154, DHY 155, DHY 156, DHY 157, DHY 158, DHY 159, Current CPR-Basic Life Support with AED Certification, and Reading Proficiency.

**DHY 168. General & Oral Pathology. 2 Credit Hours.**

General & Oral Pathology introduces the student to general pathology with emphasis on oral pathosis. Oral diseases and oral manifestations of systemic diseases are studied in depth.

Prerequisites: DHY 150, DHY 152, DHY 154, DHY 155, DHY 156, DHY 157, DHY 158, DHY 159, Current CPR-Basic Life Support with AED Certification, and Reading Proficiency.

**DHY 169. Ethics in Dental Hygiene. 1 Credit Hour.**

Ethics in Dental Hygiene sets the foundation and explores the relationship between ethics and professionalism, ethical theory, philosophy, principles and values. In addition, social responsibility and the code of ethics are discussed. Students will practice ethical decision-making through the use of case studies.

Prerequisites: DHY 150, DHY 152, DHY 154, DHY 155, DHY 156, DHY 157, DHY 158, DHY 159, Current CPR-Basic Life Support with AED Certification, and Reading Proficiency.

**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. Corequisite: DHY 273.

Prerequisites: 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 250. Concepts in Clinical Dental Hygiene III. 2 Credit Hours.**

Concepts in Clinical Dental Hygiene III introduces 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, and pulp vitality testers are introduced. Ergonomics for the dental hygienist, further strategies and methods for treating dentin hypersensitivity in the periodontal patient, and care and maintenance of dental implants will be presented.

Prerequisites: DHY 172, DHY 273; Current CPR-Basic Life Support with AED Certification, Reading Proficiency.

**DHY 251. Concepts in Clinical Dental Hygiene III: Lab. 1 Credit Hour.**

Concepts in Clinical Dental Hygiene III: Lab involves the application of clinical dental hygiene concepts and various dental materials learned in Concepts of Clinical Dental Hygiene III and Dental Materials.

Prerequisites: DHY 172, DHY 273, Current CPR-Basic Life Support with AED Certification and Reading Proficiency.

**DHY 252. Clinical Dental Hygiene III. 5 Credit Hours.**

Clinical Dental Hygiene III continues with students applying 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.

Prerequisites: DHY 172, DHY 273, Current CPR-Basic Life Support with AED Certification and Reading Proficiency.

**DHY 257. Dental Materials. 1 Credit Hour.**

Dental Materials introduces the student to the physical properties and procedures for using various dental materials. Students are instructed in the use of impression material, steps in constructing study casts, formulating restorative materials and replacing or protecting structures within the oral cavity. The clinical application and use of these materials will take place in DHY 251 Concepts of Clinical Dental Hygiene Lab.

Prerequisites: DHY 172, DHY 273, Current CPR-Basic Life Support with AED Certification and Reading Proficiency.

**DHY 258. Dental Pharmacology. 2 Credit Hours.**

Dental Pharmacology introduces pharmacology which can be defined as the science of drugs. Within pharmacology is an interrelationship of biomedical sciences, including biochemistry, physiology, and pathology. This course will provide 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: DHY 172, DHY 273; Current CPR-Basic Life Support with AED Certification, Reading Proficiency.

**DHY 259. Dental Nutrition & Biochemistry. 2 Credit Hours.**

Dental Nutrition & Biochemistry introduces the concepts of biochemistry 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 relationship of nutrition to oral health.

Prerequisites: DHY 172, DHY 273, Current CPR-Basic Life Support with AED Certification and Reading Proficiency.

**DHY 260. Concepts IV: Transitioning into Professional Dental Hygiene Practice. 2 Credit Hours.**

Concepts IV: Transitioning into Professional Dental Hygiene Practice introduces various supportive topics such as dental hygiene care for the cancer patient and the recognition and legal reporting of suspected cases of child abuse. The health care provider-patient legal relationship, state rules and regulations for the practice of dentistry and dental hygiene, and the theory of quality assurance are emphasized. Employment seeking skills are presented including the electronic portfolio.

Prerequisites: DHY 250, DHY 251, DHY 252, DHY 257, DHY 258, DHY 259; Current CPR-Basic Life Support with AED Certification, Reading Proficiency.

**DHY 262. Clinical Dental Hygiene IV. 5 Credit Hours.**

Clinical Dental Hygiene IV continues with students applying the learned theories, principles, procedures, instrumentation and responsibilities related to the field of dental hygiene practice in the dental hygiene clinic and at community dental health facilities. Students will also participate in service learning opportunities.

Prerequisites: DHY 250, DHY 251, DHY 252, DHY 257, DHY 258, DHY 259, Current CPR-Basic Life Support with AED Certification, and Reading Proficiency.

**DHY 263. Dental Public Health. 2 Credit Hours.**

Dental Public Health provides a study of the history, economics, and management of the dental 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 examination of the principles of dental 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. Students will also complete a community service project experience as a component of this course.

Prerequisites: DHY 250, DHY 251, DHY 252, DHY 257, DHY 258, DHY 259, Current CPR-Basic Life Support with AED Certification, and Reading Proficiency.



**DHY 273. Pain Control. 2 Credit Hours.**

Pain Control is a course that covers the 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 the course. Students are required to pass competency testing in this course for successful course completion.

Corequisite: DHY 172.

Prerequisites: DHY 160, DHY 162, DHY 164, DHY 167, DHY 168, DHY 169, Current CPR-Basic Life Support with AED Certification, 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. 3 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. 3 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.**

Diesel Engine Operation and Repair is the study of the theories of operation, construction, maintenance, diagnosis, disassembly, and assembly of the diesel engine and its supporting systems, including lubrication system, cooling system, and engine brakes.

Prerequisites: DIE 100 and 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 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.

## Economics (ECO)

**ECO 140. Introduction to Economics (MOTR ECON 100). 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 or MTH 050, and Reading Proficiency.

**ECO 151. Principles of Macroeconomics (MOTR ECON 101). 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 or MTH 050 with a minimum grade of "C" and Reading Proficiency.

**ECO 152. Principles of Microeconomics (MOTR ECON 102). 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.

Prerequisites: MTH 030 or MTH 050 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: ENG 101 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 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 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: EMT 121.

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 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 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 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 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.**

English Grammar for Non-Native Speakers I provides English language learners 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.

Prerequisites: Recommendation of ESL staff.

**ENG 053. Listening and Note-Taking for Non-native Speakers. 3 Credit Hours.**

Listening and Note-Taking for Non-Native Speakers is designed for English language learners 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, 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.**

Academic English for Non-native Speakers II is designed for English language learners who have demonstrated general fluency in reading and writing English, and need to develop clarity in using English for academic purposes.

Prerequisites: ENG 050 and ENG 051 with grades of "C" or better.

**ENG 061. English Grammar for Non-native Speakers II. 3 Credit Hours.**

English Grammar for Non-native Speakers II provides English language learners 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.**

Academic English for Non-Native Speakers III is designed to facilitate English language learners' 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 101. College Composition I (MOTR ENGL 100). 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 (MOTR ENGL 200). 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 (MOTR ENGL 110). 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 (MOTR LITR 100F). 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 (MOTR LITR 100). 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 I (MOTR LITR 101A). 3 Credit Hours.**

American Literature I is a survey of American Literature from its pre-colonial beginnings through the end of the Civil War. This course includes literary criticism, textual reception, as well as historical and cultural context. Various authors and genres will be included.

Prerequisites: ENG 101 with a minimum grade of "C" and Reading Proficiency.

**ENG 205. American Literature II (MOTR LITR 101B). 3 Credit Hours.**

American Literature II provides a survey of American literature from the Civil War to the present. This course includes the topics of literary criticism, textual reception, as well as historical and cultural context. Various authors and genres will be included.

Prerequisite: ENG 101 with a minimum grade of "C" and 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 II (MOTR LITR 102B). 3 Credit Hours.**

British Literature II provides a survey of British Literature and culture from the late 18th century to the present. This course includes the topics of literary criticism, textual reception, as well as historical and cultural context. Various authors and genres will be included.

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 (MOTR LITR 106). 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 (MOTR LITR 105AA). 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 (MOTR LITR 200). 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.

## 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 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 (MOTR LANG 101). 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 (MOTR LANG 102). 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 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.**

Dynamics of Grief Management 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: Reading Proficiency.

### **FSE 103. Funeral Directing. 3 Credit Hours.**

Funeral Directing 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.

Prerequisite: Reading Proficiency.

### **FSE 104. Funeral Directing Practicum. 2 Credit Hours.**

Funeral Directing Practicum is a course that 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 practicum hours may be 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.**

Mortuary Law and Ethics 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: Reading Proficiency.

### **FSE 107. Funeral Service Merchandising. 2 Credit Hours.**

Funeral Service Merchandising introduces the practical aspects of product knowledge and merchandising for caskets, outer burial containers, and other related funeral service merchandise.

Prerequisite: Reading Proficiency.

### **FSE 108. Embalming Chemistry. 2 Credit Hours.**

Embalming Chemistry provides a survey of the basic principles of chemistry as they relate to funeral service. In this course there is major emphasis on chemical principles and precautions involved in the sanitation, disinfection

## 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 (MOTR GEOG 101). 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 (MOTR GEOG 100). 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 (MOTR PHYS 110ES). 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 (MOTR PHYS 110LES). 1 Credit Hour.**

Earth Science Laboratory is a course designed to accompany GEO 100 Earth Science Lecture or independently with GEO 100 as a prerequisite. This inquiry-based course includes introductory laboratory exercises in astronomy, geology, oceanography and meteorology, A required field trip to Missouri geologic sites is part of the course.

Prerequisites: Prior or concurrent enrollment in GEO 100 and Reading Proficiency.

**GEO 103. Environmental Geology (MOTR GEOL 100). 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 (MOTR GEOL 100L). 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 (MOTR LANG 105). 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 (MOTR LANG 106). 4 Credit Hours.**

Elementary German II introduces students to basic vocabulary, terminology, and cultural information necessary to become proficient in German. This is a standard, college-level course that 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 German language, an inquiry, which can happen both in and out of the classroom.

Prerequisites: Minimum grade of C in 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 and Language. 4 Credit Hours.**

Medical Terminology and Language 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.

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 (MOTR HIST 101). 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 (MOTR HIST 102). 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 115. Ancient and Medieval History to 1500 (MOTR WCIV 101). 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 (MOTR WCIV 102). 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 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 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.

## 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 134. Micropropagation of Plants. 3 Credit Hours.**

Micropropagation of Plants is an introduction to micropropagation, also called tissue culture. Topics presented include plant anatomy, hormones involved in plant growth, micropropagation techniques and industry uses. Techniques practiced include apical, root and seed propagation, and callus manipulation influenced by different hormones. Prerequisites: HRT 101 or BIO 124 and HRT 103 or BIO 219 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.**

Introduction to the Hospitality Industry 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. Prerequisites: 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.**

Hospitality Customer Service and Guest Relations provides the student with the basic knowledge of "service" and how it applies to managing guest relations in the hospitality industry. Customer service expectations will be examined from the perspective of those who deliver it and those who manage it.  
Prerequisites: HTM 100 and Reading Proficiency.

**HTM 120. Supervision and Leadership in the Hospitality Industry. 3 Credit Hours.**

Supervision and Leadership in the Hospitality Industry introduces students to the functions of a typical hospitality supervisor/leader as they relate to and impact stakeholders within a hospitality organization. Supervisory roles, responsibilities, and essential supervisory skills are presented through study and practical applications.  
Prerequisites: HTM 100 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.**

Procurement in the Hospitality Industry 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, comparative buying, and procedures associated with purchasing, receiving, issuing and inventory control using current industry technology, processes and procedures.  
Prerequisites: HTM 100, MTH 108 or Higher, and Reading Proficiency.

**HTM 205. Legal Aspects of Hospitality. 3 Credit Hours.**

Legal Aspects of Hospitality 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 and Reading Proficiency.

**HTM 210. Hospitality Financial Planning and Cost Control. 3 Credit Hours.**

Hospitality Financial Planning and Cost Control introduces students to common methods of operational cost control and accountability found in the hospitality industry. Students will be introduced to operational standards and the impact they have on financial performance. Costs of food, beverage, labor, and direct expenses are examined. Budgeting, forecasting, analysis, and decision making are examined.  
Prerequisites: HTM 100, MTH 108 or higher, and Reading Proficiency.

**HTM 215. Hospitality Sales and Marketing. 3 Credit Hours.**

Hospitality Sales and Marketing 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 hospitality organization.  
Prerequisites: HTM 100 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.**

Hotel Operations examines the organization, functions, and management of typical lodging 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.  
Prerequisites: HTM 100 and Reading Proficiency.

**HTM 230. Bar and Beverage Management. 3 Credit Hours.**

Bar and Beverage Management introduces the student to the topics of beverage knowledge, purchasing, control, marketing, legislation, staffing, service, food pairing, and responsible alcohol beverage service as they relate to positions found within the hospitality industry. Students are offered the opportunity to earn the ServSafe Alcohol certification through the National Restaurant Association.  
Prerequisites: HTM 100 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. 4 Credit Hours.**

Workplace Learning: Hospitality provides the student an opportunity to apply theory and skills learned in the classroom, learn new skills, and explore career possibilities while supervised by professionals in the field and a faculty member. Student will observe and participate in the functions of the hospitality industry, participate in service learning projects, volunteer for events sponsored by the hospitality department, or a combination of above, to enhance their preparation for entering the hospitality field. The student is required to complete a minimum of 200 hours of documented experience in a position or activity related to their academic or career goal. Co-requisite: 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 and Reading Proficiency.

**HTM 245. Meetings and Event Planning. 3 Credit Hours.**

Meetings and Event Planning 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: HTM 100 and 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.

**HTM 275. Travel and Tourism. 3 Credit Hours.**

Travel and Tourism provides a comprehensive overview of this enormous and captivating field and how it interconnects with hospitality. It thoroughly examines the various sectors of the industry (e.g., transportation, accommodations, food and beverage, attractions and entertainment, and destinations) considering the management, marketing and finance issues most important to industry members. It also investigates the economic, political, environmental, social, and cultural impacts of tourism, along with current and future trends.

Prerequisites: HTM 100 and Reading Proficiency.

**HTM 280. Foodservice Management Lab. 3 Credit Hours.**

Foodservice Management Lab requires the student to use both technical knowledge and managerial ability to organize and complete a commercial simulation of a full-service dining operation. Menu planning, recipe development, personnel management, financial analysis, marketing, and food preparation techniques will be taught. Students will serve in both front-of-house and back-of-house roles during planned meal events.

Prerequisites: CUL 150, HTM 115, HTM 210, 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 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. Co-requisite: HMS 203.

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. Co-requisite: HMS 204.

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 (MOTR WCIV 101). 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 (MOTR WCIV 101). 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 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 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 will 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 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 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.**

Web Development I 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 187 or IS 153, IS 139, IS 265 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.**

Medical Terminology 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.

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 267. C++ Programming II. 4 Credit Hours.**

C++ Programming II focuses on broadening and deepening the student's understanding of Object Oriented Programming (OOP) as implemented in the C++ language. Core elements include design and development of classes and use of inheritance, including multiple inheritance, polymorphism, and the use of the Standard Template Library. Development of Graphical User Interfaces in an integrated development environment (IDE) will be explored.

Prerequisites: IS 167 with a minimum grade of "C" 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 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.**

Java Frameworks: Spring 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 288 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 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.**

Firewall and VPN Security focuses on security solutions and processes in a network with emphasis on practical skills in the following areas: firewall, Intrusion Prevention System (IPS), Virtual Private Network (VPN) design, implementation, configuration, and maintenance.

Prerequisites: IT 201 with a minimum grade of "C" and Reading Proficiency.

**IT 211. Introduction to Virtualization and Cloud Computing. 4 Credit Hours.**

Introduction to Virtualization and Cloud Computing 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 240 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.

**IT 250. CCNA Cybersecurity Operations. 5 Credit Hours.**

CCNA Cybersecurity Operations (CyberOps) covers knowledge and skills needed to handle the tasks, duties, and responsibilities of an associate-level Security Analyst working in a Security Operations Center (SOC). The course emphasizes best practices and provides hands-on experience needed to respond to security events to maintain and ensure security operational readiness of secure networked systems. Recommended Preparation: Basic Windows and Unix operating system knowledge is recommended.

Prerequisites: IT 201 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.

Prerequisite: 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 (MOTR LANG 105). 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 (MOTR LANG 106). 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 (MOTR LANG 105). 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 (MOTR LANG 106). 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 110. Introduction to Law. 3 Credit Hours.**

Introduction to Law includes a general overview on the role of the law in modern society. The ethical and professional practice standards of the legal profession will be introduced. The legal process and the structures of Federal and Missouri Courts are examined. Several specific legal areas are surveyed including Tort, Contract, Property, Probate, Criminal and Administrative Law.

Prerequisite: Reading Proficiency.

**LGL 111. Law Office Management. 3 Credit Hours.**

Law Office Management is an introduction to the management of a law office and the role of the paralegal. It includes law office organization, communication and correspondence, trust accounting, conflicts management, marketing, physical and electronic file management, timekeeping and billing.

Prerequisite: Reading Proficiency.

**LGL 112. Contract Law. 3 Credit Hours.**

Contract Law provides students with an overview of the elements required for an enforceable contract. The impact of the Statute of Frauds as well as the Uniform Commercial Code on contracts will be examined.

Prerequisite: Reading Proficiency.

**LGL 113. Computers and the Law. 3 Credit Hours.**

Computers and the Law will help students become familiar with the use of technology in the legal profession. It includes a general introduction to various hardware and software systems used in law offices as well as by the courts. Emphasis is placed on hands-on experience with applications, locating factual and legal information using technology, as well as finding resources for continued acquisition of technical skills. Recommended Preparation: Prior computer experience strongly recommended.

Prerequisites: Reading Proficiency.

**LGL 202. Wills, Trusts, and Probate. 3 Credit Hours.**

Wills, Trusts, and Probate will provide an overview of the Estate Planning process and documents including Wills and Trusts. Students will draft Estate Plan documents. The students will use court forms for preparing Missouri Probate Administrations for decedent estates as well as for conservatorships and guardianships.

Prerequisites: LGL 110 or LGL 108 and Reading Proficiency.

**LGL 205. Real Estate Law. 3 Credit Hours.**

Real Estate Law is a study of the law of real property and in-depth survey of the more common types of real estate transaction and conveyances. Drafting problems involving various conveyance instruments are covered as well as the system for recording and searching public documents.

Prerequisites: LGL 110 or LGL 108 and Reading Proficiency.

**LGL 206. Administrative Law. 3 Credit Hours.**

Administrative Law provides an examination of the nature and authority of administrative agencies, the Administrative Procedures Act, rules and rule making, and administrative hearings. The student will examine the impact of various government regulations from Federal and Missouri agencies.

Prerequisites: LGL 110 or LGL 108 and Reading Proficiency.

**LGL 211. Tort Law. 3 Credit Hours.**

Tort Law is 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 and a study of the various forms of pleadings involved in commencing such claims in court actions.

Prerequisites: LGL 110 or 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.**

Legal Research is an introduction to the process of legal research, legal analysis, as well as the connection between research and legal writing. Legal issues, appropriate sources of law for legal analysis, and proper citation to legal authority will be examined.

Prerequisites: LGL 110 or LGL 108, ENG 100 or ENG 101, and Reading Proficiency.

**LGL 218. Legal Writing. 3 Credit Hours.**

Legal Writing is an introduction of the principles involved in legal analysis and the preparation of legal documents.

Prerequisites: 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.**

Family Law introduces statutory and case law regarding the dissolution of marriage action, termination of parental rights, adoption law, court appointment of guardians, and guardian ad litem. Topics will include client interviewing and counseling. Necessary documentation, discovery tools, and court forms required for filing as well as methods for determining the timing and venue for filings, will be examined. Recommended Preparation: Recommended that LGL 235 be completed prior to enrolling in this course.

Prerequisites: LGL 110 or LGL 108 and Reading Proficiency.

**LGL 230. Employment Law. 3 Credit Hours.**

Employment Law will examine the employer and employee relationship and the laws governing the employment agreement. This course will include the specific areas of employment discrimination, Worker's Compensation, and regulation of union activity.

Prerequisites: LGL 110 or 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.

**LGL 235. Civil Litigation. 3 Credit Hours.**

Civil Litigation focuses on the stages and preparation for civil trial. Litigation documents including pleadings, discovery documents and motions will be examined. The rules of evidence and the rules of civil procedure will be introduced.

Prerequisites: LGL 110 or LGL 108 and Reading Proficiency.

**LGL 236. Topics in Law. 3 Credit Hours.**

Topics in Law is a study of a selected area of law or current topics in law. This course will provide an opportunity to explore a specific areas of law such as Criminal Law, Cyber Law, Elder Law, Immigration Law, Intellectual Property, or other current legal issues in greater detail.

Prerequisites: LGL 110 or LGL 108 and Reading Proficiency.

**LGL 240. Advanced Civil Litigation. 3 Credit Hours.**

Advanced Civil Litigation is designed as an advanced course for those students who have completed Civil Litigation. The focus will be a detailed examination of court rules pertaining to discovery, civil trial procedures and preparation as well as appellate procedures.

Prerequisites: LGL 235 or LGL 104, and Reading Proficiency.

**LGL 280. Paralegal Clinical Studies. 3 Credit Hours.**

Paralegal Clinical Studies is an on-campus clinical experiential course that 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 licensed attorney. Students will perform legal work to enhance their preparation for entering the field.

Prerequisites: Approval of the campus program coordinator and Reading Proficiency.

**LGL 290. Workplace Learning: Paralegal. 3 Credit Hours.**

Workplace Learning: Paralegal is an experiential course that 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: Approval of the campus program coordinator 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 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 050. Mathematical Literacy. 3 Credit Hours.**

Mathematical Literacy will provide students with the skills and conceptual understanding to succeed in college-level mathematics courses. The course will help students develop conceptual understanding and acquire multiple strategies for solving application problems. It contains such topics as numeracy, proportional reasoning, algebraic reasoning, probability, sets, interpreting tables and graphs, and graphs of linear equations.  
Prerequisites: MTH 020 with grade of "C" or higher or satisfactory score on placement test, and RDG 020 with a grade of "C" or higher or satisfactory score on placement test.

**MTH 056. Principles of Quantitative Reasoning. 2 Credit Hours.**

Principles of Quantitative Reasoning is a co-requisite course for MTH 161, Quantitative Reasoning, for students with Learning Support Mathematics requirements. This course is designed to support the content covered in MTH 161 by addressing deficiencies in skills required for the topics in MTH 161.  
Co-requisite: MTH 161.  
Prerequisite: Reading Proficiency.

**MTH 058. Principles of Introductory Statistics. 2 Credit Hours.**

Principles of Introductory Statistics is a co-requisite course for MTH 180, Introductory Statistics, for students with Learning Support Mathematics requirements. This course is designed to support the content covered in MTH 180 by addressing deficiencies in skills required for the topics in MTH 180.  
Co-requisite: MTH 180.  
Prerequisite: Reading Proficiency.

**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 or MTH 050 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 or MTH 050 with a grade of "C" or better or satisfactory score on placement test and Reading Proficiency.

**MTH 140. Intermediate Algebra. 3 Credit Hours.**

Intermediate Algebra provides the transition from the Math Literacy Course into the Precalculus Algebra course. 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 or MTH 050 with a grade of "C" or better or satisfactory score on placement test and Reading Proficiency.

**MTH 160. Precalculus Algebra (MOTR MATH 130). 4 Credit Hours.**

Precalculus Algebra is a college algebra course and one of the prerequisites on the STEM pathway leading to Calculus. It includes the following topics: theory of equations; functions and graphs including circles, ellipses, parabolas, hyperbolas, polynomials, rationals, exponentials, and logarithms; systems of equations and inequalities; and matrices. 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. 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 161. Quantitative Reasoning (MOTR MATH 120). 4 Credit Hours.**

Quantitative Reasoning provides a comprehensive overview of the quantitative skills required to navigate the mathematical demands of modern life and to prepare students for a deeper understanding of information presented in mathematical terms. Emphasis is placed on improving students' ability to draw conclusions, make decisions, and communicate effectively in quantitative-based situations that depend upon multiple factors.

Prerequisites: MTH 050 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. Precalculus Trigonometry. 3 Credit Hours.**

Precalculus Trigonometry is a trigonometry course and one of the prerequisites on the STEM pathway leading to calculus. It 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.**

Finite Mathematics is the study of the mathematics of finance, matrices, linear programming, and probability, as well as the use of these concepts to model several types of applications. Prerequisite courses must have been completed within the last three years.

Prerequisites: MTH 160, MTH 160A, MTH 160B or MTH 160C with grade of "C" or better and Reading Proficiency.

**MTH 180. Introductory Statistics (MOTR MATH 110). 4 Credit Hours.**

Introductory Statistics 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, correlation, and regression analysis.

Prerequisites: MTH 050 with a minimum grade of "C" or satisfactory scores on placement test, and Reading Proficiency.

**MTH 185. Precalculus (MOTR MATH 150). 5 Credit Hours.**

Precalculus is one of the prerequisites on the STEM pathway leading to calculus. This course 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 including conic sections; the solving of algebraic and trigonometric equations; systems of equations; and trigonometric identities. 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 introductory 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 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 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 211 both with minimum grades of "B" or department approval.

**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.

## 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 (MOTR MUSC 101). 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 (MOTR MUSC 100J). 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 (MOTR MUSC 100). 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 (MOTR MUSC 100RP). 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 (MOTR PERF 102C). 1 Credit Hour.**

Study and performance of representative choral literature. Emphasis on vocal technique and development. Additional studio hours required.

**MUS 132. Orchestra (MOTR PERF 102O). 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 (MOTR PERF 102B). 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 (MOTR PERF 102C). 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 (MOTR MUSC 104). 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 of 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. 3 Credit Hours.**

Paramedic Clinical I provides the student the opportunity to demonstrate the ability to perform airway, pharmacology and medical skills by completing a minimum of 236 clinical hours in various hospital departments and on an ambulance.

Corequisites: PAR 235.

Prerequisites: Admission to the Paramedic program and Reading Proficiency.

**PAR 222. Paramedic Clinical II. 3 Credit Hours.**

Paramedic Clinical II builds upon the clinical hours in various hospital departments and on an ambulance from Paramedic Clinical I.

Prerequisites: PAR 221 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.

**PAR 233. EMS Foundations. 1 Credit Hour.**

EMS Foundations provides the student with an introduction to what it means to be a Paramedic. The course includes the following topics: EMS Systems, Research, Safety and Wellness, Documentation, EMS System Communication, Therapeutic Communication, Medical/Legal and Ethics.

Prerequisite: Admission to Paramedic Program and Reading Proficiency.

**PAR 234. EMS Pharmacology. 3 Credit Hours.**

EMS Pharmacology provides the student with the principles of pharmacology, safety and administration, pharmacodynamics, pharmacokinetics and emergency medications.

Corequisite: PAR 235.

Prerequisites: Admission to the Paramedic program and Reading Proficiency.

**PAR 235. Paramedic Skills I. 2 Credit Hours.**

Paramedic Skills I introduces the basic required skills to function as a Paramedic. The student will learn and be competent in medication administration (IV, IO, IM, SQ, inhaled), patient assessment and airway management.

Corequisite: PAR 234.

Prerequisites: Admission to the Paramedic program and Reading Proficiency.

**PAR 236. EMS Pathophysiology. 2 Credit Hours.**

EMS Pathophysiology is a course where the student will learn the principles of pathophysiology as it relates to the emergency patient, how to recognize pathophysiologic findings and how to anticipate changes in a patient's condition based upon the findings.

Prerequisites: Admission to the Paramedic program and Reading Proficiency.

**PAR 237. Pulmonology. 2 Credit Hours.**

Pulmonology is a course in which the student will review the respiratory anatomy and physiology, assessment and treatment of respiratory emergencies.

Prerequisites: Admission to the Paramedic program and Reading Proficiency.

**PAR 238. Cardiology. 4 Credit Hours.**

Cardiology teaches the student to recognize and treat cardiovascular emergencies, perform ECGs and interpret ECGs.

Prerequisites: PAR 234, PAR 235, PAR 236, PAR 237, PAR 242, or by permission of the program director, and Reading Proficiency.

**PAR 239. Trauma. 3 Credit Hours.**

Trauma is the review of the anatomy, physiology and pathophysiology of trauma, and assessment and treatment of various traumatic injuries.

Prerequisites: PAR 234, PAR 235, PAR 236, PAR 242 and Reading Proficiency.

**PAR 240. EMS Operations. 2 Credit Hours.**

EMS Operations addresses various aspects of Emergency Medical Services including Incident Management, Mass Casualty Incident, Hazardous Materials, Rescue Operations, Air Evacuation and Terroristic threats.

Prerequisites: PAR 234, PAR 235, PAR 236, PAR 237, PAR 242 or by permission of the program director and Reading Proficiency.

**PAR 241. EMS Seminar. 3 Credit Hours.**

EMS Seminar is a capstone course designed to help students synthesize various patient assessment techniques and treatment plan implementations. The student will review all the skills and knowledge necessary to prepare for the NREMT practical and written examinations.

Prerequisites: PAR 233, PAR 238, PAR 239, PAR 240, PAR 222, PAR 245, PAR 244, and Reading Proficiency.

**PAR 242. Medical Care. 4 Credit Hours.**

Medical Care is a course in which the student will review anatomy and physiology of the human body and study neurology, abdominal and gastrointestinal disorders, immunology, infectious diseases, endocrine disorders, toxicology, hematology, renal/genitourinary, psychiatric, non-traumatic musculoskeletal disorders and diseases of the eye, ear, nose and throat.

Prerequisites: Admission to Paramedic program and Reading Proficiency.

**PAR 243. Field Internship. 4 Credit Hours.**

Field Internship students will be assigned to an Advanced Life Support ambulance where they will act as the team leader in performing total patient care including assessment and treatment of the patient. Co-requisite: PAR 241.

Prerequisites: Admission to Paramedic program, PAR 233, PAR 234, PAR 235, PAR 236, PAR 237, PAR 238, PAR 239, PAR 240, PAR 242, PAR 244, PAR 221, PAR 222, PAR 245, and Reading Proficiency.

**PAR 244. Special Patients. 2 Credit Hours.**

Special Patients is a course where the student will receive instruction in the care of the obstetric patient, neonatal and pediatric care, geriatrics and patients with special challenges. Co-requisite: PAR 245.

Prerequisites: Admission to Paramedic program and Reading Proficiency.

**PAR 245. Paramedic Skills II. 2 Credit Hours.**

Paramedic Skills II brings continues with skills from Paramedic Skills I and adds advanced skills to the Paramedic student including assessment of the pediatric patient, critical care patient assessment, methods of infant delivery, thoracentesis, cricothyrotomy and ventilators. Co-requisite: PAR 244.

Prerequisites: PAR 234, PAR 235, PAR 236, PAR 237, PAR 242, or by permission of the program director, 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 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 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 (MOTR PHIL 100). 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 (MOTR PHIL 101). 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 (MOTR RELG 100). 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 (MOTR PHIL 102). 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 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 an overnight float trip on Missouri Rivers.

**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. Additional 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 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 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 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 (MOTR PHYS 110). 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 or higher with a minimum grade of "C" and Reading Proficiency.

**PSI 111. Introduction to Astronomy I (MOTR ASTR 100). 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, MTH 050, or test into MTH 140 and Reading Proficiency.

**PSI 115. Observational Astronomy (MOTR ASTR 100L). 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 (MOTR PHYS 110AS). 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 (MOTR PHYS 110LAS). 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.**

Health Occupation Seminar 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 "S" 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 (MOTR PHYS 150L). 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 (MOTR PHYS 200L). 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.

## Political Science (PSC)

**PSC 101. Introduction to American Politics (MOTR POSC 101). 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 (MOTR POSC 201). 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.

**PSY 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 (MOTR PSYC 100). 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 (MOTR PSYC 200). 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 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.**

Brain and Behavior 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.**

Addiction and Compulsive Behavior examines the origins and treatment of addictive and compulsive behaviors, including substance abuse, workaholism, compulsive gambling, eating disorders, and dependent relationships.  
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 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 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 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 Care (RC)

**RC 100. Foundations of Respiratory Care. 3 Credit Hours.**

Foundations of Respiratory Care introduces students to the profession of respiratory care. The course will include the history of the profession, as well as the current and future roles of the respiratory care practitioner. The application of patient safety, communication, ethics, physical sciences, and microbiology to the field of respiratory care will be covered. This course will also include an overview of medical terminology.  
Prerequisite: Reading Proficiency.

**RC 110. Cardiopulmonary Anatomy and Physiology. 3 Credit Hours.**

Cardiopulmonary Anatomy and Physiology is an in-depth study of the anatomy and physiology of the respiratory system. Pulmonary physiological principles discussed will include ventilation, perfusion, diffusion, and blood gas transport. The course will conclude with an overview of the anatomy and physiology of the cardiovascular system.  
Prerequisites: BIO 208, Program Admission, and Reading Proficiency.

**RC 120. Respiratory Care Practices I. 5 Credit Hours.**

Respiratory Care Practices I provides classroom instruction and laboratory practice of the respiratory care practices utilized to administer general respiratory care. Areas of concentration will include storage and delivery of medical gases, humidity and aerosol therapy, aerosol drug therapy, lung expansion therapy, and airway clearance therapy.  
Prerequisites: BIO 208, Program Admission, and Reading Proficiency.

**RC 130. Patient Assessment. 3 Credit Hours.**

Patient Assessment provides classroom instruction and laboratory practice of initial contact with and assessment of respiratory care patients. Topics to be covered include principles of infection control, obtaining a medical history, vital signs, pulse oximetry, advanced patient assessment techniques, and documentation. The course will conclude with information of some of the most common diagnostic tests used in respiratory care.  
Prerequisites: BIO 208, Program Admission, and Reading Proficiency.

**RC 140. Respiratory Pharmacology. 2 Credit Hours.**

Respiratory Pharmacology provides information regarding the pharmacologic agents used in treatment of cardiopulmonary diseases. The course addresses pharmacological principles as well as the indications and application of medications used in the treatment of cardiopulmonary diseases.  
Prerequisites: RC 120, RC 130, and Reading Proficiency.

**RC 150. Respiratory Care Practices II. 4 Credit Hours.**

Respiratory Care Practices II provides classroom instruction and laboratory practice of the respiratory care practices and procedures utilized to assess, diagnose, and treat patients with cardiopulmonary disease. Areas of concentration include arterial blood gas analysis and interpretation, clinical laboratory findings, capnography, assisting a physician during special procedures, and airway management.  
Prerequisites: RC 100, RC 110, RC 120, RC 130, and Reading Proficiency.

**RC 160. Mechanical Ventilation I. 4 Credit Hours.**

Mechanical Ventilation I provides classroom instruction and laboratory practice of providing positive pressure ventilation to patients through intermittent positive-pressure breathing (IPPB), non-invasive positive-pressure ventilation, and invasive mechanical ventilation. Students will gain an understanding of initiating and assessing various modes and settings.  
Prerequisites: RC 100, RC 110, RC 120, RC 130, and Reading Proficiency.

**RC 170. Respiratory Care Clinical Practice I. 1 Credit Hour.**

Respiratory Care Clinical Practice I focuses on the application of general respiratory care principles in the hospital setting. Students receive a hospital orientation, assess patients, and provide general floor care that may include but is not limited to oxygen therapy, humidity and bland aerosol therapy, hyperinflation therapy, airway clearance therapies, and aerosolized medication therapy.  
Prerequisites: RC 100, RC 110, RC 120, RC 130, and Reading Proficiency.

**RC 180. Cardiopulmonary Diseases. 3 Credit Hours.**

Cardiopulmonary Diseases addresses the etiology, pathology, clinical manifestations, diagnosis, and treatment of various cardiopulmonary diseases. Students will learn to apply evidence-based guidelines to the treatment of cardiopulmonary disease.  
Prerequisites: RC 140, RC 150, RC 160, RC 170, and Reading Proficiency.

**RC 190. Respiratory Care Clinical Practice II. 1 Credit Hour.**

Respiratory Care Clinical Practice II will allow students more time to assess patients and apply general respiratory care principles in the hospital setting. The course will also include an introduction to the assessment and care of patients in the intensive care unit.  
Prerequisites: RC 140, RC 150, RC 160, RC 170 and Reading Proficiency.

**RC 200. Adult Critical Care. 3 Credit Hours.**

Adult Critical Care provides the student an understanding of the assessment, diagnosis, and management of an adult patient who is critically ill. Information will include the interpretation of electrocardiograms, Advanced Cardiac Life Support (ACLS), hemodynamic monitoring, critical care medications, and end-of-life care.  
Prerequisites: RC 180, RC 190, and Reading Proficiency.

**RC 210. Mechanical Ventilation II. 4 Credit Hours.**

Mechanical Ventilation II provides classroom instruction and laboratory practice of advancing topics centered around invasive mechanical ventilation. Topics will include methods to improve oxygenation and ventilation, troubleshooting, graphics analysis, and weaning invasive mechanical ventilation. The course will provide discussion on advanced modes and settings, high-frequency ventilation, and long-term ventilation strategies.  
Prerequisites: RC 180, RC 190, and Reading Proficiency.

**RC 220. Neonatal and Pediatric Respiratory Care. 3 Credit Hours.**

Neonatal and Pediatric Respiratory Care provides classroom instruction and laboratory practice of the respiratory care practices and procedures utilized to assess, diagnose, and treat neonatal and pediatric patients with cardiopulmonary disease. The etiology, pathophysiology, clinical manifestations, diagnosis, and management of neonatal and pediatric cardiopulmonary diseases will be discussed. The non-invasive and invasive mechanical ventilation concepts for this patient population will also be reviewed.  
Prerequisites: RC 180, RC 190, and Reading Proficiency.

**RC 230. Respiratory Care Clinical Practice III. 2 Credit Hours.**

Respiratory Care Clinical Practice III will focus on the assessment of patients and application of respiratory care in the critical care setting. Specialty rotations may include, but are not limited to: neonatal and pediatric respiratory care, airway management, and long-term care.  
Prerequisites: RC 180, RC 190, and Reading Proficiency.

**RC 240. Respiratory Care Specialties. 3 Credit Hours.**

Respiratory Care Specialties provides an introduction to the specialty areas in which a respiratory care practitioner can work. These areas include, but are not limited to pulmonary function testing, cardiopulmonary rehabilitation, home care, patient and community education, and out-of-hospital transport.  
Prerequisites: RC 200, RC 210, RC 220, RC 230, and Reading Proficiency.

**RC 250. Respiratory Care Capstone. 4 Credit Hours.**

Respiratory Care Capstone provides an overview of the research process used in respiratory care. The course will also discuss leadership roles in the field. Students will be given an opportunity to complete a project centered around respiratory care leadership or research. The course will also provide students with an opportunity to practice for the National Board for Respiratory Care (NBRC) exams required to obtain the Registered Respiratory Therapist (RRT) credential.  
Prerequisites: RC 200, RC 210, RC 220, RC 230, and Reading Proficiency.

**RC 260. Respiratory Care Clinical Practice IV. 2 Credit Hours.**

Respiratory Care Clinical Practice IV focuses on the assessment of patients and the application of respiratory care in the critical care setting. Specialty rotations may include, but are not limited to: neonatal and pediatric respiratory care, airway management, and long-term care.  
Prerequisites: RC 200, RC 210, RC 220, RC 230, and Reading Proficiency.

# Respiratory Therapy (RTH)

**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 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. 3 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.

**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 139. Electrical Training Alliance: Network Technologies. 2 Credit Hours.**

Electrical Training Alliance: Network Technologies is a part of the Second Year Core Curriculum of the Electrical Joint Apprenticeship and Training Committee. Students will be introduced to the fundamentals of networking including network topologies, the OSI model, network protocols, wireless technologies, and basic wiring principles.

**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. Students 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.

**SKT 144. Laborer Joint Apprenticeship Program: Concrete Placement. 3 Credit Hours.**

Laborer Joint Apprenticeship Program: Concrete Placement will allow students to learn all facets of concrete placement including but not limited to personal protective equipment usage; properties of concrete mix; impacts of add-mixtures to concrete; proper tool usage; different forms of a concrete slab; proper mathematical calculations to concrete placement.

**SKT 145. Laborer Joint Apprenticeship Program: Concrete Formwork. 3 Credit Hours.**

Laborer Joint Apprenticeship Program: Concrete Formwork will allow students to know and understand all facets of concrete formwork including but not limited to: the proper equipment use for formwork, proper methods for leveling and plumbing a wall, proper mathematical concepts to find top wall grade for foundation walls, installation of curbs and gutters, identification of power tools, and proper use of measurements to estimate concrete quantities.

**SKT 146. Laborer Joint Apprenticeship Program: Laborer Workplace Learning II. 6 Credit Hours.**

Laborer Joint Apprenticeship Program: Laborer Workplace Learning II is the on-the-job training experience of the First Year Laborers AGC Training Curriculum. Students in this course will gain important workplace learning experience based on concepts learned in the first year curriculum.

**SKT 147. Laborer Joint Apprenticeship Program: Laborer Workplace Learning III. 6 Credit Hours.**

Laborer Joint Apprenticeship Program: Laborer Workplace Learning III is the on-the-job training experience of the Second Year Laborers AGC Training Curriculum. Students in this course will gain important workplace learning experience based on concepts learned in the first year curriculum.

**SKT 148. Laborer Joint Apprenticeship Program: Laborer Workplace Learning IV. 6 Credit Hours.**

Laborer Joint Apprenticeship Program: Laborer Workplace Learning IV is the on-the-job training experience of the Second Year Laborers AGC Training Curriculum. Students in this course will gain important workplace learning experience based on concepts learned in the first year curriculum.

**SKT 149. Laborer Joint Apprenticeship Program: Scaffold Building/Aerial Lift. 3 Credit Hours.**

Laborer Joint Apprenticeship Program: Scaffold Building/Aerial Lift will allow students to learn all facets of scaffold building/aerial lifts. Proper analysis, set up, and use of scaffolding will be covered.

**SKT 150. Insulator Joint Apprenticeship Program: Insulator Safety I - OSHA. 1 Credit Hour.**

Insulator Safety I will focus on nomenclature of OSHA standards, OSHA's 10 hour safety course and the SMART MARK certification.

**SKT 151. Insulator Joint Apprenticeship Program: Insulator Safety II. 2 Credit Hours.**

Insulator Joint Apprenticeship Program: Health and Safety II 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 152. Insulator Joint Apprenticeship Program: Insulator Safety III. 1 Credit Hour.**

Insulator Joint Apprenticeship Program: Health and Safety III i will introduce students to basic health and safety practices on the worksite. Particular focus in this course will address the application of Firestop and Smoke Seal materials used in the insulator industry.

**SKT 153. Insulator Joint Apprenticeship Program: Fundamental Insulation I - Piping. 3 Credit Hours.**

Insulator Joint Apprenticeship Program: Fundamental Insulation I - Piping will focus on reducing heat transfer by applying proper insulation, finishes and covering to pipes, fittings and valves.

**SKT 154. Insulator Joint Apprenticeship Program: Fundamental Insulation II - Equipment. 3 Credit Hours.**

Insulator Joint Apprenticeship Program: Fundamental Insulation II - Equipment will focus on reducing heat transfer by applying proper insulation, finishes and covering to HVAC systems and Mechanical Equipment. Prerequisite: SKT 153.

**SKT 155. Insulator Joint Apprenticeship Program: Removable Insulation Design. 2 Credit Hours.**

Insulator Joint Apprenticeship Program: Removable Insulation Design introduces students to designing and installing removable and reusable insulation devices.

**SKT 156. Insulator Joint Apprenticeship Program: Advanced Metal Jacketing II - Equipment. 3 Credit Hours.**

Insulator Joint Apprenticeship Program: Advanced Metal Jacketing II - Equipment introduces students to layout, fabrication and installation techniques for protective metal finishes on equipment.

**SKT 157. Insulator Joint Apprenticeship Program: Blueprints, Codes and Specifications. 3 Credit Hours.**

Insulator Joint Apprenticeship Program: Blueprints, Codes and Specifications allows students to develop the skills necessary to interpret a set of plans, blueprints or drawings.

**SKT 158. Insulator Joint Apprenticeship Program: Advanced Metal Jacketing I - Piping. 3 Credit Hours.**

Insulator Joint Apprenticeship Program: Advanced Metal Jacketing I - Piping introduces students to layout, fabrication and installation techniques for protective metal finishes on piping.

**SKT 159. Insulator Joint Apprenticeship Program: Vapor Barriers. 1 Credit Hour.**

Insulator Joint Apprenticeship Program: Vapor Barriers will allow students to understand how condensation affects mechanical insulation and the application of various types and methods of vapor barrier to reduce water vapor transmission through insulation.

**SKT 160. Insulator Joint Apprenticeship Program: Workplace Learning I. 5 Credit Hours.**

Insulator Joint Apprenticeship Program: Workplace Learning I will allow students to have the apprentice experience on actual worksites, to understand and extend the learned concepts from the classroom and to continue education in the insulation industry through mentoring with journey persons.

**SKT 161. Floor Layers Joint Apprenticeship: Hardwood I – Adhesives, Measuring, Herringbone and Parquet Patter. 2 Credit Hours.**

Floor Layers Joint Apprenticeship: Hardwood I – Adhesives, Measuring, Herringbone and Parquet Patterns is part of the Floor Layers Joint Apprenticeship Program Curriculum. This course is designed to instruct the apprentice on the proper procedures and techniques associated with the installation of hardwood pattern flooring.

**SKT 162. Floor Layers Joint Apprenticeship: Resilient I. 2 Credit Hours.**

Floor Layers Joint Apprenticeship: Resilient I is part of the Floor Layers Joint Apprenticeship Program Curriculum. This course is designed to provide students with the basic skills necessary to install vinyl composition tile (VCT) and standard wall base. Class time will be dedicated to discussion and presentations involving identification of different types of resilient flooring and their characteristics, floor preparation, safe use and maintenance of tools, as well as installation procedures.

**SKT 165. Floor Layers Joint Apprenticeship: Stretching and Sewing. 3 Credit Hours.**

Floor Layers Joint Apprenticeship: Stretching and Sewing is part of the Floor Layers Joint Apprenticeship Program Curriculum. This course is designed to introduce students to the basic skills required to estimate the amount of materials needed to supply a job, determine efficient layout of the materials to minimize waste and power stretch carpet in a small room to multiple room application. Students will demonstrate skills in specialized carpet installations including "waterfall" style hand sewn bull-nosed step upholstery, incorporation of designs into carpet rugs and hand binding of area rugs.

## 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 (MOTR SOCI 101). 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. Work and Society. 3 Credit Hours.**

Work and Society is designed to give a broad understanding of work and how social forces have shaped the workplace. It will take a historical perspective, examining work from before the Industrial Revolution to today. The course will also examine major sociological theories related to work, shifting demands of the workplace on workers, worker resistance to increasing dominance and control, transnational workers, inequality in the workplace, and issues related to work/family balance.  
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 (MOTR LANG 103). 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 (MOTR LANG 104). 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 122 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 224.

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 (MOTR THEA 100A). 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 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.

# PERSONNEL

## 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

## Chancellor

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

## District-Wide Administrators/Professional Staff

Code	Title	Credit Hours
	Kirsten Abotsi, M.A., Manager, DW IR Systems	
	Alfred Adkins, M.A., Director Public Safety & Emergency Management	
	Nicholas Apelquist, B.A., Student Information System Lead	
	Gregory Atwood, Lead Enterprise Server Analyst	
	Suhail Awan, Senior Application & Systems Analyst/Programmer	
	Deborah Barron, M.A., Associate Vice Chancellor for Human Resources	
	Linda Basich, B.S., Executive Assistant, Associate Vice Chancellor for Workforce Solutions	
	Carol Bennett, M.S., DW IR Collection Services	
	Beverly Bevineau, B.A., Labor & Employee Relation Specialist	
	Philip Bewig, Senior Application & Systems Analyst/Programmer	
	Regina Blackshear, M.B.A., Director, Districtwide Financial Aid and Scholarships	
	Yvonne Bloom, Administrative Associate to Chancellor	
	Tim Boul, B.S., SHRM-CP, PHR, Customized Training Manager	
	Stacy Boyle, Application Solutions Analyst	
	Cassandra Brown, M.P.P.A., Program Manager, American Job Center	
	Jacquelyn Brown, M.A., Enrollment Operations Manager	
	Tracy Carpenter Bond, B.S., Coordinator, Veterans' Affairs	
	Kelli Burns, M.A., Director, Institutional Research and Planning	
	Neidra Butler, District Financial Aid Comp Proc	
	Patricia Chappuis, Data & Process Automation Analyst	
	Christopher Clayton, M.S., Senior Application & Systems Analyst/Programmer	
	Bobby Collins, M.S.Ed., District Manager, Loans and Scholarships	
	Shirley Colvin, B.S., Executive Assistant, Vice Chancellor for Student Affairs	
	Julie Conway, B.F.A., Graphic Design Lead	
	James Cooper, Senior Application & Systems Analyst/Programmer	
	Anthony Cruz, Ed.D., Vice Chancellor, Student Affairs	
	Ramon Cusi, Construction Project Facilitator	
	Susan Daniel, Coordinator of Degree Audit Systems and Processes	
	Kelly Deloch, B.S., C.O.M. Manager, Business, Finance and Technology Support	
	Michael Devitt, Business Analyst - Banner Student	
	John Dickey, B.S., Enterprise Business Application System Leader	
	Jo-Ann K. Digman, M.S.W., Executive Director, STLCC Foundation	
	Dennis Dill, M.B.A., LEED-AP BD&C, CEA, Senior Manager, Facilities	
	Mark Dowdy, Electrical Engineer	
	John Duarte, C.S., Supervisor, Central Facilities	
	Rene Dulle, M.B.A., Project Manager, Environmental and Transportation Programs	
	William Dyer, Senior Application & Systems Analyst/Programmer	
	Sara Dysert, Server Systems Analyst	
	Lesley English-Abram, B.S.W., Manager, Community Services	
	Becky Epps, B.A., Program Manager, Aviation & Technical Training	
	Jonathan Fanter, Lead Network Engineer	
	Matthew Favre, M.A., Coordinator, HWT Intake and Adult Learning Academy	

*Personnel*  
(12/04/18)

Larre Figgs, B.S., Executive Assistant, Vice Chancellor for Finance and Administration  
 Stacey Foster, M.A., Manager, Online Student Services  
 Keith Fuller, J.D., Director, Diversity and Inclusion  
 Joseph Furlong, Senior Application & Systems Analyst/Programmer  
 Marie Furtado, M.B.B.S., M.P.H., Program Coordinator  
 Rebecca Garrison, B.A.S., Associate, Board Relations  
 LaVerne Gee, M.A., Human Resources Specialist II  
 Dan Gioia, B.S., Senior Application Solutions Analyst  
 Matt Gioia, Information Security Analyst  
 Cindy Green, B.S., B.A., Assistant Controller, Controller's Office  
 Robert Guthrie, B.S., Application Systems Analyst/Programming Lead  
 Keith Hacke, M.S., Chief Information Officer  
 Khoulood Hawasli, M.I.M., Director, Enterprise Services and Operations  
 Laurie Hawkins, M.A., Program Coordinator and Career Pathway Coach  
 Patricia Henderson, M.A., Manager, Talent Management  
 Lesley Holland, M.B.A., Total Compensation Specialist  
 Monica Holland, Serials Coordinator  
 Jill Houghton, M.B.A., Coordinator, Budget  
 Tamara Howard, Coordinator, Student Accounts  
 Matthew Huber, M.A., Director, Enrollment Management  
 Lori Jahn, A.A., Executive Assistant, Information Technology  
 Jackie Johnson, B.F.A., Graphic Designer III  
 Joyce Johnson, Ph.D., Interim Associate Vice Chancellor for Academic Affairs  
 Paulette Johnson, B.S., District Manager, Campus Based Aid and Grants  
 Christopher Jones, M.S., Learning Experience Consultant  
 Kennard Jones, Staff Attorney  
 Michael Kelley, Program Specialist, Applications Systems Analyst  
 Ken Kempf, M.B.A., B.E.D., Manager, Engineering and Design  
 Troy Kitchen, A.A.S., Manager, Auto Controls  
 Karol Koch, A.A.S., Executive Assistant, Vice Chancellor for Academic Affairs  
 Robert Kovarik, Senior Application & Systems Analyst/Programmer  
 Andrew Langrehr, Ph.D., Vice Chancellor for Academic Affairs  
 Pamela Lanning, Oracle App Database Analyst  
 Lisa Lee, M.B.A., Manager, Student Accounts  
 Kimberly Linkous, Coordinator DW IR Acquisitions  
 Annette Lukacz, Coordinator, Library Services  
 Joseph Marshall, Construction Project Facilitator  
 Kerri Martin, Business Enterprise Application Specialist  
 Julie Massey, M.A., Manager, Student Success Initiatives  
 Darnette McCleary, M.A., Project Manager  
 Ashley McIntosh, M.A., Talent Management Specialist  
 Lucia Miller, B.A., Workforce Data and Reporting Coordinator  
 Kim Mueller, B.S., Learning Development Specialist  
 Hart Nelson, B.A., M.B.A., M.I.M., Associate Vice Chancellor for Workforce Solutions  
 James Nelson, Catalog Librarian  
 Mary Nelson, J.D., General Counsel/Chief Legal Officer, Legal Services  
 Ann Noland, A.A., Bursar, Controller's Office  
 Sheila Ouellette, M.L.S., Director, Instructional Resources  
 Jennifer Peterlin, Senior Research Associate, Institutional Research and Planning

Marie Peters, B.S.B.A., M.B.A., C.P.P., Manager, Continuing Education Programs  
 Skye Peters, B.A., Interactive Producer  
 Mike Petz, A.A.S., Manager, Telecommunications  
 Colleen Phillips, Coordinator of Alumni Relations and Annual Fund  
 Jeremiah Piechoinski, Application and System Analyst  
 Kayla Piedimonte, B.J., Email & Graphic Communication Specialist  
 Ron Portman, B.A., Supervisor, Payroll, Controller's Office  
 Marilyn Powers, B.S., Total Compensation Specialist  
 Emily Ransom, B.S.C.S., Business Analyst, Finance  
 Jennifer Reed, M.B.A., Manager, Marketing  
 Brett D. Richardson, Manager, Career and Technical Education Partnerships and Processes  
 Justin Rudick, M.A., Senior Manager, Auxiliary Services  
 George Sackett, Senior Content Administrator  
 Lanqin Sang, M.S., Application Systems Analyst  
 Marquinez Savala, B.A., Communications Manager  
 Steven Schnell, M.A., WorkKeys Specialist  
 Matthew Schrum, Applications Systems Analyst  
 Jeffery Schultz, Retirement Specialist  
 Richard Schumacher, B.S.B.A., Manager, Technology Initiatives  
 Ben Shasserre, B.F.A., Senior Web Designer  
 John Snider, B.S., Environmental Health/Safety Specialist  
 Melanie Stegeman, M.S., Registrar  
 Lisa Stepanovic, Ed.S., Learning Experience Consultant  
 Christopher Sulincevski, B.S., Senior Project Associate I  
 Mark Swadener, Assistant Controller, Manager of Accounting  
 Kevin Talbot, B.S.B.A., Project Manager  
 Ibrahim Talundzic, B.A., Senior Project Associate I  
 Kedra Tolson, Executive Director, Marketing and Communications  
 Jill Vaughn, Ed.S., Manager, Curriculum Systems and Processes  
 Alexandria Vlahos, M.A., Continuing Education Specialist  
 Grant Walker, Server Systems Analyst  
 Lisa Ward, B.A., Enterprise Business Application System Leader  
 Vicki Wessely, Interim Director, Online Learning  
 Dennis White, M.A., Director, Strategic Plan Initiatives & CQI  
 Eric Whitehead, B.A., Customized Training Manager  
 Lisa Wilson, B.S., Executive Associate, Foundation  
 Gregory Works, Senior Research Associate  
 Lysa Young-Bates, B.S.B.A., Manager, Marketing Communications  
 Mary Zabriskie, J.D., Director, Student Conduct/Title IX Coordinator  
 Paul Zinck, M.B.A., Vice Chancellor, Finance and Administration

## Florissant Valley

Academic/Professional Staff (p. ) Student Affairs (p. ) Faculty (p. 172)

## Academic/Professional Staff

Code	Title	Credit Hours
<b>Chief Campus Academic Officer</b>		
	Elizabeth Perkins, Ed.D., Provost	
<b>Academic Deans</b>		

Janice Nesser-Chu, M.A., Dean, Arts and Communications and Human Services

Stephen White, Ph.D., Dean, Science and Science Technology, Engineering and Industrial Technology and Trades, and Business, Management and Technology

**Business Services**

**Campus Auxiliary Services**

Julie T. Stillman, B.A., Manager, Auxiliary Services

**Campus Police**

William A. Ozmec, Lieutenant

**Center for Plant and Life Sciences**

Richard Norris, Ph.D., Director

Elizabeth Boedeker, M.S., Senior Research Scientist/CRO Coordinator

**Center for Workforce Innovation**

John Hope, B.S., Educational Assistant

**Emerson Center for Engineering and Manufacturing**

Kevin Porter, LSSGB, Lab Supervisor

**Facilities**

**Gateway to College**

James Gillespie, M.S., Manager

**Information Technology**

Mea Hampton, Manager

**Instructional Resources**

John Furlong, M.L.S., Senior Manager, Library and Instructional Resources

**Marketing and Communications**

Shantana Stewart, Campus Marketing and Communications Coordinator

**Theatre**

Marie McCool, M.F.A., Theatre Manager

**Student Affairs**

Code	Title	Credit Hours
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**Dean**

	Deborah Carter, MAT, Dean, Student Development & Enrollment Management	
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**Academic Advising and Assessment**

	Patricia Barnes, M.Ed., Manager	
--	---------------------------------	--

	Janice Claverie, M.A., Academic Advisor	
--	---	--

	Maurice Davis, M.A., Academic Advisor	
--	---------------------------------------	--

	Ivory Hill, M.A., Academic Advisor	
--	------------------------------------	--

	Jonathan Howard, M.A., Academic Advisor	
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	John Lucas, B.A., Academic Advisor	
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	Amy McMurray, M.A., Assessment Specialist	
--	---	--

	Robert Miller, B.S., Academic Advisor	
--	---------------------------------------	--

	Susan Watkins, M.Ed., Academic Advisor	
--	--	--

**Access Office**

	Amy Bird, M.Ed., Manager	
--	--------------------------	--

	Regina Driskill, A. A. A., Assistant Interpreter Coordinator	
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	Mary Wagner, M.A., Specialist	
--	-------------------------------	--

**Admissions and Enrollment Services**

	Christopher M. Fletcher, M.Ed., Manager	
--	---	--

Pamela Brooks, M.Ed., Enrollment Services Coordinator

**Campus Life**

	Gwen Nixon, M.Ed., Manager
--	----------------------------

	Dwayne Morgan, M.S.A., Coordinator, Student Orientation and Transition
--	--

**Career and Employment Services**

	Davis Moore, M.Ed., Manager
--	-----------------------------

**Counseling**

	Emily Lasek, M.A., L.P.C., N.C.C., Professor
--	--

	Pamela Wilson, M.Ed., Associate Professor
--	---

**Financial Aid**

	Shawn Harrell, M.B.M., Lead Financial Aid Counselor
--	---

	Willie Banks, B.S., Financial Aid Counselor
--	---

	Tequilla L. Brown, B.S., Financial Aid Counselor
--	--

**Student Assistance Program**

	Danielle Lusk, B.A., Senior Project Associate I, Counseling
--	---

**TRIO**

	Rosita Lewis, M.B.A., Senior Project Associate I
--	--

	Melphina Amos, M.A., Project Associate II
--	---

	Whitney Williams, B.S.W., Project Associate II
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**Faculty**

Code	Title	Credit Hours
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**Art**

	Julia Jenner, B.A., Associate Professor	
--	---	--

	Robert Langnas, M.F.A., Professor	
--	-----------------------------------	--

	Michael Quintero, M.F.A., Professor	
--	-------------------------------------	--

	Eric Shultis, M.F.A., Professor	
--	---------------------------------	--

**Biology**

	Kimberly Barr, M.S., Instructor II	
--	------------------------------------	--

	Neelima Bhavsar, Ph.D., Professor	
--	-----------------------------------	--

	Scott Gevaert, Ph.D., Assistant Professor	
--	---	--

	Mark Manteuffel, Ph.D., Professor	
--	-----------------------------------	--

	Aundrea Warren, M.S., Assistant Professor	
--	---	--

**Business Administration/Accounting**

	Anthony Clark, Ph.D., Professor	
--	---------------------------------	--

	Elida Kraja, M.A.S., Professor	
--	--------------------------------	--

	Lynn Selders, M.B.A., C.P.A., C.G.M.A., Assistant Professor	
--	---	--

**Chemistry**

	Suzanne Saum, Ph.D., Professor	
--	--------------------------------	--

**Communication Arts**

	Amy Brown-Marshall, M.A., Assistant Professor	
--	---	--

	Christopher Stephens, M.F.A., Professor	
--	---	--

**Deaf Communications**

	Dan Betzler, M.A., Professor	
--	------------------------------	--

	John Eric Driskill, M.Ed., Associate Professor	
--	--	--

	Thomas Flynn, M.A., Associate Professor	
--	---	--

	Lisa Gale-Betzler, B.A., Assistant Professor	
--	--	--

**Engineering and Technology**

	Carl Fischer, B.S., Associate Professor	
--	---	--

	Terrence Freeman, Ph.D., Professor	
--	------------------------------------	--

David Kobe, B.S., Assistant Professor

Thomas McGovern, M.S., Associate Professor

Amy Sherwin, M.S., Associate Professor

Richard Unger, M.S., P.E., Professor

#### English

Mary Brennan M.A., M.Ed., Associate Professor

Ronald Ebest, Ph.D., Associate Professor

Thomas Flynn, M.A., Associate Professor

Katherine Gordon, Ph.D., Professor

Carol Hake, M.A., Associate Professor

Timothy Layton, M.A., M.F.A., Associate Professor

James Mense, M.A. M.F.A., Associate Professor

Barbara Wachal, M.A., Associate Professor

#### Family and Consumer Science

Jeanne Florini, M.S., R.D., Professor

#### Foreign Languages

Kelly Mueller, M.A., Associate Professor

#### Health and Wellness (formerly Physical Education)

Wayne Bryan, M.S., Assistant Professor

Cindy Campbell, Specialist, Educational Administration and Leadership, Professor

#### History

Linda Collins, Ph.D., Associate Professor

Jennifer Medeiros, Ph.D., Professor

#### Human Services

Howard Rosenthal, Ed.D., L.P.C., Professor

#### Information Systems

David Doering, M.Ed., Associate Professor

Phyllis Davis, B.S., Assistant Professor

#### Library Services

Sharon Fox, M.S., M.L.I.S., Professor

Joanne Galanis, M.L.S., M.L.A., Professor

Cathy Reilly, M.A., M.L.S., M.A., Professor

#### Mass Communications

Steve Bai, M. A., Assistant Professor

Renee Thomas-Woods, M.A., Associate Professor

#### Mathematics

Diane Ascare, M.S., Assistant Professor

Joseph Bauer, M.A., Instructor II

Jason Boehm, M.S., Assistant Professor

Brian Bozek, M.S., Professor

John C. Hake, M.A., Instructor II

Christine Lewis, M.A., Associate Professor

Anne Marie Mosher, M.A., Professor

Rokhaya Ndao, Ph.D., Associate Professor

Sharon North, M.S., Professor

Rita Pernik, M.S., Associate Professor

Anne Ross, M.A., Associate Professor

Douglas Runge, M.S., Associate Professor

Patricia A. Suess, Ph.D., Professor

#### Music

Paul Higdon, D.M.A., Professor

#### Nursing

Barbara Cook, Instructor II

Jordan Cooper, Instructor II

Maria Darris, R.N., M.S.N., Instructor II

Stephanie Dribben, Assistant Professor

Deanna Martin, Ph.D., Assistant Professor

Michelle Petterchak, R.N., M.S.N., C.P.N.P., Assistant Professor

Ellen Stillwell, R.N., M.S.N., Assistant Professor

#### Philosophy and Humanities

Ana Coelho, M.A., Professor

#### Physics/Geology

Dino Edmonds, M.A., Instructor II

#### Political Science

Michael Metroulas, M.A., Assistant Professor

#### Psychology

Steven Christiansen, M.S., Associate Professor

Margaret Tyler, Ph.D., Professor

#### Reading

Carlos Blanco, Ph.D., Professor

Victoria Cernich, M.A., Assistant Professor

Carolyn Fuller, M.A., Assistant Professor

#### Sociology and Anthropology

Andrea Waggoner, M.A., Assistant Professor

LaRhonda Wilson, M.A., Associate Professor

#### Teacher Education

Mark Taylor, M.A., Professor

#### Theatre Arts

Dan Betzler, M.A., Professor

## Forest Park

Academic/Professional Staff (p. ) Student Affairs (p. ) Faculty (p. )

## Academic/Professional Staff

Code	Title	Credit Hours
<b>Chief Campus Academic Officer</b>		
	Julie Fickas, Ed.D., Interim Provost	
<b>Academic Deans</b>		
	Debra Harper-LeBlanc, Ph.D., Dean, Arts and Communications and Human Services	
	William Hubble, Ph.D., Dean, Health Sciences	
	James Munden, Ph.D., Dean, Science and Science Technology, Business, Management and Technology, and Engineering and Industrial Technology and Trades	
<b>Academic Support Center</b>		
	Cynthia Jenkins, M.A., Manager	
<b>Business Services</b>		
	Ena Primous, B.S., Manager, Business Services	
<b>Campus Auxiliary Services</b>		
	Ellen Gough, Manager	
<b>Campus Police</b>		
	Adis Becirovic, Lieutenant	

### Center for Teaching and Learning

Layla Goshey, M.F.A., Assistant Professor, Coordinator

### Facilities

Josh DeWitte, Manager, Facilities

### Information Technology

Muhamed Hadziselimovic, M.A., Manager, End User Support Services

### Library and Instructional Resources

June S. Williams, M.L.S., Senior Manager, Library and Instructional Resources

Joni Hynes, Coordinator, Library Services

Bridgette Lee, Library Specialist

### Marketing and Communications

Brittney Aladegbami, M.Ed., Coordinator, Campus Marketing and Communications

## Student Affairs

Code	Title	Credit Hours
<b>Dean</b>		
	Franklyn Taylor, Ed.D, Dean of Student Development and Enrollment Services	
<b>Academic Advising</b>		
	Cassandra White, M.Ed., Manager, Academic Advising	
	Mary Cobb, M.S., Academic Advisor	
	Leroy Crisp, B.B.A., Academic Advisor	
	Beverly Evans, B.A., Academic Advisor	
	Alantra Jefferson, B.A., Academic Advisor	
	E. Aurora Hill, M.A., Academic Advisor	
	Sarah Manfucci, M.S.L., Academic Advisor	
	Natasha Winston, M.P.A., Academic Advisor	
	Anita Zieren, M.B.A., Academic Advisor	
<b>Access Office</b>		
	Telitha Rogers-Anderson, M.Ed., L.P.C., Manager, Access Office, disAbility Support Services	
	Renee Dingman, MSVR, Specialist, Access Office, disAbility Support Services	
	Geoffrey Littleton, B.A., Educational Assistant III, Support Services, Access Office/disAbility Support Services	
<b>Admissions and Enrollment Services</b>		
	Glenn Marshall, M.A., Manager, Enrollment Services	
	Deborah Logan, Admission Coordinator	
	Mame Mor Nsiaye, Admissions Advisor I	
	Chasity Perry Smit, MHRM, Admissions and Enrollment Services	
	Yolanda Weathersby, M.Ed., Enrollment Services Coordinator	
<b>Assessment Center</b>		
	Sanela Bejdic, Manager, Assessment Center	
	Wanda Blalock, Assessment Specialist	
<b>Campus Life</b>		
	Donivan Foster, M.Ed., Manager, Campus Life	
	Dedra Duncun, B.S., Coordinator, Student Orientation and Transition	
<b>Career and Employment Services</b>		
	Davis Moore, M.Ed., Manager, Career and Employment Services	
	Hester Owens, B.S., Specialist	

### Counseling

Troy Hansen, M.A., LPC, NCC, Associate Professor

Reginald Johnson, M.A., L.P.C, Associate Professor

Sandra Knight, M.Ed., Professor

### Financial Aid

Kristin Thomas, Lead Financial Aid Counselor

### 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

Taylor Jones, M.A., Upward Bound Project Associate I

## Faculty

Code	Title	Credit Hours
<b>Art</b>		
	Matt Isaacson, M.F.A., Professor	
	Jamie Kreher, M.F.A., Associate Professor, Chair, Fine and Performing Arts	
	Yingxue Zuo, M.F.A., Professor	
<b>Automotive Technology</b>		
	Rick Anthes, B.S., Associate Professor, Chair	
	Joseph Jackson, B.S., M.Ed., Assistant Professor	
	Josh Walker, B.S., Assistant Professor	
<b>Biology</b>		
	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., Assistant Professor	
	Angela NewMyer, M.S., Associate Professor	
<b>Business Administration and Economics</b>		
	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	
<b>Chemistry</b>		
	Joe Wilson, Ph.D., Professor	
<b>Clinical Laboratory Technology</b>		
	Angela C. Njoku, M.S., M.T., (ASCP), Professor, Program Coordinator	
<b>Communications</b>		
	Sandra Osburn, Ed.D., Professor	
	Amber Schmisser, M.A., M.S.E.D., Associate Professor	
<b>Criminal Justice</b>		
	Jennifer Moldthan-Lorentz, Assistant Professor	
<b>Dental Assisting</b>		
	Deborah Bush-Munson, M.S., CDA, Associate Professor/Program Coordinator	
	Hadeel Sharhan, Instructor I	
<b>Dental Hygiene</b>		
	Kim K. Polk, M.Ed., R.D.H., Professor/Program Coordinator	

Phyllis Ring, M.S., R.D.H., Professor

Melany Thien, M.A.E., R.D.H., Assistant Professor

#### **Diagnostic Medical Sonography**

Patti Rudick M.Ed., R.D.M.S., RT(R), Associate Professor

James Wendling, M.Ed., R.D.C.S., Assistant Professor / Program Coordinator

#### **Emergency Medical Services & Fire Protection**

##### **English**

Zita M. Casey, M.B.A., Assistant Professor

Jeremy K. Dennis, M.A., M.Ed., Professor/Chair, Humanities

Tom Dieckmann, M.A., Associate Professor

Eve Fonseca, M.A.T., Professor

Layla Goushey, M.F.A., Associate Professor

Keith C. Hulseley, M.A., TESL, Professor

Marita Jason, Ph.D., Professor, Coordinator, Honors Program

Rachel Martin, Assistant Professor

Sharon Person, M.A., Professor

Todd Rohman, Ph.D., Associate Professor

Angela Warfield, Ph.D., Professor

Hilary Wilson, M.A., Instructor II

Wei Yan, M.A., Associate Professor/Assistant Chair, Humanities

##### **Foreign Language**

##### **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

Louis Williams, Ph.D., Professor

##### **Hospitality Studies**

Michael Downey, M.S.Ed., CCA, CCC, CCE, FMP, Professor

Rob Hertel, M.B.A., CEC, CCE, AAC, FMP, CFE, Professor

Jeffrey P. Ivory, M.S.Ed., CHE, Professor

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**

##### **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

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**

Sharon Fox, M.S., M.L.I.S., 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

Nita Graham, M.S., Associate Professor

Sandra Irons, M.A.T., Instructor II

Arabela Koric, M.A., Instructor II

Michael Lueke, Ph.D., Professor

Efrem Negash, M.Sc., Assistant Professor

##### **Music**

Thomas A. Zirkle, D.M.A., Professor

##### **Nursing**

LeaAnne Banholzer, Assistant Professor

Devon Bennett, Instructor II

Carolyn Godfrey, R.N., M.S.N., Professor

Kim Kraft, Assistant Professor

Kristin Krewson, Instructor II

Patrick Mayfield, R.N., M.S.N., Assistant Professor

Lisa Moreland, R.N., M.S.N., Professor

Karen Mueller, Assistant Professor

Stephen Pitchford, R.N., M.S.N., Instructor II

Candace Ritchie, 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**

Gary Forde, M.A., Associate Professor

Bruce Munson, M.A., Assistant Professor

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., Associate Professor

Kathy Petroff, M.A., Professor



**Respiratory Care**

Blake Anyan, Assistant Professor
Lindsay Fox, M.Ed., RRT-NPS, Associate Professor, Program Coordinator
Oscar Schwartz, M.D., Medical Director

**Surgical Technology**

Emily Albers, Instructor II
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
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**Theatre**

Alex Saccavino, M.A., Manager
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**William J. Harrison Education Center  
Administrators/Professional Staff**

Code	Title	Credit Hours
	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	
	Amber Moore, Student Assistance Program	

**Meramec**

Academic/Professional Staff (p. ) Student Affairs (p. ) Faculty (p. )

**Academic/Professional Staff**

Code	Title	Credit Hours
<b>Chief Campus Academic Officer</b>		
	Carol Lupardus, Ph.D., Provost	
<b>Academic Deans</b>		
	Ame Mead, Ed.D., Dean, Arts and Communications	
	Patrick Mallory, Ph.D., Dean, Business and Social Sciences	
	Janet Walsh, Ed.D., R.N., Dean, Science, Technology, Engineering and Mathematics	
<b>Campus Auxiliary Services</b>		
	Paula Savarino, B.A., Manager, Campus Auxiliary Services	
<b>Campus Police</b>		
	Terri Buford, Lieutenant	
<b>Center for Teaching and Learning</b>		
	Denise Sperruzza, M.A., Professor, Coordinator	
<b>Facilities</b>		
	Dennis Dill, Senior Manager	
<b>Academic Support Center</b>		
	Cindy Clausen, M.A., Manager	
<b>Marketing and Communications</b>		
	Ashley Bain, Campus Marketing and Communications Coordinator	

**Student Affairs**

Code	Title	Credit Hours
<b>Dean</b>		
	Kimberly Fitzgerald, M.Ed., Dean of Student Development and Enrollment Management	
<b>Academic Advising</b>		
	Lisa Gillis-Davis, M.Ed., 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 Schweigert, 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	
<b>Access Office</b>		
	Linda Nissenbaum, M.A.T., Manager, Access Office disAbility Support Services	
	Joseph Bryant, Ed.D., J.D., Specialist, Services for Students with disAbilities	
	Sneha Kothari Kiss, M.S., Specialist, Services for Students with disAbilities	
	Theresa Smythe, M. Ed., Specialist, Services for Students with disAbilities	
<b>Admissions and Enrollment Services</b>		
	Phillip Campbell, M.S.Ed., Manager	
	Meredith Buschmann, M.Ed., Coordinator of Admissions	
	Ashley Jeffers, M.A.Ed., Admissions Advisor I	
	Bertha Moreland, M.S., Coordinator of Enrollment Services	
	Mindy Souvannalay, B.A., Admissions Advisor I	
<b>Assessment Center</b>		
	Ray Eberle-Mayse, M.A., Manager, Assessment	
	Ruth Davenport, B.A., Assessment Specialist	
	Matthew Lane, B.A., Assessment Specialist	
<b>Campus Life</b>		
	Carolyn O’Laughlin, M.A., Manager, Campus Life	
	Amber Grant, M.Ed., Coordinator, Orientation and Transition, Campus Life	
<b>Career and Employment Services</b>		
	Jacqueline Meaders-Booth, Ed.D., Manager, Career Development	
	Diane Kaver, M.A., Career Specialist, Career Development	
<b>Counseling</b>		
	Ellen Nickrent, M.A., Professional Counseling, Assistant Professor/ Counselor	
	Kathleen Swyers, M.Ed., L.P.C, CRC, Professor	
	Donna Zumwinkel, M.Ed., Professor	
<b>Financial Aid</b>		
	Nicole Moore, M.B.A., Lead Counselor	

### Student Assistance Program

Bella Hafezi, M.Ed., Senior Project Associate, Student Assistance Program

### TRIO

Sanela Mesic, M.A., Project Director

Bisheng Ahmed, M.Ed., Advisor

Andrew Smith, LMSW, Advisor

## Faculty

Code	Title	Credit Hours
<b>Accounting/Legal Studies</b>		
	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	
<b>Biological Science/Horticulture/Chemistry</b>		
	Jason Allen, Ph.D., Associate Professor	
	Jody Atleins, Ph.D., Professor	
	Matthew Bast, M.S., Assistant Professor	
	Jeff Baumstark, M.S., Assistant Professor	
	Elizabeth Granier, Ph.D., Associate Professor	
	Robert Harms, Ph.D., Professor	
	Jerald Pence, B.S., Assistant Professor	
	Tom Peters, Ph.D., Associate Professor	
	Kelli Roberts, M.S., Assistant Professor	
<b>Business/Information Systems</b>		
	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	
<b>Communications</b>		
	Jacqueline Barker, M.A., Professor	
	Dennis Dufer, M.A., Associate Professor	
	Christaan Eayrs, M.A., Associate Professor	
	Robert Hahn, M.F.A., Professor	
	Susan Hunt-Bradford, M.A., Professor	
	Douglas Hurst, J.D., Professor	
	Christopher Smejkal, Ed.D, Associate Professor	
	Denise Sperruzza, M.A., Professor	
<b>Design, Visual and Performing Arts</b>		
	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	
	James Ibur, M.F.A., Professor	

Erin LeClerc, M.A., Associate Professor

Timothy Linder, Ph.D., Professor

Betsy Morris, M.F.A., Professor

Gerald Myers, D.M.A., Professor

Keith Oliver, M.F.A., 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., 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

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

Richard Long, Ed.D., Professor

Eric Meyer, M.A., Associate Professor

Lisa Mizes, M.Ed., Assistant Professor

Richard Peraud, M.A., Assistant Professor

Shaun Reno, M.A., Associate Professor

Shannon Sanders, M.A., Assistant Professor

Juliet Scherer, M.S., Professor

Jeffrey Schneider, Ph.D., Professor

Francine Sigmund, M.A., Assistant Professor

David Taylor, Ph.D., Professor

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

### Humanities

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

Cathy Reilly, M.A., M.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, M.A., Professor
Lisa Harden, M.S., Associate Professor
Sarah Henry, 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**

Janis Aiello, R.N., M.S.N., Professor
Deborah Chanasue, R.N., M.S.N., 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
Christine Stephens, R.N., M.S.N., Assistant 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., 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., Associate Professor
Ana Cruz, Ph.D., Professor
Cynthia Epperson, Ph.D., Professor
Gail Heyne Hafer, Ph.D., Professor
Patty Keller, Ed.D., Professor

Eric Nielsen, M.A., Assistant Professor
Sophia Pierroutsakos, Ph.D., Professor
Diane Pisacreta, M.A., Professor
Vicki Ritts, Ph.D., Professor
David Shields, Ph.D., Professor
Amanda White, Ph.D., Professor

**South County Administrators/Professional Staff**

Code	Title	Credit Hours
	Julie Loyet, M.A., Manager	
	Kathleen Pritchard, M.A., Coordinator, Student Services	
	Mike Buda, Student Support Specialist	
	Mary Beth Overby, M.Ed., Student Support Specialist	

**Wildwood**

Academic/Professional Staff (p. ) Student Affairs (p. ) Faculty (p. )

**Academic / Professional Staff**

Code	Title	Credit Hours
<b>Chief Campus Academic Officer</b>		
	Steve Collins, Ph.D., Interim Associate Provost	
<b>Campus Auxiliary Services</b>		
	Christina Hart, M.A., Manager	
<b>Instructional Resources</b>		
	Susan Townsend, M.A., M.L.S., Manager, Instructional Resources and Academic Resources	
<b>Dual Credit and Enrollment Partnerships</b>		
	Erika Malone, M.Ed., Coordinator	
<b>Marketing and Communications</b>		
	Gina Tarte, M.A., Coordinator, Marketing and Communications	
<b>Physical Facilities</b>		
	Samuel Guth, BSM, BSLGS, Manager	

**Student Affairs**

Code	Title	Credit Hours
<b>Academic Advising</b>		
	Anthony Steele, M.Ed., Coordinator	
<b>Admissions and Enrollment Services</b>		
	Britni Fischer, B.S.B.A., Admissions Advisor	
<b>Campus Life and College Transition</b>		
	Stephanie Church, M.F.A., Coordinator	
<b>disAbility Support Services</b>		
	Krista Sucher, M.Ed., Coordinator	
<b>Financial Aid</b>		
	Shantelle Harris, B.A., Interim Lead Financial Aid Counselor	
<b>Student Development and Enrollment Management</b>		

Laura Davidson, M.Ed., Associate Dean of Student Development and Enrollment Management

## Faculty

Code	Title	Credit Hours
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### Arts and Humanities

Gwendolyn Verhoff, Ph.D., Assistant Professor

### English/Reading/Foreign Languages/Interdisciplinary Studies/ Communications/Mass Communications/Business Administration

Sarah Fielding, Ph.D., Associate Professor

Ellen McCloskey, M.A., Professor, Department Chair

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