



SPRING 2021

CATALOG

PROGRAMS AND COURSES AT STLCC



St. Louis Community College

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WELCOME

Chancellor's welcome:

Welcome to St. Louis Community College.

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

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

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

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

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

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

Sincerely,

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

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GENERAL INFORMATION

About this Catalog

The St. Louis Community College Spring 2021 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 https://applications.stlcc.edu/ClassSchedule/Term_Courses.asp.

The information in this catalog is current as of October 2020. 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 21st century.

Economic Value

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

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

- Research shows that for every \$1 invested in their STLCC education, students receive a return on that investment of more than \$4.70 in higher future income over their working careers.
- From a taxpayer perspective, every \$1 of state or local tax money invested in STLCC returns \$2.80.
- STLCC's annual impact on St. Louis is \$2.5 billion or approximately 2.2 percent of the total St. Louis area economy. The activities of STLCC and its students support 32,371 jobs – that's one out of every 34 jobs in the St. Louis area.
- For every dollar invested in STLCC in FY 2017-18, people in Missouri will receive \$10.80 in return, for as long as STLCC's FY 2017-18 students remain active in the workforce.
- It is estimated that the St. Louis area economy annually receives a net of over \$145 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 approximately \$10,100 more per year in the St. Louis area.

Source:

Economic Modeling Specialists, Inc., 2019

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 and Workforce Development (DHEWD).

The Associate Degree Nursing Program at St. Louis Community College (STLCC), located in St. Louis, MO, is approved by the Missouri Board of Nursing and is accredited by the:

Accreditation Commission for Education in Nursing (ACEN)

3343 Peachtree Road NE, Suite 850

Atlanta, GA 30326

404-975-5000

The most recent accreditation decision made by the ACEN Board of Commissioners for the Associate Degree Nursing Program at STLCC based on

the February 2020 evaluation visit is continuing accreditation with the next scheduled evaluation visit for spring 2028.

Florissant Valley

General Fine Art

National Association of Schools of Art and Design

Child Development Center

Missouri Accreditation for Children and Youth Programs; State Accreditation

Missouri Department of Health and Senior Services; Licensure

National Association for the Education of Young Children (NAEYC); National Accreditation

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

Photography

National Association of Schools of Art and Design

Forest Park

Automotive Technology

ASE Education Foundation

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 (ACF)

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)

Diesel Technology

ASE Education Foundation

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

Professional Certificate Approval Program (PCAP) through 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 November 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 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 official 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.

A student who does 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 sophomores, 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 Authorization 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.
- Attend orientation activities or registration workshops as required by their district or program.
- 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 (<https://catalog.stlcc.edu/general-information/policies/student-success/#access>).

Dual Credit

High school sophomores, 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.
- Meet with high school counselor to inquire and register into dual credit courses. Counselors will verify student eligibility and collect student and parent/guardian consent to participate.
- Submit Dual Credit Registration Form, which will also gather parent and counselor permission as part of the process.
- Meet the college's requirements for entry into the course. Students must meet assessment requirements or provide appropriate ACT/SAT scores to waive testing.
- 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 (<https://catalog.stlcc.edu/general-information/policies/student-success/#access>).

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) 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 (<https://www.stlcc.edu/admissions/register/nswr.aspx>)). Students interact with advisors to clarify academic goals, review placement test scores and to discuss course scheduling. They also learn how to use the online registration system.

Archer Orientation

Prior to the start of classes, all first-time-in-college students will participate in Archer Orientation. 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 2020-21

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 2020

August

17-21	Service Days
24	Semester classes begin

September

5-7	Labor Day holiday (college closed)
21	First Day of 12-Week Classes

October

16	Midterm
19	Midterm grades due

19	First Day of 2nd 8-Week Classes
27	All College day (no classes)
November	
20	Withdrawal deadline ¹
25	Fall Semester Break (no classes)
26-29	Thanksgiving holiday (college closed)
December	
13	Last day of semester classes
14-20	Final exams
21	Grades due
23	Official degree conferral date
23	Last day college open until Jan. 4, 2021

¹ Full-term classes only.

Community Programs

Project Lead the Way

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

Project Lead the Way students also are required to take rigorous academic courses while in high school that better prepare them for college-level coursework. For additional information on Project Lead the Way credit or other Project Lead the Way activities, contact Brett Richardson at 314-644-9687.

Spring Semester 2021

January	
4	College opens
11-15	Service days
18	Martin Luther King, Jr. holiday (college closed)
19	Semester begins
February	
8	First day of 12-week classes
15	Presidents' Day holiday (college closed)
March	
12	Midterm
15	Midterm grades due
15-21	Spring break (no classes)
17	Spring Staff Development Day (selected offices closed)
19-21	Spring holiday (college closed)
22	First day of 2nd 8-week classes
April	
16	Withdrawal deadline ¹
May	
9	Last day of semester classes
10-16	Final exams
16	Commencement (Tentative)
17	Grades due
20	Official degree conferral date

Summer Session 2021

May	
18	First day of 3-week Classes
31	Memorial Day holiday (college closed)
June	
6	Grades due for 3-week classes
7	First day of summer classes
July	
2	Summer Break (No classes)
5	Independence Day holiday observed (college closed)
August	
1	Last Day of Summer Term
2	Grades Due for Summer Classes
5	Official degree conferral date

Workforce Solutions Group

St. Louis Community College Workforce Solutions Group (WSG) connects job seekers and employment providers through customized and accelerated training, and offers opportunities for lifelong learning through continuing education. WSG builds community through its Business Services, Community Services, Continuing Education and Institutional Development (Grants) operating units and provides regional labor insights via its annual State of the St. Louis Workforce Report (<https://www.stlcc.edu/workforce/st-louis-workforce/>). All Workforce Solutions Group operating units are located at Corporate College (<https://www.stlcc.edu/workforce/corporate-college/>), a state-of-the-art campus dedicated to corporate education and professional development. Learn more at stlcc.edu/workforce/ (<https://stlcc.edu/workforce/>), on Twitter (@STLCCworkforce (<https://nam04.safelinks.protection.outlook.com/?url=https%3A%2F%2Ftwitter.com%2Fstlccce&data=02%7C01%7Cjvaughn81%40stlcc.edu%7Cfdd2b048fe7f45f19f0d08d866455057%7C4cd64bfea7a14304947b1393797262a2%7C0%2B5gdrtr9RRUunz3Sz%2FaY1VGOkkJE16fM%3D&reserved=0>)) and on Facebook (STLCCworkforce (<https://nam04.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.facebook.com%2FSTLCCworkforce%2F&data=02%7C01%7Cjvaughn81%40stlcc.edu%7Cfdd2b048fe7f45f19f0d08d866455057%7C4cd64bfea7a14304947b1393797262a2%7C0%2B5gdrtr9RRUunz3Sz%2FaY1VGOkkJE16fM%3D&reserved=0>)).

Advancing Employers: Business Services

Business Services offers customized and comprehensive solutions for dynamic workforces. As one of the largest providers of training and consulting services in the St. Louis metro area, this WSG unit helps advance more than 10,000 employees annually, representing more than 100 organizations. Business Services' flagship Center for Workforce Innovation (<https://www.stlcc.edu/workforce/center-for-workforce-innovation/>) provides advanced training in aerospace, manufacturing, automated controls and industrial maintenance technology in its 32,000 square-foot, high-tech facility. The unit also offers enterprise-wide solutions for organizations with national and international footprints. Business Services coordinates onsite services at Corporate College (<https://www.stlcc.edu/workforce/corporate-college/>) through its Testing and Assessment Center (<https://www.stlcc.edu/workforce/for-employers/certification-testing-center.aspx>), WorkKeys Solution Center (<https://www.stlcc.edu/workforce/for-employers/workkeys-solutions-center.aspx>) and Meeting and Event Services (<https://www.stlcc.edu/workforce/corporate-college/meetings-events-space-rentals.aspx>). Visit stlcc.edu/corporate (<https://www.stlcc.edu/workforce/for-employers/>) to learn more.

Advancing Communities: Community Services

Community Services partners with employers, community organizations, schools, educators and government to create job training opportunities for residents and a talent pipeline for employers. Community Services helps job seekers develop marketable job skills through accelerated training programs, usually with a duration of less than one semester, and specializes in strengthen underserved communities throughout the St. Louis region. Visit Community Services (<https://www.stlcc.edu/workforce/for-the-community/>) to learn more, and discover explore Accelerated Job Training opportunities at stlcc.edu/accelerated (<https://www.stlcc.edu/programs-academics/accelerated-job-training/>).

Advancing People: Continuing Education

Continuing Education (CE) enrolls thousands of participants annually in professional development and personal enrichment courses. More than 40 percent of enrollees complete professional development training in pursuit of a license or certification, while 60 percent seek personal enrichment opportunities. Each year, CE offers hundreds of courses at locations throughout the greater St. Louis region and online, often in partnership with other community organizations and non-profits. Visit CE online at stlcc.edu/ce

(<https://stlcc.edu/programs-academics/continuing-education/>), on Twitter (@STLCCce (<https://nam04.safelinks.protection.outlook.com/?url=https%3A%2F%2Ftwitter.com%2Fstlccce&data=02%7C01%7Cjvaughn81%40stlcc.edu%7Cfdd2b048fe7f45f19f0d08d866455057%7C4cd64bfea7a14304947b1393797262a2%7C0%2B5gdrtr9RRUunz3Sz%2FaY1VGOkkJE16fM%3D&reserved=0>)), on Instagram (STLCCce (<https://nam04.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.instagram.com%2Fstlccce%2F&data=02%7C01%7Cjvaughn81%40stlcc.edu%7Cfdd2b048fe7f45f19f0d08d866455057%7C4cd64bfea7a14304947b1393797262a2%7C0%2B5gdrtr9RRUunz3Sz%2FaY1VGOkkJE16fM%3D&reserved=0>)) and on Facebook (STLCCce (<https://nam04.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.facebook.com%2FSTLCCce&data=02%7C01%7Cjvaughn81%40stlcc.edu%7Cfdd2b048fe7f45f19f0d08d866455057%7C4cd64bfea7a14304947b1393797262a2%7C0%2B5gdrtr9RRUunz3Sz%2FaY1VGOkkJE16fM%3D&reserved=0>)) to learn more.

Advancing the Mission: Institutional Development

Institutional Development advances STLCC's mission to expand minds and change lives every day through working with faculty, staff and partners to secure funding and build capacity from federal, state and local sources. This work allows WSG to offer programs and services that best serve the needs of students and the community. Visit Institutional Development (<https://www.stlcc.edu/about/institutional-development/>) to learn more.

Fees and Refunds

Residency Status

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

A resident student is defined as follows:

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

Burden of Proof

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

- Missouri 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 (https://login.live.com/login.srf?wa=wsignin1.0&rpsnv=12&ct=1455125621&rver=6.4.6456.0&wp=MBI_SSL_SHARED&wreply=https:%2F%2Fmail.live.com%2Fdefault.aspx%3Frru%3Dinbox&lc=1033&id=64855&mkt=en-us&cbcxt=mai) email account.

The college accepts cash and checks for payments made at the Cashier's office. Checks may be processed as automated clearing house (ACH) network debit. In addition, the college accepts online payments when using MasterCard, Visa, American Express and Discover or ACH payments using checking or saving account information. Card payments incur a 2.75% convenience fee. 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 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 ¹

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.

¹ 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 ¹	2nd week of session	3rd week of session
15 week session	1st week of session	3rd week of session
14 week session	1st week of session	3rd week of session
13 week session	1st week of session	3rd week of session
12 week session	1st week of session	3rd week of session
11 week session	1st week of session	2nd week of session
10 week session	1st week of session	2nd week of session
9 week session	1st week of session	2nd week of session
8 week session	4th day of session	2nd week of session
7 week session	3rd day of session	1st week of session
6 week session	3rd day of session	1st week of session

5 week session	2nd day of session	1st week of session
4 week session	2nd day of session	1st week of session
3 week session	1st day of session	3rd day of session
2 week session	1st day of session	2nd day of session
1 week session	1st day of session	None

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

Federal Financial Aid (Title IV) Recipients

Refunds

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

Title IV of the Federal Higher Education Act (HEA) requires that students who receive federal grants (Federal Pell Grant, Federal Supplemental Educational Opportunity Grant) and federal loans repay some of their federal financial aid if they do not attend class through 60 percent of the term. Most students who do not attend at least one class through the 60 percent point of the term will owe some of their Title IV aid back to the U.S. Department of Education.

Please refer to the following website for more information about the return of unearned Title IV funds as required by HEA Title IV law and regulations: <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](https://www.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 October 1st.

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

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 completing an appeal application 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 School Certifying Official (SCO) in the Financial Aid office. Information regarding

veteran services are available here at <https://stlcc.edu/admissions/apply-to-stlcc/veterans.aspx>.

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 Manager of Academic Advising.

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 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 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 an 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 ¹
F	0	failure

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

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

The Following Symbols Also May Appear on Students' Transcripts

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

S¹—Satisfactory—A symbol indicating the award of credit. The earned credits count toward graduation, but are not used in grade point average calculations.

U¹—Unsatisfactory—A symbol indicating the award of no credit and no grade points.

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

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

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

W—Withdrawal—A transcript notation that reflects withdrawal.

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

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

Health and Safety

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 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. Students entering college for the very first time in fall 2019 and who intend to complete an associate's degree must successfully complete a civics examination. Students who have completed dual credit courses must complete this examination. Students who participated in Early College or other dual enrollment programs, transfer students, and previously enrolled students are exempt from this requirement.
6. College policy requires students who apply for a degree to participate in an appropriate outcomes assessment prior to degree being awarded.
7. 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
HST 137	African American History through Reconstruction (MOTR HIST 101AA)	3
HST 138	African American History from Reconstruction to the Present (MOTR HIST 102AA)	3
PSC 101	Introduction to American Politics (MOTR POSC 101)	3

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. For students seeking a certificate of proficiency, 15 credit hours must be completed at St. Louis Community College.
4. For students seeking a certificate of specialization, 9 credit hours 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 enrolled at St. Louis Community College as degree or certificate seeking, 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/torder/faces/TOBridge/) (<https://secure.studentclearinghouse.org/torder/faces/TOBridge/>).

A \$10 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.

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.

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
Northwest 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/>).

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 Development); 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.

1. 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 assist students in clarifying their educational goals and in developing strategies to achieve those goals. Academic advisors provide students with information about programs of study, course requirements, and college policies and procedures. Academic plans developed by advisors and students lead to the timely completion of degrees or certificates. For students who plan to transfer, an advisor can explore with them the transfer requirements and suggest appropriate coursework; however, the responsibility for course selection and meeting degree and transfer requirements rests with each student.

Academic Success and Tutoring

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.

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 of their choice in order to complete the 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 early in the enrollment process. This allows more time to implement reasonable accommodations. Please note, there is no deadline to apply for services, as students may submit their application and documentation any time during their tenure at the college.

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 may be 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 high school GPA of 2.6 or higher will waive the reading and English tests.
- 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 or Accuplacer 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. GPAs do not expire. Call the Assessment Center (<https://www.stlcc.edu/admissions/testing-centers/>) for hours of operation, or visit <https://www.stlcc.edu/admissions/testing-centers/>

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. 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).

Campus Life

Campus Life creates a vibrant community that supports student engagement and success by providing opportunities for all students to develop a sense of belonging and connection. Campus Life sponsors various social, educational, cultural, and civic events and activities. Opportunities for leadership development are available through student government, clubs and organizations, honorary societies, student publications, and special interest groups. Providing opportunities to engage in campus events and join student organizations promotes students' leadership development and personal growth, as well as improved relationships with others. For informal gatherings, the campuses provide facilities such as multi-purpose meeting rooms, lounges, study areas and cafeterias. Engaging in campus life initiatives supports students' academic success and leadership development.

Career Planning and Development

Career Specialists assist students in their career development process through discovery, exploration, planning, and action. Career Specialists provide students with assistance and tools to clarify and take action on their career path. They are also available to help students in their development of a Career Action Plan, resume and cover letter development, interviewing skills, and job search strategies.

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

Well-qualified professional mental health counselors are available to assist students working through a variety of concerns that may arise while attending college. Counselors can help students balance the multiple roles and responsibilities of being a successful student, parent, spouse and/or employee; manage stress and anxieties; or resolve personal problems or other issues that may interfere with college success. Counselors are available by appointment, or as needed in a crisis situation. All services are confidential and free to STLCC students.

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.

Live Virtual Learning Courses

A course that meets online, at a specific date and time, using a streaming service. Students are required to be online during class time for lectures and other learning activities to experience real-time engagement with faculty and classmates.

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 (https://login.live.com/login.srf?wa=wsignin1.0&rpsnv=12&ct=1455130601&rver=6.4.6456.0&wp=MBI_SSL_SHARED&wreply%2F%2Fmail.live.com%2Fdefault.aspx%3Frru%3Dinbox&lc=1033&id=64855&mkt=en-us&cbcxt=mai) 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 <https://stlcc.smartermeasure.com/> (<https://nam04.safelinks.protection.outlook.com/?url=https%3A%2F%2Fstlcc.smartermeasure.com%2F&data=02%7C01%7Cjvaughn81%40stlcc.edu%7C6b11e615b08f443fcdc108d8710b7ce6%7C4cd64bfea7a14304947b1393797262a2%7C0%2FcuM4BxcJgleVcHGIK50%2FplnBPIIRAXKzQ54RMvYJqk%3D&reserved=0>); 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 314-513-4771 or online@stlcc.edu.

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.

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 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 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. Services will be tailored to meet the individual needs of each student and include helping students locate and access programs and services for child care, domestic violence, energy assistance, healthcare, homelessness, and hunger. Other services include creating action plans with students to help students problem solve barriers to their education and learn self-advocacy. Students receiving public assistance or students in need of attendance or program progress verification will also receive services from the Student Assistance Program. The Archers' Market food and toiletry pantry is also a service of the Student Assistance Program, allowing students in need of food and personal care items a place to obtain help and learn of additional resources. 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.

If a problem should arise which can be traced to ineffective study habits, the student should contact the Academic Support 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 the Academic Support Center.

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 [stlouiscobookstore.com](http://www.stlouiscobookstore.com) (<http://www.stlouiscobookstore.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 Program¹
 - Aerospace Engineering
 - African-American Studies
 - Aviation Management
 - Biomedical Engineering
 - Business Administration
 - Criminology and Criminal Justice
 - Emergency Management
 - Health Information Management
 - Mechanical Engineering
 - Public Health
 - Social Work

School of the Art Institute of Chicago

- General Fine Arts, BFA
- Photography, BFA

Savannah College of Art and Design

- Painting
- Photography
- Printmaking
- Sculpture

Southeast Missouri State University

- Industrial Technology, BS, 2+2

Southern Illinois University-Carbondale

- Architectural Studies, BS

Southern Illinois University-Edwardsville

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

St. Charles Community College

- Paramedic Technology

St. Louis Carpenter's Joint Apprenticeship Committee

- Construction Management Technology, AAS

University of Missouri-Columbia

- Architectural Studies, BS
- Business Administration
- Elementary Education
- Nursing, BSN, MS(N)

University of Missouri-St. Louis

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

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

- Bachelor of Science

Webster University

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

William Woods University

- Deaf Communication Studies/Interpreter Training

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

St. Louis Community College Foundation

Mission

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

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 or email 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. 29)
- Business Administration (p. 39)

Associate in Fine Arts

- General Fine Arts (p. 61)
- Graphic Communications (p. 64)
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Associate in Science

- Engineering Science (p. 58)
- General STEM Transfer Studies (p. 62)

Associate of Arts in Teaching

- Teaching (p. 33)

Career and Technical Education

Associate in Applied Science

- Accounting (p. 31)
- Automotive Technology (p. 35)
- Baking and Pastry Arts (p. 36)
- Behavioral Health Support (p. 37)
- Biotechnology (p. 38)
- Business Administration (p. 40)
- Child and Family Development (p. 40)
- Clinical Laboratory Technology (p. 42)
- Computer Integrated Manufacturing (p. 44)
- Criminal Justice (p. 45)
- Culinary Arts (p. 46)
- Cybersecurity (p. 47)
- Deaf Communication Studies: Interpreter Education (p. 50)
- Dental Hygiene (p. 50)
- Diesel Technology (p. 53)
- Electrical/Electronic Engineering Technology (p. 56)
- Engineering Technology (p. 59)
- Funeral Services Education (p. 60)
- Graphic Communications (p. 63)
- Health Information Technology (p. 65)
- Horticulture (p. 66)
- Hospitality Management (p. 68)
- Human Services (p. 69)
- Interior Design (p. 71)
- Legal Studies for the Paralegal (p. 73)
- Network Engineering (p. 76)
- Nursing (p. 78)
- Occupational Therapy Assistant (p. 79)
- Office Information Systems (p. 80)
- Paramedic Technology (p. 81)
- Physical Therapist Assistant (p. 84)
- Radiologic Technology (p. 86)
- Respiratory Care (p. 87)
- Skilled Trades Industrial Occupations Technology (p. 88)

- Software Developer (p. 89)
- Surgical Technology (p. 91)

Certificate of Proficiency

- Accounting (p. 32)
- Automotive Technology (p. 35)
- Biomedical Electronics Technology (p. 38)
- Business Administration (p. 40)
- Criminal Justice: Law Enforcement (p. 46)
- Cybersecurity (p. 48)
- Database Developer (p. 48)
- Deaf Communications Studies: American Sign Language (p. 49)
- Dental Assisting (p. 50)
- Diagnostic Medical Sonography (p. 52)
- Diesel Technology (p. 54)
- Early Care and Education (p. 56)
- Horticulture (p. 67)
- Kitchen and Bath Design (p. 72)
- Legal Studies for the Paralegal (p. 74)
- Medical Billing and Coding (p. 75)
- Network Engineering (p. 77)
- Network Security (p. 77)
- Paramedic Technology (p. 82)

Certificate of Specialization

- Addictions Study (p. 33)
- Automotive Service (p. 35)
- Automotive Vehicle Inspection and Light Maintenance (p. 35)
- Biotechnology (p. 39)
- Business Administration (p. 40)
- Cisco Networking Academy: CCNA (p. 41)
- Computer Accounting Technology (p. 42)
- Computer Aided Design (p. 43)
- Computer Applications (p. 44)
- Diesel Technology (p. 55)
- Digital Media--Interactive and Graphic Design (p. 55)
- Emergency Medical Technology (p. 57)
- Funeral Directing (p. 59)
- Interior Design Professional (p. 72)
- IT Help Desk/End User Support (p. 70)
- Life Science Laboratory Assistant (p. 75)
- Precision Machining Technology (p. 85)
- Skilled Trades Industrial Occupations Technology (p. 89)
- Web Developer (p. 92)

General Transfer Studies, Associate in Arts Degree

Florissant Valley, Forest Park, Meramec, Wildwood and Online

St. Louis Community College's 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 requirements 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.

The 42 credit hours of general education 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. Many private institutions also accept the 42-credit hour block to satisfy their general education requirements. Students wishing to transfer to a four-year institution should consult an advisor for specific requirements.

In addition to the 42 credit hours of CORE 42 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.

Students should become familiar with the requirements at the institution to which they plan to transfer and select their transfer courses carefully. Many bachelor's 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 an 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.

Cost of Attendance. For more information on cost of attendance visit MoSCORES (<https://scorecard.mo.gov/Search/>).

Program Career and Salary Information. Pursuant to Missouri HB 1606 (2018), information regarding the number of credit hours, program length, employment rate, wage data, and graduates employed in careers related to their program of study at St. Louis Community College can be found at the following URL: <https://scorecard.mo.gov/scorecard/> (https://www.google.com/url?q=https://scorecard.mo.gov/scorecard/&sa=D&ust=1555536894857000&usg=AFQjCNG1xf3E_i2lO96zEytILO-s5xaJCQ). Search using School / Program "St. Louis Community College" and choose the degree or credential type of interest.

The following limitations to the data apply: Information provided is based on the most recent cohorts available. Typically, most recent cohorts for wage and completion data are six years prior to the current academic year. Time to complete a program of study varies depending on the number of credit hours students earn per semester.

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.

Missouri Civics Examination. Students entering college for the very first time in fall 2019 and who intend to complete an associate's degree must successfully complete a civics examination. Students who have completed dual credit courses must complete this examination. Students who participated in Early College or other dual enrollment programs, transfer students, and previously enrolled students are exempt from this requirement.

Program of Study

Code	Title	Credit Hours
General Education ¹		
	Written Communications	6
	Oral Communications	3
Mathematics	Students must complete one (1) of the four (4) courses in the Mathematics pathway (MTH 160, MTH 161, MTH 180, or MTH 185), or a course that requires one of the Mathematics pathways courses as a prerequisite.	3
Social and Behavioral Sciences	Students must complete nine (9) credit hours from at least two (2) different disciplines. One course must be an approved Civics course.	9
Humanities and Fine Arts	Students must complete nine (9) credit hours from at least two (2) different 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.	9
Natural Sciences	Students must complete seven (7) credit hours from at least two (2) different disciplines. One course must contain a laboratory component.	7
CORE 42 Elective	Any course designated with a MOTR number can be used to reach 42 credit hours with the exception of a limit of three (3) credit hours of Performance courses. No more than three (3) credit hours of Performance courses can be applied to the entire 42-credit hour CORE 42 general education block.	5
Electives		
	Elective credits within the Associate in Arts degree allow the student to begin working toward an academic major by selecting courses within a discipline or to explore various subjects at an introductory level. Students should consult their transfer institution and/or work with an advisor for best course options.	18
Total Credit Hours		60

¹ Students who complete the 42-credit hour general education block according to CORE 42 guidelines will have "CORE 42" noted on their transcripts. (Students who complete 42 credit hours of general education but who varied from the CORE 42 requirements will have "General Education Completed" noted on their transcript--This applies only to students with a catalog year of 201830 or earlier.)

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 or BLW 201	Business Law I Legal Environment of Business	3
BUS 201	Elementary Statistics	3
IB 100	International Business	3
IS 116	Computer Literacy	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 (MOTR SBSC 101)	3
COM 201	Interpersonal Communication (MOTR COMM 120)	3

Film Studies

Code	Title	Credit Hours
MCM 101	Introduction to Mass Communications (MOTR SBSC 100)	3
MCM 130	Film Appreciation (MOTR FILM 100)	3
MCM 115	Acting for the Camera	3
MCM 125	Scriptwriting for Television and Film	3
MCM 131	History of Film (MOTR FILM 103)	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)	5
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: ¹

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

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

Media Communications

Code	Title	Credit Hours
MCM 101	Introduction to Mass Communications (MOTR SBSC 100)	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 (MOTR SBSC 100)	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 (MOTR PERF 106)	3
THT 106	Theatre Practicum	3
THT 108	Acting I (MOTR PERF 100)	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.

Cost of Attendance. For more information on cost of attendance visit MoSCORES (<https://scorecard.mo.gov/Search/>).

Program Career and Salary Information. Pursuant to Missouri HB 1606 (2018), information regarding the number of credit hours, program length, employment rate, wage data, and graduates employed in careers related to their program of study at St. Louis Community College can be found at the following URL: <https://scorecard.mo.gov/scorecard/> (https://www.google.com/url?q=https://scorecard.mo.gov/scorecard/&sa=D&ust=1555536894857000&usg=AFQjCNG1xf3E_i2lO96zEytILO-s5xaJCQ). Search using School / Program “St. Louis Community College” and choose the degree or credential type of interest.

The following limitations to the data apply: Information provided is based on the most recent cohorts available. Typically, most recent cohorts for wage and completion data are six years prior to the current academic year. Time to complete a program of study varies depending on the number of credit hours students earn per semester.

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.

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

Missouri Civics Examination. Students entering college for the very first time in fall 2019 and who intend to complete an associate's degree must successfully complete a civics examination. Students who have completed dual credit courses must complete this examination. Students who participated in Early College or other dual enrollment programs, transfer students, and previously enrolled students are exempt from this requirement.

Program of Study

Code	Title	Credit Hours
Career General Education		
ENG 100 or ENG 101	College Composition I (MOTR ENGL 100)	3
ENG 103 or ENG 102	Report Writing (MOTR ENGL 110) College Composition II (MOTR ENGL 200)	3
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
Physical Education Activity		
Select 2 credit hours		2
Program Requirements		
ACC 100	Applied Accounting	3
ACC 110	Financial Accounting I	4
ACC 114	Managerial Accounting	3
ACC 208	Intermediate Accounting I	3
ACC 213	Survey of Business Taxes	3
BLW 101	Business Law I	3
BUS 104	Introduction to Business Administration	3
Technology Core Courses		
ACC 120	Computer Accounting Applications for Business	3
ACC 122	Computer Accounting Applications - Spreadsheets	3
ACC 124	Computer Accounting Applications - Databases	3
Area of Concentration		
Select one of the following options:		6
Accounting Associate Option		
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	
Business Electives		
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.

Cost of Attendance. For more information on cost of attendance visit MoSCORES (<https://scorecard.mo.gov/Search/>).

Program Career and Salary Information. Pursuant to Missouri HB 1606 (2018), information regarding the number of credit hours, program length, employment rate, wage data, and graduates employed in careers related to their program of study at St. Louis Community College can be found at the following URL: [https://scorecard.mo.gov/scorecard/](https://scorecard.mo.gov/scorecard/(https://www.google.com/url?q=https://scorecard.mo.gov/scorecard/&sa=D&ust=1555536894857000&usg=AFQjCNG1xf3E_i2lO96zEytILO-s5xaJcQ).) (https://www.google.com/url?q=https://scorecard.mo.gov/scorecard/&sa=D&ust=1555536894857000&usg=AFQjCNG1xf3E_i2lO96zEytILO-s5xaJcQ). Search using School / Program "St. Louis Community College" and choose the degree or credential type of interest.

The following limitations to the data apply: Information provided is based on the most recent cohorts available. Typically, most recent cohorts for wage and completion data are six years prior to the current academic year. Time to complete a program of study varies depending on the number of credit hours students earn per semester.

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.

9. communicate orally useful information about the financial condition of a business entity.
10. interpret financial information while working in teams consisting of individuals with diverse backgrounds.
11. identify the various uses of technology as it applies to the Accounting field.
12. demonstrate technical proficiency for an entry-level junior accountant with the use of Quickbooks software and Microsoft Excel.
13. identify the different types of ethical issues that are encountered in a business environment.
14. apply the Accounting code of ethical conduct that relates to business organizations.
15. apply high ethical standards as it relates to contacts with fellow students, instructors, and employers.
16. 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.
17. write responses addressing a legal dilemma using the various sources of law.
18. distinguish between the legal and ethical responses to a business dilemma.

Program of Study

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

Cost of Attendance. For more information on cost of attendance visit MoSCORES (<https://scorecard.mo.gov/Search/>).

Program Career and Salary Information. Pursuant to Missouri HB 1606 (2018), information regarding the number of credit hours, program length, employment rate, wage data, and graduates employed in careers

related to their program of study at St. Louis Community College can be found at the following URL: <https://scorecard.mo.gov/scorecard/> (https://www.google.com/url?q=https://scorecard.mo.gov/scorecard/&sa=D&ust=1555536894857000&usg=AFQjCNG1xf3E_i2lO96zEytILO-s5xaJCQ). Search using School / Program “St. Louis Community College” and choose the degree or credential type of interest.

The following limitations to the data apply: Information provided is based on the most recent cohorts available. Typically, most recent cohorts for wage and completion data are six years prior to the current academic year. Time to complete a program of study varies depending on the number of credit hours students earn per semester.

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
Required Courses		
HMS 100	Introduction to Human Services	3
HMS 101	Human Services: Theories and Skills	3
HMS 205	Crisis Intervention	3
HMS 111	Group Practice in Human Services	3
HMS 201	Workplace Learning I: Human Services	3
HMS 203	Human Services Workplace Learning Seminar I	3
SOC 126	Pharmacology of Addictive Drugs	3
SOC 211	Substance Use, Abuse and Dependence	3
Electives		
Select one of the following:		3
PSY 200	General Psychology (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)

Passing scores established by educator preparation programs can be found here (<https://dese.mo.gov/sites/default/files/eq-epp-passingscores1920.pdf>).

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.

Cost of Attendance. For more information on cost of attendance visit MoSCORES (<https://scorecard.mo.gov/Search/>).

Program Career and Salary Information. Pursuant to Missouri HB 1606 (2018), information regarding the number of credit hours, program length, employment rate, wage data, and graduates employed in careers related to their program of study at St. Louis Community College can be found at the following URL: <https://scorecard.mo.gov/scorecard/> (https://www.google.com/url?q=https://scorecard.mo.gov/scorecard/&sa=D&ust=1555536894857000&usg=AFQjCNG1xf3E_i2lO96zEytILO-s5xaJQC). Search using School / Program “St. Louis Community College” and choose the degree or credential type of interest.

The following limitations to the data apply: Information provided is based on the most recent cohorts available. Typically, most recent cohorts for wage and completion data are six years prior to the current academic year. Time to complete a program of study varies depending on the number of credit hours students earn per semester.

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.

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Program of Study

Code	Title	Credit Hours
General Education		
ENG 101	College Composition I (MOTR ENGL 100)	3
ENG 102	College Composition II (MOTR ENGL 200)	3
MTH 161 or MTH 160	Quantitative Reasoning (MOTR MATH 120) (or higher) ¹ Precalculus Algebra (MOTR MATH 130)	4
COM 101 or COM 107	Oral Communication I (MOTR COMM 100) Public Speaking (MOTR COMM 110)	3
PSC 101	Introduction to American Politics (MOTR POSC 101)	3
HST 101 or HST 102	United States History to 1865 (MOTR HIST 101) ² United States History from 1865 to the Present (MOTR HIST 102)	3
PSY 200	General Psychology (MOTR PSYC 100)	3
XXX xxx	Humanities and Fine Arts Elective with MOTR designation ³	9
Select one of the following pathways:		11
Elementary Education Pathway		
Natural Sciences CORE 42 course with laboratory		
Natural Sciences CORE 42 course with laboratory		
CORE 42 Elective (any course to reach 42 MOTR credits)		
Secondary Education Pathway		
Natural Science CORE 42 course		
Natural Science CORE 42 course with laboratory		
CORE 42 Elective (any course to reach 42 MOTR credits)		
Program Requirements		
EDU 210	Teaching Profession with Field Experience	3
EDU 211	Foundations of Education in a Diverse Society	3
EDU 218	Educational Technology	3
EDU 227	Educational Psychology	3
PSY 205 or PSY 203 or PSY 214	Human Growth and Development (MOTR PSYC 200) Child Psychology Adolescent Psychology	3
Education Electives (One of the following must be completed):		3

EDU 219	Education of Exceptional Learners	
EDU 228	Multicultural Education	
XXX xxx	Elective ⁴	2-3
Total Credit Hours		62-63

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

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 Service, Certificate of Specialization

Forest Park

The Automotive Service Certificate of Specialization covers the essential skills needed to perform typical services in the Automotive Service Excellence (ASE) areas of brakes, electrical, engine mechanical, and engine performance. This program will prepare students for entry-level employment based on the four topics from each of the four courses. These courses will focus on testing, diagnosing, and servicing of the following:

- Electrical: Starting and charging systems, batteries, and electrical circuits
- Brakes: Disc, drum, hydraulic, and electronic brake systems
- Engine mechanical: Complete evaluation of an engine including the disassembly, inspection, and re-assembly
- Powertrain: Identification of engine management sensors, interpreting scan tool data, and servicing fuel systems

Cost of Attendance. For more information on cost of attendance visit MoSCORES (<https://scorecard.mo.gov/Search/>).

Program Career and Salary Information. Pursuant to Missouri HB 1606 (2018), information regarding the number of credit hours, program

length, employment rate, wage data, and graduates employed in careers related to their program of study at St. Louis Community College can be found at the following URL: [https://scorecard.mo.gov/scorecard/\(https://www.google.com/url?q=https://scorecard.mo.gov/scorecard/&sa=D&ust=1555536894857000&usg=AFQjCNG1xf3E_i2lO96zEytILO-s5xaJCQ\)](https://scorecard.mo.gov/scorecard/(https://www.google.com/url?q=https://scorecard.mo.gov/scorecard/&sa=D&ust=1555536894857000&usg=AFQjCNG1xf3E_i2lO96zEytILO-s5xaJCQ)). Search using School / Program “St. Louis Community College” and choose the degree or credential type of interest.

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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 engine mechanical-related customer concerns.
2. service a hydraulically controlled disc/drum brake system.
3. diagnose electronic brake control system failures.
4. measure internal engine components for excessive clearance and wear.
5. assess the condition of an internal engine using common testing procedures.
6. test the fuel delivery of an automobile.
7. diagnose customer concerns related to engine performance.

Missouri Civics Examination. Students entering college for the very first time in fall 2019 and who intend to complete an associate’s degree must successfully complete a civics examination. Students who have completed dual credit courses must complete this examination. Students who participated in Early College or other dual enrollment programs, transfer students, and previously enrolled students are exempt from this requirement.

Code	Title	Credit Hours
AUT 101	Automotive Fundamentals and Service Information	3
AUT 110	Automotive Electrical Principles	3
AUT 112	Automotive Brake Systems Service and Diagnosis	3
AUT 114	Automotive Engine Repair and Diagnosis	3
AUT 116	Automotive Powertrain Controls	3
Total Credit Hours		15

Automotive Vehicle Inspection and Light Maintenance, Certificate of Specialization

Forest Park

Automotive Vehicle Inspection and Light Maintenance Certificate of Specialization teaches students the essential skills needed to gain entry-level employment in the automotive industry. Students will gain a deep understanding of safety procedures used in the automotive industry as well as learn how to perform a comprehensive vehicle inspection. Students will begin to learn how to perform light maintenance on vehicle fluids, steering and suspension components, and alignments.

Cost of Attendance. For more information on cost of attendance visit MoSCORES (<https://scorecard.mo.gov/Search/>).

Program Career and Salary Information. Pursuant to Missouri HB 1606 (2018), information regarding the number of credit hours, program length, employment rate, wage data, and graduates employed in careers related to their program of study at St. Louis Community College can be found at the following URL: <https://scorecard.mo.gov/scorecard/> (https://www.google.com/url?q=https://scorecard.mo.gov/scorecard/&sa=D&ust=1555536894857000&usg=AFQjCNG1xf3E_i2lO96zEytILO-s5xaJCQ). Search using School / Program “St. Louis Community College” and choose the degree or credential type of interest.

The following limitations to the data apply: Information provided is based on the most recent cohorts available. Typically, most recent cohorts for wage and completion data are six years prior to the current academic year. Time to complete a program of study varies depending on the number of credit hours students earn per semester.

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 how to properly lift and support a vehicle using a drive-on and two-post style lift.
2. demonstrate proper waste handling practices and clean shop practices.
3. inspect different automotive fluid types and their condition.
4. inspect suspension, chassis, and brake components using Missouri Safety Inspection guidelines.
5. service a tire and wheel assembly to include replacing or repairing the tire, balancing the assembly, and reprogramming the Tire Pressure Monitoring System (TPMS).
6. remove and replace worn steering and suspension components.

Code	Title	Credit Hours
AUT 101	Automotive Fundamentals and Service Information	3
AUT 103	Automotive Vehicle Inspection and Light Maintenance	3
AUT 105	Automotive Maintenance and Service	3
AUT 107	Automotive Steering and Suspension Service	3
Total Credit Hours		12

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.

Cost of Attendance. For more information on cost of attendance visit MoSCORES (<https://scorecard.mo.gov/Search/>).

Program Career and Salary Information. Pursuant to Missouri HB 1606 (2018), information regarding the number of credit hours, program length, employment rate, wage data, and graduates employed in careers related to their program of study at St. Louis Community College can be found at the following URL: <https://scorecard.mo.gov/scorecard/> (https://www.google.com/url?q=https://scorecard.mo.gov/scorecard/&sa=D&ust=1555536894857000&usg=AFQjCNG1xf3E_i2lO96zEytILO-s5xaJCQ). Search using School / Program “St. Louis Community College” and choose the degree or credential type of interest.

The following limitations to the data apply: Information provided is based on the most recent cohorts available. Typically, most recent cohorts for wage and completion data are six years prior to the current academic year. Time to complete a program of study varies depending on the number of credit hours students earn per semester.

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.

Missouri Civics Examination. Students entering college for the very first time in fall 2019 and who intend to complete an associate’s degree must successfully complete a civics examination. Students who have completed dual credit courses must complete this examination. Students who participated in Early College or other dual enrollment programs, transfer students, and previously enrolled students are exempt from this requirement.

Program of Study

Code	Title	Credit Hours
General Education		
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
Area of Concentration		
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
Baking and Pastry Arts Option		
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 Associate in Applied Science 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 the program is a prerequisite to taking any second-semester courses. Admission is contingent on meeting the established minimum criteria as defined in the Behavioral Health Support Program Handbook. Applicants are required to complete a criminal background check to participate in practicum experiences.

Cost of Attendance. For more information on cost of attendance visit MoSCORES (<https://scorecard.mo.gov/Search/>).

Program Career and Salary Information. Pursuant to Missouri HB 1606 (2018), information regarding the number of credit hours, program length, employment rate, wage data, and graduates employed in careers related to their program of study at St. Louis Community College can be found at the following URL: <https://scorecard.mo.gov/scorecard/> (https://www.google.com/url?q=https://scorecard.mo.gov/scorecard/&sa=D&ust=1555536894857000&usg=AFQjCNG1xf3E_i2lO96zEytILO-s5xaJCQ). Search using School / Program “St. Louis Community College” and choose the degree or credential type of interest.

The following limitations to the data apply: Information provided is based on the most recent cohorts available. Typically, most recent cohorts for wage and completion data are six years prior to the current academic year. Time to complete a program of study varies depending on the number of credit hours students earn per semester.

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:

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

Missouri Civics Examination. Students entering college for the very first time in fall 2019 and who intend to complete an associate’s degree must successfully complete a civics examination. Students who have completed dual credit courses must complete this examination. Students who participated in Early College or other dual enrollment programs, transfer students, and previously enrolled students are exempt from this requirement.

Program of Study

Code	Title	Credit Hours
General Education		
ENG 101	College Composition I (MOTR ENGL 100)	3
ENG 103	Report Writing (MOTR ENGL 110)	3
COM 201	Interpersonal Communication (MOTR COMM 120)	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
Area of Concentration		
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 Proficiency

Florissant Valley

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

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

Cost of Attendance. For more information on cost of attendance visit MoSCORES (<https://scorecard.mo.gov/Search/>).

Program Career and Salary Information. Pursuant to Missouri HB 1606 (2018), information regarding the number of credit hours, program length, employment rate, wage data, and graduates employed in careers related to their program of study at St. Louis Community College can be found at the following URL: <https://scorecard.mo.gov/scorecard/> (https://www.google.com/url?q=https://scorecard.mo.gov/scorecard/&sa=D&ust=1555536894857000&usg=AFQjCNG1xf3E_i2lO96zEytILO-s5xaJCQ). Search using School / Program “St. Louis Community College” and choose the degree or credential type of interest.

The following limitations to the data apply: Information provided is based on the most recent cohorts available. Typically, most recent cohorts for wage and completion data are six years prior to the current academic year. Time to complete a program of study varies depending on the number of credit hours students earn per semester.

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. repair basic medical patient monitoring equipment.
2. troubleshoot common problems and issues with electronic equipment.
3. describe the regulatory requirements that govern a hospital's or clinic's ability to provide a safe environment for patients and employees.
4. evaluate medical equipment for electrical safety (including electrostatic discharge, ESD).
5. read schematic diagrams and service manuals in order to address issues with complex equipment.
6. analyze electronic circuits, both Alternating Current (AC) and Direct Current (DC), using instruments, meters, and analyzers to troubleshoot circuits and circuit boards.

7. describe future trends in medical instrumentation and patient care technology, including computer systems and integration with network systems.
8. apply basic networking terminology for describing medical device setups.

Code	Title	Credit Hours
Program Requirements		
MTH 140	Intermediate Algebra (or higher excluding MTH 161 and MTH 180)	3
EE 134	Electric Circuits	6
EE 132	Electronic Devices	5
BE 153	Workplace Learning: Biomedical Electronics Technology	4-6
BE 254	Biomedical Applications	5
IT 101	Cisco Networking Academy I: Introduction to Networks	5
Total Credit Hours		28-30

Biotechnology, Associate in Applied Science

Florissant Valley

The Associates in Applied Science in Biotechnology offers students specialized training for employment as biotechnicians engaged in Research and Development, Quality Control, Biomanufacturing, and Bioprocessing. All students in this field of study are required to complete the core biotechnology/science courses. Specialization is offered from the second through the fourth semester course work by allowing individualized selection of Advanced Topics in Biotechnology. The completion of this program provides the knowledge and hands on skills necessary to work in a life science research laboratory/workplace.

Cost of Attendance. For more information on cost of attendance visit MoSCORES (<https://scorecard.mo.gov/Search/>).

Program Career and Salary Information. Pursuant to Missouri HB 1606 (2018), information regarding the number of credit hours, program length, employment rate, wage data, and graduates employed in careers related to their program of study at St. Louis Community College can be found at the following URL: <https://scorecard.mo.gov/scorecard/> (https://www.google.com/url?q=https://scorecard.mo.gov/scorecard/&sa=D&ust=1555536894857000&usg=AFQjCNG1xf3E_i2lO96zEytILO-s5xaJCQ). Search using School / Program “St. Louis Community College” and choose the degree or credential type of interest.

The following limitations to the data apply: Information provided is based on the most recent cohorts available. Typically, most recent cohorts for wage and completion data are six years prior to the current academic year. Time to complete a program of study varies depending on the number of credit hours students earn per semester.

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 a record of laboratory work.
2. use written and oral skills to communicate results and analyses of experiments.

3. explain basic molecular biology principles.
4. use principles of good laboratory practices and professionalism in the laboratory.
5. design experiments on nucleic acids, proteins, and cells.
6. perform experiments on nucleic acids, proteins, and cells.
7. analyze results of experiments performed on nucleic acids, proteins, and cells.
8. assess the contributions of biotechnology to advances in the fields of agriculture and human health.

Missouri Civics Examination. Students entering college for the very first time in fall 2019 and who intend to complete an associate's degree must successfully complete a civics examination. Students who have completed dual credit courses must complete this examination. Students who participated in Early College or other dual enrollment programs, transfer students, and previously enrolled students are exempt from this requirement.

Program of Study

Code	Title	Credit Hours
General Education		
ENG 101	College Composition I (MOTR ENGL 100)	3
MTH 160	Precalculus Algebra (MOTR MATH 130)	4
XXX xxx	Social & Behavioral Sciences: Civics Requirement	3
CHM 105	General Chemistry I (MOTR CHEM 150L)	5
BIO 140	Principles of Biology I (MOTR BIOL 150L)	5
Program Requirements		
BIO 157	Good Laboratory Practices, Compliance, and Bioinformatic Principles	3
BIO 104	Basic Laboratory Methods for Biotechnology	3
BIO 152	Quantitative Methods in Biotechnology	2
BIO 228	Research and Presentation Skills for the Life Sciences	2
BIO 218	Microbiology for Biotechnology	4
BIO 219	Biotechnology I	5
BIO 220	Biotechnology II	5
BIO 221	Workplace Learning: Biotechnology	3
BIO 226	Advanced Topics in Biotechnology (three sections required)	3
BIO 226	Advanced Topics in Biotechnology (three sections required)	3
BIO 226	Advanced Topics in Biotechnology (three sections required)	3
CHM 106	General Chemistry II	5
Total Credit Hours		61

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 Arts

Florissant Valley, Forest Park, Meramec and Wildwood

The Associate in Arts in Business Administration degree program meets the general education requirements (42 MOTR Credits), and, offers a seamless transfer into business programs at four-year colleges and universities. This program provides students the opportunity to complete the first two years of study toward a bachelor's degree in business or a business related field.

Cost of Attendance. For more information on cost of attendance visit MoSCORES (<https://scorecard.mo.gov/Search/>).

Program Career and Salary Information. Pursuant to Missouri HB 1606 (2018), information regarding the number of credit hours, program length, employment rate, wage data, and graduates employed in careers related to their program of study at St. Louis Community College can be found at the following URL: [https://scorecard.mo.gov/scorecard/\(https://www.google.com/url/?q=https://scorecard.mo.gov/scorecard/&sa=D&ust=1555536894857000&usg=AFQjCNG1xf3E_i2lO96zEytILO-s5xaJCQ\)](https://scorecard.mo.gov/scorecard/(https://www.google.com/url/?q=https://scorecard.mo.gov/scorecard/&sa=D&ust=1555536894857000&usg=AFQjCNG1xf3E_i2lO96zEytILO-s5xaJCQ)). Search using School / Program "St. Louis Community College" and choose the degree or credential type of interest.

The following limitations to the data apply: Information provided is based on the most recent cohorts available. Typically, most recent cohorts for wage and completion data are six years prior to the current academic year. Time to complete a program of study varies depending on the number of credit hours students earn per semester.

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. \\n
2. use quantitative and qualitative skills to define problems, and communication skills to propose solutions.
3. identify and apply contributions from a range of academic disciplines to conceptualize and explain enduring and contemporary business issues.
4. analyze the ethical implications of choices that reflect diversity of cultural, religious, economic, or historic perspectives or experiences.
5. explain how the primary functions of business interact to achieve organizational goals.
6. analyze and apply internal and external sources of data to propose solutions for strategic decision making.

Program of Study

Code	Title	Credit Hours
General Education		
	Written Communications	6
	Oral Communications	3
ECO 151	Principles of Macroeconomics (MOTR ECON 101)	3
ECO 152	Principles of Microeconomics (MOTR ECON 102)	3
XXX xxx	Social & Behavioral Sciences: Civics Requirement	3
Select one of the following math courses:		4
MTH 160	Precalculus Algebra (MOTR MATH 130)	

MTH 186	Survey of Calculus (or higher)	
XXX xxx	Humanities and Fine Arts Electives ¹	9
XXX xxx	Natural Sciences Electives with a MOTR designation (one lab course required) ²	7
CORE 42 Elective		4
Choose from the following:		
MTH 186 or higher is strongly recommended (excluding any math course taken to meet program requirements); or,		
Course(s) designated with a MOTR number		
Program Requirements		
ACC 110	Financial Accounting I	4
ACC 114	Managerial Accounting	3
BUS 104	Introduction to Business Administration	3
BUS 201	Elementary Business Statistics (Recommended)	3-4
or MTH 180	Introductory Statistics (MOTR MATH 110)	
Electives		
Select 2 of the following:		6
BLW 101	Business Law I ³	
or BLW 201	Legal Environment of Business	
FIN 201	Fundamentals of Finance ³	
IB 100	International Business ³	
IS 116	Computer Literacy ³	
MGT 204	Business Organization and Management ³	
MKT 203	Principles of Marketing ³	
Total Credit Hours		61-62

¹ 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.

² Students must complete seven (7) credit hours from at least two (2) different prefixes. One course must contain a laboratory component.

³ Students are encouraged to check with an advisor at the transferring institution to determine if these credits will transfer.

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.

Cost of Attendance. For more information on cost of attendance visit MoSCORES (<https://scorecard.mo.gov/Search/>).

Program Career and Salary Information. Pursuant to Missouri HB 1606 (2018), information regarding the number of credit hours, program length, employment rate, wage data, and graduates employed in careers related to their program of study at St. Louis Community College can be found at the following URL: <https://scorecard.mo.gov/scorecard/> (https://www.google.com/url?q=https://scorecard.mo.gov/scorecard/&sa=D&ust=1555536894857000&usq=AFQjCNG1xf3E_i2lO96zEytILO-s5xaJQC). Search using School / Program “St. Louis Community College” and choose the degree or credential type of interest.

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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.

Missouri Civics Examination. Students entering college for the very first time in fall 2019 and who intend to complete an associate's degree must successfully complete a civics examination. Students who have completed dual credit courses must complete this examination. Students who participated in Early College or other dual enrollment programs, transfer students, and previously enrolled students are exempt from this requirement.

Program of Study

Code	Title	Credit Hours
Career General Education		
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
Program Requirements		
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

The Certificate of Specialization in Cisco Networking Academy: CCNA covers 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 later in the curriculum. In each course, students will learn technology concepts with the support of interactive media and apply the knowledge and practice related skills through a series of hands-on and simulated activities that reinforce their learning. The courses serve as preparation to take the Cisco Certified Network Associate (CCNA®) Implementing and Administering Cisco Solutions (CCNA) (<https://www.cisco.com/c/en/us/training-events/training-certifications/training/training-services/courses/implementing-and-administering-cisco-solutions-ccna.html>) exam after completing all three courses.

Cost of Attendance. For more information on cost of attendance visit MoSCORES (<https://scorecard.mo.gov/Search/>).

Program Career and Salary Information. Pursuant to Missouri HB 1606 (2018), information regarding the number of credit hours, program length, employment rate, wage data, and graduates employed in careers related to their program of study at St. Louis Community College can be found at the following URL: [https://scorecard.mo.gov/scorecard/](https://scorecard.mo.gov/scorecard/(https://www.google.com/url?q=https://scorecard.mo.gov/scorecard/&sa=D&ust=1555536894857000&usg=AFQjCNG1xf3E_i2lO96zEytILO-s5xaJQC)) (https://www.google.com/url?q=https://scorecard.mo.gov/scorecard/&sa=D&ust=1555536894857000&usg=AFQjCNG1xf3E_i2lO96zEytILO-s5xaJQC). Search using School / Program "St. Louis Community College" and choose the degree or credential type of interest.

The following limitations to the data apply: Information provided is based on the most recent cohorts available. Typically, most recent cohorts for wage and completion data are six years prior to the current academic year. Time to complete a program of study varies depending on the number of credit hours students earn per semester.

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 based on industry standards.
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: Switching, Routing, and Wireless Essentials	5
IT 202	Cisco Networking Academy III: Enterprise Networking, Security, and Automation	5
Total Credit Hours		15

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.

Cost of Attendance. For more information on cost of attendance visit MoSCORES (<https://scorecard.mo.gov/Search/>).

Program Career and Salary Information. Pursuant to Missouri HB 1606 (2018), information regarding the number of credit hours, program length, employment rate, wage data, and graduates employed in careers related to their program of study at St. Louis Community College can be found at the following URL: <https://scorecard.mo.gov/scorecard/> (https://www.google.com/url?q=https://scorecard.mo.gov/scorecard/&sa=D&ust=1555536894857000&usg=AFQjCNG1xf3E_i2lO96zEytILO-s5xaJCQ). Search using School / Program "St. Louis Community College" and choose the degree or credential type of interest.

The following limitations to the data apply: Information provided is based on the most recent cohorts available. Typically, most recent cohorts for wage and completion data are six years prior to the current academic year. Time to complete a program of study varies depending on the number of credit hours students earn per semester.

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.

Missouri Civics Examination. Students entering college for the very first time in fall 2019 and who intend to complete an associate's degree must successfully complete a civics examination. Students who have completed dual credit courses must complete this examination. Students who participated in Early College or other dual enrollment programs, transfer students, and previously enrolled students are exempt from this requirement.

Program of Study

Code	Title	Credit Hours
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 (MOTR ENGL 110)	
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 (MOTR LIFS 150LAP)	4
BIO 208	Anatomy and Physiology II	4
MTH 140	Intermediate Algebra	3
Physical Education Activity		
Select 2 credit hours		2
Program Requirements		
CLT 100	Orientation to the Medical Laboratory	1
CLT 101	Medical Microbiology	3
CLT 202	Clinical Practice I	4
CLT 207	Clinical Practice II	4
CLT 110	Urinalysis and Body Fluids	2
CLT 111	Hematology and Coagulation	4
CLT 113	Pathogenic Bacteriology	2
CLT 211	Parasites, Fungi and Intracellular Pathogens	2
CLT 213	Introduction to Clinical Chemistry	2
CLT 217	Clinical Chemistry	5
CLT 215	Immunohematology	4
CLT 219	Professional Skills Seminar	1
CLT 115	Immunology and Serology	2
CLT 120	Clinical Laboratory Skill Development	4
Total Credit Hours		70

Computer Accounting Technology, Certificate of Specialization

Florissant Valley, Forest Park and Meramec

The Computer Accounting Technology Certificate of Specialization program is designed for Accounting students on the fast-track to the job-market or working professionals who want to update their computer technology skills. Students who are enrolled in the Certificate of Specialization program will receive hands-

on training with Microsoft Excel, QuickBooks, and Access on how to apply these technologies in an Accounting setting.

Cost of Attendance. For more information on cost of attendance visit MoSCORES (<https://scorecard.mo.gov/Search/>).

Program Career and Salary Information. Pursuant to Missouri HB 1606 (2018), information regarding the number of credit hours, program length, employment rate, wage data, and graduates employed in careers related to their program of study at St. Louis Community College can be found at the following URL: <https://scorecard.mo.gov/scorecard/> (https://www.google.com/url?q=https://scorecard.mo.gov/scorecard/&sa=D&ust=1555536894857000&usg=AFQjCNG1xf3E_i2lO96zEytILO-s5xaJCQ). Search using School / Program “St. Louis Community College” and choose the degree or credential type of interest.

The following limitations to the data apply: Information provided is based on the most recent cohorts available. Typically, most recent cohorts for wage and completion data are six years prior to the current academic year. Time to complete a program of study varies depending on the number of credit hours students earn per semester.

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 a working knowledge of 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.
- 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.

Code	Title	Credit Hours
ACC 110	Financial Accounting I	4
ACC 120	Computer Accounting Applications for Business	3
ACC 122	Computer Accounting Applications - Spreadsheets	3
ACC 124	Computer Accounting Applications - Databases	3
Select 3 credit hours of the following:		3
ACC 114	Managerial Accounting (or higher)	
IS 116	Computer Literacy	

Computer Aided Design (CAD), Certificate of Specialization

Florissant Valley

The Computer Aided Design (CAD) Certificate of Specialization 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.

Cost of Attendance. For more information on cost of attendance visit MoSCORES (<https://scorecard.mo.gov/Search/>).

Program Career and Salary Information. Pursuant to Missouri HB 1606 (2018), information regarding the number of credit hours, program length, employment rate, wage data, and graduates employed in careers related to their program of study at St. Louis Community College can be found at the following URL: <https://scorecard.mo.gov/scorecard/> (https://www.google.com/url?q=https://scorecard.mo.gov/scorecard/&sa=D&ust=1555536894857000&usg=AFQjCNG1xf3E_i2lO96zEytILO-s5xaJCQ). Search using School / Program “St. Louis Community College” and choose the degree or credential type of interest.

The following limitations to the data apply: Information provided is based on the most recent cohorts available. Typically, most recent cohorts for wage and completion data are six years prior to the current academic year. Time to complete a program of study varies depending on the number of credit hours students earn per semester.

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:

- create two-dimensional (2D) CAD drawings.
- create three-dimensional (3D) CAD models.
- produce drawings that comply with industry standards.
- incorporate and extract design properties in CAD files.
- manage CAD files.
- interpret mechanical and electrical drawings.

Code	Title	Credit Hours
GE 101	Technical Computer Applications	3
EGR 100	Engineering Drawing	3
EGR 133	Introduction to AutoCAD I	2
GE 135	Blueprint Reading for Engineering Technicians	2
EGR 141	Introduction to AutoCAD II	2
Select one course:		
ME 230	Introduction to 3-D Solid Modeling for Design	4
or EGR 230	Introduction to Revit	

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.

Cost of Attendance. For more information on cost of attendance visit MoSCORES (<https://scorecard.mo.gov/Search/>).

Program Career and Salary Information. Pursuant to Missouri HB 1606 (2018), information regarding the number of credit hours, program length, employment rate, wage data, and graduates employed in careers related to their program of study at St. Louis Community College can be found at the following URL: <https://scorecard.mo.gov/scorecard/> (https://www.google.com/url?q=https://scorecard.mo.gov/scorecard/&sa=D&ust=1555536894857000&usg=AFQjCNG1xf3E_i2lO96zEytILO-s5xaJCQ). Search using School / Program “St. Louis Community College” and choose the degree or credential type of interest.

The following limitations to the data apply: Information provided is based on the most recent cohorts available. Typically, most recent cohorts for wage and completion data are six years prior to the current academic year. Time to complete a program of study varies depending on the number of credit hours students earn per semester.

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.

Cost of Attendance. For more information on cost of attendance visit MoSCORES (<https://scorecard.mo.gov/Search/>).

Program Career and Salary Information. Pursuant to Missouri HB 1606 (2018), information regarding the number of credit hours, program length, employment rate, wage data, and graduates employed in careers related to their program of study at St. Louis Community College can be found at the following URL: <https://scorecard.mo.gov/scorecard/> (https://www.google.com/url?q=https://scorecard.mo.gov/scorecard/&sa=D&ust=1555536894857000&usg=AFQjCNG1xf3E_i2lO96zEytILO-s5xaJCQ). Search using School / Program “St. Louis Community College” and choose the degree or credential type of interest.

The following limitations to the data apply: Information provided is based on the most recent cohorts available. Typically, most recent cohorts for wage and completion data are six years prior to the current academic year. Time to complete a program of study varies depending on the number of credit hours students earn per semester.

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.

Missouri Civics Examination. Students entering college for the very first time in fall 2019 and who intend to complete an associate’s degree must successfully complete a civics examination. Students who have completed dual credit courses must complete this examination. Students who participated in Early College or other dual enrollment programs, transfer students, and previously enrolled students are exempt from this requirement.

Program of Study

Code	Title	Credit Hours
Career General Education		
ENG 101	College Composition I (MOTR ENGL 100)	3
COM 101	Oral Communication I (MOTR COMM 100)	3
MTH 140	Intermediate Algebra (or higher) ¹	3

XXX xxx	Social & Behavioral Sciences: Civics Requirement	3
XXX xxx	Social Science Elective	3
XXX xxx	Life or Physical Science elective	3
Physical Education Activity		
Select 2 credit hours		2
Program Requirements		
GE 131	Engineering Technology Orientation	1
EGR 100 or ME 154	Engineering Drawing Mechanical Blueprint Reading	2-3
EGR 133	Introduction to AutoCAD I	2
GE 101 or GE 121	Technical Computer Applications Principles of Engineering	3
ME 133	Production Control	3
ME 151 or ME 120	Manufacturing Processes I Manual Machining I	3
ME 152 or ME 212	Manufacturing Processes II Introduction to Computer Numerical Control (CNC) Machining	3
ME 249	Materials and Metallurgy	3
QC 212	Quality Tools for Advanced Manufacturing	3
GE 240	Product Design and Fabrication	4
3-D CAD Requirement		
Select one of the following:		2-4
EGR 147	Introduction to Engineering Design	
ME 230	Introduction to 3-D Solid Modeling for Design	
EGR 145		
EGR 148	Solid Modeling with Unigraphics	
Fundamentals Course		
Select one of the following:		3
ME 140	Introduction to Robotics	
ME 121	Computer Integrated Manufacturing	
GE 151	Introduction to Aerospace Engineering	
Electives		
Select 11 credit hours of the following elective areas:		11
ME XXX		
EGR XXX		
QC XXX		
GE XXX		
Total Credit Hours		63-66

¹ Except MTH 165 and MTH 166

Criminal Justice, Associate in Applied Science

Florissant Valley, Forest Park, Meramec, and Online

The Criminal Justice Associate in Applied Science prepares students for entry-level employment in the criminal justice system, lays the groundwork for students transferring to a four-year university to pursue a bachelor's degree, or may assist those currently employed in entry-level jobs with career advancement. The program introduces students to the criminal justice system and its components: law enforcement, courts, and corrections. Students will

learn how societal influences affect the crime rate and how the various agencies respond to those changes.

Cost of Attendance. For more information on cost of attendance visit MoSCORES (<https://scorecard.mo.gov/Search/>).

Program Career and Salary Information. Pursuant to Missouri HB 1606 (2018), information regarding the number of credit hours, program length, employment rate, wage data, and graduates employed in careers related to their program of study at St. Louis Community College can be found at the following URL: [https://scorecard.mo.gov/scorecard/](https://scorecard.mo.gov/scorecard/(https://www.google.com/url/?q=https://scorecard.mo.gov/scorecard/&sa=D&ust=1555536894857000&usg=AFQjCNG1xf3E_i2lO96zEytILO-s5xaJCQ)) (https://www.google.com/url/?q=https://scorecard.mo.gov/scorecard/&sa=D&ust=1555536894857000&usg=AFQjCNG1xf3E_i2lO96zEytILO-s5xaJCQ). Search using School / Program "St. Louis Community College" and choose the degree or credential type of interest.

The following limitations to the data apply: Information provided is based on the most recent cohorts available. Typically, most recent cohorts for wage and completion data are six years prior to the current academic year. Time to complete a program of study varies depending on the number of credit hours students earn per semester.

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 major components of the criminal justice system and the functions of law enforcement, corrections, and the courts. \\n
2. describe legal concepts, terminology, and evidentiary rules and constitutional protections to which criminal justice professionals must adhere when practicing within the field.
3. describe similarities and differences among the distinct and overlapping roles of law enforcement agencies, the adult and juvenile court systems, correctional facilities, and philosophies of crime, rehabilitation, punishment, and theories of deviance.
4. analyze criminal justice issues.
5. propose ethical solutions to crime-related issues in the community.
6. produce clearly written documentation in the performance of duties as criminal justice professionals.

Missouri Civics Examination. Students entering college for the very first time in fall 2019 and who intend to complete an associate's degree must successfully complete a civics examination. Students who have completed dual credit courses must complete this examination. Students who participated in Early College or other dual enrollment programs, transfer students, and previously enrolled students are exempt from this requirement.

Program of Study

Code	Title	Credit Hours
General Education		
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
XXX xxx	Social & Behavioral Sciences: Civics Requirement	3
PHL 104	Ethics (MOTR PHIL 102)	3
MTH xxx	Mathematics 100 level or above	3
XXX xxx	CORE 42 Natural Science Elective	3

XXX xxx	CORE 42 Social Science (PSY or SOC)	6
Program Requirements		
IS 116	Computer Literacy	3-4
or IS 151	Computer Applications in Business	
CRJ 101	American Correctional System	3
CRJ 129	Introduction to Law Enforcement	3
CRJ 122	Introduction to Criminal Justice	3
CRJ 123	Juvenile Justice	3
CRJ 124	Criminal Law and Procedures	3
CRJ 206	Management of Human Conflicts	3
or SOC 203	Crime and Society	
CRJ 212	Criminal Investigation	3
Electives		
Select 9 credit hours from the following:		9
CRJ 111	Rules of Criminal Evidence	
or Any CRJ course that is not a program requirement		
ANT 102	Introduction to Cultural Anthropology (MOTR ANTH 201)	
PSC 101	Introduction to American Politics (MOTR POSC 101)	
ENG 103	Report Writing (MOTR ENGL 110)	
COM 201	Interpersonal Communication (MOTR COMM 120)	
COM 107	Public Speaking (MOTR COMM 110)	
PRD 128	Mental Health First Aid	
PE 129	First Aid	
Total Credit Hours		60-61

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.

Cost of Attendance. For more information on cost of attendance visit MoSCORES (<https://scorecard.mo.gov/Search/>).

Program Career and Salary Information. Pursuant to Missouri HB 1606 (2018), information regarding the number of credit hours, program length, employment rate, wage data, and graduates employed in careers related to their program of study at St. Louis Community College can

be found at the following URL: <https://scorecard.mo.gov/scorecard/> (https://www.google.com/url?q=https://scorecard.mo.gov/scorecard/&sa=D&ust=1555536894857000&usg=AFQjCNG1xf3E_i2lO96zEytILO-s5xaJCQ). Search using School / Program “St. Louis Community College” and choose the degree or credential type of interest.

The following limitations to the data apply: Information provided is based on the most recent cohorts available. Typically, most recent cohorts for wage and completion data are six years prior to the current academic year. Time to complete a program of study varies depending on the number of credit hours students earn per semester.

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.

Missouri Civics Examination. Students entering college for the very first time in fall 2019 and who intend to complete an associate’s degree must successfully complete a civics examination. Students who have completed dual credit courses must complete this examination. Students who participated in Early College or other dual enrollment programs, transfer students, and previously enrolled students are exempt from this requirement.

Program of Study

Code	Title	Credit Hours
Career General Education		
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
Program Requirements		
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
Culinary Arts Courses		

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

The Associate in Applied Science in Cybersecurity 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.

Cost of Attendance. For more information on cost of attendance visit MoSCORES (<https://scorecard.mo.gov/Search/>).

Program Career and Salary Information. Pursuant to Missouri HB 1606 (2018), information regarding the number of credit hours, program length, employment rate, wage data, and graduates employed in careers related to their program of study at St. Louis Community College can be found at the following URL: <https://scorecard.mo.gov/scorecard/> (https://www.google.com/url?q=https://scorecard.mo.gov/scorecard/&sa=D&ust=1555536894857000&usg=AFQjCNG1xf3E_i2lO96zEytILO-s5xaJCQ). Search using School / Program "St. Louis Community College" and choose the degree or credential type of interest.

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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.

Missouri Civics Examination. Students entering college for the very first time in fall 2019 and who intend to complete an associate's degree must successfully complete a civics examination. Students who have completed dual credit courses must complete this examination. Students who participated in Early College or other dual enrollment programs, transfer students, and previously enrolled students are exempt from this requirement.

Code	Title	Credit Hours
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 (MOTR ENGL 110)	
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
Physical Education Activity		
Select 2 credit hours		2
Program Requirements		
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	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.

Cost of Attendance. For more information on cost of attendance visit MoSCORES (<https://scorecard.mo.gov/Search/>).

Program Career and Salary Information. Pursuant to Missouri HB 1606 (2018), information regarding the number of credit hours, program length, employment rate, wage data, and graduates employed in careers related to their program of study at St. Louis Community College can be found at the following URL: <https://scorecard.mo.gov/scorecard/> (https://www.google.com/url?q=https://scorecard.mo.gov/scorecard/&sa=D&ust=1555536894857000&usg=AFQjCNG1xf3E_i2lO96zEytILO-s5xaJcQ). Search using School / Program “St. Louis Community College” and choose the degree or credential type of interest.

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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.

Cost of Attendance. For more information on cost of attendance visit MoSCORES (<https://scorecard.mo.gov/Search/>).

Program Career and Salary Information. Pursuant to Missouri HB 1606 (2018), information regarding the number of credit hours, program length, employment rate, wage data, and graduates employed in careers related to their program of study at St. Louis Community College can be found at the following URL: <https://scorecard.mo.gov/scorecard/> (https://www.google.com/url?q=https://scorecard.mo.gov/scorecard/&sa=D&ust=1555536894857000&usg=AFQjCNG1xf3E_i2lO96zEytILO-s5xaJcQ).

Search using School / Program “St. Louis Community College” and choose the degree or credential type of interest.

The following limitations to the data apply: Information provided is based on the most recent cohorts available. Typically, most recent cohorts for wage and completion data are six years prior to the current academic year. Time to complete a program of study varies depending on the number of credit hours students earn per semester.

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 database management systems that comply with current industry standards.
2. develop fast and secure data-centric applications using advanced SQL and reporting tools.
3. manage database systems for efficient storage, processing and data retrieval.
4. tune database queries for maximum high performance.
5. implement distributed cloud server systems.
6. mitigate against the common security vulnerabilities of database systems.
7. design transactional and data warehouse databases.
8. develop data-driven applications integrated with database systems.
9. deploy analytical search tools for extraction and data mining.

Code	Title	Credit Hours
IS 153 or IS 187	C# Programming I Java Programming I	4
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 or IS 276	SQL Server Programming Oracle Programming	3
Electives		
Select 6-8 credit hours:		6-8
IS 237	Fundamentals of Information Assurance/Security	
IS 273	Oracle Design and Implementation	
IS 275	Advanced C++ Programming	
IS 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 Proficiency

Florissant Valley and Wildwood

The Certificate of Proficiency in Deaf Communication Studies: American Sign Language teaches introductory and intermediate ASL, the native, indigenous language of the North American Deaf community. Graduates of the ASL Certificate program will be able to carry on extended conversations in ASL on everyday topics, choose conceptually accurate signs to express their thoughts, articulate the signs correctly, order the signs into ASL sentence patterns, and receptively comprehend ASL at an equivalent level. The ASL Certificate is ideal for hearing people who have Deaf family members, friends, or co-workers, for those who serve Deaf clients, for Deaf individuals who want to learn to communicate in sign language, and for students who need to learn ASL before enrolling in the Interpreter Education Program.

Cost of Attendance. For more information on cost of attendance visit MoSCORES (<https://scorecard.mo.gov/Search/>).

Program Career and Salary Information. Pursuant to Missouri HB 1606 (2018), information regarding the number of credit hours, program length, employment rate, wage data, and graduates employed in careers related to their program of study at St. Louis Community College can be found at the following URL: <https://scorecard.mo.gov/scorecard/> (https://www.google.com/url?q=https://scorecard.mo.gov/scorecard/&sa=D&ust=1555536894857000&usg=AFQjCNG1xf3E_i2lO96zEytILO-s5xaJCQ). Search using School / Program “St. Louis Community College” and choose the degree or credential type of interest.

The following limitations to the data apply: Information provided is based on the most recent cohorts available. Typically, most recent cohorts for wage and completion data are six years prior to the current academic year. Time to complete a program of study varies depending on the number of credit hours students earn per semester.

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 five to ten minutes on everyday topics such as introductions, self-care, home, family, daily schedules and activities, interests, and simple stories.
2. incorporate conceptually accurate intermediate ASL vocabulary including classifiers and idioms, spatialization, directional verbs, and role shifting to convey their thoughts.
3. articulate signs on the hands, face, and body.
4. construct a variety of ASL sentence types.
5. demonstrate receptive and expressive fingerspelling.
6. employ the standard basic terminology of ASL linguistics.
7. demonstrate basic knowledge of the US Deaf community including origins of ASL, Deaf education, assistive technology, Deaf communication modes, and 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 and Numbers	4
DCS 111	American Sign Language Linguistics	4
DCS 115	Introduction to Deaf Culture	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.

Cost of Attendance. For more information on cost of attendance visit MoSCORES (<https://scorecard.mo.gov/Search/>).

Program Career and Salary Information. Pursuant to Missouri HB 1606 (2018), information regarding the number of credit hours, program length, employment rate, wage data, and graduates employed in careers related to their program of study at St. Louis Community College can be found at the following URL: <https://scorecard.mo.gov/scorecard/> (https://www.google.com/url?q=https://scorecard.mo.gov/scorecard/&sa=D&ust=1555536894857000&usg=AFQjCNG1xf3E_i2lO96zEytILO-s5xaJCQ). Search using School / Program "St. Louis Community College" and choose the degree or credential type of interest.

The following limitations to the data apply: Information provided is based on the most recent cohorts available. Typically, most recent cohorts for wage

and completion data are six years prior to the current academic year. Time to complete a program of study varies depending on the number of credit hours students earn per semester.

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 (MOTR LIFS 150LAP)	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 (MOTR LIFS 150LAP)	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.

Cost of Attendance. For more information on cost of attendance visit MoSCORES (<https://scorecard.mo.gov/Search/>).

Program Career and Salary Information. Pursuant to Missouri HB 1606 (2018), information regarding the number of credit hours, program length, employment rate, wage data, and graduates employed in careers related to their program of study at St. Louis Community College can be found at the following URL: <https://scorecard.mo.gov/scorecard/> (https://www.google.com/url?q=https://scorecard.mo.gov/scorecard/&sa=D&ust=1555536894857000&usg=AFQjCNG1xf3E_i2lO96zEytILO-s5xaJQC). Search using School / Program “St. Louis Community College” and choose the degree or credential type of interest.

The following limitations to the data apply: Information provided is based on the most recent cohorts available. Typically, most recent cohorts for wage and completion data are six years prior to the current academic year. Time to complete a program of study varies depending on the number of credit hours students earn per semester.

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.

Missouri Civics Examination. Students entering college for the very first time in fall 2019 and who intend to complete an associate's degree must successfully complete a civics examination. Students who have completed dual credit courses must complete this examination. Students who participated in Early College or other dual enrollment programs, transfer students, and previously enrolled students are exempt from this requirement.

Program of Study

Code	Title	Credit Hours
Career General Education		
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
Program Requirements		
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

Cost of Attendance. For more information on cost of attendance visit MoSCORES (<https://scorecard.mo.gov/Search/>).

Program Career and Salary Information. Pursuant to Missouri HB 1606 (2018), information regarding the number of credit hours, program length, employment rate, wage data, and graduates employed in careers

related to their program of study at St. Louis Community College can be found at the following URL: <https://scorecard.mo.gov/scorecard/> (https://www.google.com/url?q=https://scorecard.mo.gov/scorecard/&sa=D&ust=1555536894857000&usg=AFQjCNG1xf3E_i2lO96zEytILO-s5xaJCQ). Search using School / Program “St. Louis Community College” and choose the degree or credential type of interest.

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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:

- 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.
- identify the sonographic appearance of normal anatomic structures, including anatomic variants and normal Doppler patterns with vascular introduction.
- 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.
- demonstrate proficiency in the performance of M-mode, two-dimensional, and Doppler (pulsed wave, continuous wave, color flow and power) echocardiographic studies.
- identify the sonographic appearance of normal cardiac anatomy, including anatomic variants and normal Doppler patterns with vascular introduction.
- identify and appropriately document the abnormal sonographic and Doppler patterns of cardiac disease processes, pathology, and pathophysiology.
- discuss basic principles in ultrasound, vascular ultrasound, and ultrasound physics and instrumentation.
- identify sectional anatomy, hemodynamics, pathophysiologic principles, and pattern recognition as it relates to vascular sonography.

Program of Study

Code	Title	Credit Hours
Core Curriculum		
DMS 103	Ultrasound Physics and Instrumentation I	2
DMS 104	Ultrasound Physics and Instrumentation II	2
DMS 201	Ultrasound Physics and Instrumentation III	2
Options		
Select one of the following options:		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.

Cost of Attendance. For more information on cost of attendance visit MoSCORES (<https://scorecard.mo.gov/Search/>).

Program Career and Salary Information. Pursuant to Missouri HB 1606 (2018), information regarding the number of credit hours, program length, employment rate, wage data, and graduates employed in careers related to their program of study at St. Louis Community College can be found at the following URL: <https://scorecard.mo.gov/scorecard/> (https://www.google.com/url?q=https://scorecard.mo.gov/scorecard/&sa=D&ust=1555536894857000&usg=AFQjCNG1xf3E_i2lO96zEytILO-s5xaJCQ). Search using School / Program “St. Louis Community College” and choose the degree or credential type of interest.

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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.

Missouri Civics Examination. Students entering college for the very first time in fall 2019 and who intend to complete an associate’s degree must successfully complete a civics examination. Students who have completed dual credit courses must complete this examination. Students who participated in Early College or other dual enrollment programs, transfer students, and previously enrolled students are exempt from this requirement.

Program of Study

Code	Title	Credit Hours
Career General Education		
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
Program Requirements		
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.

Cost of Attendance. For more information on cost of attendance visit MoSCORES (<https://scorecard.mo.gov/Search/>).

Program Career and Salary Information. Pursuant to Missouri HB 1606 (2018), information regarding the number of credit hours, program length, employment rate, wage data, and graduates employed in careers related to their program of study at St. Louis Community College can be found at the following URL: <https://scorecard.mo.gov/scorecard/> (https://www.google.com/url?q=https://scorecard.mo.gov/scorecard/&sa=D&ust=1555536894857000&usg=AFQjCNG1xf3E_i2lO96zEytILO-s5xaJCQ). Search using School / Program “St. Louis Community College” and choose the degree or credential type of interest.

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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
Program Requirements		
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.

Cost of Attendance. For more information on cost of attendance visit MoSCORES (<https://scorecard.mo.gov/Search/>).

Program Career and Salary Information. Pursuant to Missouri HB 1606 (2018), information regarding the number of credit hours, program length, employment rate, wage data, and graduates employed in careers related to their program of study at St. Louis Community College can be found at the following URL: [https://scorecard.mo.gov/scorecard/](https://scorecard.mo.gov/scorecard/(https://www.google.com/url?q=https://scorecard.mo.gov/scorecard/&sa=D&ust=1555536894857000&usg=AFQjCNG1xf3E_i2lO96zEytILO-s5xaJCQ)) (https://www.google.com/url?q=https://scorecard.mo.gov/scorecard/&sa=D&ust=1555536894857000&usg=AFQjCNG1xf3E_i2lO96zEytILO-s5xaJCQ). Search using School / Program “St. Louis Community College” and choose the degree or credential type of interest.

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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
Program Requirements		
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--Interactive and Graphic Design, Certificate of Specialization

Meramec

This 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.

Cost of Attendance. For more information on cost of attendance visit MoSCORES (<https://scorecard.mo.gov/Search/>).

Program Career and Salary Information. Pursuant to Missouri HB 1606 (2018), information regarding the number of credit hours, program length, employment rate, wage data, and graduates employed in careers related to their program of study at St. Louis Community College can be found at the following URL: [https://scorecard.mo.gov/scorecard/](https://scorecard.mo.gov/scorecard/(https://www.google.com/url?q=https://scorecard.mo.gov/scorecard/&sa=D&ust=1555536894857000&usg=AFQjCNG1xf3E_i2lO96zEytILO-s5xaJCQ)) (https://www.google.com/url?q=https://scorecard.mo.gov/scorecard/&sa=D&ust=1555536894857000&usg=AFQjCNG1xf3E_i2lO96zEytILO-s5xaJCQ). Search using School / Program “St. Louis Community College” and choose the degree or credential type of interest.

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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. utilize the technical skills, creative abilities, and professional practices required in the areas of Interactive and Graphic Design.
2. understand and employ classic design principles; such as scale, proportion, rhythm, contrast, emphasis and unity.
3. identify media project scope and outcomes and be able to review and analyze technical requirements.
4. be conversant in the language and terms of the industry.

5. be skilled in the current computer-based software and hardware tools of the industry.
6. 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

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.

Cost of Attendance. For more information on cost of attendance visit MoSCORES (<https://scorecard.mo.gov/Search/>).

Program Career and Salary Information. Pursuant to Missouri HB 1606 (2018), information regarding the number of credit hours, program length, employment rate, wage data, and graduates employed in careers related to their program of study at St. Louis Community College can be found at the following URL: <https://scorecard.mo.gov/scorecard/> (https://www.google.com/url?q=https://scorecard.mo.gov/scorecard/&sa=D&ust=1555536894857000&usg=AFQjCNG1xf3E_i2lO96zEytILO-s5xaJCQ). Search using School / Program “St. Louis Community College” and choose the degree or credential type of interest.

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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
Electives		
Select two of the following:		6
ECE 102	Creative Experiences in Early Care and Education	
ECE 103	Language and Literacy in Early Care and Education	
ECE 107	Early Care and Special Education	
ECE 108	Infant, Toddler and Two-Year-Old Children	
ECE 201	Math and Science in Early Care and Education	
ECE 202	Movement and Music in Early Care and Education	
ECE 204	Management of Early Care and Education Settings	
ECE 208	Before and After School Care	
Total Credit Hours		30

Electrical/Electronic Engineering Technology, Associate in Applied Science

Florissant Valley

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

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

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

This program is accredited by the

Engineering Technology Accreditation Commission of the Accreditation Board for Engineering and Technology (ABET)
415 N. Charles Street
Baltimore, Md. 21202
telephone 410-347-7700
ABET.org (<http://www.ABET.org>)

Cost of Attendance. For more information on cost of attendance visit MoSCORES (<https://scorecard.mo.gov/Search/>).

Program Career and Salary Information. Pursuant to Missouri HB 1606 (2018), information regarding the number of credit hours, program length, employment rate, wage data, and graduates employed in careers related to their program of study at St. Louis Community College can be found at the following URL: <https://scorecard.mo.gov/scorecard/> (https://www.google.com/url?q=https://scorecard.mo.gov/scorecard/&sa=D&ust=1555536894857000&usg=AFQjCNG1xf3E_i2lO96zEytILO-s5xaJCQ).

Search using School / Program “St. Louis Community College” and choose the degree or credential type of interest.

The following limitations to the data apply: Information provided is based on the most recent cohorts available. Typically, most recent cohorts for wage and completion data are six years prior to the current academic year. Time to complete a program of study varies depending on the number of credit hours students earn per semester.

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:

- engage in analysis, synthesis, troubleshoot and solve problems of electrical, electronics and biomedical systems.
- 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.
- assemble, connect, and analyze breadboard and final assembly electronic circuits from schematic diagrams.
- apply mathematics and modern computation methods in the solution and troubleshooting of electrical, electronic and digital circuits.
- identify the thermal and mechanical effects in defining and troubleshooting form, fit and function in electrical/electronic prototyping.
- properly use and care for instruments, set up test instruments, read, record and interpret test data.
- meet industry's expectations with regard to skills, knowledge and safe work habits.
- exhibit effective interpersonal and team skills, as well as effective oral and written communication skills in on-the-job situations.

Missouri Civics Examination. Students entering college for the very first time in fall 2019 and who intend to complete an associate's degree must successfully complete a civics examination. Students who have completed dual credit courses must complete this examination. Students who participated in Early College or other dual enrollment programs, transfer students, and previously enrolled students are exempt from this requirement.

Program of Study

Code	Title	Credit Hours
Career General Education		
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 (MOTR ENGL 110)	
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
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 (MOTR PHYS 150L)	
CHM 101	Fundamentals of Chemistry I (MOTR CHEM 100L)	
BIO 111	Introductory Biology I (MOTR BIOL 100L)	
BIO 207	Anatomy and Physiology I (MOTR LIFS 150LAP)	
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		
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.

Cost of Attendance. For more information on cost of attendance visit MoSCORES (<https://scorecard.mo.gov/Search/>).

Program Career and Salary Information. Pursuant to Missouri HB 1606 (2018), information regarding the number of credit hours, program

length, employment rate, wage data, and graduates employed in careers related to their program of study at St. Louis Community College can be found at the following URL: <https://scorecard.mo.gov/scorecard/> (https://www.google.com/url?q=https://scorecard.mo.gov/scorecard/&sa=D&ust=1555536894857000&usg=AFQjCNG1xf3E_i2lO96zEytILO-s5xaJCQ). Search using School / Program “St. Louis Community College” and choose the degree or credential type of interest.

The following limitations to the data apply: Information provided is based on the most recent cohorts available. Typically, most recent cohorts for wage and completion data are six years prior to the current academic year. Time to complete a program of study varies depending on the number of credit hours students earn per semester.

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

The Associate in Science degree in Engineering Science is 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 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.

Cost of Attendance. For more information on cost of attendance visit MoSCORES (<https://scorecard.mo.gov/Search/>).

Program Career and Salary Information. Pursuant to Missouri HB 1606 (2018), information regarding the number of credit hours, program length, employment rate, wage data, and graduates employed in careers related to their program of study at St. Louis Community College can be found at the following URL: <https://scorecard.mo.gov/scorecard/> (https://www.google.com/url?q=https://scorecard.mo.gov/scorecard/&sa=D&ust=1555536894857000&usg=AFQjCNG1xf3E_i2lO96zEytILO-s5xaJCQ). Search using School / Program “St. Louis Community College” and choose the degree or credential type of interest.

The following limitations to the data apply: Information provided is based on the most recent cohorts available. Typically, most recent cohorts for wage and completion data are six years prior to the current academic year. Time to complete a program of study varies depending on the number of credit hours students earn per semester.

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 mathematical and scientific concepts in identifying, formulating, and solving general engineering problems.
2. design and conduct experiments that generate data for further analysis.
3. summarize professional and ethical responsibility in engineering.
4. communicate the results from solving engineering problems.
5. articulate the potential impact of engineering solutions in a global, economic, environmental, technological, or social context.
6. function effectively in diverse and multidisciplinary teams.
7. apply real-world constraints (environmental, social, political, ethical, health and safety, manufacturability, and sustainability) to engineering problems.
8. utilize basic techniques, skills, and modern engineering tools necessary for engineering practice.
9. describe the importance of soft skills and life-long learning in the engineering profession.

Missouri Civics Examination. Students entering college for the very first time in fall 2019 and who intend to complete an associate’s degree must successfully complete a civics examination. Students who have completed dual credit courses must complete this examination. Students who participated in Early College or other dual enrollment programs, transfer students, and previously enrolled students are exempt from this requirement.

Program of Study

Code	Title	Credit Hours
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 (MOTR ENGL 110)	
or COM 101	Oral Communication I (MOTR COMM 100)	
or COM 107	Public Speaking (MOTR COMM 110)	
MTH 210	Analytic Geometry and Calculus I (or higher)	5
MTH 220	Analytic Geometry and Calculus II	5

MTH 230	Analytic Geometry and Calculus III	5
MTH 240	Differential Equations	3
CHM 105	General Chemistry I (MOTR CHEM 150L)	5
PHY 122	Engineering Physics I (MOTR PHYS 200L)	5
PHY 223	Engineering Physics II	5
XXX xxx	Social & Behavioral Sciences: Civics Requirement	3

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 Statics	3

Engineering Electives

Choose courses from the following based on the engineering field of study 7-11 and transfer institution.

ESC 204	Engineering Dynamics
ESC 205	Mechanics of Materials
ESC 206	Strength of Materials Lab
ESC 207	Engineering Thermodynamics
EGR 100	Engineering Drawing ¹
ME 151	Manufacturing Processes I ¹
ME 249	Materials and Metallurgy ¹
CHM 106	General Chemistry II
ESC 000	Engineering Science Elective

Total Credit Hours 62-66

¹ Check with transfer institution to determine course acceptability.

Engineering Technology, Associate in Applied Science

Florissant Valley

The Engineering Technology Associate in Applied Science program prepares students for entry level positions as engineering technologists through classroom instruction, laboratory skill practice, and/or work experience. Students will gain hands on knowledge in electronics, blueprint reading, measurement techniques, and prototype development.

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. Engineering technicians jobs are available in a wide variety areas including engineering, manufacturing, medical, repair, maintenance, and other fields. Course work can be focused on biomedical equipment repair, computer aided design, manufacturing, electronics repair, robotics, or other areas.

Cost of Attendance. For more information on cost of attendance visit MoSCORES (<https://scorecard.mo.gov/Search/>).

Program Career and Salary Information. Pursuant to Missouri HB 1606 (2018), information regarding the number of credit hours, program length, employment rate, wage data, and graduates employed in careers related to their program of study at St. Louis Community College can be found at the following URL: <https://scorecard.mo.gov/scorecard/> (https://www.google.com/url?q=https://scorecard.mo.gov/scorecard/&sa=D&ust=1555536894857000&usg=AFQjCNG1xf3E_i2lO96zEytILO-s5xaJCQ). Search using School / Program "St. Louis Community College" and choose the degree or credential type of interest.

The following limitations to the data apply: Information provided is based on the most recent cohorts available. Typically, most recent cohorts for wage and completion data are six years prior to the current academic year. Time to complete a program of study varies depending on the number of credit hours students earn per semester.

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 technical issues through written documents and oral communications.
2. troubleshoot basic Direct Current (DC) and Alternating Current (AC) circuits.
3. interpret engineering drawings and schematics.
4. solve engineering problems at the technician level.
5. apply measurement techniques to mechanical and electrical problems.
6. use equipment properly while meeting safety and environmental concerns in the workplace.

Missouri Civics Examination. Students entering college for the very first time in fall 2019 and who intend to complete an associate's degree must successfully complete a civics examination. Students who have completed dual credit courses must complete this examination. Students who participated in Early College or other dual enrollment programs, transfer students, and previously enrolled students are exempt from this requirement.

Program of Study

Code	Title	Credit Hours
General Education		
ENG 101	College Composition I (MOTR ENGL 100)	3
MTH 140	Intermediate Algebra	3
BIO 109	Human Biology (MOTR LIFS 100)	3
or PSI 101	Physical Science (MOTR PHYS 110)	
COM 101	Oral Communication I (MOTR COMM 100)	3
or COM 107	Public Speaking (MOTR COMM 110)	
or COM 201	Interpersonal Communication (MOTR COMM 120)	
Social & Behavioral Sciences: Civics Requirement		3
Required Courses		
GE 131	Engineering Technology Orientation	1
GE 101	Technical Computer Applications	3
GE 135	Blueprint Reading for Engineering Technicians	2
EE 134	Electric Circuits	6
GE 240	Product Design and Fabrication	4
Elective hours		29
Elective hours are to be taken from CE, EE, EGR, ESC, GE, ME, QC prefixes or IT 101, IT 201 based around the desired Engineering Technician specialization		
Total Credit Hours		60

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.

Cost of Attendance. For more information on cost of attendance visit MoSCORES (<https://scorecard.mo.gov/Search/>).

Program Career and Salary Information. Pursuant to Missouri HB 1606 (2018), information regarding the number of credit hours, program length, employment rate, wage data, and graduates employed in careers related to their program of study at St. Louis Community College can be found at the following URL: <https://scorecard.mo.gov/scorecard/> (https://www.google.com/url?q=https://scorecard.mo.gov/scorecard/&sa=D&ust=1555536894857000&usg=AFQjCNG1xf3E_i2lO96zEytILO-s5xaJCQ). Search using School / Program “St. Louis Community College” and choose the degree or credential type of interest.

The following limitations to the data apply: Information provided is based on the most recent cohorts available. Typically, most recent cohorts for wage and completion data are six years prior to the current academic year. Time to complete a program of study varies depending on the number of credit hours students earn per semester.

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.

4. practice varieties of funeralization rites and ceremonies, as seen in major religious and ethnic subcultures, fraternal, and military groups in the United States.
5. counsel families about funerals prior to a death, during the time of the funeral, and after the funeral.
6. adhere to high standards of ethical conduct in order to promote the dignity of funeral service.
7. 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.abfse.org (<http://www.abfse.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/>). To request a printed copy of this program's scores and rates, go to the Funeral Service Education program office, Forest Park campus, Room E-411, or by email at dcoughran@stlcc.edu, or by telephone, 314-644-9327.

Please check the college website <https://www.stlcc.edu/programs-academics/pathways/human-studies/funeral-services-education.aspx> (<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.

Cost of Attendance. For more information on cost of attendance visit MoSCORES (<https://scorecard.mo.gov/Search/>).

Program Career and Salary Information. Pursuant to Missouri HB 1606 (2018), information regarding the number of credit hours, program length, employment rate, wage data, and graduates employed in careers related to their program of study at St. Louis Community College can be found at the following URL: <https://scorecard.mo.gov/scorecard/> (https://www.google.com/url?q=https://scorecard.mo.gov/scorecard/&sa=D&ust=1555536894857000&usg=AFQjCNG1xf3E_i2lO96zEytILO-s5xaJCQ). Search using School / Program “St. Louis Community College” and choose the degree or credential type of interest.

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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. explain the importance of funeral service professionals in developing relationships with the families and communities they serve.
2. identify standards of ethical conduct in funeral service practice.
3. interpret how federal, state, and local laws apply to funeral service in order to ensure compliance.
4. apply principles of public health and safety in handling and preparation of human remains.
5. demonstrate technical skills in embalming and restorative art that are necessary for the preparation and handling of human remains.
6. demonstrate skills required for conducting arrangement conferences, visitations, services, and ceremonies.
7. describe the requirements and procedures for burial, cremation, and other accepted forms of final disposition of human remains.
8. describe methods to address the grief-related needs of the bereaved.
9. explain management skills associated with operating a funeral establishment.
10. demonstrate verbal and written communication skills and research skills needed for funeral service practice.

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Program of Study

Code	Title	Credit Hours
Career General Education		
BIO 111	Introductory Biology I (MOTR BIOL 100L)	4
MTH 108	Elementary Applied Mathematics (or higher)	3
ENG 101	College Composition I (MOTR ENGL 100)	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
Program Requirements		
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
FSE 212	Embalming II	3
Total Credit Hours		74

General Fine Arts, Associate in Fine Arts Degree

Florissant Valley, Forest Park, Meramec and Wildwood

General Fine Arts, Associate in Fine Arts Degree is designed for students who plan to transfer to four-year programs to earn a bachelors degree in an art-related discipline. Students may experience both two- and three-dimensional artwork through courses in painting, drawing, ceramics, sculpture, printmaking, design, and other studio areas. 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.

Cost of Attendance. For more information on cost of attendance visit MoSCORES (<https://scorecard.mo.gov/Search/>).

Program Career and Salary Information. Pursuant to Missouri HB 1606 (2018), information regarding the number of credit hours, program length, employment rate, wage data, and graduates employed in careers related to their program of study at St. Louis Community College can be found at the following URL: <https://scorecard.mo.gov/scorecard/> (https://www.google.com/url?q=https://scorecard.mo.gov/scorecard/&sa=D&ust=1555536894857000&usg=AFQjCNG1xf3E_i2lO96zEytILO-s5xaJCQ). Search using School / Program “St. Louis Community College” and choose the degree or credential type of interest.

The following limitations to the data apply: Information provided is based on the most recent cohorts available. Typically, most recent cohorts for wage and completion data are six years prior to the current academic year. Time to complete a program of study varies depending on the number of credit hours students earn per semester.

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. use appropriate vocabulary to describe, analyze, and evaluate works of art they create or encounter.
3. create a personal portfolio of artwork that demonstrates competent use of materials.
4. present a personal portfolio that meets current minimum professional standards.
5. explain the qualities of exhibition-worthy and/or professional-level work that reflects the formal, conceptual, and/or media interests of the student's artwork and artistic practice.

Missouri Civics Examination. Students entering college for the very first time in fall 2019 and who intend to complete an associate's degree must successfully complete a civics examination. Students who have completed dual credit courses must complete this examination. Students who participated in Early College or other dual enrollment programs, transfer students, and previously enrolled students are exempt from this requirement.

Program of Study

Code	Title	Credit Hours
General Education*		
ART 101	Art History I (MOTR ARTS 101)	3
ART 102	Art History II (MOTR ARTS 102)	3
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
MATH/SCIENCE: Student may elect to take MTH 161 and a science OR 2 science courses.		6-8
MTH 161	Quantitative Reasoning (MOTR MATH 120) *	
Science Elective(s)		
Program Requirements		
ART 107	Design I	2
ART 108	Design II	2
ART 109	Drawing I (MOTR PERF 105D)	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 11-12 credit hours of the following:		11-12
ART 131	Computer Art Studio	
ART 138	Drawing for Graphics	
ART 113	Ceramics I (MOTR PERF 105C)	
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 249	Digital Photography II
ART 275	Photo Imaging I: Photoshop (MOTR PERF 105GA)
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
EDU 211	Foundations of Education in a Diverse Society

Total Credit Hours 61-64

* Students who are interested in art education will be advised to make particular selections in the areas noted.

General STEM Transfer Studies, Associate in Science

Florissant Valley, Forest Park, Meramec, and Wildwood

St. Louis Community College's General STEM Transfer Studies, Associate in Science degree program is designed for students who plan to transfer to a four-year college or university and major in one of the traditional STEM areas (science, technology, engineering, math) with a heavy emphasis on undergraduate mathematics or science.

Students should become familiar with the requirements at the institution to which they plan to transfer and select their transfer courses carefully. Many bachelor's 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 an 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.

Cost of Attendance. For more information on cost of attendance visit MoSCORES (<https://scorecard.mo.gov/Search/>).

Program Career and Salary Information. Pursuant to Missouri HB 1606 (2018), information regarding the number of credit hours, program length, employment rate, wage data, and graduates employed in careers related to their program of study at St. Louis Community College can be found at the following URL: [https://scorecard.mo.gov/scorecard/\(https://www.google.com/url/?q=https://scorecard.mo.gov/scorecard/&sa=D&ust=1555536894857000&usq=AFQjCNG1xf3E_i2l096zEytILO-s5xaJCQ\)](https://scorecard.mo.gov/scorecard/(https://www.google.com/url/?q=https://scorecard.mo.gov/scorecard/&sa=D&ust=1555536894857000&usq=AFQjCNG1xf3E_i2l096zEytILO-s5xaJCQ)).

Search using School / Program “St. Louis Community College” and choose the degree or credential type of interest.

The following limitations to the data apply: Information provided is based on the most recent cohorts available. Typically, most recent cohorts for wage and completion data are six years prior to the current academic year. Time to complete a program of study varies depending on the number of credit hours students earn per semester.

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 analytic thinking and problem solving skills in mathematics and the sciences.
2. communicate mathematically using verbal, graphical, numerical, and symbolic representations.
3. demonstrate a general knowledge of biological, chemical, computer science, physical, mathematics, or engineering disciplines.
4. apply quantitative methods to science, engineering, or computer science.
5. use technology in mathematical and scientific problem solving.

Missouri Civics Examination. Students entering college for the very first time in fall 2019 and who intend to complete an associate’s degree must successfully complete a civics examination. Students who have completed dual credit courses must complete this examination. Students who participated in Early College or other dual enrollment programs, transfer students, and previously enrolled students are exempt from this requirement.

Program of Study

Code	Title	Credit Hours
General Education		
MTH 210	Analytic Geometry and Calculus I	5
ENG 101	College Composition I (MOTR ENGL 100)	3
or ENG 102	College Composition II (MOTR ENGL 200)	
or ENG 103	Report Writing (MOTR ENGL 110)	
Natural Science	Students must complete seven (7) credit hours.	7
XXX xxx	Social & Behavioral Sciences: Civics Requirement	3
Electives		
Electives in science, technology, engineering, and math are recommended to fulfill requirements of a 4-yr program. Elective credits within the General STEM AS degree allow the student to begin working toward an academic major by selecting courses within in a STEM discipline or to explore various STEM subjects at an introductory level. Students should consult their transfer institution and/or work with an advisor for best course options.		42
Total Credit Hours		60

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.

Cost of Attendance. For more information on cost of attendance visit MoSCORES (<https://scorecard.mo.gov/Search/>).

Program Career and Salary Information. Pursuant to Missouri HB 1606 (2018), information regarding the number of credit hours, program length, employment rate, wage data, and graduates employed in careers related to their program of study at St. Louis Community College can be found at the following URL: <https://scorecard.mo.gov/scorecard/> (https://www.google.com/url/?q=https://scorecard.mo.gov/scorecard/&sa=D&ust=1555536894857000&usg=AFQjCNG1xf3E_i2lO96zEytILO-s5xaJCQ). Search using School / Program “St. Louis Community College” and choose the degree or credential type of interest.

The following limitations to the data apply: Information provided is based on the most recent cohorts available. Typically, most recent cohorts for wage and completion data are six years prior to the current academic year. Time to complete a program of study varies depending on the number of credit hours students earn per semester.

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 traditional drawing and digital rendering.
2. understand design principles of scale, proportion, rhythm, contrast, emphasis and unity.
3. be knowledgeable of design industry history, standards, tools, and trends.
4. apply conceptual thinking to generate creative solutions that solve design problems.
5. be skilled in the software of the art and design industry.
6. defend design concepts in the critique process using professional presentation methods.
7. prepare final designs composed in a comprehensive portfolio for print and electronic publication.

Missouri Civics Examination. Students entering college for the very first time in fall 2019 and who intend to complete an associate’s degree must successfully complete a civics examination. Students who have completed dual credit courses must complete this examination. Students who participated in Early College or other dual enrollment programs, transfer students, and previously enrolled students are exempt from this requirement.

Program of Study

Code	Title	Credit Hours
Career General Education		
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
Physical Education Activity		
Select 2 credit hours		2
Program Requirements		
ART 109	Drawing I (MOTR PERF 105D)	3
ART 107	Design I	2
ART 108	Design II	2
AT 106	Motion Media Design	3
ART 111	Figure Drawing I	3
ART 131	Computer Art Studio	3
ART 133	Graphic Design I	3
ART 134	Graphic Design II	3
ART 135	Graphic Production	2
ART 138	Drawing for Graphics	2
ART 236	Typography	2
ART 245	Portfolio Design and Professional Practices	2
Focus Area		
Select one focus area from the following:		14-15
Graphic and Interactive Design		
Illustration and animation design		
Total Credit Hours		64-65

Focus Areas

Graphic and Interactive Design

Code	Title	Credit Hours
ART 233	Graphic Design III	3
ART 234	Graphic Design IV	3
AT 135	Web Design I	3
AT 143	Web Design II	3
Approved Electives (see list)		3
Total Credit Hours		15

Illustration and Animation Design

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

Approved Electives

Code	Title	Credit Hours
AT 120	Computer Drawing I: Illustrator	3
AT 135	Web Design I	3
AT 143	Web Design II	3
AT 146	3D Modeling and Spaces	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 165	Photography I	3
ART 172	Digital Photography	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 (MOTR PERF 105GA)	3

Graphic Communications, Associate in Fine Arts Degree

Florissant Valley, Forest Park and Meramec

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

Cost of Attendance. For more information on cost of attendance visit MoSCORES (<https://scorecard.mo.gov/Search/>).

Program Career and Salary Information. Pursuant to Missouri HB 1606 (2018), information regarding the number of credit hours, program length, employment rate, wage data, and graduates employed in careers related to their program of study at St. Louis Community College can be found at the following URL: [https://scorecard.mo.gov/scorecard/\(https://www.google.com/url?q=https://scorecard.mo.gov/scorecard/&sa=D&ust=1555536894857000&usg=AFQjCNG1xf3E_i2lO96zEytILO-s5xaJCQ\)](https://scorecard.mo.gov/scorecard/(https://www.google.com/url?q=https://scorecard.mo.gov/scorecard/&sa=D&ust=1555536894857000&usg=AFQjCNG1xf3E_i2lO96zEytILO-s5xaJCQ)). Search using School / Program "St. Louis Community College" and choose the degree or credential type of interest.

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complete a program of study varies depending on the number of credit hours students earn per semester.

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 traditional drawing and illustration.
2. understand design principles of scale, proportion, rhythm, contrast, emphasis and unity.
3. be knowledgeable of design industry history, standards, tools, and trends.
4. defend design concepts in the critique process using professional presentation methods.
5. be skilled in the software of the art and design industry.
6. apply conceptual thinking to generate creative solutions that solve design problems.
7. develop and apply comprehensive design concepts across different compositional platforms.

Missouri Civics Examination. Students entering college for the very first time in fall 2019 and who intend to complete an associate's degree must successfully complete a civics examination. Students who have completed dual credit courses must complete this examination. Students who participated in Early College or other dual enrollment programs, transfer students, and previously enrolled students are exempt from this requirement.

Program of Study

Code	Title	Credit Hours
General Education		
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) ¹	
Science Elective		
Physical Education Activity		
Select 2 credit hours		2
Program Requirements		
ART 107	Design I	2
ART 108	Design II	2
ART 109	Drawing I (MOTR PERF 105D)	3
ART 110	Drawing II	3
ART 111	Figure Drawing I	3
ART 112	Figure Drawing II	3
ART 131	Computer Art Studio	3
ART 133	Graphic Design I	3
ART 134	Graphic Design II	3
ART 138	Drawing for Graphics	2
ART 239	Illustration I	3
ART 240	Illustration II	3
ART 233	Graphic Design III	3

ART 234	Graphic Design IV	3
ART 245	Portfolio Design and Professional Practices	2
ART 135	Graphic Production	2
ART 236	Typography	2
AT 242	History of Graphic Communications	3
Total Credit Hours		65-66

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

Health Information Technology, Associate in Applied Science

Forest Park

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

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

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

Cost of Attendance. For more information on cost of attendance visit MoSCORES (<https://scorecard.mo.gov/Search/>).

Program Career and Salary Information. Pursuant to Missouri HB 1606 (2018), information regarding the number of credit hours, program length, employment rate, wage data, and graduates employed in careers related to their program of study at St. Louis Community College can be found at the following URL: <https://scorecard.mo.gov/scorecard/> (https://www.google.com/url?q=https://scorecard.mo.gov/scorecard/&sa=D&ust=1555536894857000&usg=AFQjCNG1xf3E_i2lO96zEytILO-s5xaJCQ). Search using School / Program "St. Louis Community College" and choose the degree or credential type of interest.

The following limitations to the data apply: Information provided is based on the most recent cohorts available. Typically, most recent cohorts for wage and completion data are six years prior to the current academic year. Time to complete a program of study varies depending on the number of credit hours students earn per semester.

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 Management field.
2. demonstrate proficiency in verifying completeness, accuracy, and quality of medical records information management.
3. develop a professional strategy in preparation for employment in the Health Information Management or related field.

Missouri Civics Examination. Students entering college for the very first time in fall 2019 and who intend to complete an associate's degree must successfully complete a civics examination. Students who have completed dual credit courses must complete this examination. Students who participated in Early College or other dual enrollment programs, transfer students, and previously enrolled students are exempt from this requirement.

Program of Study

Code	Title	Credit Hours
Career General Education		
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 (MOTR LIFS 150LAP) and Anatomy and Physiology II	8
XXX xxx	Social Science Elective	3
XXX xxx	Social & Behavioral Sciences: Civics Requirement	3
Physical Education Activity		
Select 2 credit hours		2
Foundation Courses		
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
Area of Concentration		
HIT 102	Health Information Management Technology	4
HIT 103	Healthcare Delivery Systems	2
HIT 106	Diagnosis Coding Systems I	3
HIT 107	Procedure Coding Systems I	3
HIT 110	Healthcare Legal and Ethical Issues	3
HIT 201	Healthcare Reimbursement	3
HIT 210	Professional Practice Experience	2
HIT 211	Electronic Health Systems	3
HIT 213	Quality and Performance Improvement in Healthcare	3
HIT 214	Calculating and Reporting Healthcare Statistics	3
HIT 291	Workplace Learning: Health Information Technology	2
IS 136	Internet Fundamentals	1
IS 151	Computer Applications in Business	4
Total Credit Hours		72

Horticulture, Associate in Applied Science

Meramec

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.

Cost of Attendance. For more information on cost of attendance visit MoSCORES (<https://scorecard.mo.gov/Search/>).

Program Career and Salary Information. Pursuant to Missouri HB 1606 (2018), information regarding the number of credit hours, program length, employment rate, wage data, and graduates employed in careers related to their program of study at St. Louis Community College can be found at the following URL: [https://scorecard.mo.gov/scorecard/](https://scorecard.mo.gov/scorecard/(https://www.google.com/url?q=https://scorecard.mo.gov/scorecard/&sa=D&ust=1555536894857000&usg=AFQjCNG1xf3E_i2lO96zEytILO-s5xaJQC).) (https://www.google.com/url?q=https://scorecard.mo.gov/scorecard/&sa=D&ust=1555536894857000&usg=AFQjCNG1xf3E_i2lO96zEytILO-s5xaJQC). Search using School / Program "St. Louis Community College" and choose the degree or credential type of interest.

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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.

Missouri Civics Examination. Students entering college for the very first time in fall 2019 and who intend to complete an associate's degree must successfully complete a civics examination. Students who have completed dual credit courses must complete this examination. Students who participated in Early College or other dual enrollment programs, transfer students, and previously enrolled students are exempt from this requirement.

Program of Study

Code	Title	Credit Hours
Career General Education		
ENG 100		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
Program Requirements		
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	
Horticulture Core		
HRT 101	Introductory Horticulture	4
or BIO 124	General Botany I (MOTR BIOL 100LB)	
HRT 102	Soils	3
HRT 105	Workplace Learning: Horticulture	1
HRT 206	Ornamental Plants - Trees and Vines	3
HRT 207	Ornamental Plants - Shrubs and Evergreens	3
HRT 230	Ornamental Plants - Herbaceous Perennials	3
HRT 214	Grounds Management	3
HRT 227	Plant Pest Management	4
Select one of the following focus areas:		6-9
Turfgrass Management		
Landscape Design		
Plant Production and Marketing		
Landscape Management		
General Horticulture		
Horticulture Electives 6		
HRT 235	Annuals and Vegetables	
Select 3-6 credit hours from Focus Areas		
Total Credit Hours		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.

Cost of Attendance. For more information on cost of attendance visit MoSCORES (<https://scorecard.mo.gov/Search/>).

Program Career and Salary Information. Pursuant to Missouri HB 1606 (2018), information regarding the number of credit hours, program length, employment rate, wage data, and graduates employed in careers related to their program of study at St. Louis Community College can be found at the following URL: <https://scorecard.mo.gov/scorecard/> (https://www.google.com/url?q=https://scorecard.mo.gov/scorecard/&sa=D&ust=1555536894857000&usg=AFQjCNG1xf3E_i2lO96zEytILO-s5xaJCQ). Search using School / Program “St. Louis Community College” and choose the degree or credential type of interest.

The following limitations to the data apply: Information provided is based on the most recent cohorts available. Typically, most recent cohorts for wage and completion data are six years prior to the current academic year. Time to complete a program of study varies depending on the number of credit hours students earn per semester.

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
Horticulture Core		
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
Select one of the following focus areas:		6-9
Turfgrass Management		
Landscape Design		
Plant Production and Marketing		
Landscape Management		
General Horticulture		
Horticulture Electives 6		
HRT 235	Annuals and Vegetables	

Select 3-6 credit hours from Focus Areas	
Total Credit Hours	36-39

Focus Areas

Turfgrass Management

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

Landscape Design

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

Plant Production and Marketing

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

Landscape Management

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

General Horticulture

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

Hospitality 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.

Cost of Attendance. For more information on cost of attendance visit MoSCORES (<https://scorecard.mo.gov/Search/>).

Program Career and Salary Information. Pursuant to Missouri HB 1606 (2018), information regarding the number of credit hours, program

length, employment rate, wage data, and graduates employed in careers related to their program of study at St. Louis Community College can be found at the following URL: <https://scorecard.mo.gov/scorecard/> (https://www.google.com/url?q=https://scorecard.mo.gov/scorecard/&sa=D&ust=1555536894857000&usg=AFQjCNG1xf3E_i2lO96zEytILO-s5xaJCQ). Search using School / Program “St. Louis Community College” and choose the degree or credential type of interest.

The following limitations to the data apply: Information provided is based on the most recent cohorts available. Typically, most recent cohorts for wage and completion data are six years prior to the current academic year. Time to complete a program of study varies depending on the number of credit hours students earn per semester.

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

Missouri Civics Examination. Students entering college for the very first time in fall 2019 and who intend to complete an associate’s degree must successfully complete a civics examination. Students who have completed dual credit courses must complete this examination. Students who participated in Early College or other dual enrollment programs, transfer students, and previously enrolled students are exempt from this requirement.

Program of Study

Code	Title	Credit Hours
Career General Education		
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

Florissant Valley, Forest Park, and Meramec

The Associate in Applied Science degree in Human Services provides students with a basic social science framework and perspective for pursuing an entry-level position in the field of human services. The program also provides currently employed human service workers the opportunity to upgrade their skills and abilities. Students are taught a specific body of theoretical knowledge and practice skills to integrate into the helping professions.

Students are introduced to human service organizations and resources designed to meet human needs. Students learn to identify various helping strategies and techniques for working with people. Persons interested in this program should enjoy working with people, should possess good communications and problem solving skills, and have a positive attitude about themselves and others.

Graduates are qualified for positions as alcoholism/drug abuse assistants, house parents, nursing home activity therapy assistants, case workers, corrections officers, vocational rehabilitation workers, teacher’s aides for exceptional children, and personal assistant. These positions are available in the areas of social welfare, mental health, juvenile and adult correctional programs, geriatrics, education, and related fields in business, industry, and health care.

Cost of Attendance. For more information on cost of attendance visit MoSCORES (<https://scorecard.mo.gov/Search/>).

Program Career and Salary Information. Pursuant to Missouri HB 1606 (2018), information regarding the number of credit hours, program length, employment rate, wage data, and graduates employed in careers related to their program of study at St. Louis Community College can be found at the following URL: <https://scorecard.mo.gov/scorecard/> (https://www.google.com/url?q=https://scorecard.mo.gov/scorecard/&sa=D&ust=1555536894857000&usg=AFQjCNG1xf3E_i2lO96zEytILO-s5xaJCQ). Search using School / Program “St. Louis Community College” and choose the degree or credential type of interest.

The following limitations to the data apply: Information provided is based on the most recent cohorts available. Typically, most recent cohorts for wage and completion data are six years prior to the current academic year. Time to

complete a program of study varies depending on the number of credit hours students earn per semester.

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 theory and evidence based practice to evaluate intervention strategies.
2. describe the roles of an entry level human service practitioner at the micro, mezzo, and macro levels of client service.
3. identify the ways that clients may be affected by the student's personal values, beliefs, experiences, and identities.
4. analyze client information to construct professional notes and reports.
5. describe intervention strategies and services to address conditions that inhibit human functioning.
6. analyze the effect of social policy on the delivery of human services.

Missouri Civics Examination. Students entering college for the very first time in fall 2019 and who intend to complete an associate's degree must successfully complete a civics examination. Students who have completed dual credit courses must complete this examination. Students who participated in Early College or other dual enrollment programs, transfer students, and previously enrolled students are exempt from this requirement.

Program of Study

Code	Title	Credit Hours
Career General Education		
ENG 101	College Composition I (MOTR ENGL 100)	3
ENG 102	College Composition II (MOTR ENGL 200)	3
SOC 101	Introduction to Sociology (MOTR SOCI 101)	3
XXX xxx	Social & Behavioral Sciences: Civics Requirement	3
PSY 200	General Psychology (MOTR PSYC 100)	3
PSY 205	Human Growth and Development (MOTR PSYC 200)	3
BIO 111	Introductory Biology I (MOTR BIOL 100L)	4
MTH 180	Introductory Statistics (MOTR MATH 110)	4
or MTH 161	Quantitative Reasoning (MOTR MATH 120)	
Program Requirements		
HMS 100	Introduction to Human Services	3
HMS 101	Human Services: Theories and Skills	3
HMS 102	Human Services: Policy and Politics	3
HMS 111	Group Practice in Human Services	3
HMS 201	Workplace Learning I: Human Services	3
HMS 202	Workplace Learning II: Human Services	3
HMS 203	Human Services Workplace Learning Seminar I	3
HMS 204	Human Services Workplace Learning Seminar II	3
HMS 205	Crisis Intervention	3
PRD 128	Mental Health First Aid	1
SOC 126	Pharmacology of Addictive Drugs	3
SOC 211	Substance Use, Abuse and Dependence	3
PE 120	Community Red Cross CPR	1
Total Credit Hours		61

IT Help Desk/End User Support, Certificate of Specialization

Forest Park and Meramec

IT Help Desk/End User Support Certificate of Specialization is a skill-oriented program that 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 will be covered. The courses in the program provide a combination of online, distance learning, and classroom-based in-depth 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 in a help desk or desktop support position.

Cost of Attendance. For more information on cost of attendance visit MoSCORES (<https://scorecard.mo.gov/Search/>).

Program Career and Salary Information. Pursuant to Missouri HB 1606 (2018), information regarding the number of credit hours, program length, employment rate, wage data, and graduates employed in careers related to their program of study at St. Louis Community College can be found at the following URL: [https://scorecard.mo.gov/scorecard/](https://scorecard.mo.gov/scorecard/(https://www.google.com/url?q=https://scorecard.mo.gov/scorecard/&sa=D&ust=1555536894857000&usg=AFQjCNG1xf3E_i2lO96zEytILO-s5xaJCQ)) (https://www.google.com/url?q=https://scorecard.mo.gov/scorecard/&sa=D&ust=1555536894857000&usg=AFQjCNG1xf3E_i2lO96zEytILO-s5xaJCQ). Search using School / Program "St. Louis Community College" and choose the degree or credential type of interest.

The following limitations to the data apply: Information provided is based on the most recent cohorts available. Typically, most recent cohorts for wage and completion data are six years prior to the current academic year. Time to complete a program of study varies depending on the number of credit hours students earn per semester.

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 end-user computer systems.
7. train computer users.
8. utilize the appropriate office application to accomplish a business task.
9. apply security settings based on enterprise policies and procedures.
10. document problems and resolution.

Code	Title	Credit Hours
Required Courses		
IT 102	Desktop Software Support - CompTIA A+ Core 2 (Software)	3
IT 103	Help Desk Principles	3
IS 130	Hardware Support - CompTIA A+ Core 1 (Hardware)	3

IS 151	Computer Applications in Business	4
IS 237	Fundamentals of Information Assurance/Security - CompTIA Security+	3
IS 229 or IS 291	Unix/Linux I Workplace Learning: Information Systems	3
IT 101	Cisco Networking Academy I: Introduction to Networks	5
Total Credit Hours		24

Interior Design, Associate in Applied Science

Meramec

The Associate in Applied Science degree in Interior Design 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 and universal 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.

Cost of Attendance. For more information on cost of attendance visit MoSCORES (<https://scorecard.mo.gov/Search/>).

Program Career and Salary Information. Pursuant to Missouri HB 1606 (2018), information regarding the number of credit hours, program length, employment rate, wage data, and graduates employed in careers related to their program of study at St. Louis Community College can be found at the following URL: <https://scorecard.mo.gov/scorecard/> (https://www.google.com/url?q=https://scorecard.mo.gov/scorecard/&sa=D&ust=1555536894857000&usg=AFQjCNG1xf3E_i2lO96zEytILO-s5xaJCQ). Search using School / Program "St. Louis Community College" and choose the degree or credential type of interest.

The following limitations to the data apply: Information provided is based on the most recent cohorts available. Typically, most recent cohorts for wage and completion data are six years prior to the current academic year. Time to complete a program of study varies depending on the number of credit hours students earn per semester.

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 free-hand drawing, hand drafting, computer drafting, rendering, and oral presentation skills to communicate design ideas.
2. develop creative projects using a systematic approach to the design processes.
3. apply the principles and elements of design to design solutions.
4. evaluate interior construction methods, building systems, building codes, fire codes, and life safety codes and their impact on interior planning and design.
5. analyze architecture, interiors, and art within a historical and cultural context.
6. integrate visual art skills in two dimensional and three dimensional design to design solutions.
7. compose design solutions that reflect color and light in interior environments.
8. evaluate the accepted ethical standards for the industry and the commitment of a professional interior designer to the built environment.
9. develop design solutions that incorporate behavioral science and human factors on interior design planning.
10. select interior finishes, furniture, and equipment appropriate for the designed interior environment.
11. prepare interior finish, furniture, and fixture specifications.
12. identify sustainable design solutions and apply them to studio coursework.

Missouri Civics Examination. Students entering college for the very first time in fall 2019 and who intend to complete an associate's degree must successfully complete a civics examination. Students who have completed dual credit courses must complete this examination. Students who participated in Early College or other dual enrollment programs, transfer students, and previously enrolled students are exempt from this requirement.

Program of Study

Code	Title	Credit Hours
Career General Education		
ENG 101	College Composition I (MOTR ENGL 100)	3
PSY 200	General Psychology (MOTR PSYC 100)	3
XXX xxx	Civics Requirement (MOTR 100 level course or higher)	3
XXX xxx	Any Science course with a MOTR designation OR any Mathematics course	3
ART 102	Art History - 1300 to Present (MOTR ARTS 102)	3
Program Requirements		
ART 107	Design I	2
ART 108	Design II	2
ART 109	Drawing I (MOTR PERF 105D) (MOTR PERF 105D)	3
ART 131	Computer Art Studio	3
ART 150	Design Communication for Interior Design and Architecture	3
ART 154	Architectural Graphics and Technology I	3
AT 287	Architectural Graphics and Technology II	3
ART 153	History of Cultural Environments I	3
ART 254	History of Cultural Environments II	3
ART 186	Building Systems and Construction for Interior Designers	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
AT 151	Interior Specifications, Materials, and Methods	3
AT 152	Lighting Design	3
Total Credit Hours		61

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.

Cost of Attendance. For more information on cost of attendance visit MoSCORES (<https://scorecard.mo.gov/Search/>).

Program Career and Salary Information. Pursuant to Missouri HB 1606 (2018), information regarding the number of credit hours, program length, employment rate, wage data, and graduates employed in careers related to their program of study at St. Louis Community College can be found at the following URL: <https://scorecard.mo.gov/scorecard/> (https://www.google.com/url?q=https://scorecard.mo.gov/scorecard/&sa=D&ust=1555536894857000&usg=AFQjCNG1xf3E_i2lO96zEytILO-s5xaJCQ). Search using School / Program “St. Louis Community College” and choose the degree or credential type of interest.

The following limitations to the data apply: Information provided is based on the most recent cohorts available. Typically, most recent cohorts for wage and completion data are six years prior to the current academic year. Time to complete a program of study varies depending on the number of credit hours students earn per semester.

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
AT 285	Interior Design Codes and Specifications	3
AT 286	Interior Design Business Practices and Ethics	3
AT 287	Architectural Graphics and Technology II	3
AT 288	Interior Detailing and Construction Documentation	3
AT 289	Interior Design Research Methods	2
AT 290	Interior Design Professional Preparation	1
Electives		3
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

The Kitchen and Bath Design Certificate of Proficiency program emphasizes the visual and oral communication skills necessary for the development of functional and aesthetically pleasing residential kitchen and bath designs. 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.

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

Cost of Attendance. For more information on cost of attendance visit MoSCORES (<https://scorecard.mo.gov/Search/>).

Program Career and Salary Information. Pursuant to Missouri HB 1606 (2018), information regarding the number of credit hours, program length, employment rate, wage data, and graduates employed in careers related to their program of study at St. Louis Community College can be found at the following URL: <https://scorecard.mo.gov/scorecard/> (https://www.google.com/url?q=https://scorecard.mo.gov/scorecard/&sa=D&ust=1555536894857000&usg=AFQjCNG1xf3E_i2lO96zEytILO-s5xaJCQ). Search using School / Program “St. Louis Community College” and choose the degree or credential type of interest.

The following limitations to the data apply: Information provided is based on the most recent cohorts available. Typically, most recent cohorts for wage and completion data are six years prior to the current academic year. Time to complete a program of study varies depending on the number of credit hours students earn per semester.

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 architectural plans and renderings to successfully communicate design ideas.
2. develop design solutions utilizing the principles and elements of design.
3. evaluate interior building construction concepts and their impact on design solutions.
4. analyze kitchen and bath historical styles and current design trends to determine the appropriate style and product for the end user.
5. evaluate the accepted ethical standards and business conduct of a professional kitchen and bath designer.
6. select appropriate cabinet styles, types, construction methods, materials, sizes, and hardware.
7. develop the skills necessary to bring projects from initial contact to successful completion.
8. select materials from specification sheets for kitchen and bath products as related to cost, size, client needs, energy, safety, and design.

Code	Title	Credit Hours
ART 154	Architectural Graphics and Technology I	3
ART 151	Interior Design I	3
ART 155	Bath Design	3
ART 156	Advanced Kitchen Design	3
AT 251	Computer Aided Kitchen and Bath Design	3
ART 186	Building Systems and Construction for Interior Designers	3
AT 151	Interior Specifications, Materials, and Methods	3
AT 152	Lighting 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	
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.

Cost of Attendance. For more information on cost of attendance visit MoSCORES (<https://scorecard.mo.gov/Search/>).

Program Career and Salary Information. Pursuant to Missouri HB 1606 (2018), information regarding the number of credit hours, program length, employment rate, wage data, and graduates employed in careers related to their program of study at St. Louis Community College can be found at the following URL: <https://scorecard.mo.gov/scorecard/> (https://www.google.com/url?q=https://scorecard.mo.gov/scorecard/&sa=D&ust=1555536894857000&usg=AFQjCNG1xf3E_i2lO96zEytILO-s5xaJCQ). Search using School / Program "St. Louis Community College" and choose the degree or credential type of interest.

The following limitations to the data apply: Information provided is based on the most recent cohorts available. Typically, most recent cohorts for wage and completion data are six years prior to the current academic year. Time to complete a program of study varies depending on the number of credit hours students earn per semester.

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.

Missouri Civics Examination. Students entering college for the very first time in fall 2019 and who intend to complete an associate's degree must successfully complete a civics examination. Students who have completed dual credit courses must complete this examination. Students who participated in Early College or other dual enrollment programs, transfer students, and previously enrolled students are exempt from this requirement.

Program of Study

Code	Title	Credit Hours
Career General Education		
ENG 100	(recommended)	3

or ENG 101	College Composition I (MOTR ENGL 100)	
ENG 103	Report Writing (MOTR ENGL 110) (recommended)	3
or ENG 102	College Composition II (MOTR ENGL 200)	
PSY 200	General Psychology (MOTR PSYC 100)	3
or SOC 103	Work and Society	
XXX xxx	Science or Math Elective ¹	3
XXX xxx	Social & Behavioral Sciences: Civics Requirement	3
BUS 101	Small Business Management (recommended)	3
or BUS 104	Introduction to Business Administration	
BUS xxx	Business Electives ²	6
COM xxx	Communications Elective ³	3
Program Requirements		
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 ELECTIVES		
Select 15 credit hours of the following:		15
Group I Electives (select at least two courses from the Group I Electives)		
LGL 112	Contract Law	
LGL 202	Wills, Trusts, and Probate	
LGL 211	Tort Law	
LGL 228	Family Law	
Group II Electives		
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 ⁴	
LGL 290	Workplace Learning: Paralegal ⁴	
Total Credit Hours		60

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

² Select from ACC 100, IS 116, MGT 120, MKT 104 or MKT 203.

³ Select from COM 101, COM 104, COM 107 or COM 201.

⁴ 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.

Cost of Attendance. For more information on cost of attendance visit MoSCORES (<https://scorecard.mo.gov/Search/>).

Program Career and Salary Information. Pursuant to Missouri HB 1606 (2018), information regarding the number of credit hours, program length, employment rate, wage data, and graduates employed in careers related to their program of study at St. Louis Community College can be found at the following URL: <https://scorecard.mo.gov/scorecard/> (https://www.google.com/url?q=https://scorecard.mo.gov/scorecard/&sa=D&ust=1555536894857000&usg=AFQjCNG1xf3E_i2lO96zEytILO-s5xaJCQ). Search using School / Program "St. Louis Community College" and choose the degree or credential type of interest.

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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
Required Courses		
ENG 100 or ENG 101	College Composition I (MOTR ENGL 100)	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		12
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	
Group Two Electives		
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 ¹	
LGL 290	Workplace Learning: Paralegal ¹	
Total Credit Hours		33

¹ 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.

Cost of Attendance. For more information on cost of attendance visit MoSCORES (<https://scorecard.mo.gov/Search/>).

Program Career and Salary Information. Pursuant to Missouri HB 1606 (2018), information regarding the number of credit hours, program length, employment rate, wage data, and graduates employed in careers related to their program of study at St. Louis Community College can

be found at the following URL: <https://scorecard.mo.gov/scorecard/> (https://www.google.com/url?q=https://scorecard.mo.gov/scorecard/&sa=D&ust=1555536894857000&usg=AFQjCNG1xf3E_i2lO96zEytILO-s5xaJQC). Search using School / Program "St. Louis Community College" and choose the degree or credential type of interest.

The following limitations to the data apply: Information provided is based on the most recent cohorts available. Typically, most recent cohorts for wage and completion data are six years prior to the current academic year. Time to complete a program of study varies depending on the number of credit hours students earn per semester.

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 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.
- practice effective oral, written, and electronic communication including keeping a laboratory notebook.
- utilize laboratory protocols and standard operating procedures, including necessary calculations, to complete scientific work.
- analyze the results of laboratory techniques performed and provide conclusions based on evidence obtained, including troubleshooting errors and improving methodology for future use.
- articulate the importance of staying technically current and keeping pace with rapidly occurring changes in life science and its applications.
- 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, 9th revision, Clinical Modification (ICD-9-CM) and International Classification of Diseases, 10th Revision, Clinical Modification (ICD-10-CM) and the International Classification of Diseases, 10th Revision, Procedure Coding System (ICD-10-CM/PCS) coding systems. Students will also gain preparation for the American Health Information Management Association (AHIMA), Certified Coding

Specialist (CCS) and Certified Coding Associate (CCA) certifications. This program is approved by the Professional Certificate Approval Program (PCAP).

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

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

Cost of Attendance. For more information on cost of attendance visit MoSCORES (<https://scorecard.mo.gov/Search/>).

Program Career and Salary Information. Pursuant to Missouri HB 1606 (2018), information regarding the number of credit hours, program length, employment rate, wage data, and graduates employed in careers related to their program of study at St. Louis Community College can be found at the following URL: [https://scorecard.mo.gov/scorecard/](https://scorecard.mo.gov/scorecard/(https://www.google.com/url?q=https://scorecard.mo.gov/scorecard/&sa=D&ust=1555536894857000&usg=AFQjCNG1xf3E_i2lO96zEytILO-s5xaJCQ)) (https://www.google.com/url?q=https://scorecard.mo.gov/scorecard/&sa=D&ust=1555536894857000&usg=AFQjCNG1xf3E_i2lO96zEytILO-s5xaJCQ). Search using School / Program “St. Louis Community College” and choose the degree or credential type of interest.

The following limitations to the data apply: Information provided is based on the most recent cohorts available. Typically, most recent cohorts for wage and completion data are six years prior to the current academic year. Time to complete a program of study varies depending on the number of credit hours students earn per semester.

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 current classification systems in the Clinical Coding field.
2. demonstrate proficiency in verifying completeness, accuracy, and quality of clinical coding using various classification systems.
3. develop a professional strategy in preparation to find employment in Clinical Coding or related field.

Code	Title	Credit Hours
Foundation Courses		
HIT 101	Medical Terminology and Language	4
BIO 207	Anatomy and Physiology I (MOTR LIFS 150LAP)	4
BIO 208	Anatomy and Physiology II	4
HIT 104	Basic Principles of Disease	2
HIT 105	Pharmacology for Health Information Technology Professionals	1
IS 116	Computer Literacy	3
Area of Concentration		
HIT 102	Health Information Management Technology	4
HIT 103	Healthcare Delivery Systems	2
HIT 106	Diagnosis Coding Systems I	3
HIT 107	Procedure Coding Systems I	3
HIT 201	Healthcare Reimbursement	3

HIT 206	Diagnosis Coding Systems II	3
HIT 207	Procedure Coding Systems II	3
HIT 208	Advanced Coding Applications	2
HIT 210	Professional Practice Experience	2
Information Systems		
IS 123	Introduction to Windows	1
IS 151	Computer Applications in Business	4
Total Credit Hours		48

Network Engineering, Associate in Applied Science

Forest Park

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 program provide a combination of theoretical and hands-on skills development. The demonstration of hands-on knowledge and skills is vital for employment in the IT networking industry. Students completing the program are prepared for a variety of industry certification exams as well as entry-level employment.

Cost of Attendance. For more information on cost of attendance visit MoSCORES (<https://scorecard.mo.gov/Search/>).

Program Career and Salary Information. Pursuant to Missouri HB 1606 (2018), information regarding the number of credit hours, program length, employment rate, wage data, and graduates employed in careers related to their program of study at St. Louis Community College can be found at the following URL: [https://scorecard.mo.gov/scorecard/](https://scorecard.mo.gov/scorecard/(https://www.google.com/url?q=https://scorecard.mo.gov/scorecard/&sa=D&ust=1555536894857000&usg=AFQjCNG1xf3E_i2lO96zEytILO-s5xaJCQ)) (https://www.google.com/url?q=https://scorecard.mo.gov/scorecard/&sa=D&ust=1555536894857000&usg=AFQjCNG1xf3E_i2lO96zEytILO-s5xaJCQ). Search using School / Program “St. Louis Community College” and choose the degree or credential type of interest.

The following limitations to the data apply: Information provided is based on the most recent cohorts available. Typically, most recent cohorts for wage and completion data are six years prior to the current academic year. Time to complete a program of study varies depending on the number of credit hours students earn per semester.

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. develop networking solutions following industry best practices as a member of a team.
3. demonstrate proficiency in the network program through successful performance on course final exams based on industry competencies.

Missouri Civics Examination. Students entering college for the very first time in fall 2019 and who intend to complete an associate's degree must successfully complete a civics examination. Students who have completed dual credit courses must complete this examination. Students who participated in Early College or other dual enrollment programs, transfer students, and previously enrolled students are exempt from this requirement.

Program of Study

Code	Title	Credit Hours
Career General Education		
ENG 101	College Composition I (MOTR ENGL 100)	3
ENG 103	Report Writing (MOTR ENGL 110)	3
or ENG 102	College Composition II (MOTR ENGL 200)	
MTH 180	Introductory Statistics (MOTR MATH 110)	3
XXX xxx	Social & Behavioral Sciences: Civics Requirement	3
XXX xxx	Natural Science Elective/Math Elective: (MOTR Requirement)	4
Program Requirements		
IS 130	Hardware Support - CompTIA A+ Core 1 (Hardware)	3
IT 102	Desktop Software Support - CompTIA A+ Core 2 (Software)	3
IS 237	Fundamentals of Information Assurance/Security - CompTIA Security+	3
IS 229	Unix/Linux I	3
IS 264	Unix/Linux II	3
IT 120	Enterprise Security Management	3
IT 121	Secure E-Commerce	3
IT 235	Network Infrastructure Design	3
IT 101	Cisco Networking Academy I: Introduction to Networks	5
IT 201	Cisco Networking Academy II: Switching, Routing, and Wireless Essentials	5
IT 202	Cisco Networking Academy III: Enterprise Networking, Security, and Automation	5
IT 211	Introduction to Virtualization and Cloud Computing	3
Select One (5 credits):		5
IT 208	Cisco Networking Academy: CCNA Security	
IT 250	CCNA Cybersecurity Operations	
Total Credit Hours		63

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.

Cost of Attendance. For more information on cost of attendance visit MoSCORES (<https://scorecard.mo.gov/Search/>).

Program Career and Salary Information. Pursuant to Missouri HB 1606 (2018), information regarding the number of credit hours, program length, employment rate, wage data, and graduates employed in careers related to their program of study at St. Louis Community College can be found at the following URL: <https://scorecard.mo.gov/scorecard/> (https://www.google.com/url/?q=https://scorecard.mo.gov/scorecard/&sa=D&ust=1555536894857000&usq=AFQjCNG1xf3E_i2lO96zEytILO-s5xaJCQ). Search using School / Program "St. Louis Community College" and choose the degree or credential type of interest.

The following limitations to the data apply: Information provided is based on the most recent cohorts available. Typically, most recent cohorts for wage and completion data are six years prior to the current academic year. Time to complete a program of study varies depending on the number of credit hours students earn per semester.

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
Network Infrastructure		
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

The Certificate of Proficiency in Network Security is a skill-oriented program that prepares students to implement and monitor security measures of a network. The program emphasizes core security technologies, installation, troubleshooting, and monitoring of network devices to maintain integrity, confidentiality, availability of data, and devices as well as competency in the technologies. The skills required to develop a security infrastructure, recognize threats and vulnerabilities to networks, and mitigate security threats are covered. Emphasis is placed on best practices and skills needed to respond to security events and to ensure security operational readiness. The tasks, duties,

and responsibilities of an associate-level Security Analyst working in a Security Operations Center (SOC) are also covered. Program competencies align with the industry CCNA Security, CCNA Cybersecurity Operations (CyberOps), and CompTIA Security+ certification examinations.

Cost of Attendance. For more information on cost of attendance visit MoSCORES (<https://scorecard.mo.gov/Search/>).

Program Career and Salary Information. Pursuant to Missouri HB 1606 (2018), information regarding the number of credit hours, program length, employment rate, wage data, and graduates employed in careers related to their program of study at St. Louis Community College can be found at the following URL: <https://scorecard.mo.gov/scorecard/> (https://www.google.com/url?q=https://scorecard.mo.gov/scorecard/&sa=D&ust=1555536894857000&usg=AFQjCNG1xf3E_i2lO96zEytILO-s5xaJCQ). Search using School / Program “St. Louis Community College” and choose the degree or credential type of interest.

The following limitations to the data apply: Information provided is based on the most recent cohorts available. Typically, most recent cohorts for wage and completion data are six years prior to the current academic year. Time to complete a program of study varies depending on the number of credit hours students earn per semester.

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 system 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 250	CCNA Cybersecurity Operations	5
Total Credit Hours		26

Nursing, Associate in Applied Science

Florissant Valley, Forest Park, and Meramec

The Associate in Applied Science degree in Nursing 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 program 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 and sit for the National Council Licensure Examination for Registered Nurses.

The nursing program has an LPN Bridge Option (NUR 160) for students selecting this career path. Please see an academic advisor for additional information.

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
ENG 101	College Composition I (MOTR ENGL 100)	3
COM 200 or SOC 101	Communication Between Cultures Introduction to Sociology (MOTR SOCI 101)	3

Math proficiency at or above the MTH 140 level. Please note: MTH 165 and MTH 166 will not meet the math requirement for the nursing program.

Biology: Students are required to have completed two semesters of high school biology with lab or one semester of college biology with lab (STLCC BIO 111 or higher) with "C" grade or higher within 5 years of applying to the nursing program.

Chemistry: Students are required to have completed two semesters of high school chemistry with lab or one semester of college chemistry with lab (STLCC CHM 101 or higher) with "C" grade or higher within 5 years of applying to the nursing program.

BIO 207	Anatomy and Physiology I (MOTR LIFS 150LAP)	4
PSY 200	General Psychology (MOTR PSYC 100)	3

NOTE: Check nursing program handbook for additional requirements such as criminal background check, drug screen, immunizations, CPR, and assessment tests.

Cost of Attendance. For more information on cost of attendance visit MoSCORES (<https://scorecard.mo.gov/Search/>).

Program Career and Salary Information. Pursuant to Missouri HB 1606 (2018), information regarding the number of credit hours, program length, employment rate, wage data, and graduates employed in careers related to their program of study at St. Louis Community College can be found at the following URL: <https://scorecard.mo.gov/scorecard/> (https://www.google.com/url?q=https://scorecard.mo.gov/scorecard/&sa=D&ust=1555536894857000&usg=AFQjCNG1xf3E_i2lO96zEytILO-s5xaJCQ). Search using School / Program "St. Louis Community College" and choose the degree or credential type of interest.

The following limitations to the data apply: Information provided is based on the most recent cohorts available. Typically, most recent cohorts for wage and completion data are six years prior to the current academic year. Time to complete a program of study varies depending on the number of credit hours students earn per semester.

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.

Missouri Civics Examination. Students entering college for the very first time in fall 2019 and who intend to complete an associate's degree must successfully complete a civics examination. Students who have completed dual credit courses must complete this examination. Students who participated in Early College or other dual enrollment programs, transfer students, and previously enrolled students are exempt from this requirement.

Program of Study

Code	Title	Credit Hours
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Pre-entry Requirements:

ENG 101	College Composition I (MOTR ENGL 100)	3
COM 200	Communication Between Cultures	3

or SOC 101 Introduction to Sociology (MOTR SOCI 101)

Chemistry: Students are required to have completed two semesters of high school chemistry with lab or one semester of college chemistry with lab (STLCC CHM 101 or higher) with "C" grade or higher within 5 years of applying to the nursing program.

Math proficiency at or above the MTH 140 level. Please note: MTH 165 and MTH 166 will not meet the math requirement for the nursing program.

Biology: Students are required to have completed two semesters of high school biology with lab or one semester of college biology with lab (STLCC BIO 111 or higher) with "C" grade or higher within 5 years of applying to the nursing program.

BIO 207	Anatomy and Physiology I (MOTR LIFS 150LAP)	4
PSY 200	General Psychology (MOTR PSYC 100)	3

Career General Education

PSY 205	Human Growth and Development (MOTR PSYC 200)	3
BIO 203	General Microbiology I	4
BIO 208	Anatomy and Physiology II	4
XXX xxx	Social & Behavioral Sciences: Civics Requirement	3

Program Requirements

NUR 151	Fundamentals of Nursing	7
NUR 152	Nursing Laboratory Practicum I	1
NUR 154	Nursing Laboratory Practicum II	1
NUR 153	Nursing 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 66-78

Occupational Therapy Assistant, Associate in Applied Science

Meramec

The Occupational Therapy Assistant Program, Associate in Applied Science prepares students for positions as occupational therapy practitioners who work under the supervision of registered occupational therapists. Through courses in the development, structure and function of the human body, psychology and occupational therapy principles and techniques, along with clinical experience, students learn skills in communicating, interviewing, assessing, intervention planning, and implementation of interventions for consumers of occupational therapy services.

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 20814-3449
Telephone: 301-652-2682 or Website: www.acoteonline.org

Graduates of the program will be able to sit for the national certification examination for the occupational therapy assistant administered by the

National Board for Certification in Occupational Therapy (NBCOT). After successful completion of this exam, the individual will be a Certified Occupational Therapy Assistant (COTA). All states require licensure in order to practice; however, acquisition of state licenses are typically based on the results of the NBCOT Certification Examination. The Occupational Therapy Assistant (OTA) program has several prerequisites based on industry standards. See an adviser for further information. Please be aware that a felony conviction could impact a student's ability to participate in fieldwork experiences, ability to take the certification exam, and/or obtain a license to practice occupational therapy. See OTA Program Director for more information.

Note: All OTA students must complete Level II Fieldwork within 18 months following completion of academic coursework.

Cost of Attendance. For more information on cost of attendance visit MoSCORES (<https://scorecard.mo.gov/Search/>).

Program Career and Salary Information. Pursuant to Missouri HB 1606 (2018), information regarding the number of credit hours, program length, employment rate, wage data, and graduates employed in careers related to their program of study at St. Louis Community College can be found at the following URL: <https://scorecard.mo.gov/scorecard/> (https://www.google.com/url?q=https://scorecard.mo.gov/scorecard/&sa=D&ust=1555536894857000&usg=AFQjCNG1xf3E_i2lO96zEytILO-s5xaJCQ). Search using School / Program "St. Louis Community College" and choose the degree or credential type of interest.

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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. recognize and describe the role that occupational therapy services play in relation to health and wellness promotion and illness prevention to support participation in occupations.
2. administer structured Activities of Daily Living (ADL) and occupational performance screenings and assist in administering other evaluations as directed.
3. demonstrate competence in selecting and using a variety of therapeutic activities and life tasks and evidence skill in adaptation, sequencing, and analysis of activities.
4. plan and implement individual and group treatment for increase of function in areas of occupation that have meaning and value.
5. demonstrate awareness of self and relationship to others, including the qualities of responsibility, respect for others, empathy and concern for clients of various ages, ethnic, social, economic, and cultural groups.
6. articulate the effects of health, wellness, and disease processes among individuals and in populations within the context of family and community.
7. explain how purposeful activity, occupation, and participation in occupation are influenced by age, ethnic, social, economic, cultural, and lifestyle differences.
8. discuss the purpose and methods of occupational therapy and identify the roles of the OTA, OT, and OT aide as well as other health care providers in both traditional and nontraditional settings.

9. demonstrate creative problem-solving and clinical reasoning skills applicable to the treatment of clients and populations.
10. identify and describe selected normal and abnormal growth and development patterns, as well as physical and mental functions affecting individuals across the lifespan.
11. utilize purposeful activity, occupation, and participation in occupation in order to contribute to a state of well-being.
12. obtain pertinent information from relevant sources and report observations, information, and instructions orally and in writing in a clear, concise manner using appropriate vocabulary.
13. engage openly in the supervisory relationship and assist in the supervision of aides and volunteers as directed.
14. exhibit ethical and professional conduct in accordance with the principles, code of ethics, and the core values and attitudes established by AOTA.
15. demonstrate advocacy skills in relation to the client's needs for services, the practitioner's needs for continued professional growth and development, and the profession's need for continued survival.

Program of Study

Code	Title	Credit Hours
Career General Education		
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
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 (MOTR LIFS 150LAP)	4
BIO 208	Anatomy and Physiology II	4
BIO 209	Kinesiology Fundamentals	3
Physical Education Activity		
Select 2 credit hours		2
Program Requirements		
OTA 101	Fundamentals of Occupational Therapy Assistant I	3
OTA 102	Fundamentals of Occupational Therapy Assistant II	4
OTA 103	Adaptive Activities I	2
OTA 104	Adaptive Activities II	2
OTA 203	Fundamentals of Occupational Therapy III	4
OTA 204	Fundamentals of Occupational Therapy IV	4
OTA 207	Health and Disease	4
OTA 208	Adaptive Living Skills	2
OTA 213	Occupational Therapy Assistant Practicum I	4
OTA 214	Occupational Therapy Assistant Practicum II	4
OTA 215	The Management of Occupational Therapy	2
OTA 216	Level II Fieldwork Seminar	1
Total Credit Hours		67

Office Information Systems, Associate in Applied Science

Florissant Valley, 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.

Cost of Attendance. For more information on cost of attendance visit MoSCORES (<https://scorecard.mo.gov/Search/>).

Program Career and Salary Information. Pursuant to Missouri HB 1606 (2018), information regarding the number of credit hours, program length, employment rate, wage data, and graduates employed in careers related to their program of study at St. Louis Community College can be found at the following URL: <https://scorecard.mo.gov/scorecard/> (https://www.google.com/url?q=https://scorecard.mo.gov/scorecard/&sa=D&ust=1555536894857000&usg=AFQjCNG1xf3E_i2lO96zEytILO-s5xaJCQ). Search using School / Program “St. Louis Community College” and choose the degree or credential type of interest.

The following limitations to the data apply: Information provided is based on the most recent cohorts available. Typically, most recent cohorts for wage and completion data are six years prior to the current academic year. Time to complete a program of study varies depending on the number of credit hours students earn per semester.

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.

Missouri Civics Examination. Students entering college for the very first time in fall 2019 and who intend to complete an associate’s degree must successfully complete a civics examination. Students who have completed dual credit courses must complete this examination. Students who participated in Early College or other dual enrollment programs, transfer students, and previously enrolled students are exempt from this requirement.

Program of Study

Code	Title	Credit Hours
Career General Education		
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
Physical Education Activity		
Select 2 credit hours		2
Program Requirements		
ACC 100	Applied Accounting	3
BUS 104	Introduction to Business Administration	3
MGT 101	Introduction to Supervision	3
IS 102	Keyboarding and Formatting	3
IS 122	Windows	3
IS 136	Internet Fundamentals	1
IS 116	Computer Literacy	3
IS 109	Proofreading and Editing	1
IS 151	Computer Applications in Business	4
IS 154	Web-Based Productivity Applications	2
IS 139	Web Publishing	3
IS 152	Computer Applications in Business-Intermediate	3
IS 165	Computer Applications-Microsoft Project	1
IS 200	Electronic Records Management	2
IS 209	Computer Applications - Advanced	3
IS 210	Office Technology and Procedures	3
IS 291	Workplace Learning: Information Systems	3
Total Credit Hours		64

Paramedic Technology, Associate in Applied Science

Forest Park

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) 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

To contact CoAEMSP:

8301 Lakeview Pkwy.
Suite 111-312
Rowlett, TX 75088
Telephone: 214-703-8445
Fax 214-703-8992
www.coaemsp.org (<http://www.coaemsp.org>)

Cost of Attendance. For more information on cost of attendance visit MoSCORES (<https://scorecard.mo.gov/Search/>).

Program Career and Salary Information. Pursuant to Missouri HB 1606 (2018), information regarding the number of credit hours, program length, employment rate, wage data, and graduates employed in careers related to their program of study at St. Louis Community College can be found at the following URL: <https://scorecard.mo.gov/scorecard/> (https://www.google.com/url?q=https://scorecard.mo.gov/scorecard/&sa=D&ust=1555536894857000&usg=AFQjCNG1xf3E_i2lO96zEytILO-s5xaJCQ). Search using School / Program “St. Louis Community College” and choose the degree or credential type of interest.

The following limitations to the data apply: Information provided is based on the most recent cohorts available. Typically, most recent cohorts for wage and completion data are six years prior to the current academic year. Time to complete a program of study varies depending on the number of credit hours students earn per semester.

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.

Missouri Civics Examination. Students entering college for the very first time in fall 2019 and who intend to complete an associate's degree must successfully complete a civics examination. Students who have completed dual credit courses must complete this examination. Students who participated in Early College or other dual enrollment programs, transfer students, and previously enrolled students are exempt from this requirement.

Program of Study

Code	Title	Credit Hours
Career General Education		
ENG 101 or ENG 100	College Composition I (MOTR ENGL 100)	3
ENG 102	College Composition II (MOTR ENGL 200)	3

or ENG 103	Report Writing (MOTR ENGL 110)	
XXX xxx	Social & Behavioral Sciences: Civics Requirement	3
SOC 100	The Sociology of Human Relations	3
or PSY 200	General Psychology (MOTR PSYC 100)	
BIO 203	General Microbiology I	4
BIO 207	Anatomy and Physiology I (MOTR LIFS 150LAP)	4
BIO 208	Anatomy and Physiology II	4
CHM 101	Fundamentals of Chemistry I (MOTR CHEM 100L)	5
or CHM 105	General Chemistry I (MOTR CHEM 150L)	
Physical Education Activity		
Select 2 credit hours		2
Program Requirements		
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) 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

To contact CoAEMSP:

8301 Lakeview Pkwy.
Suite 111-312
Rowlett, TX 75088
Telephone: 214-703-8445
Fax 214-703-8992
www.coaemsp.org (<http://www.coaemsp.org>)

Cost of Attendance. For more information on cost of attendance visit MoSCORES (<https://scorecard.mo.gov/Search/>).

Program Career and Salary Information. Pursuant to Missouri HB 1606 (2018), information regarding the number of credit hours, program length, employment rate, wage data, and graduates employed in careers related to their program of study at St. Louis Community College can be found at the following URL: <https://scorecard.mo.gov/scorecard/> (https://www.google.com/url?q=https://scorecard.mo.gov/scorecard/&sa=D&ust=1555536894857000&usg=AFQjCNG1xf3E_i2lO96zEytILO-s5xaJCQ). Search using School / Program “St. Louis Community College” and choose the degree or credential type of interest.

The following limitations to the data apply: Information provided is based on the most recent cohorts available. Typically, most recent cohorts for wage and completion data are six years prior to the current academic year. Time to complete a program of study varies depending on the number of credit hours students earn per semester.

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 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

The Associate in Fine Arts degree in Photography is designed for students planning to transfer to a four-year art program 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.

Cost of Attendance. For more information on cost of attendance visit MoSCORES (<https://scorecard.mo.gov/Search/>).

Program Career and Salary Information. Pursuant to Missouri HB 1606 (2018), information regarding the number of credit hours, program length, employment rate, wage data, and graduates employed in careers related to their program of study at St. Louis Community College can be found at the following URL: <https://scorecard.mo.gov/scorecard/> (https://www.google.com/url?q=https://scorecard.mo.gov/scorecard/&sa=D&ust=1555536894857000&usg=AFQjCNG1xf3E_i2lO96zEytILO-s5xaJCQ). Search using School / Program “St. Louis Community College” and choose the degree or credential type of interest.

The following limitations to the data apply: Information provided is based on the most recent cohorts available. Typically, most recent cohorts for wage and completion data are six years prior to the current academic year. Time to complete a program of study varies depending on the number of credit hours students earn per semester.

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 portfolios of prints showing both aesthetic and technical aspects of commercial photographic approaches and those dealing with artistic theories.
2. utilize the material and technical aspects of the medium in the development of individual work or projects.
3. describe the technical aspects of camera settings, image adjustment techniques, and printing.
4. employ verbal and written formats in the interpretations and evaluations of contemporary and historic photographs.

Missouri Civics Examination. Students entering college for the very first time in fall 2019 and who intend to complete an associate's degree must successfully complete a civics examination. Students who have completed dual credit courses must complete this examination. Students who participated in Early College or other dual enrollment programs, transfer students, and previously enrolled students are exempt from this requirement.

Program of Study

Code	Title	Credit Hours
General Education		
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	Social Science Elective	3
ART 168	History of Photography	3
Math/Science Electives		
Students may elect to take MTH 161 or MTH 140 or MTH 180 AND One (1) Science Elective OR Students may elect to take Two (2) Science Electives		6-7
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	
Program Requirements		
ART 107	Design I	2
ART 108	Design II	2
ART 109	Drawing I (MOTR PERF 105D)	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 (MOTR PERF 105GA)	3
Photography Electives		
Select 6 credit hours of the following:		6
ART 266	Black and White Printing Lab	
AT 279	Alternative Photographic Processes	
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 (MOTR PERF 105C)	
ART 213	Ceramics II	
ART 114	Painting I	
ART 214	Painting II	
ART 115	Printmaking I	
ART 215	Printmaking II	
ART 116	Sculpture I	
ART 216	Sculpture II	
ART 131	Computer Art Studio	
ART 207	Design III	
ART 208	Design IV	
AT 120	Computer Drawing I: Illustrator	
AT 106	Motion Media Design	
AT 135	Web Design I	
AT 143	Web Design II	
AT 201	Mixed Media	
Total Credit Hours		62-65

Physical Therapist Assistant, Associate in Applied Science

Meramec

The Associate in Applied Science degree in Physical Therapist Assistant (PTA) prepares graduates to 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.

Cost of Attendance. For more information on cost of attendance visit MoSCORES (<https://scorecard.mo.gov/Search/>).

Program Career and Salary Information. Pursuant to Missouri HB 1606 (2018), information regarding the number of credit hours, program length, employment rate, wage data, and graduates employed in careers related to their program of study at St. Louis Community College can be found at the following URL: <https://scorecard.mo.gov/scorecard/> (https://www.google.com/url?q=https://scorecard.mo.gov/scorecard/&sa=D&ust=1555536894857000&usg=AFQjCNG1xf3E_i2lO96zEytILO-s5xaJCQ). Search using School / Program “St. Louis Community College” and choose the degree or credential type of interest.

The following limitations to the data apply: Information provided is based on the most recent cohorts available. Typically, most recent cohorts for wage and completion data are six years prior to the current academic year. Time to complete a program of study varies depending on the number of credit hours students earn per semester.

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 skills necessary for a physical therapists assistant, equipping students to pass the national licensure exam.
2. discuss the value of contemporary physical therapy through lifelong learning and service.
3. communicate effectively with patients/clients, caregivers, and interprofessional team members.
4. integrate appropriate evidence based resources to support clinical decision making.
5. develop a professional growth plan for career advancement and learning opportunities to improve knowledge, skills, and behaviors.

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Program of Study

Code	Title	Credit Hours
Career General Education		
ENG 101	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
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 (MOTR LIFS 150LAP)	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.

Cost of Attendance. For more information on cost of attendance visit MoSCORES (<https://scorecard.mo.gov/Search/>).

Program Career and Salary Information. Pursuant to Missouri HB 1606 (2018), information regarding the number of credit hours, program length, employment rate, wage data, and graduates employed in careers related to their program of study at St. Louis Community College can be found at the following URL: <https://scorecard.mo.gov/scorecard/> (https://www.google.com/url?q=https://scorecard.mo.gov/scorecard/&sa=D&ust=1555536894857000&usg=AFQjCNG1xf3E_i2lO96zEytILO-s5xaJCQ). Search using School / Program “St. Louis Community College” and choose the degree or credential type of interest.

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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

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.

Cost of Attendance. For more information on cost of attendance visit MoSCORES (<https://scorecard.mo.gov/Search/>).

Program Career and Salary Information. Pursuant to Missouri HB 1606 (2018), information regarding the number of credit hours, program length, employment rate, wage data, and graduates employed in careers related to their program of study at St. Louis Community College can be found at the following URL: [https://scorecard.mo.gov/scorecard/](https://scorecard.mo.gov/scorecard/(https://www.google.com/url/?q=https://scorecard.mo.gov/scorecard/&sa=D&ust=1555536894857000&usg=AFQjCNG1xf3E_i2lO96zEytILO-s5xaJCQ)) (https://www.google.com/url/?q=https://scorecard.mo.gov/scorecard/&sa=D&ust=1555536894857000&usg=AFQjCNG1xf3E_i2lO96zEytILO-s5xaJCQ). Search using School / Program "St. Louis Community College" and choose the degree or credential type of interest.

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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.

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Program of Study

Code	Title	Credit Hours
General Education		
ENG 101	College Composition I (MOTR ENGL 100)	3
COM 101	Oral Communication I (MOTR COMM 100)	3
MTH 140	Intermediate Algebra (or higher) ¹	3
BIO 207	Anatomy and Physiology I (MOTR LIFS 150LAP) ²	4
BIO 208	Anatomy and Physiology II	4
PSY 200	General Psychology (MOTR PSYC 100)	3
XXX xxx	Social & Behavioral Sciences: Civics Requirement	3
Program Requirements		
XRT 101	Radiographic Procedures I	4
XRT 102	Radiographic Procedures II	3
XRT 103	Radiographic Procedures III	3
XRT 104	Principles of Radiographic Exposure I	3
XRT 105	Principles of Radiographic Exposure II	3
XRT 107	Radiologic Physics I	2
XRT 108	Radiologic Physics II	2
XRT 111	Clinical Education I	2
XRT 112	Clinical Education II	2
XRT 116	Clinical Education III	3
XRT 121	Radiographic Image Evaluation I	2
XRT 122	Radiographic Image Evaluation II	2
XRT 207	Radiologic Pathology	2
XRT 208	Advanced Imaging Modalities	2
XRT 209	Radiobiology	2
XRT 211	Radiologic Technology Review	3
XRT 212	Professional Development in Radiography	2
XRT 213	Clinical Education IV	3
XRT 214	Clinical Education V	3
XRT 215	Clinical Education VI	2
Total Credit Hours		73

¹ Except MTH 161, MTH 165, MTH 166, MTH 180

² BIO 207 is a prerequisite for XRT 101 and must be completed with a grade C or better before starting the Area of Concentration courses.

Respiratory Care, Associate in Applied Science

Forest Park

This program prepares students for positions as respiratory therapists. Students learn to 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 (Program #200050) offering an Associate's in Applied Science (AAS) degree at the Forest Park campus located at 5600 Oakland Avenue, St. Louis, MO is accredited by the Commission on Accreditation for Respiratory Care (<http://www.coarc.com>) (CoARC).

Cost of Attendance. For more information on cost of attendance visit MoSCORES (<https://scorecard.mo.gov/Search/>).

Program Career and Salary Information. Pursuant to Missouri HB 1606 (2018), information regarding the number of credit hours, program length, employment rate, wage data, and graduates employed in careers related to their program of study at St. Louis Community College can be found at the following URL: <https://scorecard.mo.gov/scorecard/> (https://www.google.com/url?q=https://scorecard.mo.gov/scorecard/&sa=D&ust=1555536894857000&usg=AFQjCNG1xf3E_i2lO96zEytILO-s5xaJCQ). Search using School / Program "St. Louis Community College" and choose the degree or credential type of interest.

The following limitations to the data apply: Information provided is based on the most recent cohorts available. Typically, most recent cohorts for wage and completion data are six years prior to the current academic year. Time to complete a program of study varies depending on the number of credit hours students earn per semester.

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.

Missouri Civics Examination. Students entering college for the very first time in fall 2019 and who intend to complete an associate's degree must successfully complete a civics examination. Students who have completed dual credit courses must complete this examination. Students who participated in Early College or other dual enrollment programs, transfer students, and previously enrolled students are exempt from this requirement.

Program of Study

Code	Title	Credit Hours
Career General Education		
BIO 207	Anatomy and Physiology I (MOTR LIFS 150LAP)	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:		3
ENG 102	College Composition II (MOTR ENGL 200)	
COM 200	Communication Between Cultures (MOTR SBSC 101)	
COM 117	Health Communication	
PSY 200	General Psychology (MOTR PSYC 100)	3
Program Requirements		
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

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.

Cost of Attendance. For more information on cost of attendance visit MoSCORES (<https://scorecard.mo.gov/Search/>).

Program Career and Salary Information. Pursuant to Missouri HB 1606 (2018), information regarding the number of credit hours, program length, employment rate, wage data, and graduates employed in careers related to their program of study at St. Louis Community College can be found at the following URL: <https://scorecard.mo.gov/scorecard/> (https://www.google.com/url?q=https://scorecard.mo.gov/scorecard/&sa=D&ust=1555536894857000&usg=AFQjCNG1xf3E_i2lO96zEytILO-s5xaJCQ). Search using School / Program "St. Louis Community College" and choose the degree or credential type of interest.

The following limitations to the data apply: Information provided is based on the most recent cohorts available. Typically, most recent cohorts for wage and completion data are six years prior to the current academic year. Time to complete a program of study varies depending on the number of credit hours students earn per semester.

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.

Missouri Civics Examination. Students entering college for the very first time in fall 2019 and who intend to complete an associate's degree must successfully complete a civics examination. Students who have completed dual credit courses must complete this examination. Students who participated in Early College or other dual enrollment programs, transfer students, and previously enrolled students are exempt from this requirement.

Program of Study

Code	Title	Credit Hours
Career General Education		
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

Cost of Attendance. For more information on cost of attendance visit MoSCORES (<https://scorecard.mo.gov/Search/>).

Program Career and Salary Information. Pursuant to Missouri HB 1606 (2018), information regarding the number of credit hours, program length, employment rate, wage data, and graduates employed in careers related to their program of study at St. Louis Community College can be found at the following URL: <https://scorecard.mo.gov/scorecard/> (https://www.google.com/url?q=https://scorecard.mo.gov/scorecard/&sa=D&ust=1555536894857000&usg=AFQjCNG1xf3E_i2lO96zEytILO-s5xaJCQ). Search using School / Program “St. Louis Community College” and choose the degree or credential type of interest.

The following limitations to the data apply: Information provided is based on the most recent cohorts available. Typically, most recent cohorts for wage and completion data are six years prior to the current academic year. Time to complete a program of study varies depending on the number of credit hours students earn per semester.

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

The Associate in Applied Science Software Developer degree provides students with the technical skills and knowledge required to design, write, implement, secure, and maintain software systems in the enterprise. It teaches the principles of software architecture and data analysis using current development tools, languages, and environments. The courses on Web design, 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 distance learning and classroom-based in-depth 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.

Cost of Attendance. For more information on cost of attendance visit MoSCORES (<https://scorecard.mo.gov/Search/>).

Program Career and Salary Information. Pursuant to Missouri HB 1606 (2018), information regarding the number of credit hours, program length, employment rate, wage data, and graduates employed in careers related to their program of study at St. Louis Community College can be found at the following URL: <https://scorecard.mo.gov/scorecard/> (https://www.google.com/url?q=https://scorecard.mo.gov/scorecard/&sa=D&ust=1555536894857000&usg=AFQjCNG1xf3E_i2lO96zEytILO-s5xaJCQ). Search using School / Program “St. Louis Community College” and choose the degree or credential type of interest.

The following limitations to the data apply: Information provided is based on the most recent cohorts available. Typically, most recent cohorts for wage and completion data are six years prior to the current academic year. Time to complete a program of study varies depending on the number of credit hours students earn per semester.

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 technical skills based on industry standards to design, write, implement, secure, and maintain software systems.
2. modify existing software incorporating new functions to support specific project goals.
3. develop software solutions following industry best practices as a member of a team.

- demonstrate proficiency in a selected focus area (Language, Web, or Database) by developing a portfolio of projects completed during courses related to the focus area.
- perform data analysis by importing, manipulating, documenting, and displaying source information.

Missouri Civics Examination. Students entering college for the very first time in fall 2019 and who intend to complete an associate's degree must successfully complete a civics examination. Students who have completed dual credit courses must complete this examination. Students who participated in Early College or other dual enrollment programs, transfer students, and previously enrolled students are exempt from this requirement.

Program of Study

Code	Title	Credit Hours
Career General Education		
ENG 101	College Composition I (MOTR ENGL 100)	3
ENG 103	Report Writing (MOTR ENGL 110)	3
or ENG 102	College Composition II (MOTR ENGL 200)	
Mathematics Requirement: Choose One		3-4
MTH 180	Introductory Statistics (MOTR MATH 110)	
MTH 160	Precalculus Algebra (MOTR MATH 130)	
XXX xxx	Social & Behavioral Sciences: Civics Requirement	3
General Education Elective		
COM 103	Small Group Communication (MOTR COMM 125)	3
or COM 112	Argumentation and Debate (MOTR COMM 220)	
or COM 201	Interpersonal Communication (MOTR COMM 120)	
or PSY 200	General Psychology (MOTR PSYC 100)	
or PHL 102	Introduction to Logic (MOTR PHIL 101)	
Program Requirements		
IS Elective: Choose One		1
IS 101	Keyboarding (or)	
IS 123	Introduction to Windows (or)	
IS 136	Internet Fundamentals (or)	
IS 165	Computer Applications-Microsoft Project	
IS 120	Introduction to Excel	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	
or IS 167	C++ Programming I	
IS 225	Database Management	4
IS 229	Unix/Linux I	3
IS 237	Fundamentals of Information Assurance/Security - CompTIA Security+	3
IS 280	Python	3
Capstone Class		
IS 241	Systems Analysis and Design	3
Select one of the following options:		8
C# Language		
IS 253	C# Programming II	
& IS 283	and C# Programming III	
Java Language		
IS 287	Java Programming II	

& IS 288	and Java Programming III	
C++ and Analytics		
IS 267	C++ Programming II	
IS 257	Big Data Analytics	
& IS 165	and Computer Applications-Microsoft Project	
Select one of the following focus areas:		9
Language		
Web		
Database		
Total Credit Hours		60-61

Focus Areas

Code	Title	Credit Hours
Language		
IS 290	C# Frameworks: .NET Web App Framework	3
or IS 294	Java Frameworks: Struts and Hibernate	
or IS 296	Java Frameworks: Spring	
IS 265	Web Scripting Technologies	3
Select 3 credit hours of approved IS electives		3
IS 285	Excel for Data Analytics	
IS 291	Workplace Learning: Information Systems	
IS 294	Java Frameworks: Struts and Hibernate	
IS 296	Java Frameworks: Spring	
IT 121	Secure E-Commerce	
Total Credit Hours		9

Web

Code	Title	Credit Hours
IS 141	Graphics for the Web	3
IS 265	Web Scripting Technologies	3
Select one of the following:		3
IS 142	Web Development I	
IS 290	C# Frameworks: .NET Web App Framework	
IS 291	Workplace Learning: Information Systems	
IT 121	Secure E-Commerce	
Total Credit Hours		9

Database

Code	Title	Credit Hours
IS 240	SQL and Database Development	3
IS 285	Excel for Data Analytics	3
Select one of the following:		3
IS 268	SQL Server Programming	
IS 276	Oracle Programming	
IS 291	Workplace Learning: Information Systems	
IT 121	Secure E-Commerce	
Total Credit Hours		9

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.

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).

Cost of Attendance. For more information on cost of attendance visit MoSCORES (<https://scorecard.mo.gov/Search/>).

Program Career and Salary Information. Pursuant to Missouri HB 1606 (2018), information regarding the number of credit hours, program length, employment rate, wage data, and graduates employed in careers related to their program of study at St. Louis Community College can be found at the following URL: <https://scorecard.mo.gov/scorecard/> (https://www.google.com/url?q=https://scorecard.mo.gov/scorecard/&sa=D&ust=1555536894857000&usg=AFQjCNG1xf3E_i2lO96zEytILO-s5xaJCQ). Search using School / Program "St. Louis Community College" and choose the degree or credential type of interest.

The following limitations to the data apply: Information provided is based on the most recent cohorts available. Typically, most recent cohorts for wage and completion data are six years prior to the current academic year. Time to complete a program of study varies depending on the number of credit hours students earn per semester.

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 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.

Missouri Civics Examination. Students entering college for the very first time in fall 2019 and who intend to complete an associate's degree must successfully complete a civics examination. Students who have completed dual credit courses must complete this examination. Students who participated in Early College or other dual enrollment programs, transfer students, and previously enrolled students are exempt from this requirement.

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 (MOTR LIFS 150LAP)	4
BIO 208	Anatomy and Physiology II	4
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)	
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
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 050 Mathematical Literacy
or Two semesters of high school algebra

BIO 111 Introductory Biology I (MOTR BIOL 100L)¹
or One year o

Cumulative GPA of 2.5 or higher on a 4.0 scale.

Total Credit Hours 63

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

IS 253	C# Programming II	4
or IS 287	Java Programming II	
Total Credit Hours		20

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.

Cost of Attendance. For more information on cost of attendance visit MoSCORES (<https://scorecard.mo.gov/Search/>).

Program Career and Salary Information. Pursuant to Missouri HB 1606 (2018), information regarding the number of credit hours, program length, employment rate, wage data, and graduates employed in careers related to their program of study at St. Louis Community College can be found at the following URL: <https://scorecard.mo.gov/scorecard/> (https://www.google.com/url?q=https://scorecard.mo.gov/scorecard/&sa=D&ust=1555536894857000&usg=AFQjCNG1xf3E_i2lO96zEytILO-s5xaJCQ). Search using School / Program "St. Louis Community College" and choose the degree or credential type of interest.

The following limitations to the data apply: Information provided is based on the most recent cohorts available. Typically, most recent cohorts for wage and completion data are six years prior to the current academic year. Time to complete a program of study varies depending on the number of credit hours students earn per semester.

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 develop websites for various display devices.
2. design and develop websites that incorporate current primary and secondary navigation features.
3. design and develop websites 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, modify, and implement upgrades to existing websites.

Code	Title	Credit Hours
Required Courses		
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

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
	Social and Behavioral Sciences	9
	9 credit hours minimum, including at least one Civics course	
	Written and Oral Communications	9
	6 credit hours minimum from Written, 3 credit hours minimum from Oral	
	Natural Sciences	7
	7 credit hours minimum, from at least two disciplines, including one course with a lab component	
	Mathematical Sciences	3-4
	Humanities and Fine Arts	9
	9 credit hours minimum, from at least two disciplines; 3 credit hour limit on performance courses	
	MOTR Courses to reach 42 credit hours	4-5

Associate in Applied Science General Education Requirements

For the Associate in Applied Science degrees, satisfactory completion of general education courses equal to a minimum of twenty-five percent of the total credit hours for the program, distributed as follows:

Code	Title	Credit Hours
	College Composition I or Career English	3
	Civics as defined by the Coordinating Board for Higher Education and included in the state-wide guaranteed transfer lists	3
	Natural Science as defined by the Coordinating Board for Higher Education and included in the state-wide transfer lists OR Mathematics	3
	Elective credit hours selected from state-wide guaranteed transfer lists to reach a minimum of twenty-five percent of the total credit hours for the program	6 or more

*Per Board Policy, Associate in Applied Science programs will be allowed five years to comply with the new AAS general education requirements.

Associate of Fine Arts General Education Requirements

For the Associate of Fine Arts, satisfactory completion of a minimum of 15 credit hours of general education courses distributed as follows:

Code	Title	Credit Hours
	College Composition I or Career English	3
	U.S. and Missouri Constitutions	3
	Natural Science and Mathematics	6
	Credit hours selected from one or more of the following categories to equal twenty-five percent or more of the total credit hours for the program:	6 or more
	Humanities, Communication, Natural Science, Mathematics, and/or Social Science (for example, a program with 60 credit hours must have at least 15 total credit hours of general education)	

Associate of Science General Education Requirements

For the Associate of Science degrees, satisfactory completion of a minimum of 15 credit hours of general education courses distributed as follows:

Code	Title	Credit Hours
	College Composition I or Career English	3
	U.S. and Missouri Constitutions	3
	Mathematics: Analytical Geometry and Calculus I	5
	Science	7

Credit hours selected from one or more of the following categories to equal twenty-five percent or more of the total credit hours for the program:

Humanities, Communication, Natural Science, Mathematics, and/or Social Science (for example, a program with 60 credit hours must have at least 15 total credit hours of general education)

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: 6 credit hours of written communications, 3 credit hours of oral communications, 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, or a course that requires one of the Mathematics pathways courses as a prerequisite), 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 101	General Anthropology (MOTR ANTH 101)	3
ANT 102	Introduction to Cultural Anthropology (MOTR ANTH 201)	3
COM 200	Communication Between Cultures (MOTR SBSC 101)	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
MCM 101	Introduction to Mass Communications (MOTR SBSC 100)	3
PSC 201	International Relations (MOTR POSC 201)	3
PSC 213	Introduction to Comparative Politics (MOTR POSC 202)	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
SOC 202	Social Problems (MOTR SOCI 201)	3
SOC 212	Race and Ethnicity (MOTR SOCI 202)	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
HST 137	African American History through Reconstruction (MOTR HIST 101AA)	3
HST 138	African American History from Reconstruction to the Present (MOTR HIST 102AA)	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 103	Small Group Communication (MOTR COMM 125)	3

COM 107	Public Speaking (MOTR COMM 110)	3
COM 112	Argumentation and Debate (MOTR COMM 220)	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
GEO 113	Oceanography (MOTR PHYS 1100)	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)	3
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

General Education Requirements
(11/02/20)

MTH 180	Introductory Statistics (MOTR MATH 110)	3
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 - Prehistory to 1300 (MOTR ARTS 101)	3
ART 102	Art History - 1300 to Present (MOTR ARTS 102)	3
ART 103	History of Modern Art (MOTR ARTS 100)	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
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
MCM 130	Film Appreciation (MOTR FILM 100)	3
MCM 131	History of Film (MOTR FILM 103)	3

MUS 103	Music Fundamentals (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 (MOTR MUSC 103)	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
PHL 112	Business Ethics (MOTR PHIL 102P)	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
ART 113	Ceramics I (MOTR PERF 105C)	3
ART 115	Printmaking I (MOTR PERF 105GA)	3
ART 116	Sculpture I (MOTR PERF 105S)	3
ART 165	Photography I (MOTR PERF 105GA)	3
ART 172	Digital Photography (MOTR PERF 105GA)	3
ART 275	Photo Imaging I: Photoshop (MOTR PERF 105GA)	3
COM 111	Voice and Articulation (MOTR PERF 100VD)	3
ENG 110	Creative Writing (MOTR PERF 106)	3
ENG 114	Writing Plays and Film Scripts (MOTR PERF 106D)	3
ENG 224	Fiction Writing (MOTR PERF 106F)	3
ENG 225	Poetry Writing (MOTR PERF 106P)	3
ENG 233	Writing Memoirs and Creative Nonfiction (MOTR PERF 106NF)	3
MUS 131	Chorus (MOTR PERF 102C)	1
MUS 132	Orchestra I (MOTR PERF 102O)	1
MUS 134	Band I (MOTR PERF 102B)	1
MUS 135	Choir (MOTR PERF 102C)	1
THT 102	Stagecraft (MOTR PERF 106)	3
THT 108	Acting I (MOTR PERF 100)	3

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 May 2020. 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/>). 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.

Prerequisites and Developmental Education

Information about prerequisites and developmental education is available online at <https://stlcc.edu/office-of-the-registrar/prerequisites.aspx/>.

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. General Anthropology (MOTR ANTH 101). 3 Credit Hours.

General Anthropology is the study of human beings, their ancestors, related primates, and their cultural behavior and institutions. This course introduces the major subfields of anthropology (anthropological archaeology, biological anthropology, linguistic anthropology, and cultural anthropology). 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. Prerequisite: Reading Proficiency.

Arabic (ARA)

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

Modern Arabic I is a beginning course that presents sentence structure and vocabulary needed to communicate in basic Arabic conversations. Students also learn about the Arabic culture as they practice listening, speaking, reading, and writing in Arabic. Prerequisite: Reading Proficiency.

ARA 102. Modern Arabic II. 4 Credit Hours.

Modern Arabic II is a continuation of Modern Arabic I. The course expands vocabulary and grammar, and encourages communication in Arabic using present and past tenses. Students learn about culture as they practice listening, reading, writing, and speaking in Arabic. Prerequisites: ARA 101 or permission of the instructor, and 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.

Art Appreciation 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. This course is intended for non-art majors.

Prerequisite: Reading Proficiency or concurrent enrollment in RDG 079.

ART 101. Art History - Prehistory to 1300 (MOTR ARTS 101). 3 Credit Hours.

Art History - Prehistory to 1300 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 - 1300 to Present (MOTR ARTS 102). 3 Credit Hours.

Art History - 1300 to Present 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 Non-Western cultures.

Prerequisite: Reading Proficiency.

ART 103. History of Modern Art (MOTR ARTS 100). 3 Credit Hours.

History of Modern Art 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.

Drawing I provides an introduction to drawing principles, construction, proportion, form, value, perspective, composition, tools, and media. Perception, visual sensitivity, and critical thinking are all stressed.

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.

Figure Drawing I provides an introduction to drawing the human figure. Exercises will include direct observation of life models. Anatomical form, proportion, structure, and gesture will be emphasized.

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 (MOTR PERF 105C). 3 Credit Hours.

Ceramics I is a study of the basic principles of ceramics and ceramic sculpture with emphasis on hand-built and wheel techniques.

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 (MOTR PERF 105GA). 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 (MOTR PERF 105S). 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.

Survey of African American Art presents a historical overview of the artists and movements that shaped American art from colonial through contemporary periods. Lectures and readings will focus on the influences of African visual culture on European Classicism and Modernism and the significant impact African American artists had on contemporaneous trends in American Art. This course will also explore the cultural and socio-political forces that informed creative philosophy and practice, and recognize artists who have traditionally been marginalized. 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. 3 Credit Hours.

Design Communication for Interior Design and Architecture provides an introduction to graphic communication techniques as a way to communicate architecture and interior design processes and solutions. Utilizing traditional and digital methods, students will gain experience in perspective drawing, rendering, sketching, layout, and composition.

Prerequisite: ART 154 and Reading Proficiency.

ART 151. Interior Design I. 3 Credit Hours.

Interior Design I introduces 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 ART 154 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. Architectural Graphics and Technology I. 3 Credit Hours.

Architectural Graphics and Technology I introduces students to the fundamentals of architectural drafting using hand drafting techniques and computer-aided drafting software currently utilized in the architecture and interior design industries. Students will apply architectural graphic standards in the creation of floor plans, elevations, and construction documents.

Prerequisites: Reading Proficiency.

ART 155. Bath Design. 3 Credit Hours.

Bath Design explores the application of 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 (NKBA).

Prerequisites: ART 151, ART 154, and Reading Proficiency.

ART 156. Advanced Kitchen Design. 3 Credit Hours.

Advanced Kitchen Design 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: ART 151, ART 154, 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 (MOTR PERF 105GA). 3 Credit Hours.

Photography I 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.

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 (MOTR PERF 105GA). 3 Credit Hours.

Digital Photography introduces the mechanics of the digital camera, image adjustments through software programs, and printing from a computer. Students will follow guided exercises and projects and produce portfolios of prints using digital printers.

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. Three-Dimensional Design. 3 Credit Hours.

Three-Dimensional Design is an introduction to three-dimensional language and expression. Students will use a variety of materials and methods to explore compositions in three dimensions.

Prerequisites: 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 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 grades of "C" or better, prior or concurrent enrollment in ART 138 with a grade of "C" or better 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.

Interior Design II 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.

Corequisite: ART 150.

Prerequisites: ART 154 and ART 151 with a grade of "C" or better 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 (MOTR PERF 105GA). 3 Credit Hours.

Photo Imaging I: Photoshop is an investigation of processing image files. Software tools and adjustment controls will be learned. Students will investigate scanning, color and tonal management, image repair, compositing, and printing.

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.

Lighting Design introduces students to the functional and technical aspects of designing interior environments utilizing artificial and natural lighting. Topics include: lighting sources, fixture selection, color and human response, lighting calculations, codes, and application of lighting principles to residential and commercial interior design projects.

Prerequisites: ART 151 and 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.

Special Topics in Photography allows for specialized study within the medium of photography by concentrating on a select set of materials, techniques, concepts, or aesthetic issues.

Prerequisites: 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 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 and 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. Architectural Graphics and Technology II. 3 Credit Hours.

Architectural Graphics and Technology II 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.

Prerequisites: ART 154, ART 251 both with minimum grades of "C", and Reading Proficiency.

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 Fundamentals 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 101. Automotive Fundamentals and Service Information. 3 Credit Hours.

Automotive Fundamentals and Service Information is an entry-level course that exposes the student to all aspects of automotive safety procedures and precautions. Additionally, students receive training on what types of electronic service information is available for technicians and how to access vehicle-specific repair procedures and specifications. Students will also become proficient using precision measuring tools using metric and standard measurements.

Prerequisite: Reading Proficiency.

AUT 103. Automotive Vehicle Inspection and Light Maintenance. 3 Credit Hours.

Automotive Vehicle Inspection and Light Maintenance will illustrate the fundamentals of basic vehicle maintenance and inspection for entry-level employment. Students will gain experience in the course from instructor-led lectures and hands-on application of identifying and performing typical light maintenance and inspection procedures.

Prerequisites: AUT 101 and Reading Proficiency.

AUT 105. Automotive Maintenance and Service. 3 Credit Hours.

Automotive Maintenance and Service teaches students entry-level skills to properly inspect, maintain, and service a modern vehicle. Students will gain exposure to various types of automotive fluids and learn how to properly exchange those fluids in accordance with the manufacturer's procedures. Additionally, students will learn how to replace common maintenance items such as wiper blades, automotive lights, and filters. This course will also cover how to properly dismount, repair, and mount a tire on a wheel and balance the assembly.

Prerequisites: AUT 101, AUT 103, and Reading Proficiency.

AUT 107. Automotive Steering and Suspension Service. 3 Credit Hours.

Automotive Steering and Suspension Service explores various types of steering and suspension designs and teaches detailed component testing procedures. Components include ball joints, struts, tie rod ends, and bushings. Students will also gain in-depth knowledge of performing two and four-wheel alignments using current wheel alignment technology.

Prerequisites: AUT 101, AUT 103, AUT 105, and Reading Proficiency.

AUT 110. Automotive Electrical Principles. 3 Credit Hours.

Automotive Electrical Principles will build the foundation for direct current (DC) electricity. Students will learn the relationship between electrical circuits and units of electrical measurements while using a digital multi-meter (DMM). Students will gain practical experience in testing, diagnosing, and repairing electrical circuits and components on modern vehicles. An emphasis will be placed on ignition systems, starting, charging, and lighting circuits.

Prerequisites: AUT 101 and Reading Proficiency.

AUT 112. Automotive Brake Systems Service and Diagnosis. 3 Credit Hours.

Automotive Brake Systems Service and Diagnosis helps develop skills needed to inspect, service, and repair modern disc/drum brakes that are hydraulically controlled. Additional emphasis will focus on the operation and diagnosis of electronic braking systems. Students will identify Anti-Lock Brakes, Traction Control, Stability Control, the associated components, as well as diagnostic and repair procedures determined by the automobile manufacturer.

Prerequisites: AUT 101 and Reading Proficiency.

AUT 114. Automotive Engine Repair and Diagnosis. 3 Credit Hours.

Automotive Engine Repair and Diagnosis teaches the theory and application of the 4-cycle internal combustion engine. Students will learn to identify components, disassemble the engine, inspect components, measure to determine acceptable wear limits, and reassemble the engine. Additionally, students will learn how to diagnose engine conditions using common testing procedures.

Prerequisites: AUT 101 and Reading Proficiency.

AUT 116. Automotive Powertrain Controls. 3 Credit Hours.

Automotive Powertrain Controls explores the relationship between fuel delivery and engine control management. Students will learn how to identify and test a fuel delivery system. Students will identify different types of powertrain sensors and the appropriate testing procedures using various scan tools, Oscilloscope (DSO), and a Digital Multi-Meter (DMM). Additionally, students learn the relationship between On-Board Diagnostics Second Generation (OBDII) and vehicle networks.

Prerequisites: AUT 101 and Reading Proficiency.

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 203. Automotive Manual Drivetrain. 3 Credit Hours.

Automotive Manual Drivetrain covers the theory of operation, service procedures and diagnosis of manual transmissions, transfer cases, constant velocity joints, differential/axles, and clutches. Students will disassemble these components to determine internal operation and service procedures. There will be a focus on the service and maintenance of the components. Additionally, students will gain the skills needed to diagnose and determine if these components can be repaired or replaced.
Prerequisites: AUT 101 and Reading Proficiency.

AUT 210. Automotive Transmissions and Transaxles. 3 Credit Hours.

Automotive Transmissions and Transaxles emphasizes the service, operation, diagnosis, and repair procedures of automatic transmissions and transaxles. Students will learn how to maintain and service multiple types of automatic transmissions. They will also disassemble an automatic transmission/transaxle to determine the internal operation and fluid flow. A complete breakdown of these units will allow students to inspect and test individual components and compare them against manufacturer specifications. There will also be a focus on diagnosing automatic transmission driveability concerns.
Prerequisites: AUT 101 and Reading Proficiency.

AUT 212. Automotive Heating, Ventilation, and Air Conditioning. 3 Credit Hours.

Automotive Heating, Ventilation, and Air Conditioning (HVAC) emphasize the principles, operation, and diagnosis of heating and air conditioning features found in automobiles. Students will learn how to recover, recharge, and recycle refrigerants used in these systems. Additionally, an in-depth look at the ventilation system will cover the operation and diagnosis of blend and mode doors. NOTE: students will be required to be certified in the recovering and recycling of refrigerants in accordance with EPA standards. Additional costs will be required.
Prerequisites: AUT 110 and Reading Proficiency.

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.

Students learn the principles and procedures governing ignition and starting systems. Course material will include inspecting, servicing and repairing ignition and starting system components in an aircraft power plant. The power plant curriculum subject included in this course and required by Federal Aviation Regulations (FAR) Part 147, Appendix D is Ignition and Starting. Additional lab hours required.

Prerequisites: AVI 102 and Reading Proficiency.

AVI 133. Airflow, Exhaust, Lubrication and Engine Instruments. 3 Credit Hours.

This course covers the inspection, service and maintenance of non-engine accessory systems and instruments critical for the proper operation of reciprocating and turbine engines. The power plant curriculum subjects included in this course and required by Federal Aviation Regulations (FAR) Part 147, Appendix D, are Induction and Engine Airflow Systems, Engine Cooling Systems, Engine Exhaust and Reversing Systems, Lubrication Systems and Engine Instrument System. Additional lab hours required.

Prerequisites: AVI 101 and Reading Proficiency.

AVI 134. Reciprocating Engines. 4 Credit Hours.

This course addresses the theory, development and maintenance of reciprocating engines for aircraft. Projects will include disassembly, re-assembly, overhaul, repair, inspection, removal, installation and testing engine components. Students will further develop skills in the use of maintenance publications and documentation of maintenance activities. The power plant curriculum subject included in this course and required by Federal Aviation Regulations (FAR) Part 147, appendix D is Reciprocating Engines.

Prerequisites: AVI 101 and Reading Proficiency.

AVI 135. Propeller Systems. 3 Credit Hours.

The development and application of fixed-pitch through constant speed propellers is presented in this course. Students inspect, replace, service or repair propellers, their accessories or auxiliary systems. The use of maintenance publications and appropriate documentation of maintenance activities will be emphasized. The power plant curriculum subject included in this course and required by Federal Aviation Regulations (FAR) Part 147, Appendix D is Propellers. Additional lab hours required.

Prerequisites: AVI 101 and Reading Proficiency.

AVI 136. Power Plant Fuel and Fire Protection Systems. 3 Credit Hours.

Students learn about aircraft fuel, engine fuel systems and components, and fuel metering devices. Carburetors and injection systems are covered along with fuel systems, fire protection systems, pumps valves, filters and metering units. The power plant curriculum subjects included in the course and required by Federal Aviation Regulations (FAR) Part 147, Appendix D are Fuel Metering Systems, Engine Fuel Systems and Engine Fire Protection Systems. Additional lab hours required.

Prerequisites: AVI 101 and Reading Proficiency.

AVI 137. Turbine Engines. 4 Credit Hours.

Theory and application of various types of turbine engines are provided in this course. Course material includes removal, replacement, installation, inspection, overhaul, repair and adjustment of turbine engines. The power plant curriculum subjects included in this course and required by Federal Aviation Regulations (FAR) Part 147, Appendix D, are Turbine Engines, Auxiliary Power Systems and Unducted Fans. Additional lab hours required.

Prerequisites: AVI 101 and Reading Proficiency.

AVI 138. Power Plant Inspections. 1 Credit Hour.

This course requires students use skills developed in the power plant courses to inspect turbine or reciprocating engines, propellers, engine accessories and auxiliary systems. Students will use extensive research of maintenance publications and effective documentation of inspection activities. The power plant curriculum subject included in this course and required by Federal Aviation Regulations (FAR) Part 147, Appendix D, is Engine Inspection. Additional lab hours required.

Prerequisites: AVI 131 and Reading Proficiency.

Baking and Pastry (BAP)

BAP 101. Introduction to Baking Theory. 3 Credit Hours.

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 Culinary Arts. 3 Credit Hours.

Bakeshop Basics for Culinary Arts 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: 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: 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, a qualifying background check, successful admission into the program, and Reading Proficiency.

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

Clinical Encounters I: Interviewing and Assessment 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 versus 'doing for', crisis intervention, transitions of care, and the diagnostic interview.

Prerequisites: BHS 101 with a grade of 'C' or better, a qualifying background check, successful admission into the program, 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. Individual behavioral health settings may have additional requirements. See program Handbook for details.

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. Individual behavioral health settings may have additional requirements. See program Handbook for details.

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.

Human Heredity will introduce students to basic concepts in human inheritance. Areas of emphasis will include patterns of inheritance, population genetics, the genetics of immunity and cancer, genetic engineering, gene therapy, and reproductive technologies. Prerequisite: Reading Proficiency

BIO 109. Human Biology (MOTR LIFS 100). 3 Credit Hours.

Human Biology is an introduction to basic human structure and function, as well as the human body's interaction with its surroundings, including cell theory, genetics, systems biology, ecology, and evolution.

Prerequisite: Reading Proficiency or concurrent enrollment in RDG 079.

BIO 110. General Zoology (MOTR BIOL 100LZ). 4 Credit Hours.

General Zoology provides a survey of the animal kingdom with emphasis on comparative anatomy, physiology, ecology, and evolution of the major invertebrate and vertebrate groups.

Prerequisite: Reading Proficiency.

BIO 111. Introductory Biology I (MOTR BIOL 100L). 4 Credit Hours.

Introductory Biology I 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 intended for liberal arts students and majors in physical and occupational therapy, nursing, and health science programs. (Credit is not allowed for both BIO 111 and BIO 140).

Prerequisite: Reading Proficiency or concurrent enrollment in RDG 079.

BIO 113. Modern Aspects of Biology (MOTR BIOL 100). 3 Credit Hours.

Modern Aspects of Biology 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.

General Botany I will introduce students to the biological aspects of plant life, including cell structure and function, anatomy, morphology, physiology, genetics, taxonomy, and the environmental factors that affect plant growth. The laboratory reinforces the topics and concepts covered in the lecture.

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).

Prerequisites: CHM 105 and 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.

Biology of Human Health and Disease will explore the evolution of microbes and human disease and the influences that regular exercise, diet, and genetic factors have on everyday 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.

The Biology of Human Sex covers 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 157. Good Laboratory Practices, Compliance, and Bioinformatic Principles. 3 Credit Hours.

Good Laboratory Practices, Compliance, and Bioinformatic Principles provides a general overview of the Food and Drug Administration (FDA) regulations as they pertain to the biotechnology field. Knowledge of current Good Laboratory Practices (cGLP) and current Good Manufacturing Practices (cGMP) is needed to work in biotechnology manufacturing and preclinical research laboratories. The course will emphasize practices of cGLP and cGMP that pertain to the biopharmaceutical industry as well as current standard operating procedures in Compliance, Bioinformatics, and Electronic Notebook usage. Recommended Preparation: Basic computer skills.

Prerequisites: BIO 104 or BIO 111 or BIO 124 or BIO 140 or BIO 207 or BIO 225 with a grade of 'C' or better, and 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.

Anatomy and Physiology I is the study of inter-relationships between the structure and the function at gross and microscopic levels of the organization of living body. This course will use the body systems to emphasize the anatomical terminology, cellular, and tissue level of organization. Anatomy and Physiology I includes the integumentary, skeletal, muscular, nervous, and the endocrine systems. The laboratory component reinforces topics and concepts covered in lectures.

Prerequisites: BIO 111 with grade of "C" or better 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.

BIO 228. Research and Presentation Skills for the Life Sciences. 2 Credit Hours.

Research and Presentation Skills for the Life Sciences provides hands-on training, organizing, and presenting scientific data in document, poster, and oral formats. Students will write cover letters and resumes. Students will write written reports and create posters summarizing data generated in BIO 220 or from internships. This data will also be presented in poster format with corresponding oral presentations to various audiences. Mock employment interviews will also be conducted.

Corequisite: BIO 220.

Prerequisite: Entry into this course must be approved by the program coordinator, and Reading Proficiency.

BIO 230. Ecology. 3 Credit Hours.

Ecology explores the factors that determine the distribution and abundance of organisms in the natural world. Emphasis of study will focus on interactions at many levels including: organismal, population, community, ecosystem, and biosphere. In addition, human impacts upon ecological systems such as climate change and habitat fragmentation will be covered.

Prerequisites: BIO 141 with a grade of "C" or better and Reading Proficiency.

BIO 231. Cell Biology. 3 Credit Hours.

Cell Biology is a comprehensive course which integrates cellular structure and function at the molecular level. Emphasis will be on extracellular and intracellular signaling and cellular response to those signals. Other mechanisms of focus will be transcription, cytoskeleton, cell division, protein biology, organelles, cell trafficking, and signal transduction.

Prerequisites: BIO 141 with a grade of "C" or better and Reading Proficiency.

BIO 232. Cell Biology Laboratory. 1 Credit Hour.

Cell Biology Laboratory provides a hands-on experience with equipment and technology for molecular and cell biology research. The laboratory course will apply concepts learned from an Introduction to Cell Biology lecture to molecular based research project(s). Co-requisite: BIO 231, or with permission of Department Chair.

Prerequisites: BIO 141 with a grade of "C" or better and Reading Proficiency.

BIO 233. Evolution. 3 Credit Hours.

Evolution presents a broad overview of evolutionary biology, from its historical origins to its modern applications. Students will explore current theories about earth's evolutionary history, explain major biotic and abiotic process that drive evolution, and discuss the future of evolution in a world increasingly shaped by human activities.

Prerequisites: BIO 141 with a grade of "C" or better and Reading Proficiency.

Biomedical Engineering Tech (BE)

BE 153. Workplace Learning: Biomedical Electronics Technology. 4-6 Credit Hours.

Workplace Learning: Biomedical Electronics Technology 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 254 and Reading Proficiency.

BE 254. Biomedical Applications. 5 Credit Hours.

Biomedical Applications develops competencies, including maintenance, troubleshooting, and repair, with such basic hospital equipment as transducers, amplifiers, processors, display modules, and respiratory and radiography instruments.

Prerequisites: EE 132 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.

Introduction to Business Administration 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.

Fundamentals of Chemistry I presents the basic concepts and symbols of chemistry with applications to everyday life. The course is designed for students desiring an introduction to chemistry and is suitable for allied health students. Laboratory work presents opportunities to use laboratory equipment, emphasizes observations and measurements, and provides elementary quantitative and qualitative analysis.

Prerequisites: MTH 050 with a minimum grade of "C", or placement into MTH 140 or higher on the Math placement test, and Reading Proficiency or concurrent enrollment in RDG 079.

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 designed for science-related majors and 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.

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.

Chemistry and the Environment presents 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.

Prerequisites: MTH 020 with a minimum grade of "C" or testing into MTH 050 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. Within this class, observation, documentation, formal and informal assessment tools, and strategies for use with young children, ages birth through age 8, will be explored.

Prerequisite: Reading Proficiency.

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.

Prerequisite: Reading Proficiency.

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 Experiences in Early Childhood. 3 Credit Hours.

Creative 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.

Prerequisite: Reading Proficiency.

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.

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.

Prerequisite: 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.

Prerequisites: CFD 101, CFD 102, and Reading Proficiency.

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. Prerequisite: Reading Proficiency.

CFD 208. Child and Family Development Capstone: Portfolio Design. 3 Credit Hours.

Child and Family Development Capstone: Portfolio Design 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 205 and Reading Proficiency.

Chinese (CHI)

CHI 101. Elementary Chinese I (MOTR LANG 105). 4 Credit Hours.

Elementary Chinese I is a beginning course that presents sentence structure and vocabulary needed to communicate in basic Chinese conversations. Students will learn about the Chinese culture as they practice listening, speaking, reading, and writing in Chinese. 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.

Elementary Chinese II is a continuation of Elementary Chinese I. The course expands vocabulary and grammar, and encourages communication in Chinese using present and past tenses. Students learn about the culture of China as they practice listening, reading, writing, and speaking in Chinese. 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 130. Introduction to Construction. 3 Credit Hours.

An introductory course providing an overview of the total construction process including city and regional planning, construction management, contracting, labor and management relations, the design process, estimating and bidding, scheduling and purchasing, construction, and equipment.

Prerequisite: Reading Proficiency.

CE 131. Construction Estimating. 3 Credit Hours.

The total estimating and bidding process. Topics will include bid form contracts, specifications, overhead, unit costs, quantity surveys, subcontract bids, pricing, checking and alternates. Students should be able to read construction drawing prior to enrolling in this course.

Prerequisites: CE 116 and Reading Proficiency.

CE 132. Construction Scheduling. 3 Credit Hours.

Construction scheduling methods to include bar graphs and Critical Path Method with emphasis on manual and computerized design, calculations, and interpretation using both arrow and precedence diagramming.

Prerequisites: 1 year Algebra and Reading Proficiency.

CE 151. Introduction to Civil Engineering and Architecture. 3 Credit Hours.

This course is an introduction to many of the varied factors involved in building design and construction including building components and systems, structural design, storm water management, site design, utilities and services, cost estimation, energy efficiency, and careers in the design and construction industry. Additional lab hours required.

Prerequisites: GE 121 or EGR 147 or department approval.

CE 230. Construction Materials and Testing. 3 Credit Hours.

The properties and standard tests used in construction on soils, aggregates, bituminous products, and concrete. Additional lab hours required.

Prerequisites: Concurrent with ME 243 and Reading Proficiency.

CE 235. Construction Office Practice. 3 Credit Hours.

The interactive role of organizations in the construction process; the structure of alternative construction delivery systems, such as general contractor, construction manager, and design-build contractor; specification and building codes; cost control reporting systems for construction.

Prerequisite: Reading Proficiency.

CE 240. Surveying I. 3 Credit Hours.

This course will explore the history and practice of surveying, the use and care of transits, levels, and tapes, as well as their more modern counterparts. Office and field methods will emphasize laboratory problems in area measurements, elevation determinations, angle collection methods, traverse calculations and topographic map compilation. Additional hours required.

Prerequisites: MTH 170 or MTH 185 and Reading Proficiency.

CE 247. Legal Aspects of Boundary Surveying. 3 Credit Hours.

Topics covered will include legal principles of surveying, Missouri survey law, legal principles of boundaries, property, monumentation, legal descriptions, deed interpretations, and legal aspects of surveying and professional liability.

Prerequisites: CE 240 or department approval and Reading Proficiency.

CE 248. Fundamentals of Land Surveying. 3 Credit Hours.

This course includes essential elements necessary in the initiation and follow through of any property survey; evidence of ownership, historical information in the subdivision of public lands, methods of measurements, description of property and legal requirements for recording.

Prerequisites: CE 240 or department approval and Reading Proficiency.

CE 250. Surveying II. 3 Credit Hours.

This is an intermediate course in land surveying techniques applicable to the office and field practices. It explores the theory, history and practice of route surveying, including the use of simple horizontal curves, vertical curves, spirals, super-elevations and earth-work computations as applied to highway and railroad surveying. Additional introductory topics may include but are not limited to photogrammetry, astronomy and GIS. Additional hours required.

Prerequisites: CE 240 and Reading Proficiency.

Clinical Laboratory Technology (CLT)

CLT 100. Orientation to the Medical Laboratory. 1 Credit Hour.

Orientation to the profession of medical technology, its functions, specialties and responsibilities. The philosophy and ethics of the practice of medical technology are considered and interpersonal relationship of technologist to medical staff, laboratory staff, patient and other departments. Medical terminology will be stressed as well.

Prerequisites: Admission to program and Reading Proficiency.

CLT 101. Medical Microbiology. 3 Credit Hours.

Theory and principles of micro-organisms and human disease. Growth requirement of micro-organisms with consideration of media, biochemical reactions, susceptibility testing will be studied. Application of theory will be practiced in laboratory sessions. Additional lab hours required.

Prerequisites: Admission to program and Reading Proficiency.

CLT 110. Urinalysis and Body Fluids. 2 Credit Hours.

This course is an introduction to urine and body fluid analysis. It includes the anatomy and physiology of the kidney, physical, chemical and microscopic examination of urine, cerebrospinal fluid, and other body fluids as well as quality control, quality assurance and safety. Practical application will be stressed. Addition hours required. Reading Proficiency.

Prerequisites: Admission to the program or permission of the program director.

CLT 111. Hematology and Coagulation. 4 Credit Hours.

This course is an introduction to the theory and principles of the physiology of blood forming organs. Blood cell maturation, blood dyscrasia, techniques of staining, counting and differentiating cell morphology will be presented. Additional lab hours required.

Prerequisites: CLT 100 with a minimum grade of "C" or permission of the program director, and Reading Proficiency.

CLT 113. Pathogenic Bacteriology. 2 Credit Hours.

This course presents the study of micro-organisms with emphasis on the bacteria associated with human diseases. Theory and principles of isolation, identification, biochemical reactions, growth requirements, and susceptibility testing will be considered. Theory and practical application will be stressed. Addition lab hours required.

Prerequisites: CLT 101 with a minimum grade of "C" or permission of the program director, and Reading Proficiency.

CLT 115. Immunology and Serology. 2 Credit Hours.

This course is the study of the theories and principles of immunological reactions. Included are antigen-antibody reactions, complement action, humoral and cellular immune response, and other body defenses, and reactions to infectious and non-infectious agents. Serological methodology will also be discussed, demonstrated, and practiced. Additional lab hours required. Prerequisites: CLT 101 with a minimum grade of "C" and Reading Proficiency.

CLT 120. Clinical Laboratory Skill Development. 4 Credit Hours.

This course provides practice of fundamental skills common to most clinical laboratories. Skills such as pipetting, phlebotomy, use of small instruments, laboratory mathematics, determination of cell counts and other diagnostic procedures will be developed. Quality assurance and problem-solving skills will be emphasized.

Prerequisites: CLT 110, CLT 111, CLT 113, CLT 115 all with minimum grades of "C" and Reading Proficiency.

CLT 202. Clinical Practice I. 4 Credit Hours.

Practical experience is attained in one of the clinical affiliated laboratories. The students rotate through each of the major departments of the clinical (medical) laboratory and are closely supervised by bench technologists and faculty. Rotation and practical experience is gained in microbiology, clinical chemistry, blood bank, hematology, urinalysis, serology and immunology departments. Prerequisites: CLT 120 and Reading Proficiency.

CLT 207. Clinical Practice II. 4 Credit Hours.

A continuation of CLT 202. Twenty-four hours clinical practice each week in hospital or private laboratories.

Prerequisites: CLT 202 and Reading Proficiency.

CLT 211. Parasites, Fungi and Intracellular Pathogens. 2 Credit Hours.

The role of parasites, fungi, and intracellular organisms in human diseases with emphasis on differential microscopic and culture methods are presented. Diagnostic tests used for identification and susceptibility testing will be discussed. Practical application will be stressed. Additional lab hours required. Prerequisites: CLT 101 with a minimum grade of "C" or permission of program director, and Reading Proficiency.

CLT 213. Introduction to Clinical Chemistry. 2 Credit Hours.

This course is an introduction to the principles and procedures of various laboratory tests performed in Clinical Chemistry. Specimen collection, instrumentation, mathematical calculations and quality control will be discussed. An introduction to proteins, carbohydrates and lipids will be provided. Reading Proficiency.

Prerequisites: BIO 208, CHM 101 or CHM 105, CLT 100, MTH 140 or MTH 160, all with minimum grades of "C" or permission of program director.

CLT 215. Immunohematology. 4 Credit Hours.

This course includes the basic immunological and genetic principles governing blood groups and transfusion medicine. Theory and principles of routine laboratory testing procedures will be presented. Additional lab hours required. Reading Proficiency.

Prerequisites: CLT 115 with minimum grade of "C" or permission of program director.

CLT 217. Clinical Chemistry. 5 Credit Hours.

This course is an advanced study of the principles and procedures of various laboratory tests performed in the chemistry department. The clinical significance of proteins, enzymes, carbohydrates, lipids, electrolytes and blood gases will be covered. Endocrinology, therapeutic drug monitoring and toxicology will be discussed. Reading Proficiency.

Prerequisites: CLT 213 with a minimum grade of "C" or permission of program director.

CLT 219. Professional Skills Seminar. 1 Credit Hour.

This course will stress the inter-relationships of laboratory tests correlated with diseases. Significance of laboratory testing and results will be taught with a dynamic overview of diagnosis and prognosis. The course also includes cross cultural communication and principles of technical training sufficient to orient a new employee. Additional lab hours required. Reading Proficiency. Corequisite: CLT 207.

Prerequisites: CLT 202 with a grade of "S" or permission of the program director.

College Orientation (COL)

COL 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.

Oral Communication I is a 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 ENG 070.

COM 103. Small Group Communication (MOTR COMM 125). 3 Credit Hours.

Small Group Communication examines the principles and concepts of working with 3-12 people towards a common goal. Students will develop and improve communication skills that relate to organizing, analyzing, conducting, and participating in small group discussions and presentations.

Prerequisite: Reading Proficiency.

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.

Public Speaking is a basic course in speech communication. This course studies the role of public speaking through the theory and practice of researching, organizing, and delivering public presentations. Audience analysis, critical listening, and the ethical dimensions of communication are also emphasized. Skills are developed through practicing speech fundamentals and analyzing presentations.

Prerequisite: Reading Proficiency.

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 (MOTR PERF 100VD). 3 Credit Hours.

Voice and Articulation is designed to meet the needs of students looking to improve common problems of voice, articulation, dialect, and language and to gain fundamental theory in voice and articulation. This course covers principles and practices of improving voice, articulation, pronunciation, foreign, and regional dialects in the context of literary and theatrical works. Considerable emphasis is placed on recognizing voice and articulation as a necessary tool for everyday communication as well as an art form. Audio-video recording is used frequently for self-evaluation.
Prerequisite: Reading Proficiency.

COM 112. Argumentation and Debate (MOTR COMM 220). 3 Credit Hours.

Argumentation and Debate focuses student learning on building and analyzing arguments in persuasive speaking and debates. Course topics include the elements of argument, information management, debate mechanics, team dynamics, and defending positions on a topic. Students develop and refine skills to construct arguments as they discover topics, gather evidence, and gain delivery skills for persuading and debating. 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 (MOTR SBSC 101). 3 Credit Hours.

Communication Between Cultures includes the study of the communication process, perception, verbal/nonverbal symbols, beliefs, values, world view, norms, identity, relationships, and social institutions. Students will examine communication topics such as barriers, language, and culture shock, and develop skills utilizing cultural research and case studies.
Prerequisite: Reading Proficiency.

COM 201. Interpersonal Communication (MOTR COMM 120). 3 Credit Hours.

Interpersonal Communication will take a theoretical case study approach to the 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.

American Correctional System focuses on the history, philosophy, theory, and practice of offender punishment and rehabilitation in the United States. It includes a survey of institutional and community corrections operations and an examination of the constitutional rights of offenders.
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.

Introduction to Criminal Justice is a survey of the history and philosophy of the criminal justice system in America, including its sub-systems (police, courts, and corrections) and their roles and relationships within the system. Emphasis will be given to the system's response to crime in society as well as theories of crime, punishment, and rehabilitation.
Prerequisite: Reading Proficiency.

CRJ 123. Juvenile Justice. 3 Credit Hours.

Juvenile Justice offers an examination of the policies, trends, best practices of the American juvenile justice system, and the function of the juvenile justice agencies.
Corequisite: CRJ 122.
Prerequisite: Reading Proficiency.

CRJ 124. Criminal Law and Procedures. 3 Credit Hours.

Criminal Law and Procedures introduces students to the history and philosophy of common and American statutory laws and procedures and how they function within the criminal justice system.
Prerequisite: Reading Proficiency.

CRJ 128. Crime Prevention. 3 Credit Hours.

Crime Prevention surveys approaches to crime deterrence. Emphasis will be given to the criminal justice system's ability to prevent crime as well as the impact of families, schools, communities, and broader economic and social policies on patterns of offending.
Prerequisite: Reading Proficiency.

CRJ 129. Introduction to Law Enforcement. 3 Credit Hours.

Introduction to Law Enforcement is an examination of American law enforcement on the local, state, and federal levels. Major topics include the historical development of law enforcement, the role of law enforcement in the criminal justice system, laws of arrest, search and seizure requirements and limitations, contemporary police organizations, methods of department operation, and the relationship of the police to the communities they serve.
Prerequisites: Reading Proficiency.

CRJ 206. Management of Human Conflicts. 3 Credit Hours.

Management of Human Conflicts explores the areas of potential conflict that can occur between members of the criminal justice community and various ethnic, racial, and regional subcultures. The course investigates the root causes of the potential conflicts in criminal justice organizations, the community, and occupational subcultures. The course will examine issues of bias, prejudice, and discriminatory practices as factors contributing to conflict. The course will evaluate proactive and reactive intervention, de-escalation, and verbal and non-verbal communication techniques. Students will learn how to keep potential conflicts from escalating and how to foster law enforcement and community relationships. Prerequisite: Prior or concurrent enrollment in CRJ 101 with a grade of "C" or higher, and 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 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 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.

American Sign Language I provides intensive exposure to basic ASL expressively and receptively. This course is an immersive environment language.

The course introduces fingerspelling and numbers to 100. Syntax covers statements, questions, negation, commands, spatial agreement, and modifying verbs. Topics include family, relationships, living arrangements, personal activities, duration and frequency, and giving directions. Discourse includes narration, description, and contrast. Deaf cultural norms include attention-getting, introductions, negotiating a signing environment, and feedback for confirmation or clarification. Creative works include jokes, history, and narratives. Prerequisite: Reading Proficiency.

DCS 105. American Sign Language II (MOTR LANG 106). 5 Credit Hours.

American Sign Language II expands on ASL I and provides intensive exposure to intermediate ASL. This course is an immersive environment language. Topics include advice, opinions, goals, plans, knowledge and abilities, clothing, years, months, time, prices, states, and provinces. Syntax includes negation, locative classifiers, temporal aspects of verbs, role shifts, and perspective shifts. Discourse includes narration, comparison, and requests. Deaf cultural norms include greetings, leave-taking, and biographies of accomplished Deaf individuals. Creative works include fables.

Prerequisites: DCS 104 with grade of "C" or better and Reading Proficiency.

DCS 106. American Sign Language III. 5 Credit Hours.

American Sign Language III provides continued intensive exposure to intermediate American Sign Language, allowing the development of broader and more accurate expressive and receptive skills. Instruction is delivered in total immersion. Emphasis is on receptive skills and text structure (narration, listing, analysis of a whole into parts, comparison and contrast, exemplification, and explanation). Topics include describing and locating items in the house, spatial agreement, temporal aspects of verbs, and 3-digit numbers. The course includes an introduction to literary genres such as handshape stories, cheers and songs, signed poetry, legends, and drama, and to some accomplished Deaf individuals of the past or present. Functional skills include getting and directing attention, controlling the pace of conversation, and asking for clarification of fingerspelling.

Prerequisites: Department permission and Reading Proficiency.

DCS 107. Fingerspelling and Numbers. 4 Credit Hours.

Fingerspelling and Numbers provides the theory and practice necessary for students to recognize and produce the American Sign Language manual alphabet and numeric systems. Instruction is delivered in total immersion. Topics include what must be fingerspelled, what may be fingerspelled, proper names, fingerspelled loan signs, American Sign Language numeric systems, numeral incorporation, and standard fingerspelled abbreviations.

Prerequisites: DCS 104 with a grade of "C" or better and Reading Proficiency.

DCS 108. The Interpreting Profession. 3 Credit Hours.

The Interpreting Profession introduces students to interpreting as an occupation and profession. Topics include a brief history of the profession, models of interpreting, roles and responsibilities of the interpreter, introduction to professional ethics, demand-control schema, interpersonal skills, professional standards, interpreter certification and licensure, and business practices.

Prerequisite: Reading Proficiency.

DCS 109. Grammar and Vocabulary for Interpreters. 3 Credit Hours.

Grammar and Vocabulary for Interpreters instructs students in the principles of vocabulary building and avoiding common grammatical errors. Vocabulary emphasizes Latin and Greek roots, prefixes, and suffixes, English idioms, word denotations, connotations, and usage, equivalent American Sign Language vocabulary, contextual clues to word meaning, and registers of discourse. Grammar review includes parts of speech, syntax, agreement, verb tenses, and drawing inferences from printed texts.

Prerequisites: DCS 106 with a grade of "C" or better (or concurrent), ENG 101 with a grade of "C" or better (or concurrent), 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. American Sign Language Linguistics. 4 Credit Hours.

American Sign Language Linguistics presents the phonetics, morphology, semantics, and syntax of American Sign Language in contrast to English. Topics include origins of American Sign Language, basic linguistic terminology of both languages, common sentence types in both language, and features unique to American Sign Language such as spatialization, directionality, role shifting, classifiers, fingerspelled loan signs, multiple methods of negation, sign variation, and non-manual features.

Prerequisite: Reading Proficiency.

DCS 115. Introduction to Deaf Culture. 3 Credit Hours.

Introduction to Deaf Culture surveys Deaf history, the physiology of the ear, causes and types of hearing loss, social and psychological aspects of deafness, adaptive technology, access to non-Deaf society, historical and current approaches to Deaf education, common features of Deaf culture, and careers related to deafness.

Prerequisite: Reading Proficiency.

DCS 116. American Sign Language Semantics. 3 Credit Hours.

American Sign Language Semantics expands students' knowledge, recognition, and understanding of American Sign Language semantic units (signs and idioms) and their denotations, connotations, and usage. Focus is on advanced intermediate ASL vocabulary (100+ signs), translating ASL idiomatic expressions to equivalent English meaning and usage, and reinforcing common ASL syntactic patterns. Expressive and receptive ASL skills acquired in other courses are reinforced and further developed in the course.

Prerequisites: DCS 105 with grade of "C" or better (or concurrent) and Reading Proficiency.

DCS 118. Sign Seminar. 3 Credit Hours.

Sign Seminar provides additional interactive opportunities for students to expand American Sign Language vocabulary, grammar, syntax, and semantics. Instruction is delivered in total immersion. Students interact with signers from the local Deaf community, on a variety of topics. Instructional approaches include discussion, expansion, and explanation in the target language. Colloquialisms, registers of discourse, and socially restricted vocabulary are included.

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.

American Sign Language IV provides intensive exposure to advanced American Sign Language allowing development of expressive and receptive skills.

Instruction is delivered in total immersion. Receptive skills are emphasized by focusing on signed narrations. Textual structures include analysis, listing, comparison, exemplification, and process analysis.

Prerequisites: DCS 106 with a grade of "C" or better and Reading Proficiency.

DCS 122. Translation. 3 Credit Hours.

Translation is a foundational course that introduces students to the knowledge and skills necessary for converting meaning from one language to another, given ample time and resources. Frozen source texts are converted to frozen target texts. The languages to be translated are American Sign Language and English. Topics require broad extralinguistic knowledge of Deaf and non-Deaf American cultures.

Prerequisites: DCS 106 with a grade of "C" or better (or concurrent), DCS 109 with a grade of "C" or better (or concurrent), and Reading Proficiency.

DCS 206. Consecutive Voice to Sign Interpreting. 3 Credit Hours.

Consecutive Voice to Sign Interpreting is an intermediate skills-based course. Consecutive interpreting is faster than translation and prepares students to succeed in simultaneous interpreting courses. Students practice the skills necessary to interpret from spoken English source text to signed target text, with brief pauses between utterances to process. Target texts include both American Sign Language and Conceptually Accurate Signed English. Source texts increase in length and complexity throughout the semester. Source texts include a variety of topics and discourse patterns.

Prerequisites: DCS 122 with a grade of "C" or better and Reading Proficiency.

DCS 207. Simultaneous Interpreting. 3 Credit Hours.

Simultaneous Interpreting 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. Consecutive Sign to Voice Interpreting. 3 Credit Hours.

Consecutive Sign to Voice Interpreting is an intermediate skills-based course. Consecutive interpreting is faster than translation and prepares students to succeed in simultaneous interpreting courses. Students practice the skills necessary to interpret from signed source texts to spoken English target texts with brief pauses between utterances to process. Source texts include both American Sign Language and Conceptually Accurate Signed English. Source texts increase in length and complexity throughout the semester. Source texts include a variety of topics and discourse patterns.

Prerequisites: DCS 122 with a grade of "C" or better and Reading Proficiency.

DCS 211. Specialized Interpreting. 3 Credit Hours.

Specialized Interpreting surveys settings and topics which may include legal, medical, mental health, employment, religious, platform, rehabilitation, Deaf-Blind, or performing arts. Students are exposed to specialized topics, and experience the interpreting demands inherent in them, for the purpose of exploring professional interests. The course also introduces students to specialized communication techniques such as those used for clients who are Deaf-Blind, oral, or high-visual.

Prerequisites: DCS 220 with a grade of "C" or better, DCS 221 with a grade of "C" or better, and Reading Proficiency.

DCS 212. Deaf History and Culture. 3 Credit Hours.

Deaf History and Culture teaches historical and current values and traditions within the American Deaf community. Values include the importance of community and clubs, approaches to Deaf education, adaptive devices and technology, interpreter services, and the preservation of American Sign Language. Traditions include humor as a coping technique, honoring successful Deaf leaders, role models, and innovators, and behaviors of empowerment. Instruction is delivered in total immersion.

Prerequisites: DCS 121 with a grade of "C" or better and Reading Proficiency.

DCS 213. Professional Issues and Ethics. 3 Credit Hours.

Professional Issues and Ethics explores the role of ethics and decision-making in professional practice. Topics include general theories of ethics, self-analysis of students' current ethical development, ethical standards of the interpreting profession as defined by the Registry of Interpreters for the Deaf Code of Professional Conduct and by Missouri's Ethical Rules of Conduct for Interpreters, application of ethical theories and standards to hypothetical situations, and ethical business practices.

Prerequisites: DCS 108, DCS 121, 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.

Interpreter Seminar provides additional optional time on task for students to continue development of interpreting skills. Students practice sign to voice and voice to sign interpreting, in English, American Sign Language, and Conceptually Accurate Signed English on a variety of topics. Instructional approaches include discussion, expansion, and comparison and contrast. In addition, the course focuses on cross cultural mediation and discourse analysis.

Prerequisites: DCS 206 with a grade of "C" or better, DCS 210 with a grade of "C" or better, and Reading Proficiency.

DCS 216. Educational Interpreting. 3 Credit Hours.

Educational Interpreting presents the principles of interpreting in kindergarten through post-secondary settings. Topics include federal and state laws, deaf children's linguistic, psychological, and social development, strategies for interpreting in educational settings, the interpreter's role in facilitating communication between Deaf individuals and peers, instructors, and staff, and the interpreter as a member of an educational team. Employment aspects of educational interpreting are considered. Students interpret signed and spoken texts from kindergarten through post-secondary topics.

Prerequisites: DCS 211 with a grade 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. Interpreter Field Experience II. 2 Credit Hours.

Interpreter Field Experience II is an intermediate school-to-work course. Students interpret in settings that do not require a professional interpreter. Practicum interpreting is combined with instruction to prepare and debrief assignments. Topics include professional organizations, state certification, qualifications, preparation time and resources, practical situational factors, and professional presentation and behavior. Prerequisites: DCS 211 with a grade of "C" or better, DCS 223 with a grade of "C" or better, and Reading Proficiency

DCS 219. Workplace Learning: DCS. 3 Credit Hours.

Workplace Learning: DCS is the culminating school-to-work course. Students engage in practicum interpreting, applying theory and skills learned in the classroom and previous practicum assignments, and explore career possibilities while supervised by a faculty member. Students accumulate a minimum of 150 hours in the workplace throughout the semester.

Prerequisites: DCS 213 with a grade of "C" or better, DCS 218 with a grade of "C" or better, and Reading Proficiency.

DCS 220. Simultaneous Voice to Sign Interpreting. 3 Credit Hours.

Simultaneous Voice to Sign Interpreting supports students in developing interpreting skills from spoken English source text to signed target text, with a brief continuous processing time. Source texts include a variety of topics and discourse patterns, spoken at approximately 110 words per minute, that increase in length and complexity throughout the semester. Target texts include American Sign Language and Conceptually Accurate Signed English. Students learn techniques to recognize and repair errors, and to analyze and improve interpretations.

Prerequisites: DCS 206 with a grade of "C" or better and Reading Proficiency.

DCS 221. Simultaneous Sign to Voice Interpreting. 3 Credit Hours.

Simultaneous Sign to Voice Interpreting supports students in developing interpreting skills from American Sign Language or Conceptually Accurate Signed English source texts to spoken English target texts, with a brief continuous processing time. Source texts include a variety of topics and discourse patterns signed at the equivalent of approximately 110 words per minute. Source texts increase in length and complexity throughout the semester. Students learn techniques to recognize and repair errors, and to analyze and improve interpretations.

Prerequisites: DCS 210 with a grade of C or better and Reading Proficiency.

DCS 222. Advanced Interpreting. 3 Credit Hours.

Advanced Interpreting prepares students for the state interpreting certification performance evaluation. Students take six mock state tests, including voice to sign transliterating, voice to sign interpreting, sign to voice interpreting, and sight translation. Mock tests are scored in the same manner as the state test. Students self-critique mock tests to analyze successes and challenges and develop action plans to improve interpretations.

Prerequisites: DCS 211 with a grade of "C" or better, DCS 216 with a grade of "C" or better, and Reading Proficiency.

DCS 223. Interpreter Field Experience I. 1 Credit Hour.

Interpreter Field Experience I is an introductory school-to-work course. Classroom instruction is combined with up to 50 hours of field experience. Classroom activities include completing required professional documents, preparing for field experiences, debriefing field experiences, and creating a practicum portfolio. Field experiences include observing, shadowing, and/or interviewing professional interpreters, and the opportunity to interpret assignments for which a professional interpreter is not required by law. Recommended Preparation: Students should have passed the Missouri Interpreter Certification System Test of English Proficiency (TEP). The TEP is a prerequisite for taking the state interpreting skills evaluation. Prerequisites: DCS 211 with a grade 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 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 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.

Introduction to Economics is a study of basic economic concepts, institutions, and policies, (both macroeconomics and microeconomics) necessary for a general understanding of the economy. Students who intend to transfer to a business administration program should take the two-course undergraduate sequence in Economics, ECO 151 and ECO 152, instead of ECO 140.

Prerequisites: MTH 050 with minimum grade of "C", or higher level math course or placement in higher level math course, and Reading Proficiency.

ECO 151. Principles of Macroeconomics (MOTR ECON 101). 3 Credit Hours.

Principles of Macroeconomics 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 050 with a minimum grade of "C", or higher level math course or placement in higher level math course, and Reading Proficiency.

ECO 152. Principles of Microeconomics (MOTR ECON 102). 3 Credit Hours.

Principles of Microeconomics 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 050 with a minimum grade of "C", or higher level math course or placement in higher level math course, and Reading proficiency.

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 134. Electric Circuits. 6 Credit Hours.

Electric Circuits emphasizes basic direct current (DC) circuit configurations, components, and calculations. Content continues with introductory alternating current (AC) circuits and calculations, oscilloscope overview, and transformers. Troubleshooting concepts are addressed along with the theory content. Laboratory experiments reinforce topics.
Prerequisites: MTH 140 or equivalent placement test scores or department approval and Reading Proficiency.

EE 233. Digital Logic. 4 Credit Hours.

Digital computer fundamentals from the systems and circuit approach and an introduction to the basic theory of analog computers. Additional lab hours required.
Prerequisites: EE 130 or departmental approval and Reading Proficiency.

EE 235. Electronic Communications. 4 Credit Hours.

The fundamental theory and application of communications circuits and devices. The study of radar fundamentals, transmission lines, and electromagnetic interference will be included. Additional lab hours required.
Prerequisites: EE 132 and Reading Proficiency.

EE 236. PLC/Programmable Logic Controller. 3 Credit Hours.

This course presents the fundamentals of ladder logic (formerly relay logic) used in modern industrial controllers. Basic elements such as timers, counters, and sequencers are studied, as well as traditional methods of applying them to machine control. Students will program and perform laboratory experiments with programmable logic controllers, using the Allen Bradley SLC 500 family and the Micrologic series, with an introduction to control logic. Additional lab hours required.
Prerequisites: GE 101 or EE 233 or ME 140 or department approval and Reading Proficiency.

EE 242. Introduction to Microprocessors. 3 Credit Hours.

This course will focus on the structure of a microcomputer input/output central processor and control units, memory programming techniques, logic circuits and arithmetic operations. Additional lab hours required.
Prerequisites: EE 130 or department approval and Reading Proficiency.

EE 260. Electronic Project Design and Fabrication. 3 Credit Hours.

This course provides techniques in safety precautions, use of laboratory equipment and component familiarization. Students receive experience in soldering techniques, chassis fabrication such as bending, drilling and punching, wiring, harnessing, and general shop practice. This course also provides the student with specialized training in printed circuit board layout and production procedures. Students are required to select a project which must be assembled on PCB, tested for proper operation, and mounted in an appropriate housing. Students must submit the completed project with documentation of the fabrication procedures for final grade assignment. Additional lab hours required.
Prerequisites: EE 132 or EE 208, EGR 104 and Reading Proficiency.

Emergency Medical Technology (EMT)

EMT 119. EMT Emergency Medical Skills. 1 Credit Hour.

EMT Emergency Medical Skills provides the student with hands-on instruction in the skills necessary to function as an EMT, such as patient assessment, airway maintenance, CPR, and stabilization of injuries. Additional hours required.

Corequisite: 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 100. Engineering Drawing. 3 Credit Hours.

Engineering Drawing 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.
Prerequisites: Reading Proficiency.

EGR 104. Electronic Drafting. 2 Credit Hours.

Electronic Drafting introduces basic drafting with emphasis on technical sketching and lettering. Topics include schematic diagrams, block diagrams, electronic symbols, etched circuit layout, wiring diagrams, mechanical detail, electronic detail, and assembly drawings.
Prerequisite: Reading Proficiency.

EGR 133. Introduction to AutoCAD I. 2 Credit Hours.

Introduction to AutoCAD I covers the fundamentals of the AutoCAD drafting system. Students will learn how to create drawings, setup units, limits, layers, linetypes, and colors. Drawing procedures for typical geometric operations are covered. Special features operations including polylines, blocks, dimensioning, cross-hatching, and plotting are also covered.
Prerequisites: 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 230. Introduction to Revit. 4 Credit Hours.

Introduction to Revit will provide instruction using Revit software for building information modeling (BIM) 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.

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.

Engineering Computer Applications and Design provides the student with basic skills in the use of Computer Aided Drafting (CAD), word-processing, spreadsheets, and computer math software. This course focuses on solving engineering problems through teamwork approaches. Students will learn to conceptualize problems, develop solutions, and present reports.

Prerequisites: MTH 140 or higher with a grade of "C" or better and Reading Proficiency.

ESC 101. Scientific Computer Programming. 3 Credit Hours.

Scientific Computer Programming emphasizes instruction in computer programming language to solve engineering problems. Instruction will include such topics as the study of digital computer systems, programming techniques, program structure, coding, execution, debugging, and verification of programs. Computer programming exercises will be conducted to analyze, interpret, and synthesize engineering data.

Prerequisites: MTH 160 or higher with a grade of "C" or better and Reading Proficiency.

ESC 200. Engineering Circuits I. 4 Credit Hours.

Engineering Circuits I 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.

Prerequisites: PHY 122 with a grade of "C" or better, prior or concurrent enrollment in MTH 230, and Reading Proficiency.

ESC 203. Engineering Statics. 3 Credit Hours.

Engineering Statics is the application of the principles of statics to the solution of engineering problems involving particles and systems in equilibrium. Topics include force systems in equilibrium, centers of gravity, friction, and moments of inertia. Vector analysis techniques will be used where appropriate.

Prerequisites: PHY 122 with a grade of "C" or better and Reading Proficiency.

ESC 204. Engineering Dynamics. 3 Credit Hours.

Engineering Dynamics is the application of the principles of dynamics to the solution of engineering problems involving particle and rigid body motion. Topics include linear motion, curvilinear relative motion, energy, impulse, and momentum. Vector methods are used where appropriate.

Prerequisites: ESC 203 with a grade of "C" or better and Reading Proficiency.

ESC 205. Mechanics of Materials. 3 Credit Hours.

Mechanics of Materials is the 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 with a grade of "C" or better and Reading Proficiency.

ESC 206. Strength of Materials Lab. 1 Credit Hour.

Strength of Materials Lab 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. Students are introduced to formal lab report writing including data presentation, analysis, and drawing conclusions.

Prerequisites: ESC 205 and Reading Proficiency.

ESC 207. Engineering Thermodynamics. 3 Credit Hours.

Engineering Thermodynamics is the study of energy transformations and the relation of energy to the states of matter. The primary focus is on the fundamental laws of thermodynamics and the concepts of analysis of energy conversion and how they are applied in engineering situations.

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. Foundations of College Writing. 3 Credit Hours.

Foundations of College Writing 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.

ENG 050. Academic English for Non-native Speakers I. 6 Credit Hours.

Academic English for Non-native Speakers I is for English language learners who need to develop academic English language skills necessary for success in college courses. Instruction in the course will promote overall English language proficiency, with an intensive focus on fluency in reading and writing.

Prerequisite: Recommendation of ESL staff based upon the ESL Assessment process.

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.

Spoken Communication and Pronunciation is designed for English language learners 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 079. Co-Requisite College Composition Skills. 3 Credit Hours.

Co-Requisite College Composition Skills primarily focuses on supporting the development of writing techniques, developing effective writing styles, writing processes, revision practices, and analytical skills needed for success in English 101.

Corequisite: ENG 101.

ENG 101. College Composition I (MOTR ENGL 100). 3 Credit Hours.

College Composition I focuses on the development of writing techniques. Students will develop effective writing styles, writing processes, revision practices, and analytical skills.

Prerequisites: Placement score or ENG 030 or ENG 070 with a grade of "C" or better or recommendation of department and Reading Proficiency or concurrent enrollment in RDG 079.

ENG 102. College Composition II (MOTR ENGL 200). 3 Credit Hours.

College Composition II 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 101 with a grade of "C" or better and Reading Proficiency.

ENG 103. Report Writing (MOTR ENGL 110). 3 Credit Hours.

Report Writing 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 101 with minimum grades of "C" and Reading Proficiency.

ENG 110. Creative Writing (MOTR PERF 106). 3 Credit Hours.

Creative Writing 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 (MOTR PERF 106D). 3 Credit Hours.

Writing Plays and Film Scripts 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.

Introduction to Fiction 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 with a grade of "C" or better and Reading Proficiency.

ENG 202. Introduction to Poetry and Plays (MOTR LITR 100). 3 Credit Hours.

Introduction to Poetry and Plays is an introductory survey of major works of poetry and drama. Special attention is given to literary terminology and critical analysis. By reading, analyzing, and discussing various works, the student will gain a familiarity with the statements and craft of a diverse 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 210. British Literature I. 3 Credit Hours.

British Literature I provides a survey of British Literature and culture from its beginnings to the 18th century. 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 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.

Women in Literature 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 with C or better and Reading Proficiency.

ENG 217. Major Black Writers (MOTR LITR 105AA). 3 Credit Hours.

Major Black Writers focuses on selected literary works by Black writers across the African Diaspora. 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 with a minimum grade of "C" or better and Reading Proficiency.

ENG 224. Fiction Writing (MOTR PERF 106F). 3 Credit Hours.

Fiction Writing 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 with a grade of "C" or better and Reading Proficiency.

ENG 225. Poetry Writing (MOTR PERF 106P). 3 Credit Hours.

Poetry Writing 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 with a grade of "C" or better 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.

World Literature 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 (MOTR PERF 106NF). 3 Credit Hours.

Writing Memoirs and Creative Nonfiction 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 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.

Elementary French I is a beginning course that presents sentence structure and vocabulary needed to communicate in basic French conversations. Students also learn about the culture of France and other French-speaking nations as they practice listening, speaking, reading, and writing in French.

Prerequisite: Reading Proficiency.

FRE 102. Elementary French II (MOTR LANG 102). 4 Credit Hours.

Elementary French II is a continuation of Elementary French I. The course expands vocabulary and grammar, and encourages communication in French using present and past tenses. Students learn about the culture of France and other French-speaking countries as they practice listening, reading, writing, and speaking in French.

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)

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.

Technical Computer Applications is an introduction to the use of personal computers in technology. Topics of this course include PC hardware, operating systems, word processing, spreadsheets, engineering 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 135. Blueprint Reading for Engineering Technicians. 2 Credit Hours.

Blueprint Reading for Engineering Technicians covers mechanical drawings, electrical drawings, and electrical schematics and introduces Geometric Dimensioning and Tolerancing (GD&T). Topics include reading specifications from the drawing, understanding basic symbols, and interpreting the drawings for producing parts.

Prerequisite: 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.

Product Design and Fabrication presents students with a real-world engineering design challenge. Engineering technology students from a variety of disciplines work together to define problems, evaluate possible solutions, and build a functional prototype.

Prerequisites: ME 151 or EE 134 or EGR 100 or ME 111 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.

Regional Geography 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 promotes an understanding of the world, its different people, places, and regions. The course examines technological innovations, the spread of political/economic ideologies, and contemporary global problems.

Prerequisite: Reading Proficiency or concurrent enrollment in RDG 079.

GEG 103. Physical Geography (MOTR GEOG 100). 3 Credit Hours.

Physical Geography 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.

Earth Science is an introductory geoscience course that 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; and weather and climate change.

Prerequisite: Reading Proficiency or concurrent enrollment in RDG 079.

GEO 101. Earth Science Laboratory (MOTR PHYS 110LES). 1 Credit Hour.

Earth Science Laboratory is an inquiry-based course that includes introductory laboratory exercises in astronomy, geology, oceanography, and meteorology. A field trip to a geological site is a requirement of this course.

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

GEO 103. Environmental Geology (MOTR GEOL 100). 3 Credit Hours.

Environmental Geology is an introductory geoscience course that 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 the 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.

Physical Geology 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 field trip is required.

Prerequisite: Reading Proficiency.

GEO 113. Oceanography (MOTR PHYS 1100). 3 Credit Hours.

Oceanography is an introductory course focusing on the physical, biological, and geological aspects of oceanography. Topics covered include properties of seawater, marine life, plate tectonics, and the relationship between atmosphere and oceans. 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.

Elementary German I is a beginning course that presents sentence structure and vocabulary needed to communicate in basic German conversations. Students also learn about the German culture as they practice listening, speaking, reading, and writing in German.

Prerequisite: Reading Proficiency.

GER 102. Elementary German II (MOTR LANG 106). 4 Credit Hours.

Elementary German II is a continuation of Elementary German I. The course expands vocabulary and grammar, and encourages communication in German using present and past tenses. Students learn about the culture of Germany as they practice listening, reading, writing, and speaking in German.
Prerequisites: GER 101 or 2 or more years of high school German, and Reading Proficiency.

GER 201. Intermediate German I. 4 Credit Hours.

A continuation of GER 102. Emphasis is on speaking German. A review of grammar assists the student in perfecting basic skills. A variety of up-to-date literary and cultural selections are read and form the basis for classroom discussions. Additional lab hours required.
Prerequisites: GER 102 or 3 or more years of high school German and Reading Proficiency.

GER 202. Intermediate German II. 4 Credit Hours.

A continuation of GER 201. Emphasis is on spoken German with continued grammar review. A variety of short stories and contemporary cultural selections are read and discussed in class. Additional lab hours required.
Prerequisites: GER 201 or 4 or more years of high school German and Reading Proficiency.

Global Education (GLE)

GLE 101. Global Education Studies. 1-3 Credit Hours.

This course will present an opportunity for students to travel to and to engage in the direct study of international cultures in order to foster an enhanced sensitivity to, appreciation of, and an understanding of the global community.
Prerequisites: Permission of instructor and Reading Proficiency.

Health Information Technology (HIT)

HIT 101. Medical Terminology 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 constitutional, cultural, economic, institutional, political, and social forces which have shaped United States history. The course begins with the colonial period, runs through the Revolution and Early Republic, including the Constitutional Convention, and concludes with the causes, course, and immediate outcome of the Civil War.

Prerequisite: Reading Proficiency or concurrent enrollment in RDG 079.

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 forces and events which have shaped the United States from the Civil War to the present. It considers constitutional, institutional, cultural, economic, political, social, environmental, and other influences on national development.

Prerequisite: Reading Proficiency or concurrent enrollment in RDG 079.

HST 115. Ancient and Medieval History to 1500 (MOTR WCIV 101). 3 Credit Hours.

Ancient and Medieval History to 1500 is a survey of the Western World 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, and Byzantium; and the contributions of Celtic, Germanic, and other tribal societies to Western Civilization.

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.

Western Civilization from 1500 to the Present 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 (MOTR HIST 101AA). 3 Credit Hours.

African American History through Reconstruction is 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 (MOTR HIST 102AA). 3 Credit Hours.

African American History from Reconstruction to the Present is a survey of African American history from the era of Jim Crow to the present. 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 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 140. Topics in Horticulture. 3 Credit Hours.

Topics in Horticulture is an introduction to new and emerging topics and trends in horticulture. Advances in technology, methods, and subjects that are relevant to the horticulture industry will be introduced and emphasized to students. Recommended Preparation: Computer proficiency and experience in the field of horticulture.

Prerequisite: 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.

HRT 250. Native Landscaping Practices. 3 Credit Hours.

Native Landscaping Practices provides students with hands-on learning in the identification, use, installation, and maintenance of native plants in the landscape. Focus will be on principles of native plant horticulture, planning and design, site evaluation and preparation, problems and solutions with native landscaping, invasive plants, development of rain gardens using native plants, and best management practices. Students will spend seven weeks at Shaw Nature Reserve and nine weeks at STLCC-Meramec. Recommended Preparation: Students should be prepared to be outside for classes.

Prerequisites: HRT 101 or BIO 124, HRT 102, 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.

Introduction to Human Services introduces 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.

Human Services: Theories and Skills introduces students to the theoretical and practical knowledge needed for entry-levels of practice in social work/human services. The course introduces students to the theories of personality development and behavior, assessment process, recording rules, confidentiality issues, treatment planning, and other pertinent information necessary for the entry level human service practitioner.

Prerequisite: Reading Proficiency.

HMS 102. Human Services: Policy and Politics. 3 Credit Hours.

Human Services: Policy and Politics is an analysis of the political process involved in the formulation of social welfare policies from a historical point of view. Students will examine federal, state, and local social welfare programs and how they impact program planning and delivery.

Prerequisite: Reading Proficiency.

HMS 111. Group Practice in Human Services. 3 Credit Hours.

Group Practice in Human Services focuses on the basic issues of group work in Human Services settings. The course will introduce students to the theory of group work and practice theory, including a study of the various types of groups, ethical issues, group leadership and the process of forming and working with groups. Recommended Preparation: Introduction to Human Services.

Prerequisites: 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.

Arts and Ideas in the Ancient World 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 or concurrent enrollment in RDG 079.

HUM 110. The Middle Ages and the Renaissance (MOTR WCIV 101). 3 Credit Hours.

The Middle Ages and the Renaissance 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 116. Art & Ideas: The Reformation through the Enlightenment. 3 Credit Hours.

Art & Ideas: The Reformation through the Enlightenment explores the arts and ideas, including philosophies and religions, that infused and created the cultural periods known as the Reformation, the Baroque, and the Enlightenment. It considers these forms in Western Europe and the Americas, and the ways these arts and ideas represented the visible and/or audible expression of the human condition. Prerequisites: Reading Proficiency or concurrent enrollment in RDG 079.

HUM 117. Art & Ideas: The Industrial Revolution through the Present. 3 Credit Hours.

Art & Ideas: The Industrial Revolution through the Present explores the arts and ideas, including philosophies and religions, that arose in the 19th, 20th, and 21st centuries in Western Europe and the Americas, and the ways in which they represented the visible and/or audible expression of the human condition. Prerequisites: Reading Proficiency or concurrent enrollment in RDG 079.

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 shall complete 50 verified hours of actual writing time during the internship.
Prerequisites: IRT 174 or one test at 200 wpm testimony and Reading Proficiency.

Information Systems (IS)

IS 101. Keyboarding. 1 Credit Hour.

Keyboarding is a skill-development course designed to introduce touch control of the keyboard using proper techniques. Emphasis is on learning the alphabetic, numeric, and symbol keys. Students learn basic techniques to build speed and accuracy. Satisfactory/Unsatisfactory grading.

IS 102. Keyboarding and Formatting. 3 Credit Hours.

Keyboarding and Formatting is a skill-development course in which students utilize proper techniques to develop touch control of the keyboard and apply basic formatting skills to letters, memos, reports, and tables.

IS 109. Proofreading and Editing. 1 Credit Hour.

Proofreading and Editing covers the production of high-quality business communications through proofreading for accuracy in mechanics, format, and content as well as editing documents for correctness.
Prerequisite: Reading Proficiency.

IS 112. Software and Hardware Architecture. 3 Credit Hours.

Software and Hardware Architecture provides 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. Recommended Preparation: Basic computer literacy is expected.
Prerequisites: MTH 160 or MTH 180 (can be taken concurrently), and 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 120. Introduction to Excel. 1 Credit Hour.

Introduction to Excel teaches the fundamentals of creating and managing Excel worksheets and workbooks. Topics include creating cells and ranges, creating tables, applying formulas and functions, and creating basic charts and objects to represent data visually.
Prerequisites: Reading Proficiency.

IS 122. Windows. 3 Credit Hours.

Windows is a skill-development course covering the Microsoft Windows operating system. Topics include file and folder management and organization, hardware management, software management, network connection, system customization, system optimization, and system security.
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.

HTML covers the essentials of creating web pages using Hypertext Markup Language (HTML) and Cascading Style Sheets (CSS). Students will create and edit web pages which include text, hyperlinks, images, and tables. 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 Support - CompTIA A+ Core 1 (Hardware). 3 Credit Hours.

Hardware Support - CompTIA A+ Core 1 (Hardware) covers the theory and hands-on skills necessary to pass the CompTIA A+ hardware (Core 1) 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. Recommended Preparation: 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.

Internet Fundamentals 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: Reading Proficiency.

IS 139. Web Publishing. 3 Credit Hours.

Web Publishing 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.

Graphics for the Web 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. 3 Credit Hours.

Web Development 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 including file formats, platform standards, user-centered navigation, dynamic content such as streaming video/audio, and search engine concepts will be presented.
Prerequisites: IS 153 or IS 167 or IS 187, IS 139, IS 265 (or concurrent), 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.

Web-Based Productivity Applications is a skills-based course covering various Internet applications. Topics include creating, sharing, and editing online files and folders; leveraging social media; managing data and project logistics; and communicating and collaborating with text, audio, and video.
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, 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 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.

Office Technology and Procedures covers concepts and skills of business professionals. Topics include becoming a professional, working ethically, working in teams, being customer focused, improving communication, communicating with technology, planning events, managing physical and electronic records, coordinating travel, understanding financial documents, seeking employment, and leading within an office environment. Prerequisites: IS 152 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 Structured 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 - CompTIA Security+. 3 Credit Hours.

Fundamentals of Information Assurance/Security - CompTIA Security+ 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 the 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.

Systems Analysis and Design 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. Prerequisites: IS 153 or IS 167 or IS 187, IS 139, and Reading Proficiency.

IS 253. 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 creating and deploying Windows programs, form application basics, building user interfaces using basic techniques, .NET fundamentals, basic coding within 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 167 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. Big Data Analytics. 3 Credit Hours.

Big Data Analytics is a continuation of the database design course covering implementation concepts such as n-tier architectures, middleware, SQL and JSON functionality, distributed databases, data warehousing and the Big Data platforms Hadoop and MongoDB. The course focuses on application of both theory and practice. 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 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 280. Python. 3 Credit Hours.

Python focuses on software development problem-solving methodologies utilizing current software design and development tools implemented in the Python programming language. Topics include data structures, program design, pseudocode, language control structures, procedures and functions, error handling, and object-oriented design. Assignments are developed in Python using a current Integrated Development Environment (IDE).

Prerequisites: 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 285. Excel for Data Analytics. 3 Credit Hours.

Excel for Data Analytics prepares students to use Excel to apply statistical techniques to identify hidden patterns in data. Topics include Power Query for data import, pivot tables, what-if analysis, charting, scripting and conditional formatting, data cleansing, reporting, and graphical data visualization with Tableau.

Prerequisites: IS 120, MTH 160 or MTH 180 (can be taken concurrently), and Reading Proficiency.

IS 287. Java Programming II. 4 Credit Hours.

Java Programming II 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 167 or IS 187 or IS 256 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.

C# Frameworks: .NET Web App Framework teaches the .NET Web application framework using C#. 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, including .NET Core and Microsoft Visual Studio. This course aligns with the "Developing ASP.NET MVC Web Applications" certification exam.

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.

Introduction to Cybersecurity 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.

Cisco Networking Academy I: Introduction to Networks 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 three (3) courses in preparation for the Cisco Certified Network Associate (CCNA) certification.

Prerequisite: Reading Proficiency.

IT 102. Desktop Software Support - CompTIA A+ Core 2 (Software). 3 Credit Hours.

Desktop Software Support - CompTIA A+ Core 2 (Software) prepares students to take the current CompTIA A+ software (Core 2) exam. Students will learn to implement, administer, and troubleshoot the Microsoft Windows client operating system. Topics include installation, upgrades, restoration, user profiles and accounts, troubleshooting, operating system security, and the TCP/IP protocol. Windows, Linux, and mobile operating systems are covered. Recommended Preparation: 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. 3 Credit Hours.

Secure E-Commerce examines the principles and techniques for secure electronic commerce. Topics include cryptography, certification authorities, public key infrastructure, biometrics, digital signatures, and legal and national policy issues surrounding e-commerce.

Prerequisites: IS 229 and IS 237, both with a minimum grade of "C" and Reading Proficiency.

IT 201. Cisco Networking Academy II: Switching, Routing, and Wireless Essentials. 5 Credit Hours.

Cisco Networking Academy II: Switching, Routing, and Wireless Essentials focuses on the architecture, components, and operations of routers and switches in a small network. Configuration of routers, switches, and wireless access points for basic functionality will be covered. This is the second of three (3) courses offered as preparation for the Cisco Certified Network Associate (CCNA) certification exam.

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

IT 202. Cisco Networking Academy III: Enterprise Networking, Security, and Automation. 5 Credit Hours.

Cisco Networking Academy III: Enterprise Networking, Security, and Automation focuses on hierarchical network design, Internet Protocol version 4 (IPv4) Open Shortest Path First (OSPF) single area routing, and Quality of Service (QoS) concepts. Configuring and securing enterprise network devices will be more fully developed. Application programming interfaces (APIs) will be introduced, as well as, the configuration management tools that make network automation possible. This is the third of three (3) courses in 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. 3 Credit Hours.

Introduction to Virtualization and Cloud Computing explores the installation, configuration, and management of virtualization tools, including VMware vSphere using ESXi and vCenter Server, 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 with a minimum grade 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.

Elementary Italian I is a beginning course that presents sentence structure and vocabulary needed to communicate in basic Italian conversations. Students also learn about the culture of Italy as they practice listening, speaking, reading, and writing in Italian.

Prerequisite: Reading Proficiency.

ITL 104. Elementary Italian II (MOTR LANG 106). 4 Credit Hours.

Elementary Italian II is a continuation of Elementary Italian I. The course expands vocabulary and grammar, and encourages communication in Italian using present and past tenses. Students learn about the culture of Italy as they practice listening, reading, writing, and speaking in Italian.

Prerequisites: ITL 103 and Reading Proficiency.

Japanese (JPN)

JPN 101. Modern Japanese I (MOTR LANG 105). 4 Credit Hours.

Modern Japanese I is a beginning course that presents sentence structure and vocabulary needed to communicate in basic Japanese conversations. Students also learn about the culture of Japan as they practice listening, speaking, reading, and writing in Japanese.

Prerequisite: Reading Proficiency.

JPN 102. Modern Japanese II (MOTR LANG 106). 4 Credit Hours.

Modern Japanese II is a continuation of Modern Japanese I. The course expands vocabulary and grammar, and encourages communication in Japanese using present and past tenses. Students learn about the culture of Japan as they practice listening, reading, writing, and speaking in Japanese.

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 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 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.

Introduction to Library and Online Research introduces the research process, including strategies and tools recommended for successful college-level work. Students will explore a variety of resources, including the open web, online library 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.

Business Organization and Management is the study of basic managerial concepts, environmental issues, and the management functions of planning, organizing, leading, hiring, and controlling in contemporary organizations.

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.

Principles of Marketing 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, ECO 152, and Reading Proficiency.

Mass Communications (MCM)

MCM 101. Introduction to Mass Communications (MOTR SBSC 100). 3 Credit Hours.

Introduction to Mass Communications 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 or 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 or 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 (MOTR FILM 100). 3 Credit Hours.

Film Appreciation offers an introduction to the art, industry, culture, and experience of movies. Students study a variety of films, contemporary and classic, narrative and non-narrative, American and international.

Prerequisite: Reading Proficiency.

MCM 131. History of Film (MOTR FILM 103). 3 Credit Hours.

History of Film introduces world film history from the origins of motion pictures to contemporary films. Students examine technical, artistic, cultural, and economic aspects of fiction and nonfiction films. Topics include diverse cinematic styles and movements as well as recurring themes.

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.

Prerequisites: MCM 143 or ART 125 or permissions of instructor, and Reading Proficiency.

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 Reading Proficiency.

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 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 parabolas, 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 or MTH 185.)

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). 3 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). 3 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: graphing algebraic, exponential, logarithmic, and trigonometric functions; solving algebraic and trigonometric equations; solving systems of equations; and verifying trigonometric identities. Note: Students will be granted credit for either MTH 185, or MTH 160 and MTH 170.

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.

Introduction to 3-D Solid Modeling for Design teaches 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. This course focuses on Solidworks or Inventor.

Prerequisites: EGR 100 or 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.

Prerequisites: EE 236 or ME 211 both with minimum grades of "B" or department approval, and Reading Proficiency.

ME 242. Mechanics-Dynamics. 3 Credit Hours.

Dynamics extends the study of mechanics from forces and their effects on motionless objects to motion and the forces required to produce motion. Energy, impulse and momentum are included.

Prerequisites: ME 135 and Reading Proficiency.

ME 243. Strength of Materials. 3 Credit Hours.

This course consists of the study of the reaction of materials to tension, compression torsion and flexure. Applications to the design of beams, columns, shafts and fasteners are presented. The students perform various materials tests in a fully-equipped laboratory. Additional lab hours required.

Prerequisites: ME 135 and Reading Proficiency.

ME 244. Mechanical Design I. 3 Credit Hours.

This course applies the principles of engineering graphics to problems dealing with the drawing and design of machines and parts. The emphasis is to produce accurate and complete detail and assembly drawings utilizing the latest industrial drafting procedures and practices which include GD&T methods. Additional lab hours required.

Prerequisites: EGR 100 and Reading Proficiency.

ME 249. Materials and Metallurgy. 3 Credit Hours.

This course is a survey of the sources, preparation, properties and uses of engineering materials. Topics include the following the iron-carbon system, ferrous metallurgy, nonferrous metallurgy, ceramics, plastics, elastomers, composites, and finishes. Practical laboratory activities are performed to clarify and enhance text material. Additional lab hours required.

Prerequisite: Reading Proficiency.

ME 254. Electricity and Controls. 3 Credit Hours.

A basic course in AC-DC electricity and controls for non-electrical students. Study of DC, AC and magnetic circuits used for electric motor drives and transformers introduction to solid state and electromagnetic controls. Laboratory experiments parallel classroom material covered. Additional lab hours required.

Prerequisite: Reading Proficiency.

ME 255. Fluid Power. 3 Credit Hours.

This course is that portion of fluid mechanics which deals with its application and has been termed "Fluid Power." It emphasizes the study of components of hydraulics and pneumatics systems as used for industrial power transmission and control purposes. Additional lab hours required.

Prerequisites: MTH 144 or equivalent and Reading Proficiency.

Missouri Civics Examination (MCE)

MCE 100. Missouri Civics Examination. 0 Credit Hours.

The Missouri Civics Examination is a non-credit course that will provide students with the state mandated Civics Exam, as well as links to study guides and practice tests. Students are able to repeat the exam until they pass with a 70% or higher in order to fulfill the state mandated graduation requirement. Recommended Preparation: HST 101, HST 102, PSC 101, PSC 103, PSC 205.

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. Music Fundamentals (MOTR MUSC 101). 3 Credit Hours.

Music Fundamentals is a survey of the basic elements of music, including musical notation, rhythmic notation, scales, and chords. This course provides a foundation for the creation and evaluation of music.

Prerequisites: Reading Proficiency or concurrent enrollment in RDG 079.

MUS 113. History of Jazz (MOTR MUSC 100J). 3 Credit Hours.

History of Jazz is a review of artists, composers, and other influences associated with the art of Jazz music. It will examine the impact of Jazz on culture in the United States and the world.

Prerequisite: Reading Proficiency.

MUS 114. Music Appreciation (MOTR MUSC 100). 3 Credit Hours.

Music Appreciation 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 associated composers will be used to explore these aspects of music.

Prerequisite: Reading Proficiency or concurrent enrollment in RDG 079.

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.

History of Rock and Roll is a review of artists, composers, and other influences associated with Rock and Roll music. It will examine the impact of Rock and Roll music on culture in the United States and the world.

Prerequisite: Reading Proficiency or concurrent enrollment in RDG 079.

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.

Choir I is the study and performance of appropriate ensemble literature. This course will develop individual and ensemble musical skills including technique, sight reading, intonation, balance, and blend.

Prerequisites: Reading Proficiency.

MUS 132. Orchestra I (MOTR PERF 102O). 1 Credit Hour.

Orchestra I is the study and performance of appropriate ensemble literature. This course will develop individual and ensemble musical skills including technique, sight reading, intonation, balance, and blend.

Prerequisites: Reading Proficiency.

MUS 134. Band I (MOTR PERF 102B). 1 Credit Hour.

Band I is the study and performance of appropriate ensemble literature. This course will develop individual and ensemble musical skills including technique, sight reading, intonation, balance, and blend.

Prerequisites: 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 (MOTR MUSC 103). 3 Credit Hours.

Music History I is a study of music in Western civilization from its origins to the 18th-century. The course includes emphasis on listening to and analyzing the music with score.

Prerequisites: Reading Proficiency.

MUS 212. Music History II (MOTR MUSC 104). 3 Credit Hours.

Music History II is a study of music in Western civilization from the 18th-century to present. The course includes emphasis on listening to and analyzing the music with score.

Prerequisites: 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.

Nursing (NUR)

NUR 151. Fundamentals of Nursing. 7 Credit Hours.

Fundamentals of Nursing is an introduction to the role of the nurse in meeting the needs common to all patients through knowledge, skill, and attitudes essential for the practice of nursing. The course will cover theory, as well as, physical, biological, and behavioral sciences. Co-requisite: NUR 152.

Prerequisites: Enrollment in the Nursing Program and Reading Proficiency.

NUR 152. Nursing Laboratory Practicum I. 1 Credit Hour.

Nursing Laboratory Practicum I allows students to practice nursing skills in the College Nursing Laboratory and reinforces principles introduced in Fundamentals of Nursing.

Corequisite: NUR 151.

Prerequisite: Enrollment in the Nursing Program and Reading Proficiency.

NUR 153. Nursing of Adults and Children I. 9 Credit Hours.

Nursing of Adults and Children I 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.

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.

Nursing Laboratory Practicum II allows students to practice nursing skills in the College Nursing Laboratory and reinforces principles introduced in Nursing of Adults and Children I.

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.

Foundations of Occupational Therapy Assistant I 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 the practice of occupational therapy are taught. (Weekly clinical hours will be arranged).

Prerequisites: Admission to the OTA program, BIO 207, PSY 200, and Reading Proficiency.

OTA 102. Fundamentals of Occupational Therapy Assistant II. 4 Credit Hours.

Fundamentals of Occupational Therapy II provides students with knowledge and beginning skills in occupational therapy treatment related to psychosocial 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 205, all with a minimum grade of "C" and Reading Proficiency.

OTA 103. Adaptive Activities I. 2 Credit Hours.

Adaptive Activities I introduces the student to the therapeutic use of purposeful activities in occupational therapy including performance skill and pattern analysis, occupational profile analysis, contexts and environments, and methods of instruction.

Prerequisites: Admission to the OTA program, BIO 207, PSY 200 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.

Fundamentals of Occupational Therapy III presents the basic principles of assessment, interpretation, and intervention implementation for deficits and performance limitations associated with physical dysfunction due to various diagnoses. The lectures and assignments are designed to enhance the clinical reasoning skills necessary for good client-centered decision-making.

Corequisite: OTA 208.

Prerequisites: OTA 102, OTA 104, OTA 207, BIO 208, BIO 209 and SOC 101 with minimum grades of "C" or better, and Reading Proficiency.

OTA 204. Fundamentals of Occupational Therapy IV. 4 Credit Hours.

Fundamentals of Occupational Therapy Assistant IV provides the student with a foundation in motor development as a basis for selecting treatment techniques and outcomes for the pediatric population. Students are given the opportunity to explore evaluation and treatment procedures in pediatrics, including developmental and perceptual motor skills, observation, screening, assessment, self-care, design, and use of adaptive equipment along with play/leisure 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.

Health and Disease provides an overview of disease conditions typically encountered in occupational therapy practice. Etiology, symptoms, and the physical as well as psychological reactions to these conditions are explored, along with basic influences contributing to healthy living. There will be an emphasis on recognizing and using appropriate medical terminology and the role and function of the occupational therapy assistant within the treatment process. Prerequisites: BIO 207, OTA 101, OTA 103, PSY 205, all with a minimum grade of "C" and Reading Proficiency

OTA 208. Adaptive Living Skills. 2 Credit Hours.

Adaptive Living Skills allows students hands-on practice with occupation-based intervention principles that are used to improve occupational performance affected by physical and/or cognitive dysfunction. The focus of this course is to gain entry level occupational therapy assistant skills needed to select and implement strategies that restore identified deficits in occupational performance - to grade and/or adapt activities, modify environments, and use adaptive equipment and assistive technology to enhance occupational performance (i.e. activities of daily living, functional mobility, community mobility, work, leisure, sleep/rest, education, etc.) 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.

The Management of Occupational Therapy explores the roles of the occupational therapy assistant in health care delivery. Topics include current trends, documentation, reimbursement, credentialing, ethical standards, Total Quality Management (TMR), ethical issues, multicultural diversity, occupational therapist and occupational therapy assistant collaboration and supervision, interprofessional team collaboration, and evidence-based practice.

Prerequisites: OTA 102, OTA 104, OTA 207, SOC 201, BIO 208, and BIO 209 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 with a "C" or higher 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 1 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.

Introduction to Philosophy is an examination of philosophical topics such as the origins and limits of knowledge, the mind-body relation, standards of morality, freedom of will, and the nature and existence of God. The course incorporates both classical and contemporary readings.

Prerequisite: Reading Proficiency or concurrent enrollment in RDG 079.

PHL 102. Introduction to Logic (MOTR PHIL 101). 3 Credit Hours.

Introduction to Logic includes the methods for constructing and evaluating deductive and inductive arguments. The course may include techniques of both traditional (syllogistic) and symbolic logic. Aspects of informal logic will also be covered.

Prerequisite: Reading Proficiency.

PHL 103. World Religions (MOTR RELG 100). 3 Credit Hours.

World Religions is an introductory course that examines the nature, function, history, and content of religions in the human experience and culture. The current status of world religions such as Buddhism, Christianity, Confucianism, Hinduism, Islam, and Judaism are also examined.

Prerequisite: Reading Proficiency or concurrent enrollment in RDG 079.

PHL 104. Ethics (MOTR PHIL 102). 3 Credit Hours.

Ethics 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 or concurrent enrollment in RDG 079.

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 (MOTR PHIL 102P). 3 Credit Hours.

Business Ethics is an examination of the ethical dimensions of the world of business from a philosophical perspective. Using theories drawn from philosophy, students will evaluate business issues and case studies with respect to such topics as personal, professional, 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 and 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. Addition fee is required to obtain certification.

PE 122. Dance Aerobics I. 1 Credit Hour.

This course is an introduction to continuous rhythmic movements and steps to encourage this enjoyable physical activity to be part of a healthy lifestyle. Workout sessions incorporate various genres of music designed for all fitness levels to improve cardio-respiratory fitness, flexibility, muscle toning and strengthening, and coordination.

PE 123. Dance Aerobics II. 1 Credit Hour.

This course is a continuation of Dance Aerobics I (PE 122) with emphasis on strengthening the cardio-respiratory system, improving muscle tone and flexibility, and promoting weight loss through rhythmic movements and steps. Various genres of music accompany workouts, which include floor aerobics, step aerobics, and low-and high-impact movements.

Prerequisite: PE 122.

PE 126. Fencing I. 1 Credit Hour.

This is an introductory course that focuses on basic fencing rules and skills including attacks, parries, strategy, and rules. Intraclass competition is performed.

PE 127. Fencing II. 1 Credit Hour.

This course is a refinement of techniques learned in Fencing I. Foil and Epee, advanced parries, attacks and electric equipment are introduced. Intraclass competition is performed.

Prerequisite: PE 126.

PE 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 is 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 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 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.

Physical Science is a survey of the fundamental principles of physics and chemistry with applications to geology, astronomy, and meteorology. Topics include motion, energy, heat, temperature, waves, and electricity. The course is designed for students in non-science and career curricula.

Prerequisites: MTH 050 or higher with a minimum grade of "C" and Reading Proficiency.

PSI 111. Introduction to Astronomy I (MOTR ASTR 100). 3 Credit Hours.

Introduction to Astronomy I presents the fundamental concepts and principles 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 050, or test into MTH 140, and Reading Proficiency.

PSI 115. Observational Astronomy (MOTR ASTR 100L). 1 Credit Hour.

Observational Astronomy presents both astronomical viewing and laboratory experimentation. Through direct observation, students will become familiar with constellations, planets, moons, stars, clusters, and nebulae, and will learn how to use small telescopes and other simple equipment. This course may accompany PSI 111 (Introduction to Astronomy I) or may be taken independently. No prior knowledge of astronomy is necessary.

Prerequisite: Reading Proficiency.

PSI 123. Meteorology (MOTR PHYS 110AS). 3 Credit Hours.

Meteorology 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 is 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 allow 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 212 with a grade of "C" or better and Reading Proficiency.

PTA 211. Physical Agents. 3 Credit Hours.

This course provides PTA students with scientific knowledge and clinical application skills required to safely and efficiently provide treatment under the direction of a PT with the following physical agents thermal agents, compression therapies, traction, cryotherapy, hydrotherapy, light and sound agents, and electrotherapeutic modalities. Additional lab hours required.

Prerequisites: PTA 105 with a grade of "C" or better and Reading Proficiency.

PTA 212. Therapeutic Exercise and Rehabilitation Concepts I. 7 Credit Hours.

This course covers data collection and intervention techniques used by the PTA under the direction and supervision of the PT in the treatment of arthritis, postural abnormalities, extremity and spinal dysfunctions, abnormal gait, cardiopulmonary conditions, and amputations. The principles and application of prosthetic and orthotic devices will also be included. Additional hours required.

Prerequisites: PTA 105 with a grade of "C" or better and Reading Proficiency.

PTA 213. Therapeutic Exercise and Rehabilitation Concepts II. 2 Credit Hours.

This course includes data collection and treatment intervention techniques performed by the PTA under the direction and supervision of the PT for pediatric and neurological conditions. The role of the PTA in assisting the PT to identify community integration barriers for clients with physical disabilities will also be discussed. Additional lab hours required.

Prerequisites: PTA 212 with a grade of "C" or better and Reading Proficiency.

PTA 214. Data Collection and Intervention Techniques for the PTA. 4 Credit Hours.

An introductory course on data collection and intervention techniques used by the PTA which includes vital signs, sterile techniques, dressing changes, emergency procedures, goniometry, muscle testing, cardiovascular response to exercise, and gait. In addition the basic concepts of exercise and techniques to develop flexibility, strength, power, and endurance will be taught. Additional lab hours required.

Prerequisites: BIO 209 with a grade of "C" or better or concurrent enrollment in BIO 209 and Reading Proficiency.

PTA 215. Medical Conditions in Rehabilitation. 3 Credit Hours.

Medical Conditions in Rehabilitation is an overview of disease conditions commonly seen for treatment in physical therapy departments.

Prerequisites: BIO 208 with a grade of "C" or better and Reading Proficiency.

PTA 216. Clinical Education IIA. 4 Credit Hours.

Clinical Education IIA provides students with an 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 104 with a grade of "S" and Reading Proficiency.

PTA 217. Clinical Education IIB. 4 Credit Hours.

Clinical Education IIB will provide students with an 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 104 with a score of "S" 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.

Engineering Physics I covers topics in units, vectors, motion in one dimension and two dimensions, Newton's Laws of Motion, forces, work, kinetic energy, potential energy, momentum, collisions, rotational motion, fluid, gravitation, temperature, and heat. The course is the first semester of a two-semester calculus-level physics sequence.

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 endemic to United States political culture, government institutions and processes, as well as citizens' movements are discussed in a modern framework.

Prerequisite: Reading Proficiency or concurrent enrollment in RDG 079.

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.

PSC 211. United States Foreign Policy, 1898 to Present. 3 Credit Hours.

Surveying developments from the late nineteenth century to present, United State Foreign Policy explore the historical and theoretical context of how U.S. observers have improvised a national relationship with the world. Topics addressed will include, among other, the origin and aftermath of two world wars, the Cold War and its demise, and the development of security, economic, and humanitarian crises in the post-Cole War Period.

Prerequisite: Reading Proficiency.

PSC 213. Introduction to Comparative Politics (MOTR POSC 202). 3 Credit Hours.

Introduction to Comparative Politics introduces students to western and non-western systems. It examines similarities and differences in the basic political ideologies, structures, economies, social institutions, and governmental processes of developed and developing countries. It also provides frameworks for understanding the cultures of the world that are the basis for formal economic and political institutions. In addition, the course examines the role of non-state and trans-national institutions in shaping national policies. It uses case studies from Africa, Asia, Latin America, as well as Europe, to enhance student understanding of comparative politics.

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.

General Psychology is an introduction to the scientific study of human behavior. In this course, students gain insights into their own and others' behavior. A variety of topics relating to psychological theories, concepts, methods, and research findings are covered.

Prerequisite: Reading Proficiency or concurrent enrollment in RDG 079.

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.

Human Growth and Development is a survey of the basic progression of human development through the life cycle. 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.

Introduction to College Reading is designed to develop college-level reading comprehension, vocabulary, and study skills. Co-requisite: STR 050.

RDG 079. Academic Literacy. 3 Credit Hours.

Academic Literacy is a developmental course emphasizing reading in the content areas. This course is designed for students who wish to improve reading skills for success in college-level courses.

Prerequisite: Placement score and concurrent enrollment in ACC 100, ART 100, AUT 158, BIO 109, BIO 111, CHM 101, DIE 100, EE 130, EGR 100, ENG 101, GEG 101, GEO 100, HRT 101, HST 101, HST 102, HUM 109, ME 154, MUS 114, MUS 128, PHL 101, PHL 103, PHL 104, PSC 101, PSY 200, SOC 101, or THT 101.

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 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)

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 Patterns. 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 163. Insulator Joint Apprenticeship Program: Workplace Learning II. 5 Credit Hours.

Insulator Joint Apprenticeship Program: Workplace Learning II will allow students to have the apprentice experience on actual work sites, understand and extend the learned concepts from the classroom and to continue education in the insulation industry through mentoring with journey persons. Prerequisite: SKT 160.

SKT 164. Insulator Joint Apprenticeship Program: Workplace Learning III. 6 Credit Hours.

Insulator Joint Apprenticeship Program: Workplace Learning III allows students to expand on the apprentice experience on actual work sites and to extend the learned concepts from the classroom. Students work side by side in the field with journeymen. Prerequisite: SKT 163.

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.

SKT 166. Floor Layers Joint Apprenticeship: Apprenticeship Orientation. 2 Credit Hours.

Floor Layers Joint Apprenticeship: Apprenticeship Orientation is part of the Floor Layers Joint Apprenticeship Program Curriculum. This class is designed as an orientation to the Floor Layers’ Joint Apprenticeship Program (FLJAP), the Carpenters’ Regional Council, as well as the role of the floorlayer on construction sites. Students will receive an Occupational Safety and Health Administration (OSHA) 10 hour construction safety certification card. Basic safety and operation of hand and power tools as well as basic construction site safety will be covered.

SKT 167. Floor Layers Joint Apprenticeship: Hardwood II. 3 Credit Hours.

Floor Layers Joint Apprenticeship: Hardwood II provides instruction, class exercises, and assessment by testing participants in the removal of existing floor coverings and debris from the job site, and diagonal installation of a prefinished hardwood floor with a specified border surrounding this area. Layout procedures in accordance with industry standards and installation techniques and processes associated with the NWFA (National Wood Flooring Association) are taught.

SKT 168. Floor Layers Joint Apprenticeship: Carpet I – Basic Installation and Seaming Methods. 2 Credit Hours.

Floor Layers Joint Apprenticeship: Carpet I – Basic Installation and Seaming Methods is part of the Floor Layers Joint Apprenticeship Program Curriculum. This course is designed to introduce students to the materials and basic skills needed to install track strip, metal transitions, carpet cushion, and the carpet seam making processes for carpet constructions.

SKT 169. Floor Layers Joint Apprenticeship: Ceramic Tile I – Wall Tile Layout and Application. 2 Credit Hours.

Floor Layers Joint Apprenticeship: Ceramic Tile I – Wall Tile Layout and Application is part of the Floor Layers Joint Apprenticeship Program Curriculum. This course is designed to introduce students to basic wall tile and CBU vertical layout, installation techniques including vapor barriers, tile identification, adhesive identification, and safe hand tool and power tool use.

SKT 170. Laborer Joint Apprenticeship Program: Power Tools II. 3 Credit Hours.

Laborer Joint Apprenticeship Program: Power Tools II is the introductory course in the Laborer’s AGC Training Council Apprenticeship program. This course will focus on the continued proper use of gas powered tools.

SKT 174. Insulator Joint Apprenticeship Program: Workplace Learning IV. 6 Credit Hours.

Insulator Joint Apprenticeship Program: Workplace Learning IV allows students to demonstrate the skills they have learned through the apprenticeship program. Students will work alongside journeymen on actual work sites in real projects. Prerequisite: SKT 164.

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.

Introduction to Sociology 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 or concurrent enrollment in RDG 079.

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. The Spectrum of Drugs and Society. 3 Credit Hours.

The Spectrum of Drugs and Society will focus on information on addictive substances, behavioral effects, and pharmacotherapy options for drugs of abuse. It will examine institutional and structural practices that reinforce addiction. It also examines societal views of addicts and implications thereof. Topics will also include the physiological processes and impacts of psychoactive drugs on the individual including risk factors related to addiction, acute and chronic health problems and communicable diseases. Prevention and harm reduction, including strategies for communities, will be explored. The economic and social impacts of addiction are covered as well as local community resources.

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 (MOTR SOCI 201). 3 Credit Hours.

Social Problems 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 with a grade of "C" or better, and Reading Proficiency.

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. Substance Use, Abuse, and Dependence. 3 Credit Hours.

Substance Use, Abuse, and Dependence explores historical and sociological perspectives on the use, abuse, and dependence of psychoactive drugs. It presents an overview of the physiological processes and impacts on the person including risk factors related to addiction. The course is designed to understand the interdisciplinary approach to treatment and prevention, using tools which are sensitive to age, culture, and gender. Identifying the impact of substance abuse in current life situations and the effects of continued use and abuse is also explored.

Prerequisite: Reading Proficiency.

SOC 212. Race and Ethnicity (MOTR SOCI 202). 3 Credit Hours.

Race and Ethnicity explores the social and historical processes that shape each concept, 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 with a grade of "C" or better and Reading Proficiency.

Spanish (SPA)

SPA 101. Elementary Spanish I (MOTR LANG 103). 4 Credit Hours.

Elementary Spanish I is a beginning course that presents sentence structure and vocabulary needed to communicate in basic Spanish conversations. Students also learn about the culture of Spain and Latin America as they practice listening, speaking, reading, and writing in Spanish.

Prerequisite: Reading Proficiency.

SPA 102. Elementary Spanish II (MOTR LANG 104). 4 Credit Hours.

Elementary Spanish II is a continuation of Elementary Spanish I. The course expands vocabulary and grammar, and encourages communication in Spanish using present and past tenses. Students learn about the culture of Spain and Latin America as they practice listening, reading, writing, and speaking in Spanish.

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. 155 lab/clinical hours. 64 open lab hours.

Corequisite: ST 108 to be taken concurrently with ST 105.

Prerequisites: Must be enrolled in the Surgical Technology program and Reading Proficiency.

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, and Reading Proficiency.

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.

Corequisite: ST 128.

Prerequisites: ST 120, ST 122 with minimum grades of "C", BIO 207 with a minimum grade of "C" or permission of program director, and Reading Proficiency.

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.

Prerequisites: Current enrollment in the Surgical Technology Program, ST 120 with a minimum grade of "C", and Reading Proficiency.

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 or concurrent enrollment in RDG 079.

THT 102. Stagecraft (MOTR PERF 106). 3 Credit Hours.

Stagecraft provides study in the technical areas of theatrical production, with focus on scenery construction and scene painting. Students will learn the processes and tools needed for proper construction and painting of a set.

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 (MOTR PERF 100). 3 Credit Hours.

Acting I provides an introduction to the fundamentals of training for the beginning actor. Emphasis is placed on the development of the actor's instrument for the stage. Acting and improvisational exercises as well as script analysis will be employed toward scene work and monologue study.

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

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Doris Graham, Ph.D., Subdistrict 1

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Anne Adams Marshall, Subdistrict 3

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Chancellor

Jeff L. Pittman, Ph.D., Chancellor

College Administration

Code	Title	Credit Hours
	Jeff L. Pittman, Ph.D., Chancellor	
	Andrew Langrehr, Ph.D., Vice Chancellor for Academic Affairs	
	Christine Davis, Ed.D., Vice Chancellor of Student Affairs	
	Paul Zinck, M.B.A., Vice Chancellor of Finance and Administration	
	Keith R. Hacke, M.S., Chief Information Officer	

Florissant Valley

Academic/Professional Staff (p. 189) Student Affairs (p. 189) Faculty (p. 190)

Academic/Professional Staff

Code	Title	Credit Hours
Chief Campus Academic Officer		
	Elizabeth Gassel Perkins, Ed.D., Campus President and Chief Academic Officer	
Academic Deans		
	Janice Nesser-Chu, M.A., Dean, Liberal Arts	
	Stephen White, Ed.D., Dean, STEM	
Academic Success and Tutoring		
	Fran Hooker, M.A., Manager	
Business Services		
	Jennifer Orzel, Supervisor	
Campus Auxiliary Services		
	Julie T. Stillman, B.A., Manager	
Campus Police		
	Terri Buford, Lieutenant	
Center for Plant and Life Sciences		
	Elizabeth Boedeker, M.S., District Director, CPLS	
Dual Credit/Dual Enrollment		
	Eboni Buckels, Coordinator	
Facilities		
	Jeffrey Smith, Manager of Facilities and Physical Plant	
Information Technology		
	Mea Hampton, Manager	
Instructional Resources		
	June Williams, Manager, Campus Library-FV	
Marketing and Communications		
	Shantana T. Stewart, Campus Marketing and Communications Coordinator	

Student Affairs

Code	Title	Credit Hours
Campus Vice President of Student Affairs		
	Deborah Carter, MAT, Campus Vice President of Student Affairs	
Academic Advising		
	Cheryle Tucker, M.S., Manager	
	Maurice Davis, M.A., Academic Advisor	

Ivory Hill, M.A., Academic Advisor
Jonathan Howard, M.A., Academic Advisor
Zinkenyu Knight, M.S., Academic Advisor
Robert Miller, B.S., Academic Advisor
Angie Seigler, M.Ed., Academic Advisor
Susan Watkins, M.Ed., Academic Advisor

Access Office

Amy Bird, M.Ed., Manager
Regina Driskill, A. A. A., Assistant Interpreter Coordinator
Geoffrey Littleton, B.A., Specialist
Mary Wagner, M.A., Specialist

Admissions

Chadwick Shade, M.A., Manager

Campus Life

Angela Kang, M.Ed., Manager
Dwayne Morgan, M.S.A., Coordinator, Student Orientation and Transition

Career Development

Susan Ryan, M.Ed., Career Specialist

Counseling Faculty

Emily Lasek, M.A., L.P.C., N.C.C., Professor
Pamela Wilson, M.Ed., Associate Professor

Financial Aid

Shawn Harrell, Ed.D., Lead Financial Aid Campus Manager
Willie Banks, B.S., Financial Aid Counselor
Arika Biney, Financial Aid Counselor
Ella R. Jones, Financial Aid Counselor
DeAnna Washington, Financial Aid Counselor

Student Assistance Program

Danielle Lusk, B.A., Coordinator

Testing Center

Patti Barnes, M.Ed., Manager
Amy McMurray, M.A., Assessment Specialist

TRiO

Kalisha Turner, Ed.D., Coordinator
Melphina Amos, M.A., Project Associate II
Rashaun Henry, MPA., Project Associate II

Faculty

Code	Title	Credit Hours
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Accounting

	Elida Kraja, M.A.S., Professor	
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Art

	Christine Giancola-Youngberg, M.A., Assistant Professor	
	Julia Jenner, M.F.A., Associate Professor	
	Robert Langnas, M.F.A., Professor	
	Elizabeth Pilarcik-Tellez, M.F.A., Assistant Professor	
	Michael Quintero, M.F.A., Professor	

Behavioral Health Support

	Jenna Mueller, M.A., Assistant Professor	
--	--	--

Biology

	Kimberly Barr, M.S., Instructor II	
	Neelima Bhavsar, Ph.D., Professor	
	Scott Gevaert, Ph.D., Associate Professor	
	Keri Janssen, M.S., Assistant Professor	
	Greg Langland, Ph.D., Assistant Professor	
	Mark Manteuffel, Ph.D., Professor	
	Aundrea Warren, M.S., Assistant Professor	

Business Administration

	Lynn Selders, M.B.A., C.P.A., C.G.M.A., Assistant Professor	
--	---	--

Chemistry

	Donna Friedman, Ph.D., Professor	
	Suzanne Saum, Ph.D., Professor	

Child and Family Development

	Jasmin Marshall, M.S., Assistant Professor	
	Carol Nixon, B.S., Assistant Professor	

Communication Arts

	Amy Brown-Marshall, M.A., Assistant Professor	
--	---	--

Criminal Justice

Deaf Communications

	Dan Betzler, M.A., Professor	
	John Eric Driskill, M.Ed., Associate Professor	

Engineering and Technology

	Carl Fischer, B.S., Associate Professor	
	David Kobe, B.S., Assistant Professor	
	Thomas McGovern, M.S., Associate Professor	
	Amy Sherwin, M.S., Associate Professor	

English

	Ronald Ebest, Ph.D., 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	

Foreign Languages

	Kelly Mueller, M.A., Associate Professor	
--	--	--

Health and Wellness

	Wayne Bryan, M.S., Assistant Professor	
--	--	--

History

	Linda Collins, Ph.D., Professor	
	Jennifer Medeiros, Ph.D., Professor	

Human Services

	Howard Rosenthal, Ed.D., L.P.C., Professor	
--	--	--

Information Systems

	David Doering, Ed.D., Associate Professor	
	Phyllis Davis, B.S., Associate Professor	

Library Services

	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., Assistant Professor
Brian Bozek, M.S., Professor
John C. Hake, M.A., Assistant Professor
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
Patricia A. Suess, Ph.D., Professor
Music
Paul Higdon, D.M.A., Professor
Nursing
Jordan Cooper, Instructor II
Maria Darris, R.N., M.S.N., Assistant Professor
Paula Linden, R.N., M.S.N., Assistant Professor
Candace Richie, R.N., M.S.N., Instructor II
Ellen Stillwell, R.N., M.S.N., Assistant Professor
Philosophy and Humanities
Aaron R. Champene, Ph.D., 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
Carolyn Fuller, M.A., Assistant Professor
Rachel Martin, M.A., Assistant Professor
Sociology and Anthropology
Andrea Waggener, 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. 191) Student Affairs (p. 191) Faculty (p. 192)

Academic/Professional Staff

Code	Title	Credit Hours
Chief Campus Academic Officer		
	Julie Fickas, Ed.D., Campus President and Chief Academic Officer	
Academic Deans		
	Debra Harper-LeBlanc, Ph.D., Dean, Arts and Communications, Social and Behavioral Sciences, and Humanities; District Dean, Human Services and Addiction Studies	
	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
Academic Support Center
Nicole Myers, M.Ed., Manager
Business Services
Ena Primous, B.S., Manager, Business Services
Campus Auxiliary Services
Ellen Gough, Manager
Campus Police
Adis Becirovic, Lieutenant
David Berryman, Lieutenant
Center for Teaching and Learning
Layla Goshey, M.F.A., Assistant Professor, Coordinator
Dual Credit/Dual Enrollment
Tanya Wilson, Coordinator
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
Campus Vice President of Student Affairs		
	Franklyn Taylor, Ed.D., Campus Vice President of Student Affairs	
Academic Advising		
	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	
Access Office		
	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	
Admissions and Enrollment Services		
	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
Campus Life
Donivan Foster, M.Ed., Manager, Campus Life
Dedra Duncun, B.S., Coordinator, Student Orientation and Transition
Career and Employment Services
Davis Moore, M.Ed., Manager, Career and Employment Services
Hester Owens, B.S., Specialist
Counseling Faculty
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
Testing Center
Sanela Bejdic, Manager, Testing Center
Wanda Blalock, Assessment 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
Art		
	Matt Isaacson, M.F.A., Professor	
	Jamie Kreher, M.F.A., Associate Professor, Chair, Fine and Performing Arts	
	Yingxue Zuo, M.F.A., Professor	
Automotive Technology		
	Joseph Jackson, B.S., M.Ed., Associate Professor, Program Coordinator	
	Rick Anthes, B.S., Associate Professor	
	Josh Walker, B.S., Assistant Professor	
Biology		
	Teresa Alvarez, Ed.D., Professor, Chair, Science	
	Thomas Frison, M.A., M.S., Assistant Professor	
	William Huber, M.S., D.C., Professor	
	Michelle LaPorte, M.S., Assistant Professor	
	Angela NewMyer, M.S., Associate Professor	
Business Administration and Economics		
	Jeffrey Jones, M.B.A., Professor	
	David A. Juriga, CPA, M.B.A., Professor	
	Nicholas Peppes, B.S., M.B.A., Professor	
	Aaron Reeves Jr., M.B.A., Professor	
Chemistry		
	Joe Wilson, Ph.D., Professor	
Clinical Laboratory Technology		

Angela C. Njoku, M.S., M.T., (ASCP), Professor, Program Coordinator
Communications
Sandra Osburn, Ed.D., Professor
Amber Schmisser, M.A., M.S.E.D., Associate Professor
Criminal Justice
Jennifer Moldthan-Lorentz, Assistant Professor
Dental Assisting
Deborah Bush-Munson, M.S., CDA, Associate Professor/Program Coordinator
Hadeel Sharhan, Instructor I
Dental Hygiene
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 / Program Coordinator
James Wendling, M.Ed., R.D.C.S., Assistant Professor
Emergency Medical Services & Fire Protection
Steve Newcomb
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., Professor
Keith C. Hulse, 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, Associate Professor
Health Information Technology
Janet Ayres, J.D., RHIA, CHPS, Associate Professor
Patricia Sherman, M.Ed., RHIA, Assistant Professor, Program Coordinator
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, Professor, Program Coordinator
Humanities
Human Services
Angela Roffle, M.S.W., Associate Professor, Chair
Information Systems
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
Craig Chott, B.S., CISSP, Associate Professor
Paul T. Daniel, B.S., B.A., Associate Professor
William Hocker, B.A., M.P.S., CompTIA (Network+, Storage+) CCNA, CCAI (IT Essentials, CCNA R&S, CCNA Cyber Ops), CCNA R&S, CCNP Voice, Assistant Professor
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
Jason Boehm, M.S., Associate Professor
Brian D. Carter, M.S., Assistant Professor
Deborah Char, M.A.T., Assistant Professor
Judy V. Clark, M.S., Instructor II
Brandon Englert, M.S., 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
Anne Ross, M.A., Associate Professor
Music
Thomas A. Zirkle, D.M.A., Professor
Nursing
LeaAnne Banholzer, Assistant Professor
Devon Bennett, Instructor II
Nadja Caus, R.N., M.S.N., Assistant Professor
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, Associate Professor
Stephen Pitchford, R.N., M.S.N., Assistant Professor
Kathleen Rizzo, R.N., M.S.N., Professor
James Shockley, R.N., M.S.N., Associate Professor
Clarissa Swope, R.N., M.S.N., Instructor II
Andrea (Bobbie) Weber, D.N.P., R.N., Associate Professor
Philosophy
William Hartmann, M.A., Professor
Physical Science and Physics
Jonathan Morris, Ph.D., Professor
Political Science
Ssebunya (Edward) Kasule, Ph.D., Associate 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

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

Teacher Education

Lori Orlando, Ed.D., Professor

Theatre

Alex Saccavino, M.A., Manager

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. 193) Student Affairs (p. 194) Faculty (p. 194)

Academic/Professional Staff

Code	Title	Credit Hours
	Chief Campus Academic Officer	
	Feleccia Moore-Davis, Ph.D., Campus President and Chief Academic Officer	

Academic Deans

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

Campus Auxiliary Services

Rodney Jones, Manager, Campus Auxiliary Services
--

Campus Police

David Berryman, Lieutenant
Center for Teaching and Learning
Denise Sperruzza, M.A., Professor, Coordinator
Dual Credit/Dual Enrollment
Diana Johnson, Coordinator
Facilities
Dennis Dill, M.B.A., Interim Manager
Kelly Crandall, Supervisor, Facilities
Suzann Anders, Supervisor, Housekeeping
Academic Success & Tutoring
Cindy Clausen, M.A., Manager
Libraries
Kirsten Abotsi, M.A., M.A.L.S., Lead Librarian, Library Systems
Carol Bennett, M.S., Lead Librarian, Collections Management
Kim Linkous, B.S., Library Associate
Sheila Ouellette, M.L.S., Lead Librarian, Acquisitions
Sarah I. Smith, M.A., District Dean of Libraries
Roger Thomas, B.S., Manager, Campus Library
Annette Lukacz, M.L.S., Library Associate
Marketing and Communications
Ashley Bain, Campus Marketing and Communications Coordinator

Student Affairs

Code	Title	Credit Hours
Campus Vice President of Student Affairs		
	Keith Robinder, Ph.D., Campus Vice President of Student Affairs	
Academic Advising		
	Lisa Gillis-Davis, M.Ed., Manager, Student Success Manager	
	Dana Austin-Cooper, B.A., Student Success Advisor	
	Mysha Clincy, M.B.A., Student Success Advisor	
	Sebrina Colvin, M.A. Student Success Advisor	
	Nicole Cornwell, M.S., Student Success Advisor	
	Johna Grier, B.S., Student Success Advisor	
	Elizabeth Higgins, B.S., Academic Advisor	
	Suzzie Schweigert, B.A., Student Success Advisor	
	Jean Kennedy, B.A., Student Success Advisor	
	Tracy Lampkins, M.S., Student Success Advisor	
	Lynne Ludens, B.A., Student Success Advisor	
	Lorri Milward, M.Ed., Student Success Advisor	
	Tracy Rankin, B.S., Student Success Advisor	
Access Office		
	Matthew Sullivan, Ph.D., Manager, Access Office disAbility Support Services	
	Scott Armstead, M.S., District-wide Assistive Technology Coordinator	
	Joseph Bryant, Ed.D., J.D., Specialist, Services for Students with disAbilities	
	Theresa Smythe, M. Ed., Specialist, Services for Students with disAbilities	
Admissions		
	Phillip Campbell, M.S.Ed., Manager	
Campus Life		
	Carolyn O'Laughlin, M.A., Manager, Campus Life	

Career Development
Diane Kaver, M.A., Career Specialist, Career Development
Counseling Faculty
Troy Hansen, M.A., LPC, NCC, Professor
Kathleen Swyers, M.Ed., L.P.C., CRC, Professor
Financial Aid
Nicole Moore, M.B.A., Manager, Financial Aid
Recruitment and Outreach
Meredith Buschmann, M.Ed., Recruitment Coordinator
Mindy Souvannalay, B.A., Recruitment Advisor
Student Assistance Program
Shannon Nicholson, M.S., L.P.C., Senior Project Associate, Student Assistance Program
Testing Center
Ruth Davenport, B.A., Manager, Assessment
Matthew Lane, B.A., Assessment Specialist
Melissa Wheeler, M.A., Assessment Specialist
TRIO
Sanela Mesic, M.A., Project Director
Bisheng Ahmed, M.Ed., Advisor

Faculty

Code	Title	Credit Hours
Accounting/Legal Studies		
	Markus Ahrens, M.B.A., C.P.A., Professor	
	Robyn Barrett, M.B.A., C.P.A., Professor	
	Jeff Hsu, M.B.A., Professor	
	Amy Monson, M.S., C.P.A., Associate Professor	
	Barbara Wiseheart, J.D., M.Ed., Professor	
Biological Science/Horticulture/Chemistry		
	Jason Allen, Ph.D., Associate Professor	
	Jody Martin Atkins, Ph.D., Professor	
	Matthew Bast, M.S., Assistant Professor	
	Jeff Baumstark, M.S., Assistant Professor	
	Elizabeth Granier, Ph.D., Professor	
	Robert Harms, Ph.D., Professor	
	Jerald Pence, B.S., Assistant Professor	
	Tom Peters, Ph.D., Associate Professor	
	Kelli Roberts, M.S., Assistant Professor	
Business		
	Pam McElligott, M.B.A., Professor	
	Steven Chamber, J.D., M.S., Professor	
Communications		
	Jacqueline Barker, M.A., Professor	
	Christaan Eayrs, M.A., Professor	
	Robert Hahn, M.F.A., Professor	
	Susan Hunt-Bradford, M.A., Professor	
	Douglas Hurst, J.D., M.A., Professor	
	Christopher Smejkal, Ed.D, Professor	
	Denise Sperruzza, M.A., Professor	
Criminal Justice		

Ruth Eilerman, M.A., Assistant Professor

Design, Visual and Performing Arts

Joseph Chesla, M.F.A., Professor

Bradley Fratello, Ph.D., Professor

Gary Gackstatter, M.M.P., Assistant Professor

Charles Groth, B.F.A., Associate Professor

David Hanlon, M.F.A., Professor

James Ibur, M.F.A., Professor

Erin LeClerc, M.A., Professor

Timothy Linder, Ph.D., Professor

Betsy Morris, M.F.A., Professor

Gerald Myers, D.M.A., Professor

Keith Oliver, M.F.A., Professor

Marica Paljakka-Cargo, M.S., CKD, NKBA, Assistant Professor

Michelle Rebollo, M.A., Associate Professor

Michael Swoboda, M.F.A., Professor

Ken Wood, M.F.A., Professor

English

Shamim Ansari, Ph.D., Professor

Elva Maxine Beach, M.F.A., Associate Professor

Michael Burke, M.A., Associate Professor

Rebecca Burns, M.A., Associate Professor

Christine Carter, M.Ed., Professor

Jean Dempsey, M.A., Assistant Professor

Pamela Garvey, M.F.A., Professor

Angela Hamilton, M.F.A., Associate Professor

Trevin Jones, M.A., 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., Professor

Lisa Wilkinson, M.A., 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., Professor

Steve Collins, Ph.D., Professor

Robert Lee, Ph.D., Professor

John Messmer, Ph.D., Professor

Emily Neal, Ph.D., Professor

Karl Dirk Voss, Ph.D., Professor

Donna Werner, Ph.D., Professor

Information Systems

Margaret Hvatum, M.S., Professor

June Mercer, M.B.A., M.S., Professor

Libraries

Rebecca Helbling, M.L.S., M.A.T., Professor

Janice Hovis, M.A.L.S., M.A.T., Professor

Cathy Reilly, M.L.S., M.A., Professor

Mathematics

Kelly Ballard, M.A., Professor

John Elliott, M.S., Professor

James Frost, M.S., Professor

Teri Graville, M.A., Professor

Lisa Harden, M.S., Professor

Sarah Henry, M.A., Assistant Professor

Laurie McManus, Ph.D., Professor

Nancy Molik, M.A., Assistant Professor

Russell Murray, M.S., Professor

Rick Pescarino, M.S., Professor

Aletta Speegle, Ph.D., Professor

Connie Stocker, M.A., Assistant Professor

Julie Tucker, M.S., M.A., 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., Professor

Lacee Kaufmann, R.N., M.S.N., Ph.D., Associate Professor

Debra Knickerbocker, R.N., M.S.N., Professor

Lisa Kokotovich, R.N., M.S.N., Professor

Joyce Rebore, R.N., M.S.N., Associate Professor

James Shockley, R.N., M.S.N., Associate Professor

Christine Stephens, R.N., M.S.N., Assistant Professor

Cheryl Strahm, R.N., M.S.N., Professor

Occupational Therapy Assistant

Cynthia Ballentine, MSOT, OTR/L, Professor

Leslie Vogan, COTA/L, B.S., Instructor I

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., PT, DPT, OCS, 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

Eric Nielsen, Ph.D., 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

Anthony Steele, M.Ed., Coordinator

Campus Life and College Transition

Stephanie Church, M.F.A., Coordinator

Counseling Faculty

Donna Zumwinkle, M.Ed., LPC, Professor, Counselor

disAbility Support Services

Lynn Demirchian, M.S., Coordinator

Financial Aid

Shantelle Harris, B.A., Interim Lead Financial Aid Counselor

Student Enrollment and Admissions

Britni Fischer, B.S., Recruiter

Brian Legate, M.S.W., Coordinator

South County Administrators/Professional Staff

Code	Title	Credit Hours
	Julie Loyet, M.A., Manager	
	Kathleen Pritchard, M.A., Coordinator, Student Services	
	Mike Buda, M.Ed., Student Support Specialist	
	Mary Beth Overby, M.Ed., Student Support Specialist	

Wildwood

Academic/Professional Staff (p. 196) Student Affairs (p. 196) Faculty (p. 196)

Academic / Professional Staff

Code	Title	Credit Hours
Chief Campus Academic Officer		
	Carol Lupardus, Ph.D., Campus President and Chief Academic Officer	
Campus Auxiliary Services		
	Rodney Jones, Manager	
Dual Credit and Enrollment Partnerships		
	Ellen Wottrich, M.A., Coordinator	
Libraries		
	Kimberly Linkous	
Marketing and Communications		
	Gina Tarte, M.A., Coordinator, Marketing and Communications	
Nursing		
	Ann Leiber, M.Ed., Nursing Retention Coach	
Physical Facilities		
	Dennis Dill, M.B.A., Interim Manager	
	Kelly Crandall, Supervisor, Facilities	
	Suzann Anders, Supervisor, Housekeeping	

Student Affairs

Code	Title	Credit Hours
Campus Vice President of Student Affairs		
	Laura Davidson, M.Ed., Campus Vice President of Student Affairs	
Academic Advising		

Faculty

Code	Title	Credit Hours
Behavioral Health Support		
	Jenna Mueller, M.A., LPC, NCC, Assistant Professor, Program Coordinator	
Business Administration		
	Anthony Clark, Ph.D., Professor	
Cisco Networking Academy: CCNA		
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