About this Catalog

The St. Louis Community College 2015-2016 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.

The first part of the catalog explains the academic policies, procedures and student services of St. Louis Community College. The second part outlines college transfer and career programs offered. A list of courses and course descriptions is contained in the third section. College personnel are identified in the fourth section.

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 online at stlcc.edu/schedule.

The information in this catalog is current as of March 2015. 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 available in the campus libraries and on the college’s website. The information in this catalog is not a substitute for Board policies.

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

Mission Statement

St. Louis Community College expands minds and changes lives every day. We create accessible, dynamic learning environments focused on the needs of our diverse communities.

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 or other sexual misconduct, contact William Woodward, Associate Vice Chancellor for Student Affairs, 314-539-5374. If you are a person with a documented disability and need accommodations to attend classes, please fill out the Access Office application at stlcc.edu/access 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 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 faculty, students and staff of the college to understand, abide by and endorse academic integrity.
Welcome to the College

Welcome to St. Louis Community College, the premier provider of quality, affordable educational programs and job training options for citizens of the metropolitan area.

Whether you are a first-time college student, a working adult who needs new job skills, or a lifelong learner, we have a place for you. With eight college-transfer options and almost 90 career programs in fields such as allied health, engineering, technology and business, you can prepare for a job that’s in demand.

We are the region’s largest resource for college transfer, career development and workforce training. With our affordable rates, you can earn a degree or certificate at your own pace by attending classes either full- or part-time. We also offer web-based learning options, including online and hybrid courses, so you can take classes at your convenience.

Our diversity makes learning more enriching. No matter what campus or education center you attend, you’ll find a student body and faculty and staff as diverse as the community.

We strive to offer a friendly, student-centered learning environment with the most current technology and equipment. Our faculty specializes in teaching at the undergraduate level and hold advanced degrees – master’s, doctoral or advanced licensing in technical fields. Our classes are smaller in size and offered at times to fit your busy schedule, including evenings and weekends.

Our faculty and support staff go the extra mile in helping you succeed, whether you need tutoring, advising, help with personal issues or assistance in figuring out your financial aid.

St. Louis Community College is fun. We have hundreds of extracurricular activities and service learning opportunities offered through clubs and organizations, student government, honor societies, student publications, art shows, concerts, plays, and intercollegiate athletics.

With highly focused instruction, small classes, flexible schedules and affordable tuition, STLCC offers you the very best opportunity to expand your mind – and change your life. We hope you’ll join us today. It’s a life-changing decision you’ll never regret.

St. Louis Community College Board of Trustees
Theodis Brown Sr. • Subdistrict 1
Eleftheria Fitzgerald, M.A. • Subdistrict 4
Doris Graham, Ph.D. • Subdistrict 1
Hattie R. Jackson, M.A. • Subdistrict 2
Craig H. Larson, Ed.D. • Subdistrict 4
Joan McGivney, M.P.P. • Subdistrict 3
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<tr>
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<td>16 First day of Intersession</td>
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<tr>
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<td>23 Last day college open until Jan. 4, 2016</td>
<td><strong>11</strong></td>
<td><strong>23</strong> Commencement</td>
</tr>
</tbody>
</table>

*Full-term classes only.
General Information
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, more than 1.2 million people have attended, enriching their lives and contributing to the economic development of the metropolitan area. Each year, more than 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 $214.2 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.

St. Louis Community College is your best financial investment now – and a great investment for your future. Student fees at STLCC are among the lowest in the area. A large portion of instructional costs is financed by tax revenue; therefore, you pay less for a high-quality academic experience. And graduates of STLCC are the region’s best economic investment.

- Research shows that for every $1 invested in their STLCC education, students receive a return on that investment of more than $5 in higher future income over their working careers.
- STLCC’s annual impact on St. Louis is $2.5 billion or approximately 2.7 percent of the total St. Louis area economy.
- Higher earnings of STLCC students (and associated increases in state income) expand the tax base in Missouri by about $158 million each year.
- It is estimated that the St. Louis area economy annually receives a net of $1.14 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 $13,300 more annually on average, over the course of a working lifetime.

Source: Economic Modeling Specialists, Inc.
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 July 1 for the next spring term; Sept. 1 for the next fall term; and Dec. 1 for the next summer term. Applications may be completed and submitted online, by mail or fax, or in person at any campus. Visit stlcc.edu/application for more information.

SELECTIVE ADMISSION PROGRAMS

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

ADMISSION CLASSIFICATIONS

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

Degree-Seeking Applicants

Degree-seeking students are full- or part-time students who are seeking a degree or certificate from STLCC. As a degree-seeking student you are given regular status and 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 mailed to the Registrar’s office. If applicable, submit the GED or HiSET test scores. Students with 15 or more hours of transferable college credit need not send a high school transcript unless requested by the Enrollment Services office. You must also complete the college’s placement test or provide documentation to waive assessment.

Non-Degree-Seeking Applicants

Non-degree-seeking applicants are given general status and are typically interested in selected courses and not a particular program of study. A student taking a course for the summer with the intent of transferring the credit to their home institution should enroll as a non-degree-seeking student. You must submit an application for admission and complete the college’s placement test, or provide documentation to waive assessment.

Non-Traditional Applicants

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

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

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

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

Non-High School Graduates

Students who have not graduated from high school are eligible for admission as a non-degree-seeking student provided they are at least 17 years of age.

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

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

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

- Complete the dual enrollment application.
- Discuss definite course or interest with counselor/principal.
- Obtain required signatures from parent/guardian and authorized school official.
- Have achieved a cumulative high school GPA of 2.0 or higher.
- Submit copy of high school transcript.
- 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 page 21.

**Dual Credit**

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

- Complete the dual credit application.
- Have a cumulative high school GPA of 3.0 or higher.
- Obtain written permission to enroll from a designated high school official and from a parent/guardian.
- Meet the college’s requirements for entry into the course.
- Pay 50 percent of the maintenance fee, the technology fee, the student activity fee and other mandatory course fees.
- Apply to the Access office for disability-related accommodations and services if applicable. Documentation of disability that meets the college’s requirements will be required. It should be noted that the requirements for and the types of accommodation at the postsecondary level are based on the Americans with Disabilities Act and Section 504, and are often significantly different from the Individuals with Disabilities Education Act. For more information, see Access Office, page 21.

**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. Request the “International Student” information packet from the campus Enrollment Services office and follow the procedures outlined.
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 transcripts of their high school and college work. These records must include the following information translated into the English language: descriptive titles of courses studied, final grades in each course and an explanation of the grading system.
5. Have all admission requirements and required documents on file 60 days before the start of classes if prospective students are still residing outside of the United States. Prospective students presently attending a college or high school in the United States must submit all materials 30 days before the start of classes.
6. Score 500 or above on the written TOEFL (Test of English as a Foreign Language) or 61 on the Internet-based TOEFL. The applicant must have taken the test within the last two years.
7. Submit a grade average of 3.0 on all course work completed at English language centers or for intensive English courses completed at other colleges or universities if prospective students are already in the United States. Students in regular academic programs at all other accredited institutions must have earned a cumulative grade point average of 2.0.
8. Submit a financial statement which certifies that they have adequate funds to carry them under normal conditions through their course of study without the need for local financial assistance. This form must be notarized and completed within the last four months.
9. Provide proof of a health insurance plan for the term in which you are applying. The plan must include repatriation and medical evaluation. Students must submit verification documents to the Enrollment Services office before they can register for classes.
International students on F-1 Visas must comply with the following regulations:

• Complete a minimum of 12 credit hours per semester.

• Maintain a cumulative grade point average of 2.0 or above.

• Complete a certification program in not more than four semesters or an associate degree program in not more than six semesters, excluding summer sessions.

• If such a student completes fewer than 12 credit hours or earns a cumulative grade point average of less than 2.0, he or she will be placed on probation for the next semester of attendance.

• If the student completes fewer than 12 credit hours or earns a grade point average less than 2.0 while on probation, he or she will not be permitted to re-enroll.

• Foreign-born students (both permanent residents and refugees) should have a command of written and spoken English in order to successfully complete college work.

ORIENTATION

New Student Registration Workshops

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

New Student Orientation

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

RE-ADMISSION

Former students who have not attended St. Louis Community College for a semester or more may reactivate their files by updating their admission status with the Enrollment Services office. If seeking a degree or certificate, transcripts of all college work not currently on file at STLCC must be sent to the Registrar’s office.

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

CHANGE OF STATUS

Students who wish to change from non-degree-seeking to degree-seeking should complete all admission requirements for regular student status. See Admission Classifications, page 7.

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

a. 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.

b. 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.

c. An adult student who has attained the age of 21 and who has established residency within the St. Louis Community College district.

d. 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.

e. A non-immigrant alien holding a visa in a category other than those specified above will be assessed in-district fees if he/she has established residency within the district.

Burden of Proof

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

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

Refer all questions concerning residency to the Enrollment Services office.

FEES

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

Electronic Billing Notification

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

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

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

In Case of Outstanding Debt

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

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

Classes will be dropped if financial arrangements have not been made prior to the payment due date.
Fees for Seniors

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

For a current schedule of maintenance fees, visit stlcc.edu/fees or contact a campus Enrollment Services office, or cashier’s office.

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.

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.

<table>
<thead>
<tr>
<th>LENGTH OF COURSE</th>
<th>80% REFUND BEFORE THE END OF THE</th>
<th>50% REFUND BEFORE THE END OF THE</th>
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<tr>
<td>16 week session*</td>
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<td>9 week session</td>
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<td>8 week session</td>
<td>4th day of session</td>
<td>2nd week of session</td>
</tr>
<tr>
<td>7 week session</td>
<td>3rd day of session</td>
<td>1st week of session</td>
</tr>
<tr>
<td>6 week session</td>
<td>3rd day of session</td>
<td>1st week of session</td>
</tr>
<tr>
<td>5 week session</td>
<td>2nd day of session</td>
<td>1st week of session</td>
</tr>
<tr>
<td>4 week session</td>
<td>2nd day of session</td>
<td>1st week of session</td>
</tr>
<tr>
<td>3 week session</td>
<td>1st day of session</td>
<td>3rd day of session</td>
</tr>
<tr>
<td>2 week session</td>
<td>1st day of session</td>
<td>2nd day of session</td>
</tr>
<tr>
<td>1 week session</td>
<td>1st day of session</td>
<td>None</td>
</tr>
</tbody>
</table>

* 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.

PAYMENT PLAN*

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

*Details of the payment plan are subject to change. For the latest information, go to stlcc.edu/paymentplan.

Medical/Job Related Withdrawals

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

Active Duty Military Service

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

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

For more information on withdrawals and the latest on policy changes concerning Veterans, see stlcc.edu/veterans.
FEDERAL FINANCIAL AID (TITLE IV) RECIPIENTS

Refunds

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

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

Please refer to the following website for more information about the return of unearned Title IV funds as required by HEA Title IV law and regulations: stlcc.edu/apply.

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 (FW-S), 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).

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

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

FINANCIAL AID

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

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

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

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

Apply Early for Aid

Students are encouraged to apply for aid as early as possible (at least by April 1 for the fall semester) because some funds may be depleted. Students should use aid programs as a supplement to personal or family funds rather than as the only way of paying for college.

Students who wish to know more about their financial aid eligibility should contact the Financial Aid office. In general, students must demonstrate need through an approved federal need analysis system.

Students receiving certain types of financial aid are required to submit official high school transcripts, placement test scores and official college transcripts to the Registrar’s office. They also are required to declare a program of study and enroll in courses appropriate to that program. Students are given a maximum amount of time within which to complete programs, based on enrollment status, and a maximum number of applicable credit hours transcripted. Students must pass at least two-thirds of all credit hours attempted.

Maintain Satisfactory Grades

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

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

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

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

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

A+ PROGRAM

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

ACADEMIC POLICIES

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

DEGREES AND CERTIFICATES OFFERED

The college offers five associate degrees, the certificate of proficiency and the certificate of specialization. Most of the college’s degrees and certificates are designed to be taken on a full- or part-time basis. Degrees can be completed in two years of full-time attendance. Certificates usually can be completed in one or two semesters. However, since most students attend classes part time, degrees and certificates can take longer to complete. (See “Degree and Certificate Time Limits.”)

• The associate in arts degree is designed for students who plan to transfer to another college and work toward a bachelor’s degree.
• The associate of arts in teaching degree is designed for students who plan to transfer to another college and work toward a bachelor’s degree in teacher education.
• The associate in fine arts degree is offered jointly with the University of Missouri-St. Louis and is designed for students who plan to transfer to UM-St. Louis and earn a bachelor of fine arts degree.
• The associate in applied science degree helps students develop practical and theoretical skills that prepare them for entry-level jobs.
• The associate in science degree is designed to transfer to a particular institution in a specialized area.

• The certificate of proficiency is for persons whose intended job does not require an associate degree. It also is for persons who wish additional information/skills in a particular subject area.
• The certificate of specialization is for persons who desire information/skills in a specific area usually related to a current job.

REQUIREMENTS FOR GRADUATION

Requirements for an associate degree are as follows:
1. Regular status as a degree-seeking student.
2. Satisfactory completion of one of the programs listed in this catalog.
3. Completion of a minimum of 64 credit hours. Fifteen hours of transferable credit applicable to the associate degree must be completed at St. Louis Community College.
   a. A maximum of four credit hours from courses numbered below :100 may apply as unspecified electives toward the associate degree. Credit hours below :100 may not be applied as electives defined by discipline, such as “science-mathematics elective” or “humanities-communications elective.”
   b. A maximum of nine credit hours in special problems courses may apply as unspecified electives toward the associate degree. Special Problems courses may not be applied as electives defined by disciplines such as “science-mathematics elective” or “humanities-communications elective.”
4. A cumulative grade point average of 2.0 (C) or higher. Credits from previously-attended colleges are not computed in the average.
5. Completion of a minimum of two credit hours of physical education, at least one in an activity course. A few specialized PE courses will not fulfill this requirement; see an academic advisor for detailed information. Appropriate accommodations will be made for students with disabilities.
6. Missouri Requirement: The course requirements in federal and state constitutions and American history
and institutions must be met by the satisfactory completion of one of the following courses:

- HST:101 American History I
- HST:102 American History II
- HST:105 The United States in the Twentieth Century
- HST:107 History of Black America
- HST:137 African-American History I
- HST:138 African-American History II
- HST:206 Women in U.S. History
- PSC:101 Introduction to American Politics
- PSC:103 State and Urban Politics
- PSC:205 Constitutional Issues

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

Requirements for certificates of proficiency and specialization are as follows:

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

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

Second Associate Degree

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

Application for Graduation

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

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

Degree and Certificate Time Limits

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

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

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

Honors

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

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

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

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

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 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.
ASSESSMENT

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

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

COMPASS: Computerized Placement Test

Assessment is required prior to advisement and registration. St. Louis Community College uses COMPASS, a computerized placement test. COMPASS gives essential information about 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 COMPASS test is required of all students unless academic credentials are submitted that qualify students to take such courses without testing.

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

- A college transcript or grade report documenting successful completion (with a C grade or higher) of reading, writing or mathematics course prerequisites.
- A college degree from an accredited institution.
- An ACT score earned within the last three years:
  - A reading score of 18 or above to waive the reading test.
  - An English score of 18 or above to waive the writing test.
  - A math score of 23 or above to waive the math test.
- An appropriate SAT score earned within the last three years:
  - A critical reading score of 500 or above to waive the reading and writing tests
  - A math score of 580 or above to waive the math test.

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

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

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

Exit Assessment

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

Course Assessment

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

Program Assessment

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

Institutional Assessment

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

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

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

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

CLASS PREPARATION

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

FINAL EXAMINATIONS

A final examination or other culminating experience usually is 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.

GRADING SYSTEM AND GRADE POINT AVERAGE

The following grading symbols and points are used:

<table>
<thead>
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<th>GRADING SYMBOLS</th>
<th>GRADE POINTS</th>
<th>EXPLANATION</th>
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<tbody>
<tr>
<td>A</td>
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<tr>
<td>B</td>
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<td>above average</td>
</tr>
<tr>
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<td>average</td>
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<tr>
<td>D</td>
<td>1</td>
<td>passing, below average*</td>
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<tr>
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<td>0</td>
<td>failure</td>
</tr>
</tbody>
</table>

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

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

The following symbols also may appear on students’ transcripts:

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

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

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

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

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

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

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

**W**—Withdrawal—A transcript notation that reflects withdrawal.

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

**Grades of S or U can be awarded only in courses approved for this purpose under guidelines developed by the college.**
**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 and logging in to their student account.

**REPEATING COURSES**

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

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

**CHANGE OF PROGRAM**

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

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

All courses will remain on the transcript.

**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.

**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-advice. 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.

**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.
General Information

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. The cost is $40 per exam.

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 transcripted 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.

TRANSCRIPT SERVICES

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

Registrar's Office
St. Louis Community College
300 S. Broadway
St. Louis, MO 63102-2800
314-539-5159
stlcc.edu/transcript

Transcripts may be requested by completing a transcript request form at stlcc.edu/transcript.

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

Students with access to Banner Self-Service may view grades and print unofficial transcripts by going to stlcc.edu/selfservice to log in to their information.

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

TRANSFER CREDIT

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

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

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

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

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

TRANSFER TO ANOTHER SCHOOL

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

Students completing STLCC’s Missouri General Education requirements will receive certification on their transcripts. This certification satisfies all general education requirements of Missouri public colleges and universities except the University of Missouri-Columbia.

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

<table>
<thead>
<tr>
<th>Missouri Two-Year Institutions:</th>
<th>Missouri Four-Year Institutions:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crowder College</td>
<td>Culver-Stockton College</td>
</tr>
<tr>
<td>East Central College</td>
<td>Harris-Stowe State University</td>
</tr>
<tr>
<td>Jefferson College</td>
<td>Lincoln University</td>
</tr>
<tr>
<td>Metropolitan Community College</td>
<td>Missouri Southern State University</td>
</tr>
<tr>
<td>Mineral Area College</td>
<td>Missouri State University</td>
</tr>
<tr>
<td>Moberly Area Community College</td>
<td>Missouri Western State University</td>
</tr>
<tr>
<td>North Central Missouri College</td>
<td>Missouri University of Science and Technology</td>
</tr>
<tr>
<td>Ozarks Technical Community College</td>
<td>Northwestern Missouri State University</td>
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<tr>
<td>St. Charles Community College</td>
<td>Southeast Missouri State University</td>
</tr>
<tr>
<td>St. Louis Community College</td>
<td>Truman State University</td>
</tr>
<tr>
<td>State Fair Community College</td>
<td>University of Central Missouri</td>
</tr>
<tr>
<td>Three Rivers Community College</td>
<td>University of Missouri-Kansas City</td>
</tr>
<tr>
<td></td>
<td>University of Missouri-St. Louis</td>
</tr>
</tbody>
</table>

CONFIDENTIALITY OF STUDENT RECORDS

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

1. The right to inspect and review the student’s education records within 45 days after the day St. Louis Community College (“college”) receives a request for access. The appropriate department and school official shall make arrangements for access to these records and notify the student of the time and place where the records may be inspected. If the records are not maintained by the school official to whom the request was submitted, that official shall advise the student of the correct official to whom the request should be addressed. This is a list of official records and their locations: Advisement (Advising); Counseling (Counseling); Disciplinary (Student Affairs); Enrollment Records (Enrollment Services); Financial Aid (Financial Aid); Placement (Career and Employment Services); Medical (Student Affairs); Security (College Police); Photo Identification Card (Campus Life).

2. The right to request the amendment of the student’s education records that the student believes is inaccurate, misleading, or otherwise in violation of the student’s privacy rights under FERPA. For those students wishing to question the accuracy or appropriateness of their records, a form requesting a challenge is available in the Enrollment Services office. This written request should identify the part of the record the student wants changed, and specify why it should be changed. The form should be filed with the Vice President for Student Affairs. If the college decides not to amend the record as requested, the student shall be notified in writing, and an appeal of the decision may be made by the student to the Student Appellate Hearing Committee.

3. The right to provide written consent before the college discloses personally identifiable information from the student’s education records, except to the extent that FERPA authorizes disclosure without consent. The college discloses directory information without the student’s consent and includes the following: name, currently admitted and currently enrolled, class level, full- or part-time enrollment, division, program of study, dates of enrollment, degrees received, height and weight for members of athletic teams, awards received, honors and college issued email addresses. Requests to withhold release of directory information should be received by the Enrollment Services office on the first day of each term during which the student wishes the withholding to be effective.

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

4. **The right to file a complaint** with the U.S. Department of Education concerning alleged failures by the college to comply with the requirements of FERPA. The name and address of the office that administers FERPA is:

<table>
<thead>
<tr>
<th>Family Policy Compliance Office</th>
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</thead>
<tbody>
<tr>
<td>U.S. Department of Education</td>
</tr>
<tr>
<td>400 Maryland Avenue, SW</td>
</tr>
<tr>
<td>Washington, D.C. 20202-8520</td>
</tr>
</tbody>
</table>

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

## ACADEMIC AND STUDENT AFFAIRS

### ACADEMIC ADVISING

Academic advisors are available to assist students by providing information about college policies and procedures, programs of study, and course requirements. For students planning to transfer, an advisor can help clarify transfer requirements and suggest appropriate coursework; however, the responsibility for course selection and meeting degree and transfer requirements rests with each student.

### ACCESS OFFICE, DISABILITY SUPPORT SERVICES

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

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

To qualify for services, students must contact the Access Office at the campus of enrollment in order to complete the Access Office Application for Services and schedule an initial meeting. Accommodations are generally not provided retroactively, so it is important for students to apply for accommodations and provide documentation that supports their requested accommodations early. This allows the college the necessary time for accommodations to be in place as soon as possible. Students may submit this application and documentation any time during their tenure at the college. However, the college recommends submitting the application at least six weeks prior to the beginning of the semester of attendance so that reasonable accommodations can be made available. For more information, visit stlcc.edu/disAbility or call the Access office at the campus of your choice.

### 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 http://stlcc.edu/SelfService/.
BLACKBOARD

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

CAREER AND EMPLOYMENT SERVICES

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

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

CHILD CARE

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

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. See Text Alerts in this section for more information on receiving urgent messages from STLCC.

CONSUMER INFORMATION

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

For more information on consumer topics, go to stlcc.edu/need2know.

COUNSELING SERVICES

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

DRUG ABUSE PREVENTION INFORMATION

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

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

For more information, go to stlcc.edu/need2know.
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.

HIGHER EDUCATION OPPORTUNITY ACT

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

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

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

For more information, go to stlcc.edu/need2know.

INTERNATIONAL EDUCATION

St. Louis Community College offers opportunities for students, faculty, staff and the community to study and experience the world through international and intercultural programs, exchanges and activities, and globalized curriculum. The goal is to prepare students and the community for success in a global economy and a world in which the U.S. plays a key role. Detailed information about the international programs, study abroad, student and faculty exchanges, and international collaborations and partnerships can be obtained by calling 314-539-5350.

LEARNING LABS

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

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

LIBRARIES

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

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/. Choose the Degree and Enrollment Verifiers tab at the top of the page.

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

STLCC offers hundreds of online and hybrid courses every semester. While the majority of online courses are 100 percent online, some instructors may require meetings on campus for course orientations and examinations. Other instructors may require proctored examinations where the student has some choice regarding the location and time of the test. Hybrid courses are a combination of face-to-face classroom instruction and online learning. To learn more about online and hybrid courses, visit stlcc.edu/distance.

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 communications, so students should activate their my.stlcc.edu email account and check it daily. More information about student email activation is available at stlcc.edu/studentemail. STLCC uses the Blackboard learning management system for online coursework. For Blackboard assistance and tutorials, go to stlcc.edu/blackboard.

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

SEXUAL HARASSMENT

St. Louis Community College is committed to providing an academic and work environment that is free from sexual harassment. In keeping with this commitment, the college prohibits sexual harassment of any member of the college community. Sexual harassment in any form, including verbal, written, physical or visual harassment will not be tolerated. More information about the policy and a list of Title IX investigators is available at stlcc.edu/need2know.

STUDENT ACTIVITIES

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

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

STUDENT ID CARDS

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

PARKING ON CAMPUS

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

Accessible parking is available for students with physical disabilities who have state parking authorization.
STUDENT RIGHTS AND RESPONSIBILITIES

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

STUDY HELP

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

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

TEXT ALERTS

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

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

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 stlouisccbookstore.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 must be ordered separately for each campus.

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.

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.

WELFARE REFORM RESPONSE

Support services are available to students who receive public assistance, Student Assistance Program (SAP), Food Stamps, Medicaid or Child Care Assistance.

The SAP office helps students stay in school and succeed in school by providing support, informing them of their rights and finding resources both on and off campus. To access these services, call the SAP office on campus.
COMMUNITY PROGRAMS

PROJECT LEAD THE WAY

St. Louis Community College is the community college partner in the region’s Project Lead the Way program and provides leadership and support for the local initiative. Through Project Lead the Way, students in high school can earn credit hours in 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 the Engineering and Technology department at 314-513-4308 or Brett Richardson at 314-539-5047.

WORKFORCE SOLUTIONS GROUP

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

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

Advancing People

Continuing Education

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

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

Advancing Businesses

Corporate Services

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

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

Advancing Communities

Community Services

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

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

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

PURPOSE

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

To make a contribution to the St. Louis Community College Foundation, call 314-539-5472 or email foundation@stlcc.edu.

BOARD OF DIRECTORS

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Vanessa Halim
Jan Holloway
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Margaret M. Mooney
Karl A. Mudra
Traci O’Bryan
Lydia Padilla
Linda K. Pietroburgo
Amy Pollack
Pamela Ross
Wilma Schopp
Scott Scully
Becky Spurgeon
Anthony Thompson
Debbie Walkenhorst
Paul Wentzien
St. Louis Community College is accredited by the Higher Learning Commission of the North Central Association of Colleges and Schools, 30 North LaSalle St., Suite 2400, Chicago, IL 60602-2504, 312-263-0456.

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.

The Nursing program on all campuses is accredited with condition by the Accreditation Commission for Education in Nursing (ACEN), 3343 Peachtree NE, Suite 850, Atlanta, GA 30326, 404-975-5000, and also is fully approved by the Missouri State Board of Nursing.

**FLORISSANT VALLEY:**

<table>
<thead>
<tr>
<th>Program</th>
<th>Accreditation/Approval</th>
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<tbody>
<tr>
<td>Art</td>
<td>National Association of Schools of Art and Design</td>
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<tr>
<td>Dietetic Technology</td>
<td>Accreditation Council for Education in Nutrition and Dietetics (ACEND)</td>
</tr>
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<td></td>
<td>Academy of Nutrition and Dietetics</td>
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<tr>
<td>Electrical/Electronic Engineering Technology</td>
<td>Engineering Technology Accreditation Commission of ABET</td>
</tr>
<tr>
<td>Graphic Communications</td>
<td>National Association of Schools of Arts and Design</td>
</tr>
<tr>
<td>Mechanical Engineering Technology</td>
<td>Engineering Technology Accreditation Commission ABET</td>
</tr>
<tr>
<td>Photography</td>
<td>National Association of Schools of Art and Design</td>
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**FOREST PARK:**

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<tr>
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<tbody>
<tr>
<td>Automotive Technology</td>
<td>National Automotive Technicians Education Foundation (NATEF)</td>
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<tr>
<td>Baking and Pastry Arts</td>
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</tr>
<tr>
<td>Clinical Laboratory Technology</td>
<td>National Accrediting Agency for Clinical Laboratory Sciences (NAACLS)</td>
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<tr>
<td>Culinary Arts</td>
<td>American Culinary Federation</td>
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<tr>
<td>Dental Assisting</td>
<td>American Dental Association Accreditation Commission of Dental Accreditation (CODA)</td>
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<td>Missouri Dental Board</td>
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<td>Dental Hygiene</td>
<td>American Dental Association Accreditation Commission of Dental Accreditation (CODA)</td>
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<tr>
<td>Diagnostic Medical Sonography</td>
<td>Commission on Accreditation of Allied Health Education Programs (CAAHEP)</td>
</tr>
<tr>
<td>Emergency Medical Technology</td>
<td>Missouri Bureau of Emergency Medical Services</td>
</tr>
<tr>
<td>Health Information Technology</td>
<td>Commission on Accreditation for Health Informatics and Information Management (CAHIIIM)</td>
</tr>
<tr>
<td>Medical Billing and Coding</td>
<td>American Health Information Management Association</td>
</tr>
<tr>
<td>Paramedic Technology</td>
<td>Committee on Accreditation of Educational Programs for the Emergency Medical Services</td>
</tr>
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<td>Missouri Bureau of Emergency Medical Services</td>
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<tr>
<td>Respiratory Therapy</td>
<td>Joint Review Committee on Education in Radiologic Technology (JRCERT)</td>
</tr>
<tr>
<td>Surgical Technology</td>
<td>Commission on Accreditation for Respiratory Care (CoARC)</td>
</tr>
<tr>
<td></td>
<td>Commission on Accreditation of Allied Health Education Programs (CAAHEP)</td>
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**MERAMEC:**

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<tbody>
<tr>
<td>Art</td>
<td>National Association of Schools of Art and Design</td>
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<tr>
<td>Information Reporting Technology Judicial</td>
<td>National Court Reporters Association</td>
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<tr>
<td>Interior Design</td>
<td>National Association of Schools of Art and Design</td>
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<tr>
<td>Kitchen and Bath</td>
<td>National Association of Schools of Art and Design</td>
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<tr>
<td></td>
<td>National Kitchen and Bath Association (NKBA)</td>
</tr>
<tr>
<td>Occupational Therapy Assistant</td>
<td>Accreditation Council for Occupational Therapy Education</td>
</tr>
<tr>
<td>Physical Therapist Assistant</td>
<td>Commission on Accreditation of Physical Therapy Education</td>
</tr>
</tbody>
</table>
Central Methodist University
Child Development, BA/BS
Nursing, BSN

Chamberlain College of Nursing
Nursing, BSN

Fontbonne University
Business Administration, 2+2

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
Organizational Leadership, BA
Practice Management, BA
Rehabilitation Services, BS

Missouri Baptist University
Education: Early Childhood and Elementary Education

Saint Louis University
Dual Admission Program*
Business Administration
Aerospace Engineering
Aviation Management
Biomedical Engineering
Civil Engineering
Computer Engineering
Electrical Engineering
Engineering Physics
Flight Science
Interdisciplinary Engineering
Mechanical Engineering
Physics

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

St. Charles Community College
Paramedic Technology

St. Louis Carpenter’s Joint Apprenticeship Committee
Construction Management Technology, AAS

University College in Arts & Sciences
Washington University in St. Louis
Bachelor of Science

University of Missouri-Columbia
Architectural Studies, BS
Business Administration
Elementary Education
Nursing, BSN

University of Missouri-St. Louis
Art Education, AFA/BFA
Biochemistry, BS
Biotechnology, BS
Drawing
Dual Admission Program*
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

Webster University
Biological Sciences, BS
Business Administration, BS
Computer Science, BS
Management, BA
Nursing, BSN

William Woods University
Deaf Communication Studies/Interpreter Training

*S*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 and the University of Missouri-St. Louis.
## COLLEGE PROGRAMS OVERVIEW

**AA**—Associate in Arts degree  
**AAS**—Associate in Applied Science degree  
**AS**—Associate in Science  
**AAT**—Associate of Arts in Teaching  
**AFA**—Associate in Fine Arts  
**CP**—Certificate of Proficiency

*Note:* Students can declare program majors at any campus. Please see pages 36-96 for specific program locations.

### TRANSFER PROGRAMS

These programs include freshman- and sophomore-level courses offered in four-year institutions. Students may concentrate in the following subject areas:

<table>
<thead>
<tr>
<th>Program</th>
<th>AAT</th>
<th>AA</th>
<th>AFA</th>
<th>AS</th>
<th>Pg.</th>
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<tbody>
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<td>Art Education</td>
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<td>Computer Science</td>
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<td>Engineering Science</td>
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<td>General Fine Arts</td>
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<td>General Transfer Studies</td>
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<td>Graphic Communications</td>
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<td>Photography</td>
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<tr>
<td>Teaching</td>
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</tbody>
</table>

### CAREER PROGRAMS

These programs are designed to help students develop or improve job skills. Selected courses from career programs may transfer to four-year institutions. See an academic advisor or counselor for information concerning transferability of courses.

<table>
<thead>
<tr>
<th>Program</th>
<th>AAS</th>
<th>CP</th>
<th>CS</th>
<th>Pg.</th>
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</thead>
<tbody>
<tr>
<td>Accounting</td>
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<td>Addictions Study</td>
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<tr>
<td>African-American Studies</td>
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<td>✔</td>
<td></td>
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<td>Architectural Technology</td>
<td>✔</td>
<td></td>
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<tr>
<td>Automotive Technology</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
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<tr>
<td>Aviation Maintenance - Airframe</td>
<td></td>
<td>✔</td>
<td></td>
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<tr>
<td>Aviation Maintenance - Power Plant</td>
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<tr>
<td>Baking and Pastry Arts</td>
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<td>Biomedical Electronics Technology</td>
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<td>✔</td>
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<td>Biotechnology</td>
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<tr>
<td>Building Inspection and Code Enforcement Technology</td>
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<td>Business Administration</td>
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<td>Chemical Technology</td>
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<td>Civil Engineering Technology</td>
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<td>Clinical Laboratory Technology</td>
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<td>Computer Aided Design</td>
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<td>Computer Aided Manufacturing</td>
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<tr>
<td>Computer Applications</td>
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<td>CAREER PROGRAMS, CON’T.</td>
<td>AAS</td>
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<td>Criminal Justice: Options</td>
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<td>Corrections</td>
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<td>Culinary Arts</td>
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<td>Deaf Communication Studies: Interpreter Education</td>
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<td>Deaf Communication Studies: American Sign Language</td>
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<td>Diagnostic Medical Sonography: Options</td>
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<td>Cardiac Sonography</td>
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<td>Medical Sonography</td>
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<td>Dietetic Technology: Nutrition Care</td>
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<td>Digital Media: Animation</td>
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<td>Digital Media: Digital Photography</td>
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<td>Digital Media: Interactive Design</td>
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<td>Digital Media: Page Layout/Graphic Design</td>
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<td>Digital Media: Video Art</td>
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<td>Early Care and Education</td>
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<td>Early Care and Education: Developmental Disabilities</td>
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<tr>
<td>Electrical/Electronic Engineering Technology</td>
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<td>Emergency Medical Technology</td>
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<td>Fire Protection Technology</td>
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<td>Funeral Directing</td>
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<td>Funeral Service Education</td>
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<td>Graphic Communications</td>
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<td>Health Information Technology</td>
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<td>Horticulture</td>
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<td>Hospitality and Tourism</td>
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<td>Human Services</td>
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<td>Human Services: Disabilities Studies</td>
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<td>Information Reporting Technology: Judicial</td>
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<tr>
<td>Information Systems: Office Information Coordinator</td>
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</table>
### CAREER PROGRAMS, CON’T.

<table>
<thead>
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<th>Program</th>
<th>AAS</th>
<th>CP</th>
<th>CS</th>
<th>Pg.</th>
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<tbody>
<tr>
<td>IT Help Desk/End User Support</td>
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<tr>
<td>Interior Design</td>
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<tr>
<td>Kitchen and Bath Design</td>
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<td>Landscape Design</td>
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<td>Legal Studies for the Paralegal</td>
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<td>Life Science Laboratory Assistant</td>
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<td>Mass Communications</td>
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<tr>
<td>Mechanical Engineering Technology</td>
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<td>Network Engineering</td>
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<td>Nursing</td>
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<tr>
<td>Occupational Therapy Assistant</td>
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<tr>
<td>Oracle Developer</td>
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<td>Paramedic Technology</td>
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</tr>
<tr>
<td>Physical Therapist Assistant</td>
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<td>Precision Machining Technology</td>
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<td>Radiologic Technology</td>
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<td>Respiratory Therapy</td>
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<td>Sustainable Environmental Design</td>
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<td>Telecommunications Engineering Technology: Basic Electronics</td>
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<tr>
<td>Travel and Tourism</td>
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<tr>
<td>Web Developer</td>
<td>✓</td>
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<td></td>
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</tr>
</tbody>
</table>

### 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.
ASSOCIATE IN ARTS DEGREE
PROGRAM

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.

General Education Courses: 42 Credit Hours

St. Louis Community College’s Associate in Arts degree requires 42 credit hours of general education courses. These courses provide an opportunity for students to develop skills and knowledge that will enhance their lives far beyond graduation. The ability to communicate effectively, solve problems, understand values, and demonstrate quantitative literacy are skills that are important whether the student is pursuing further education, is active in the workforce, or participates in the civic and cultural life of the community. Courses that provide general knowledge in science, social and behavioral sciences, humanities, and cultural diversity serve to broaden each student’s perspective in an increasingly complex world. A one-credit hour capstone course serves as an intentional opportunity for students to demonstrate their ability to integrate skill and knowledge areas while investigating a topic of interest.

Students who complete the 42-credit hour block of general education courses will have “Missouri General Education Requirement completed” noted on their transcripts. Students who complete this block will have satisfied all general education at any Missouri public college or university to which they may transfer, except the University of Missouri-Columbia. Students wishing to transfer to UM-C should consult an advisor for specific requirements. Many private institutions also accept the 42-credit hour block to satisfy their general education requirements.

In addition to the 42 credit hours of general education and two credit hours of physical education, students will select 20 credit hours to complete the 64-credit hour Associate in Arts degree. Students should work closely with a counselor or advisor to select courses that are transferable to a degree program at a four-year institution. For students who have clear academic goals these courses may be in a specified academic field, while other students may use these credits to sample a variety of courses to help them determine future academic plans. Recommended concentrations in Business Administration, Communications, Public Relations/Advertising, Media Communications, Theatre, Film Studies, Life Sciences, Mathematics and Music are described beginning on page 36.

General Education Revision

Beginning in August 2014, St. Louis Community College implemented a revision to its existing general education requirements. The faculty approved this revision because it offers students a greater opportunity to learn and refine the skills and knowledge areas that are important in the 21st century. As part of this revision, every course that is offered to students as a general education requirement has undergone a thorough review by faculty and administrators to ensure that it represents the most current, accurate, and relevant content. This review of courses is ongoing. As a result, not all general education courses that will be available for enrollment have completed the approval process at the printing of this catalog. The most current list of approved courses is available from an adviser or counselor and can also be found at stlcc.edu/Gen-Ed-Courses.
I. FOUNDATION COURSES

13 credits required

- ENG:101 College Composition I .................. 3
- ENG:102 College Composition II .................. 3
- COM:101 Oral Communication I (or)
- COM:107 Public Speaking .......................... 3

Select one Mathematics course from the following:
- MTH:160 College Algebra ........................... 4
- MTH:161 Applications of College Mathematics ........ 4
- MTH:170 Trigonometry .............................. 3
- MTH:186 Survey of Calculus ......................... 4
- MTH:185 Precalculus .................................. 5
- MTH:215 Linear Algebra ................................ 3
- MTH:212 Discrete Mathematics ...................... 3
- MTH:210 Analytic Geometry and Calculus I ........... 5
- MTH:220 Analytic Geometry and Calculus II ........... 5
- MTH:230 Analytic Geometry and Calculus III ......... 5

II. MAIN FLOOR COURSES

28 credit hours required, students must select at least one course that meets the Global/Intercultural requirement, indicated by a +.

a. Humanities and Fine Arts

9 credits required

- ART:100+ Art Appreciation ............................ 3
- ART:101+ Art History I .................................. 3
- ART:102+ Art History II .................................. 3
- ART:103 History of Modern Art ........................ 3
- CHI:101 Elementary Chinese I ....................... 4
- COM:107 Public Speaking ............................ 3
- COM:114 Oral Interpretation of Literature ........... 3
- ENG:114 Writing Plays and Filmscripts ............... 3
- ENG:221* British Literature after 1800 ............... 3
- ENG:213 British Literature after 1800 ............... 3
- ENG:216* Women in Literature ....................... 3
- ENG:217* Major Black Writers ....................... 3
- ENG:225 Poetry Writing .............................. 3
- ENG:228 Studies in Literature ....................... 3
- ENG:230* Environmental Literature ................. 3
- ENG:231* World Literature ............................ 3
- FRE:101 Elementary French I ....................... 4
- FRE:102 Elementary French II ....................... 4
- GER:101 Elementary German I ....................... 4
- HUM:101+ Humanities: Prehistory to 1600 .......... 3
- HUM:102+ Humanities: 1600 to the Present .......... 3
- HUM:106+ Black Humanities .......................... 3
- HUM:109+ Arts and Ideas in the Ancient World ....... 3
- HUM:110+ The Middle Ages and the Renaissance ... 3
- ITL:103 Italian I ...................................... 4
- ITL:104 Italian II ..................................... 4
- FNM:101 Modern Japanese I ......................... 4
- FNM:102 Modern Japanese II ......................... 4
- MCM:102 Media Literacy .............................. 3
- MCM:130 Film Appreciation .......................... 3
- MCM:131 History of Film ............................. 3
- MCM:132 Themes in Film ............................. 3
- MCM:134 Filmmaking .................................. 3
- MCM:209 Black Cinema ................................ 3
- MCM:218 Advanced Filmmaking ....................... 3
- MCM:14 History of Jazz Music ....................... 3
- MCM:114 Music Appreciation ......................... 3
- MCM:128 History of Rock and Roll ................... 3
- PHL:101 Introduction to Philosophy .................. 3
- PHL:102 Introduction to Logic ....................... 3
- PHL:103+ World Religions ............................ 3
- PHL:104 Ethics ........................................ 3
- PHL:105+ Black Philosophy ......................... 3
- PHL:109 Bio-Medical Ethics .......................... 3
- PHL:111 Environmental Ethics ....................... 3
- PHL:112 Business Ethics ............................. 3
- PHL:114 Philosophy of Religion ..................... 3
- RUS:101 Elementary Russian I ..................... 4
- SPA:101 Elementary Spanish I ...................... 4
- SPA:102 Elementary Spanish II .................... 4
- SPA:201 Intermediate Spanish I .................... 4
- THT:101 Introduction to Theatre ..................... 3
- THT:110+ History of Theatre ......................... 3

b. Social and Behavioral Sciences

9 credits required, including at least one course that meets the Missouri State Requirement, indicated by an *

- COM:110+ Organizational Communication in a Global Age .... 3
- COM:120+ Gender Communication ..................... 3
- COM:200+ Communication Between Cultures .......... 3
- ECO:140 Introduction to Economics .................. 3
- ECO:151 Principles of Macroeconomics ............... 3
- ECO:152 Principles of Microeconomics ............... 3
- GEG:106* World Geography ............................ 3
- HST:101* United States History to 1865 .......... 3
- HST:102* United States History from 1865 to the Present ... 3
- HST:105* United States in the 20th Century ........ 3
### c. Life and Physical Sciences

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO:106</td>
<td>Human Heredity</td>
<td>4</td>
</tr>
<tr>
<td>BIO:110</td>
<td>General Zoology</td>
<td>4</td>
</tr>
<tr>
<td>BIO:111</td>
<td>Introductory Biology I (Lab)</td>
<td>4</td>
</tr>
<tr>
<td>BIO:124</td>
<td>General Botany I</td>
<td>4</td>
</tr>
<tr>
<td>CHM:101</td>
<td>Fundamentals of Chemistry (Lab)</td>
<td>5</td>
</tr>
<tr>
<td>CHM:105</td>
<td>General Chemistry (Lab)</td>
<td>5</td>
</tr>
<tr>
<td>CHM:106</td>
<td>General Chemistry II</td>
<td>5</td>
</tr>
<tr>
<td>CHM:109</td>
<td>Chemistry and the Environment</td>
<td>5</td>
</tr>
<tr>
<td>GEO:111</td>
<td>Physical Geology</td>
<td>5</td>
</tr>
<tr>
<td>GEO:123</td>
<td>Geologic Field Experiences in North America</td>
<td>4</td>
</tr>
</tbody>
</table>

#### Laboratory Courses

- BIO:106 Human Heredity: 4 credits
- BIO:110 General Zoology: 4 credits
- BIO:111 Introductory Biology I (Lab): 4 credits
- BIO:124 General Botany I: 4 credits
- CHM:101 Fundamentals of Chemistry (Lab): 5 credits
- CHM:105 General Chemistry (Lab): 5 credits
- CHM:106 General Chemistry II: 5 credits
- CHM:109 Chemistry and the Environment: 5 credits
- GEO:111 Physical Geology: 5 credits
- GEO:123 Geologic Field Experiences in North America: 4 credits

#### Non-Laboratory Courses

- BIO:106 Human Heredity: 4 credits
- BIO:109 Human Biology: 3 credits
- BIO:113 Modern Aspects of Biology: 3 credits
- BIO:117 Conservation and Ecology: 3 credits
- BIO:123 Animal Behavior: 3 credits
- BIO:151 Biology of Human Health and Disease: 3 credits
- BIO:153 Introduction to Tropical Biology: 3 credits
- BIO:154 The Biology of Human Sex: 3 credits
- GEG:103 Physical Geography: 3 credits
- GEO:100 Earth Science: 3 credits
- GEO:103 Environmental Geology: 3 credits
- GEO:113 Oceanography: 3 credits
- GEO:104 Prehistoric Life: 3 credits
- PSI:111 Introduction to Astronomy: 3 credits
- PSI:123 Meteorology: 3 credits

### d. Interdisciplinary Studies

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>IDS:102</td>
<td>Urban Legends and American Society</td>
<td>3</td>
</tr>
<tr>
<td>IDS:103</td>
<td>Topics in Arab Culture</td>
<td>3</td>
</tr>
<tr>
<td>IDS:104</td>
<td>Equity in Education</td>
<td>3</td>
</tr>
<tr>
<td>IDS:105</td>
<td>Law Goes to the Movies</td>
<td>3</td>
</tr>
<tr>
<td>IDS:106</td>
<td>The Artist in Society</td>
<td>3</td>
</tr>
<tr>
<td>IDS:107</td>
<td>Representations of Race, Class, Gender, and Sexual</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Ity in US Society</td>
<td></td>
</tr>
<tr>
<td>IDS:108</td>
<td>Movement Culture of 1960s America</td>
<td>3</td>
</tr>
<tr>
<td>IDS:109+</td>
<td>Global Dimensions of Race, Ethnicity, and Religion</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>in America</td>
<td></td>
</tr>
<tr>
<td>IDS:112+</td>
<td>Sex Trafficking in Global Perspective</td>
<td>3</td>
</tr>
<tr>
<td>IDS:113+</td>
<td>Global Encounters in the Visual Arts</td>
<td>3</td>
</tr>
<tr>
<td>IDS:114</td>
<td>Leadership in the 21st Century</td>
<td>3</td>
</tr>
<tr>
<td>IDS:115</td>
<td>The Science and Value of Happiness</td>
<td>3</td>
</tr>
<tr>
<td>IDS:116+</td>
<td>Historical, Social, and Cultural Constructions of</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Youth</td>
<td></td>
</tr>
<tr>
<td>IDS:117</td>
<td>Sport and Society</td>
<td>3</td>
</tr>
</tbody>
</table>

#### 3 credits required

- IDS:102 Urban Legends and American Society: 3 credits
- IDS:103 Topics in Arab Culture: 3 credits
- IDS:104 Equity in Education: 3 credits
- IDS:105 Law Goes to the Movies: 3 credits
- IDS:106 The Artist in Society: 3 credits
- IDS:107 Representations of Race, Class, Gender, and Sexuality in US Society: 3 credits
- IDS:108 Movement Culture of 1960s America: 3 credits
- IDS:109+ Global Dimensions of Race, Ethnicity, and Religion in America: 3 credits
- IDS:112+ Sex Trafficking in Global Perspective: 3 credits
- IDS:113+ Global Encounters in the Visual Arts: 3 credits
- IDS:114 Leadership in the 21st Century: 3 credits
- IDS:115 The Science and Value of Happiness: 3 credits
- IDS:116+ Historical, Social, and Cultural Constructions of Youth: 3 credits
- IDS:117 Sport and Society: 3 credits

### III. Capstone

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEN:200</td>
<td>Capstone</td>
<td>1</td>
</tr>
</tbody>
</table>

#### 1 credit required

- GEN:200 Capstone: 1 credit

+ Course fulfills Global/Intercultural Requirement.
* Course meets Missouri State Requirement.

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For the latest updated list of approved General Education Courses, visit stlcc.edu/programs or contact a counselor or advisor.
ASSOCIATE IN ARTS DEGREE (General Transfer Studies)

Florissant Valley, Forest Park, Meramec, Wildwood and Online

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

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

<table>
<thead>
<tr>
<th>I. General Education .......... 42 credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG:101 College Composition .................. 3</td>
</tr>
<tr>
<td>ENG:102 College Composition II ............... 3</td>
</tr>
<tr>
<td>COM:101 Oral Communication I (or) .......... 3</td>
</tr>
<tr>
<td>COM:107 Public Speaking ....................... 3</td>
</tr>
<tr>
<td>MTH:xxx Mathematics Requirement .............. 4</td>
</tr>
<tr>
<td>XXX:xxx Social and Behavioral Sciences .......... 9</td>
</tr>
<tr>
<td>(including 3 credits that satisfy the Missouri constitution requirement)</td>
</tr>
<tr>
<td>XXX:xxx Humanities and Fine Arts .............. 9</td>
</tr>
<tr>
<td>XXX:xxx Life and Physical Sciences ............ 7</td>
</tr>
<tr>
<td>(One lab course required)</td>
</tr>
<tr>
<td>IDS:xxx Interdisciplinary Studies ................ 3</td>
</tr>
<tr>
<td>(except 101 and 201)</td>
</tr>
<tr>
<td>GEN:200 Capstone .................................. 1</td>
</tr>
</tbody>
</table>

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

| II. Physical Education Activity ....... 2 credits |
| III. Electives ..................... 20 credits |

Elective credits within the Associate in Arts degree allow the student to begin working toward an academic major by selecting courses within a discipline or to continue to explore various subjects at an introductory level. The following concentrations are suggestions to assist students in planning for their bachelor’s degree work.

Missouri public colleges and universities, as well as most private institutions, require three semesters (12 to 13 credit hours) of a foreign language for a bachelor of arts degree.

<table>
<thead>
<tr>
<th>Business Administration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students are encouraged to take ECO:151 Principles of Macroeconomics and ECO:152 Principles of Microeconomics 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.</td>
</tr>
<tr>
<td>ACC:110 Financial Accounting I .................. 4</td>
</tr>
<tr>
<td>ACC:114 Managerial Accounting .................... 3</td>
</tr>
<tr>
<td>BUS:104 Introduction to Business Administration ...... 3</td>
</tr>
<tr>
<td>BLW:101 Business Law I (or) ..................... 3</td>
</tr>
<tr>
<td>BLW:201 Legal Environment of Business ............ 3</td>
</tr>
<tr>
<td>BUS:201 Elementary Statistics (or) ................ 3</td>
</tr>
<tr>
<td>BUS:202 Statistical Analysis ........................ 3</td>
</tr>
<tr>
<td>IB:100 International Business ..................... 3</td>
</tr>
<tr>
<td>IS:103 Information Systems for Business (or) ...... 3</td>
</tr>
<tr>
<td>IS:116 Computer Literacy ........................... 3</td>
</tr>
<tr>
<td>MGT:204 Business Organization and Management .... 3</td>
</tr>
<tr>
<td>MKT:203 Principles of Marketing ................... 3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Communications</th>
</tr>
</thead>
<tbody>
<tr>
<td>COM:102 Oral Communication II ................... 3</td>
</tr>
<tr>
<td>COM:103 Small Group Communication ................ 3</td>
</tr>
<tr>
<td>COM:104 Persuasion ................................. 3</td>
</tr>
<tr>
<td>COM:107 Public Speaking ............................ 3</td>
</tr>
<tr>
<td>COM:110 Organizational Communication ............ 3</td>
</tr>
<tr>
<td>COM:114 Oral Interpretation of Literature .......... 3</td>
</tr>
<tr>
<td>COM:200 Communication Between Cultures .......... 3</td>
</tr>
<tr>
<td>COM:201 Interpersonal Communication ............... 3</td>
</tr>
</tbody>
</table>
### Film Studies
- MCM:101 Introduction to Mass Communications... 3
- MCM:130 Film Appreciation ........................ 3
- MCM:115 Acting for the Camera .................... 3
- MCM:125 Scriptwriting for Television and Film .... 3
- MCM:131 History of Film.................................. 3
- MCM:132 Major Themes in Film....................... 3
- MCM:134 Filmmaking .................................... 3
- MCM:209 Blacks and the World of Cinema .......... 3
- MCM:215 Major Film Directors ....................... 3
- MCM:218 Advanced Filmmaking ....................... 3
- MCM:219 Multimedia Applications ................. 1-3

### Life Sciences
- BIO:140 Principles of Biology I ..................... 4
- BIO:141 Principles of Biology II .................... 4
- CHM:206 Organic Chemistry Lecture I ............ 3
- CHM:207 Organic Chemistry Lecture II ........... 3
- CHM:210 Organic Chemistry Laboratory I ........ 2
- CHM:211 Organic Chemistry Laboratory II ....... 2
- PHY:111 College Physics I ............................ 4
- PHY:112 College Physics II ........................... 4

### Mathematics
- ESC:101 Scientific Computer Programming ........ 3
- MTH:220 Analytical Geometry and Calculus II .... 5
- MTH:230 Analytical 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.*

- CHM:105 General Chemistry I ...................... 5
- CHM:106 General Chemistry II ..................... 5
- CHM:206 Organic Chemistry Lecture I ........... 3
- CHM:207 Organic Chemistry Lecture II .......... 3
- CHM:210 Organic Chemistry Lab I ............... 2
- CHM:211 Organic Chemistry Lab II ............... 2
- PHY:122 Engineering Physics I ..................... 5
- PHY:223 Engineering Physics II .................... 5
- PHY:224 Engineering Physics III ................... 3

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

### Media Communications
- MCM:101 Introduction to Mass Communications ...... 3
- MCM:120 Introduction to Broadcasting .............. 3
- MCM:110 Journalism & 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
- MCM:120 Introduction to Broadcasting .............. 3

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

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

### Theatre
- THT:101 Introduction to Theatre ..................... 3
- THT:102 Stagecraft ...................................... 3
- THT:103 Stage Design and Lighting .................. 3
- THT:106 Theatre Practicum ............................ 3
- THT:107 Playwriting .................................... 3
- THT:108 Acting I ........................................ 3
- THT:109 Acting II ........................................ 3
- THT:110 History of Theatre ............................ 3
- THT:115 Acting for the Camera ....................... 3
- THT:201 Directing ...................................... 3

Program total... .64 credits
Florissant Valley, Forest Park, Meramec and Wildwood

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

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

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

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

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

I. General Education 42–43 credits

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG:101 College Composition I</td>
<td>3</td>
</tr>
<tr>
<td>ENG:102 College Composition II</td>
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</tr>
<tr>
<td>MTH:xxx Mathematics Requirement</td>
<td>4</td>
</tr>
<tr>
<td>COM:101 Oral Communication (or)</td>
<td>3</td>
</tr>
<tr>
<td>COM:107 Public Speaking</td>
<td></td>
</tr>
</tbody>
</table>

XXX:xxx Social & Behavioral Sciences 9

Recommendations for Certification:

- HST:101* or HST:102* 3
- PSY:200 (prerequisite for EDU:227) 3
- PSY:203, PSY:205, or PSY:214 3

XXX:xxx Humanities and Fine Arts 9

(Non-studio art or music class recommended for Elementary Certification)

XXX:xxx Life and Physical Sciences 7-8

(One lab course required for Secondary Certification; two lab courses required for Elementary certification)

IDS:xxx Interdisciplinary Studies 3

GEN:200 Capstone 1

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

* Course meets Missouri State Requirement

II. Physical Education 2

III. Area of Concentration 12

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDU:210 Teaching Profession with Field Experience</td>
<td>3</td>
</tr>
<tr>
<td>EDU:211 Foundations of Education</td>
<td></td>
</tr>
<tr>
<td>EDU:218 Technology for Teachers</td>
<td>3</td>
</tr>
<tr>
<td>EDU:227 Educational Psychology</td>
<td>3</td>
</tr>
</tbody>
</table>

IV. Electives 7-8 credits

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.

Recommended Electives:

EDU:120 Art for Children
EDU:219 Education of Exceptional Learners
EDU:226 Children’s Literature
PSC:101 Introduction to American Politics
ECO:140 Introduction to Economics
MTH:165 Structures of Mathematical Systems I
MTH:166 Structures of Mathematical Systems II

Program total . . . . 64 credits
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.

Art Education

Associate in Fine Arts Degree
Florissant Valley, Forest Park, Meramec and Wildwood

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

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

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

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

I. General Education 23 credits

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG:101</td>
<td>College Composition I</td>
<td>3</td>
</tr>
<tr>
<td>COM:101</td>
<td>Oral Communication I</td>
<td>3</td>
</tr>
<tr>
<td>HST:101</td>
<td>American History I (or)</td>
<td>3</td>
</tr>
<tr>
<td>HST:102</td>
<td>American History II</td>
<td>3</td>
</tr>
<tr>
<td>PSY:200</td>
<td>General Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSY:205</td>
<td>Human Growth and Development</td>
<td>3</td>
</tr>
<tr>
<td>MTH:160</td>
<td>College Algebra</td>
<td>4</td>
</tr>
<tr>
<td>XXXxxx</td>
<td>Science Elective with lab</td>
<td>4</td>
</tr>
</tbody>
</table>

II. Physical Education Activity 2 credits

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Credits</th>
</tr>
</thead>
</table>

III. Professional Education 15 credits

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDU:218</td>
<td>Technology for Teachers</td>
<td>3</td>
</tr>
<tr>
<td>EDU:120</td>
<td>Art for Children</td>
<td>3</td>
</tr>
<tr>
<td>EDU:210</td>
<td>Teaching Profession With Field Experience</td>
<td>3</td>
</tr>
<tr>
<td>EDU:227</td>
<td>Educational Psychology</td>
<td>3</td>
</tr>
<tr>
<td>EDU:211</td>
<td>Foundations of Education</td>
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</table>
### IV. Area of Concentration

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART:101</td>
<td>Art History I</td>
<td>3</td>
</tr>
<tr>
<td>ART:102</td>
<td>Art History II</td>
<td>3</td>
</tr>
<tr>
<td>ART:107</td>
<td>Design I</td>
<td>2</td>
</tr>
<tr>
<td>ART:108</td>
<td>Design II</td>
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<tr>
<td>ART:109</td>
<td>Drawing I</td>
<td>3</td>
</tr>
<tr>
<td>ART:110</td>
<td>Drawing II</td>
<td>3</td>
</tr>
<tr>
<td>ART:111</td>
<td>Figure Drawing I</td>
<td>3</td>
</tr>
<tr>
<td>ART:131</td>
<td>Computer Art Studio</td>
<td>3</td>
</tr>
</tbody>
</table>

### V. 3-D Art Elective

<table>
<thead>
<tr>
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<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART:113</td>
<td>Ceramics I</td>
<td>3</td>
</tr>
<tr>
<td>ART:116</td>
<td>Sculpture I</td>
<td>3</td>
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</table>

### VI. 2-D Art Electives

<table>
<thead>
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<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>ART:112</td>
<td>Figure Drawing II</td>
<td>3</td>
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<tr>
<td>ART:114</td>
<td>Painting I</td>
<td>3</td>
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<tr>
<td>ART:115</td>
<td>Printmaking I</td>
<td>3</td>
</tr>
<tr>
<td>ART:133</td>
<td>Graphic Design I</td>
<td>3</td>
</tr>
<tr>
<td>ART:165</td>
<td>Photography I</td>
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<tr>
<td>ART:209</td>
<td>Drawing III</td>
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</table>

**Program total: 71 credits**

### General Fine Arts

**Associate in Fine Arts Degree**

**Florissant Valley, Forest Park, Meramec and Wildwood**

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

### I. General Education

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<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tr>
<td>ENG:102</td>
<td>College Composition II</td>
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<tr>
<td>XXX:xxx</td>
<td>Missouri State Requirement</td>
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<td>XXX:xxx</td>
<td>Social Science Elective</td>
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<tr>
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<td>Science Elective</td>
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<tr>
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<td>ART:102</td>
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### II. Physical Education Activity

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**Program total: 67-69 credits**

### III. Area of Concentration

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<tr>
<td>ART:110</td>
<td>Drawing II</td>
<td>3</td>
</tr>
<tr>
<td>ART:111</td>
<td>Figure Drawing I</td>
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<tr>
<td>ART:112</td>
<td>Figure Drawing II</td>
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<tr>
<td>ART:207</td>
<td>Design III</td>
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<tr>
<td>ART:208</td>
<td>Design IV</td>
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<tr>
<td>ART:211</td>
<td>Figure Drawing III</td>
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<tr>
<td>ART:209</td>
<td>Drawing III</td>
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<tr>
<td>ART:210</td>
<td>Advanced Drawing</td>
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### IV. Electives

<table>
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<tbody>
<tr>
<td>ART:131</td>
<td>Computer Art Studio</td>
<td>3</td>
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<tr>
<td>ART:138</td>
<td>Drawing for Graphics I</td>
<td>2</td>
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<tr>
<td>ART:243</td>
<td>Figure Illustration</td>
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<tr>
<td>ART:113</td>
<td>Ceramics I</td>
<td>3</td>
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<tr>
<td>ART:213</td>
<td>Ceramics II</td>
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<td>Advanced Ceramics</td>
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<td>ART:165</td>
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<td>ART:166</td>
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<tr>
<td>ART:279</td>
<td>Non-Silver Photography</td>
<td>3</td>
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<tr>
<td>ART:172</td>
<td>Digital Photography</td>
<td>3</td>
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<tr>
<td>ART:275</td>
<td>Photo Imaging &amp; Photoshop</td>
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<tr>
<td>ART:108</td>
<td>Computer Painting and Drawing: Corel Painter</td>
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<tr>
<td>ART:175</td>
<td>Video Art I</td>
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<td>ART:275</td>
<td>Video Art II</td>
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<tr>
<td>ART:116</td>
<td>Sculpture I</td>
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<tr>
<td>ART:216</td>
<td>Sculpture II</td>
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<tr>
<td>ART:227</td>
<td>3-D Studio</td>
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<tr>
<td>ART:219</td>
<td>Figure Sculpture</td>
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<td>ART:230</td>
<td>Figure Sculpture II</td>
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<tr>
<td>ART:201</td>
<td>Mixed Media</td>
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<tr>
<td>ART:114</td>
<td>Painting I</td>
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<tr>
<td>ART:214</td>
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<td>ART:229</td>
<td>Advanced Painting Projects</td>
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<td>ART:228</td>
<td>Figure Painting</td>
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<tr>
<td>ART:121</td>
<td>Watercolor I</td>
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<td>ART:221</td>
<td>Watercolor II</td>
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<td>ART:115</td>
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<td>ART:215</td>
<td>Advanced Printmaking</td>
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<tr>
<td>ART:210</td>
<td>Drawing Problems</td>
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</table>

**Program total: 67-69 credits**
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.

I. General Education    18-19 credits

<table>
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<tr>
<th>Course</th>
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<tbody>
<tr>
<td>ENG:101 College Composition I</td>
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<tr>
<td>ENG:102 College Composition II (or)</td>
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<tr>
<td>ENG:103 Report Writing (or)</td>
<td></td>
</tr>
<tr>
<td>MCM:217 Publications Writing (or)</td>
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<tr>
<td>COM:101 Oral Communication I</td>
<td>3</td>
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<tr>
<td>XXX:xxx Missouri State Requirement</td>
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<td>XXX:xxx Social Science Elective</td>
<td>3</td>
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<tr>
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<td>MTH:140 Mathematics (140 level or higher) or Science elective</td>
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II. Physical Education Activity    2 credits

III. Area of Concentration    50 credits

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<td>ART:107 Design I</td>
<td>2</td>
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<tr>
<td>ART:108 Design II</td>
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<tr>
<td>ART:109 Drawing I</td>
<td>3</td>
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<tr>
<td>ART:110 Drawing II</td>
<td>3</td>
</tr>
<tr>
<td>ART:111 Figure Drawing I</td>
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<td>ART:112 Figure Drawing II</td>
<td>3</td>
</tr>
<tr>
<td>ART:131 Computer Art Studio</td>
<td>3</td>
</tr>
<tr>
<td>ART:133 Graphic Design I</td>
<td>3</td>
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<tr>
<td>ART:134 Graphic Design II</td>
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<td>ART:138 Drawing for Graphics I</td>
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<td>ART:238 Drawing for Graphics II</td>
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<td>ART:239 Illustration I</td>
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<td>ART:240 Illustration II</td>
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<td>ART:233 Graphic Design III</td>
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<td>ART:234 Graphic Design IV</td>
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<tr>
<td>ART:245 Portfolio Design and Professional Practices</td>
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<tr>
<td>ART:135 Graphic Production I</td>
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<td>ART:235 Graphic Production II</td>
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<tr>
<td>AT:242 The History of Graphic Communications</td>
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</tbody>
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Program total. . . 70-71 credits

Photography
Associate in Fine Arts Degree
Florissant Valley, Forest Park, Meramec and Wildwood
This program is designed for students planning to transfer to a four-year art school or the University of Missouri-St. Louis and earn a bachelor of fine arts degree. Students develop skills in black and white printing techniques; ways to gather information from visual images and use visual elements to form mental constructs; issues and ideas about photography; portrait, architectural, documentary, large format, industrial, field and figure fashion photography; and other 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.

I. General Education     24-25 credits

<table>
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<tr>
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<tr>
<td>ENG:102 College Composition II</td>
<td>3</td>
</tr>
<tr>
<td>XXX:xxx Missouri State Requirement</td>
<td>3</td>
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<tr>
<td>XXX:xxx Social Science Elective</td>
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<tr>
<td>MTH:140 Mathematics (140 level or higher) or Science elective</td>
<td>3-4</td>
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<tr>
<td>XXX:xxx Science Elective</td>
<td>3</td>
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<tr>
<td>ART:168 History of Photography</td>
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<tr>
<td>ART:xxx Art History—choose one</td>
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<tr>
<td>ART:101 Art History I</td>
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<td>ART:102 Art History II</td>
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<td>ART:103 History of Modern Art</td>
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<td>ART:169 Visual Language</td>
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II. Physical Education Activity    2 credits

III. Area of Concentration    31 credits

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>ART:107 Design I</td>
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<tr>
<td>ART:109 Drawing I</td>
<td>3</td>
</tr>
<tr>
<td>ART:110 Drawing II (or)</td>
<td>3</td>
</tr>
<tr>
<td>ART:111 Figure Drawing I</td>
<td>3</td>
</tr>
<tr>
<td>ART:165 Photography I</td>
<td>3</td>
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<tr>
<td>ART:166 Photography II</td>
<td>3</td>
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<tr>
<td>ART:167 Color Photography</td>
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<tr>
<td>ART:204 Photography III</td>
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<td>ART:265 Artificial Light Photography</td>
<td>3</td>
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<td>ART:275 Photo Imaging I: Photoshop</td>
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<td>ART:172 Digital Photography</td>
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<td>Course Code</td>
<td>Course Title</td>
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<tr>
<td>ART:266</td>
<td>Black and White Printing Lab</td>
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<td>Non-Silver Photography</td>
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<tr>
<td>ART:267</td>
<td>Color Photography II</td>
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<td>ART:272</td>
<td>Documentary Photography</td>
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<td>ART:268</td>
<td>Large Format Photography</td>
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<td>ART:269</td>
<td>Field Photography</td>
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<td>ART:271</td>
<td>Portrait Photography</td>
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<td>ART:273</td>
<td>Architectural Photography</td>
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<td>AT:175</td>
<td>Video Art I</td>
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<td>AT:275</td>
<td>Video Art II</td>
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<td>AT:276</td>
<td>Photo Imaging II: Photoshop</td>
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<td>AT:212</td>
<td>Special Topics in Photography</td>
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<td>Advanced Photography</td>
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<td>Digital Printing</td>
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<td>Workplace Learning: Photography</td>
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<td>AT:104</td>
<td>Electronic Photo Studio</td>
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<td>Photography Workshop</td>
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<td>Contemporary Concepts in Photography</td>
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<td>Figure Fashion Photography</td>
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Computer Science
Associate in Science Degree
Florissant Valley, Forest Park and Meramec

This program provides students with the first two years of study toward a bachelor’s degree at a four-year college or university. Persons with computer science skills design, engineer, produce, implement, sell or service systems for a variety of organizations. Many are employed to analyze jobs, translate them into computer language, refine programs or operate systems on a daily basis.

Students are strongly advised to familiarize themselves with the computer science program at the schools to which they plan to transfer. The general education component is designed to meet the receiving institutions’ guidelines. They should contact the instructional department, counselor or advisor at STLCC to plan a program to meet those requirements.

I. General Education 27 credits

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
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<td>ENG:101</td>
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<tr>
<td>ENG:102</td>
<td>College Composition II</td>
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</tr>
<tr>
<td>MTH:210</td>
<td>Analytic Geometry and Calculus</td>
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<td>CHM:105</td>
<td>General Chemistry I</td>
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<td>PHY:122</td>
<td>Engineering Physics I</td>
<td>5</td>
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<td>XXXxxx</td>
<td>Humanities or Social Science Elective</td>
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<td>Missouri State Requirement</td>
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II. Physical Education Activity 2 credits

<table>
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III. Area of Concentration 27 credits

<table>
<thead>
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<th>Course</th>
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<tbody>
<tr>
<td>IS:112</td>
<td>Software and Hardware Concepts</td>
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<td>IS:227</td>
<td>C Programming</td>
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<td>IS:256</td>
<td>C++ Programming</td>
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<td>MTH:220</td>
<td>Analytic Geometry and Calculus II</td>
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<td>MTH:230</td>
<td>Analytic Geometry and Calculus III</td>
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<td>MTH:212</td>
<td>Discrete Mathematics</td>
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<td>PHY:223</td>
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IV. Electives 12-15 credits

Choose one of the following:

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<tr>
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<td>Database Management</td>
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<tr>
<td>IS:229</td>
<td>UNIX/Linux I</td>
<td>3</td>
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</table>

Engineering Science
Associate in Science Degree
Florissant Valley and Meramec

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

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

Program total. . . 68-71 credits
I. General Education 27 credits

ENG:101 College Composition I
ENG:102 College Composition II (or)
ENG:103 Report Writing (or) ......................................... 3
ENG:203 American Literature ............................................. 3
MTH:210 Analytical Geometry and Calculus I ................. 5
CHM:105 General Chemistry I .................................... 5
PHY:122 Engineering Physics I ..................................... 5
XXX:xxx Social Science Requirement .......................... 3
XXX:xxx Missouri State Requirement ............................ 3

II. Physical Education Activity 2 credits

III. Area of Concentration 31 credits

ESC:100 Engineering Computer Applications 
and Design ................................................................. 3
ESC:101 Scientific Computer Programming (or)
IS:227 C Programming ................................................. 3
ESC:200 Engineering Circuits I .................................... 4
ESC:203 Engineering Mechanics I ................................. 3
MTH:220 Analytic Geometry and Calculus II ................. 5
MTH:230 Analytic Geometry and Calculus III ................. 5
MTH:240 Differential Equations ..................................... 3
PHY:223 Engineering Physics II ..................................... 5

IV. Engineering Electives 3-4 credits

Choose one course from the following list based on the engineering field to be pursued and the recommendation of the college to which transfer is expected.

ESC:201 Engineering Circuits II .................................... 4
ESC:204 Engineering Mechanics II ................................. 3
ESC:205 Mechanics of Materials .................................. 3
ESC:207 Engineering Thermodynamics (or)
ESC:202 Thermal Analysis ............................................. 3

V. Technical and General Education Electives 6-7 credits

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

Engineering and Related Electives:

EGR:100 Engineering Drawing ........................................ 3
ESC:201 Engineering Circuits II .................................... 4
ESC:204 Engineering Mechanics II ................................. 3
ESC:205 Mechanics of Materials .................................. 3
ESC:206 Strength of Materials Lab .................................. 1
ESC:207 Engineering Thermodynamics (or)
ESC:202 Thermal Analysis ............................................. 3
ME:151 Manufacturing Processes I* ................................ 3
ME:249 Materials and Metallurgy* ................................ 3
CE:240 Surveying I* .................................................. 3
CE:243 Introduction to Environmental Engineering* ........ 3
QC:100 Introduction to Quality Control* ......................... 3
SAF:100 Safety Program Organization 
and Administration* ................................................. 3
IS:256 C++ Programming ............................................. 3

*Check with transfer institution to determine course acceptability.

Science and Mathematics Electives:

BIO:117 Conservation and Ecology* ........................................ 3
CHM:106 General Chemistry II ........................................... 5
CHM:201 Quantitative Analysis ......................................... 4
CHM:206 Organic Chemistry Lecture I (and) .................... 3
CHM:210 Organic Chemistry Lab I .................................... 2
CHM:207 Organic Chemistry Lecture II (and) .................... 3
CHM:211 Organic Chemistry Lab II .................................... 2
GEO:111 Physical Geology* ............................................. 5
MTH:215 Linear Algebra ................................................... 3
PHY:224 Engineering Physics III ........................................ 3

*Check with transfer institution to determine course acceptability.

Recommended General Education Electives**:

ANT:103 Cultural Variations
ART:133 Graphic Design I
COM:101 Oral Communication I
ECO:151 Principles of Macroeconomics
HST:119 The Modern World
HUM:112 Creative Thinking
PHL:111 Environmental Ethics
PSC:201 International Relations
PSY:200 General Psychology
PSY:206 Introduction to Social Psychology
PSY:217 Cross-Cultural Psychology
SOC:101 Introduction to Sociology
SOC:202 American Social Problems and Issues

**Substitutions may be made with permission from an advisor.

Program total . . . 69-71 credits
ASSOCIATE IN APPLIED SCIENCE DEGREE PROGRAM

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 have coursework in the following areas:

**Humanities and Communications** ................................................................. 6 credit hours
Select from Art, College Composition, English Literature and Culture, Foreign Language and Cultures, Humanities, Media, Music, Philosophy, Reading, Speech, and Theatre.

**Natural Science and Mathematics** ............................................................. 6 credit hours
Select from Astronomy, Biology, Chemistry, Geology, Physical Geography, Physical Science, Physics and Mathematics.

**Social Science** ......................................................................................... 6 credit hours
Select from Anthropology, Economics, Geography (except physical), History, Political Science, Psychology and Sociology.

**Physical Education** .................................................................................. 2 credit hours
Select from activity courses. For the remaining hours required for the degree, you may choose general electives or courses that fit a specific major.

CERTIFICATE PROGRAMS

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.

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.
Accounting
Associate in Applied Science Degree
Florissant Valley, Forest Park and Meramec

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

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

I. Career General Education 21 credits
   ENG:100 Career English (or)
   ENG:101 College Composition I
   ENG:103 Report Writing (or)
   ENG:102 College Composition II
   ECO:151 Principles of Macroeconomics
   ECO:152 Principles of Microeconomics
   MTH:xxx Mathematics (140 level or higher)
   BUS:103 Business Mathematics
   XXX:xxx Missouri State Requirement

II. Physical Education Activity 2 credits

III. Area of Concentration 22 credits
   ACC:100 Applied Accounting
   ACC:110 Financial Accounting I
   ACC:114 Managerial Accounting
   ACC:208 Intermediate Accounting I
   ACC:213 Survey of Business Taxes
   BLW:101 Business Law I
   BUS:104 Introduction to Business Administration

IV. Technology Core Courses 9 credits
   ACC:120 Computer Accounting Applications for Business
   ACC:122 Computer Accounting Applications - Spreadsheets
   ACC:124 Computer Accounting Applications - Database

V. Area of Concentration 6 credits
   Accounting Associate Option:
   Accounting electives

Tax Emphasis Option:
   Approved tax electives

VI. Business Electives 6 credits
   Choose two from the following:
   ACC:xxx
   IS:xxx
   MGT:xxx or MKT:xxx
   FIN:xxx
   BUS:201

Program total. . . . . 66 credits

Accounting
Certificate of Proficiency
Florissant Valley, Forest Park and Meramec

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

Courses 34 credits
   BUS:103 Business Mathematics
   ACC:100 Applied Accounting
   ACC:110 Financial Accounting I
   ACC:114 Managerial Accounting
   ACC:208 Intermediate Accounting I
   ACC:213 Survey of Business Taxes
   BLW:101 Business Law I
   ACC:120 Computer Accounting Applications for Business
   ACC:122 Computer Accounting Applications - Spreadsheets
   ACC:124 Computer Accounting Applications - Database
   ACC:xxx Accounting Elective

Business Electives 3 credits
   Choose from:
   ACC:xxx
   IS:xxx
   BUS:xxx
   FIN:xxx

Program total. . . . . 37 credits
### 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.

#### Courses 24 credits

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HMS:100</td>
<td>Introduction to Human Services</td>
<td>3</td>
</tr>
<tr>
<td>HMS:101</td>
<td>Human Services: Theories and Skills</td>
<td>3</td>
</tr>
<tr>
<td>HMS:205</td>
<td>Crisis Intervention</td>
<td>3</td>
</tr>
<tr>
<td>HMS:111</td>
<td>Group Practice in Human Services</td>
<td>3</td>
</tr>
<tr>
<td>HMS:201</td>
<td>Workplace Learning I: Human Services</td>
<td>3</td>
</tr>
<tr>
<td>HMS:203</td>
<td>Human Services Workplace Learning Seminar I</td>
<td>3</td>
</tr>
<tr>
<td>SOC:126</td>
<td>Study of Psychodynamic Substances</td>
<td>3</td>
</tr>
<tr>
<td>SOC:211</td>
<td>Alcoholism and Drug Abuse</td>
<td>3</td>
</tr>
</tbody>
</table>

#### Electives 3 credits

Choose one course from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSY:200</td>
<td>General Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSY:205</td>
<td>Human Growth and Development</td>
<td>3</td>
</tr>
<tr>
<td>PSY:208</td>
<td>Abnormal Psychology</td>
<td>3</td>
</tr>
<tr>
<td>SOC:204</td>
<td>Family and Society</td>
<td>3</td>
</tr>
</tbody>
</table>

**Program total... 27 credits**

### African-American Studies
#### Certificate of Specialization
Forest Park

This program is designed for students interested in a broad-based education and in enhancing their knowledge, understanding and capabilities for functioning effectively in a multi-racial society. Although the program is geared to students planning to transfer to four-year colleges, students in career programs will find the insight gained through these courses valuable. All students are urged to take at least one course in African-American Studies.

#### Courses 18 credits

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HUM:106</td>
<td>Black Humanities</td>
<td>3</td>
</tr>
<tr>
<td>PHL:105</td>
<td>Black Philosophy (or)</td>
<td></td>
</tr>
<tr>
<td>ENG:217</td>
<td>Major Black Writers*</td>
<td></td>
</tr>
<tr>
<td>PSY:200</td>
<td>General Psychology (Black Emphasis)</td>
<td></td>
</tr>
<tr>
<td>HST:137</td>
<td>African-American History through Reconstruction (or)</td>
<td></td>
</tr>
<tr>
<td>HST:138</td>
<td>African-American History II from Reconstruction to the Present</td>
<td></td>
</tr>
<tr>
<td>SOC:101</td>
<td>Introduction to Sociology (Black Emphasis)</td>
<td></td>
</tr>
<tr>
<td>XXXxxxx</td>
<td>African-American Studies approved Elective</td>
<td></td>
</tr>
</tbody>
</table>

* Required courses not selected may be taken as an elective course or any of the following courses:

#### Electives

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART:104</td>
<td>Major Black Artists</td>
<td></td>
</tr>
<tr>
<td>ECO:103</td>
<td>Economics of the Black Experience</td>
<td></td>
</tr>
<tr>
<td>HST:130</td>
<td>African History I</td>
<td></td>
</tr>
<tr>
<td>HST:131</td>
<td>African History II</td>
<td></td>
</tr>
<tr>
<td>MCM:209</td>
<td>Black Cinema</td>
<td></td>
</tr>
<tr>
<td>PHL:106</td>
<td>Black Religion</td>
<td></td>
</tr>
<tr>
<td>PSC:106</td>
<td>Blacks and the American Political Process</td>
<td></td>
</tr>
<tr>
<td>PSC:204</td>
<td>Politics of African Nations</td>
<td></td>
</tr>
</tbody>
</table>

**Program total... 18 credits**

### Architectural Technology
#### Associate in Applied Science Degree
Meramec

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

### Automotive Technology
#### Associate in Applied Science Degree
Forest Park

This program prepares students for entry-level positions in the automotive industry at beginning supervisory and managerial levels. Students are trained in every aspect of the mechanical parts of a car; however, auto body repair training is not offered. The program begins during the fall semester only. Part-time or full-time attendance is possible.

Persons interested in this program should be able to work well with people, be capable of assuming responsibility and be able to work without supervision. They should have a strong math and reading background and be mechanically inclined with a high level of manual dexterity and eye/hand coordination.

Graduates of the AAS program are qualified for positions as mechanics and diagnostic technicians at automobile dealerships, independent garages and repair shops, discount stores, tire centers and service centers. Certificate graduates qualify for many entry level positions.

#### I. Career General Education 19 credits

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG:101</td>
<td>College Composition I</td>
<td>3</td>
</tr>
<tr>
<td>COM:101</td>
<td>Oral Communication I</td>
<td>3</td>
</tr>
<tr>
<td>MTH:124</td>
<td>Technical Mathematics I</td>
<td>3</td>
</tr>
<tr>
<td>PSI:124</td>
<td>Principles of Physical Science</td>
<td>4</td>
</tr>
<tr>
<td>XXXxxxx</td>
<td>Missouri State Requirement</td>
<td></td>
</tr>
<tr>
<td>XXXxxxx</td>
<td>Psychology or Sociology Elective</td>
<td></td>
</tr>
</tbody>
</table>

#### II. Physical Education Activity 2 credits

#### III. Area of Concentration Activity 47 credits
ACC:100  Applied Accounting (or)          3
BUS:104  Introduction to Business Administration          3
AUT:150  Automotive Fuel and Induction Systems          3
AUT:151  Automotive Engine Operation          3
AUT:156  Automotive Electricity          3
AUT:158  Charts, Diagrams, and Handbook Usage          2
AUT:167  Automotive Electronics          3
AUT:168  Suspension and Steering I          3
AUT:169  Suspension and Steering II          3
AUT:256  Automotive Powertrains          3
AUT:271  Diagnostic Equipment and Emissions          3
AUT:272  Accessories, Controls and Air Conditioning          3
AUT:273  Automatic Transmissions and Transaxes          3
AUT:281  Automotive Field Work I          5
AUT:282  Automotive Field Work II          5
AUT:291  Automotive Service Management          2
AUT:282  Automotive Field Work II          5

Program total.          68 credits

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

Automotive Technology

Certificate of Proficiency
Forest Park

Building on the skills developed in the Certificate of Specialization, this program prepares the graduate to perform more complicated repair and maintenance tasks on automobiles.

<table>
<thead>
<tr>
<th>Courses</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUT:150 Automotive Fuel and Induction Systems</td>
<td>3</td>
</tr>
<tr>
<td>AUT:151 Automotive Engine Operation</td>
<td>3</td>
</tr>
<tr>
<td>AUT:156 Automotive Electricity</td>
<td>3</td>
</tr>
<tr>
<td>AUT:158 Charts, Diagrams, and Handbook Usage</td>
<td>2</td>
</tr>
<tr>
<td>AUT:167 Automotive Electronics</td>
<td>3</td>
</tr>
<tr>
<td>AUT:168 Suspension and Steering I</td>
<td>3</td>
</tr>
<tr>
<td>AUT:169 Suspension and Steering II</td>
<td>3</td>
</tr>
<tr>
<td>AUT:158 Charts, Diagrams, and Handbook Usage</td>
<td>2</td>
</tr>
<tr>
<td>AUT:167 Automotive Electronics</td>
<td>3</td>
</tr>
<tr>
<td>AUT:256 Automotive Powertrains</td>
<td>3</td>
</tr>
<tr>
<td>AUT:271 Diagnostic Equipment and Emissions</td>
<td>3</td>
</tr>
<tr>
<td>AUT:272 Accessories, Controls and Air Conditioning</td>
<td>3</td>
</tr>
<tr>
<td>AUT:273 Automatic Transmissions and Transaxes</td>
<td>3</td>
</tr>
<tr>
<td>AUT:281 Automotive Field Work I</td>
<td>5</td>
</tr>
</tbody>
</table>

Program total.          47 credits

Automotive Technology

Certificate of Specialization
Forest Park

Concentrating on development of skills, this certificate prepares the graduate to perform basic repairs and routine maintenance on automobiles and to use the necessary tools.

<table>
<thead>
<tr>
<th>Courses</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUT:150 Automotive Fuel and Induction Systems</td>
<td>3</td>
</tr>
<tr>
<td>AUT:151 Automotive Engine Operation</td>
<td>3</td>
</tr>
<tr>
<td>AUT:156 Automotive Electricity</td>
<td>3</td>
</tr>
<tr>
<td>AUT:168 Suspension and Steering I</td>
<td>3</td>
</tr>
<tr>
<td>AUT:169 Suspension and Steering II</td>
<td>3</td>
</tr>
<tr>
<td>ENG:101 College Composition I (or)</td>
<td>3</td>
</tr>
<tr>
<td>MTH:124 Technical Mathematics I (or)</td>
<td>3</td>
</tr>
<tr>
<td>COM:101 Oral Communication I</td>
<td>3</td>
</tr>
</tbody>
</table>

Program total.          18 credits

Aviation Maintenance - Airframe

Certificate of Proficiency
Gateway STEM High School

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

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

<table>
<thead>
<tr>
<th>Technical Area</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AVI:101 General Mechanics, Drawings and Safety</td>
<td>2</td>
</tr>
<tr>
<td>AVI:102 Basic Electricity for Aviation Technicians</td>
<td>2</td>
</tr>
<tr>
<td>AVI:103 Structural Materials and Corrosion Control</td>
<td>2</td>
</tr>
<tr>
<td>AVI:104 Federal Regulations and Ground Operations</td>
<td>2</td>
</tr>
<tr>
<td>AVI:105 Basic Physics for Aviation</td>
<td>2</td>
</tr>
<tr>
<td>AVI:106 Quantitative Applications</td>
<td>2</td>
</tr>
</tbody>
</table>
### College Programs

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AVI:121</td>
<td>Aircraft Non-metallic Structures and Finishes</td>
<td>2</td>
</tr>
<tr>
<td>AVI:122</td>
<td>Aviation Welding</td>
<td>2</td>
</tr>
<tr>
<td>AVI:123</td>
<td>Airframe Fuel Systems and Fire Detection</td>
<td>1</td>
</tr>
<tr>
<td>AVI:124</td>
<td>Aircraft Metallic Structures</td>
<td>4</td>
</tr>
<tr>
<td>AVI:125</td>
<td>Aircraft Fluid and Pneumatic Power Systems</td>
<td>2</td>
</tr>
<tr>
<td>AVI:126</td>
<td>Rigging, Inspection, Cabin Environment, Ice and Rain</td>
<td>3</td>
</tr>
<tr>
<td>AVI:127</td>
<td>Communication/Navigation Systems</td>
<td>3</td>
</tr>
<tr>
<td>AVI:128</td>
<td>Aircraft Electrical Systems</td>
<td>4</td>
</tr>
<tr>
<td>AVI:131</td>
<td>Power Plant Electrical Systems</td>
<td>4</td>
</tr>
<tr>
<td>AVI:132</td>
<td>Ignition and Starting Systems</td>
<td>1</td>
</tr>
<tr>
<td>AVI:133</td>
<td>Airflow, Exhaust, Lubrication and Engine Instruments</td>
<td>3</td>
</tr>
<tr>
<td>AVI:134</td>
<td>Reciprocating Engines</td>
<td>4</td>
</tr>
<tr>
<td>AVI:135</td>
<td>Propeller Systems</td>
<td>3</td>
</tr>
<tr>
<td>AVI:136</td>
<td>Power Plant Fuel and Fire Protection Systems</td>
<td>3</td>
</tr>
<tr>
<td>AVI:137</td>
<td>Turbine Engines</td>
<td>4</td>
</tr>
<tr>
<td>AVI:138</td>
<td>Power Plant Inspections</td>
<td>1</td>
</tr>
</tbody>
</table>

**Entrance Requirements:** A minimum score of 46 on the COMPASS Algebra domain or successful completion of MTH:030, Elementary Algebra (or higher) with a C or better. Students are required to submit to a background check prior to admission.

**Program Total:** 33 credits

### Aviation Maintenance - Power Plant

**Certificate of Proficiency**

**Gateway STEM High School**

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

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

**Technical Area**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AVI:101</td>
<td>General Mechanics, Drawings and Safety</td>
<td>2</td>
</tr>
<tr>
<td>AVI:102</td>
<td>Basic Electricity for Aviation Technicians</td>
<td>2</td>
</tr>
<tr>
<td>AVI:103</td>
<td>Structural Materials and Corrosion Control</td>
<td>2</td>
</tr>
<tr>
<td>AVI:104</td>
<td>Federal Regulations and Ground Operations</td>
<td>2</td>
</tr>
<tr>
<td>AVI:105</td>
<td>Basic Physics for Aviation</td>
<td>2</td>
</tr>
<tr>
<td>AVI:106</td>
<td>Quantitative Applications</td>
<td>2</td>
</tr>
<tr>
<td>AVI:131</td>
<td>Power Plant Electrical Systems</td>
<td>1</td>
</tr>
<tr>
<td>AVI:132</td>
<td>Ignition and Starting Systems</td>
<td>2</td>
</tr>
<tr>
<td>AVI:133</td>
<td>Airflow, Exhaust, Lubrication and Engine Instruments</td>
<td>3</td>
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<tr>
<td>AVI:134</td>
<td>Reciprocating Engines</td>
<td>4</td>
</tr>
<tr>
<td>AVI:135</td>
<td>Propeller Systems</td>
<td>3</td>
</tr>
<tr>
<td>AVI:136</td>
<td>Power Plant Fuel and Fire Protection Systems</td>
<td>3</td>
</tr>
</tbody>
</table>

**Baking and Pastry Arts**

**Associate in Applied Science Degree**

**Forest Park**

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

**I. Career General Education**  18 credits

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG:101</td>
<td>College Composition I</td>
<td>3</td>
</tr>
<tr>
<td>COM:101</td>
<td>Oral Communication I (or) Public Speaking</td>
<td>3</td>
</tr>
<tr>
<td>MTH:108</td>
<td>Elementary Applied Mathematics (or) Higher Level Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>XXX:xxx</td>
<td>Natural Science or Mathematics</td>
<td>3</td>
</tr>
</tbody>
</table>

**II. Physical Education Activity**  2 credits

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HTM:105</td>
<td>Professionalism in the Hospitality Industry</td>
<td>3</td>
</tr>
</tbody>
</table>

**III. Area of Concentration**  17 credits

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HTM:100</td>
<td>Introduction to the Hospitality Industry</td>
<td>3</td>
</tr>
<tr>
<td>CUL:101</td>
<td>Safety and Sanitation</td>
<td>1</td>
</tr>
<tr>
<td>HTM:120</td>
<td>Supervision and Leadership in the Hospitality Industry</td>
<td>3</td>
</tr>
<tr>
<td>HTM:210</td>
<td>Hospitality Financial Planning and Cost Control</td>
<td>3</td>
</tr>
<tr>
<td>HTM:25</td>
<td>Nutrition for the Culinarian</td>
<td>3</td>
</tr>
<tr>
<td>HTM:200</td>
<td>Procurement in the Hospitality Industry</td>
<td>3</td>
</tr>
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</table>

2015-2016 St. Louis Community College Catalog • stlcc.edu
Baking and Pastry Arts Courses  
28 credits

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BAP:101</td>
<td>Introduction to Baking Theory</td>
<td>3</td>
</tr>
<tr>
<td>BAP:105</td>
<td>Breads, Rolls, and Bakeries</td>
<td>3</td>
</tr>
<tr>
<td>BAP:110</td>
<td>Production Pastry Techniques</td>
<td>3</td>
</tr>
<tr>
<td>BAP:115</td>
<td>Cake Production and Decoration</td>
<td>3</td>
</tr>
<tr>
<td>CUL:150</td>
<td>Culinary Essentials for the Pastry Arts</td>
<td>3</td>
</tr>
<tr>
<td>BAP:201</td>
<td>Artisan and Decorative Bread</td>
<td>2</td>
</tr>
<tr>
<td>BAP:205</td>
<td>Ice Cream and Frozen Desserts</td>
<td>2</td>
</tr>
<tr>
<td>BAP:210</td>
<td>Chocolate Candies and Showpieces</td>
<td>2</td>
</tr>
<tr>
<td>BAP:215</td>
<td>Plated Desserts</td>
<td>2</td>
</tr>
<tr>
<td>BAP:220</td>
<td>Sugar Candies and Showpieces</td>
<td>2</td>
</tr>
<tr>
<td>BAP:260</td>
<td>Baking and Pastry Arts Capstone</td>
<td>3</td>
</tr>
</tbody>
</table>

Program total . . . 65 credits

Biomedical Electronics Technology

Certificate of Specialization
Floissant Valley

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

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

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

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

I. Area of Concentration  
12-21 credits

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EE:130</td>
<td>Electric Circuits I (and)</td>
<td>4</td>
</tr>
<tr>
<td>EE:131</td>
<td>Electric Circuits II (and)</td>
<td>4</td>
</tr>
<tr>
<td>EE:132</td>
<td>Electronic Devices (or)</td>
<td>5</td>
</tr>
<tr>
<td>EE:133</td>
<td>Electrical/Electronic Bridge</td>
<td>4</td>
</tr>
<tr>
<td>BE:153</td>
<td>Workplace Learning: Biomedical Engineering Technology</td>
<td>4</td>
</tr>
<tr>
<td>BE:254</td>
<td>Biomedical Applications</td>
<td>4</td>
</tr>
</tbody>
</table>

II. Life Science Requirement  
3-4 credits

Select at least one of the following

(Human Biology is preferred):

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO:109</td>
<td>Human Biology</td>
<td>3</td>
</tr>
<tr>
<td>BIO:111</td>
<td>Introductory Biology I</td>
<td>4</td>
</tr>
<tr>
<td>BIO:207</td>
<td>Anatomy and Physiology I</td>
<td>4</td>
</tr>
</tbody>
</table>

Program total . . . 15-25 credits

Biotechnology

Associate in Applied Science Degree
Floissant Valley

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

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

I. General Education  
21 credits

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG:101</td>
<td>College Composition I</td>
<td>3</td>
</tr>
<tr>
<td>MTH:160</td>
<td>College Algebra</td>
<td>4</td>
</tr>
<tr>
<td>COM:101</td>
<td>Oral Communication I</td>
<td>3</td>
</tr>
<tr>
<td>CHM:105</td>
<td>General Chemistry I</td>
<td>5</td>
</tr>
<tr>
<td>XXX:xxx</td>
<td>Missouri State Requirement</td>
<td>3</td>
</tr>
<tr>
<td>XXX:xxx</td>
<td>Social Science Elective</td>
<td>3</td>
</tr>
</tbody>
</table>

II. Physical Education Activity  
2 credits

III. Area of Concentration  
48 credits

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO:104</td>
<td>Basic Laboratory Methods for Biotechnology</td>
<td>3</td>
</tr>
<tr>
<td>BIO:140</td>
<td>Principles of Biology I</td>
<td>4</td>
</tr>
<tr>
<td>BIO:152</td>
<td>Quantitative Methods in Biotechnology</td>
<td>2</td>
</tr>
<tr>
<td>BIO:218</td>
<td>Microbiology for Biotechnology</td>
<td>4</td>
</tr>
<tr>
<td>BIO:219</td>
<td>Biotechnology I</td>
<td>5</td>
</tr>
<tr>
<td>BIO:220</td>
<td>Biotechnology II</td>
<td>5</td>
</tr>
<tr>
<td>BIO:221</td>
<td>Workplace Learning: Biotechnology</td>
<td>3</td>
</tr>
<tr>
<td>BIO:225</td>
<td>Genetics</td>
<td>5</td>
</tr>
<tr>
<td>BIO:226</td>
<td>Advanced Topics in Biotechnology (two sections)</td>
<td>6</td>
</tr>
<tr>
<td>CHM:106</td>
<td>General Chemistry II</td>
<td>5</td>
</tr>
<tr>
<td>GE:101</td>
<td>Technical Computer Applications</td>
<td>3</td>
</tr>
<tr>
<td>PHL:109</td>
<td>Bio-Medical Ethics</td>
<td>3</td>
</tr>
</tbody>
</table>

Program total . . . 71 credits

Biotechnology

Certificate of Specialization
Floissant Valley

Courses  
Credits

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO:104</td>
<td>Basic Laboratory Methods for Biotechnology</td>
<td>3</td>
</tr>
<tr>
<td>BIO:219</td>
<td>Biotechnology I</td>
<td>5</td>
</tr>
<tr>
<td>BIO:220</td>
<td>Biotechnology II</td>
<td>5</td>
</tr>
<tr>
<td>BIO:226</td>
<td>Advanced Topics in Biotechnology (two sections)</td>
<td>6</td>
</tr>
</tbody>
</table>

Program total . . . 19 credits
Building Inspection and Code Enforcement Technology

Associate in Applied Science Degree
Florissant Valley

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

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

Graduates are qualified for positions as building inspectors and code enforcement officials with municipal governments, national and state agencies and private firms.

I. Career General Education 24 credits

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG:101</td>
<td>College Composition I</td>
<td>3</td>
</tr>
<tr>
<td>ENG:103</td>
<td>Report Writing</td>
<td>3</td>
</tr>
<tr>
<td>COM:101</td>
<td>Oral Communication I</td>
<td>3</td>
</tr>
<tr>
<td>CHM:114</td>
<td>Industrial Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>MTH:124</td>
<td>Technical Mathematics I</td>
<td>3</td>
</tr>
<tr>
<td>PSI:101</td>
<td>Physical Science Lecture</td>
<td>3</td>
</tr>
<tr>
<td>XXXxxxxxxx</td>
<td>Missouri State Requirement</td>
<td>3</td>
</tr>
<tr>
<td>SOC:101</td>
<td>Introduction to Sociology</td>
<td>3</td>
</tr>
</tbody>
</table>

II. Physical Education Activity 2 credits

III. Area of Concentration 42 credits

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIC:101</td>
<td>Basic Building Inspection Techniques</td>
<td>3</td>
</tr>
<tr>
<td>BIC:103</td>
<td>Building Codes and Ordinances</td>
<td>3</td>
</tr>
<tr>
<td>BIC:200</td>
<td>Plumbing and Mechanical Inspection</td>
<td>4</td>
</tr>
<tr>
<td>BIC:201</td>
<td>Electrical Inspection</td>
<td>2</td>
</tr>
<tr>
<td>BIC:202</td>
<td>Administration of Building Regulations</td>
<td>3</td>
</tr>
<tr>
<td>BIC:203</td>
<td>Plan Review I (Non-structural)</td>
<td>3</td>
</tr>
<tr>
<td>BIC:204</td>
<td>Plan Review II (Structural)</td>
<td>3</td>
</tr>
<tr>
<td>BIC:205</td>
<td>Soils, Grading and Waste Water Control</td>
<td>3</td>
</tr>
<tr>
<td>CE:116</td>
<td>Construction Blueprint Reading</td>
<td>3</td>
</tr>
<tr>
<td>FIR:105</td>
<td>Inspection and Fire Prevention</td>
<td>3</td>
</tr>
<tr>
<td>FIR:210</td>
<td>Architectural Structural Representation-Materials</td>
<td>3</td>
</tr>
<tr>
<td>ME:135</td>
<td>Mechanics-Statics</td>
<td>3</td>
</tr>
<tr>
<td>ME:243</td>
<td>Strength of Materials</td>
<td>3</td>
</tr>
<tr>
<td>MGT:204</td>
<td>Business Organization and Management</td>
<td>3</td>
</tr>
</tbody>
</table>

Program total. . . . . 68 credits

Building Inspection and Code Enforcement Technology

Certificate of Proficiency
Florissant Valley

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

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

<table>
<thead>
<tr>
<th>Courses</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>XXXxxxx Building Inspection, or Fire Protection or Mechanical Engineering Electives from AAS degrees</td>
<td>23</td>
</tr>
<tr>
<td>XXXxxxx Approved Electives from AAS degree</td>
<td>9</td>
</tr>
</tbody>
</table>

Program total. . . . . 32 credits

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Building Inspection and Code Enforcement Technology: Housing Inspection Option

Certificate of Proficiency
Florissant Valley

This program provides training for individuals seeking positions in municipal government and private firms. In general, the housing inspector performs inspections on existing homes to insure they meet local and national codes.

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

<table>
<thead>
<tr>
<th>Courses</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIC:101</td>
<td>3</td>
</tr>
<tr>
<td>BIC:102</td>
<td>3</td>
</tr>
<tr>
<td>BIC:103</td>
<td>3</td>
</tr>
<tr>
<td>BIC:104</td>
<td>3</td>
</tr>
<tr>
<td>BIC:200</td>
<td>4</td>
</tr>
<tr>
<td>BIC:201</td>
<td>2</td>
</tr>
<tr>
<td>COM:101</td>
<td>3</td>
</tr>
<tr>
<td>ENG:101</td>
<td>3</td>
</tr>
<tr>
<td>FIR:105</td>
<td>3</td>
</tr>
<tr>
<td>FIR:210</td>
<td>3</td>
</tr>
<tr>
<td>SOC:101</td>
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</table>

Program total. . . . . . . . . . . . 33 credits

Business Administration
Associate in Applied Science Degree
Florissant Valley, Forest Park, Meramec and Wildwood

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

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

I. Career General Education 18-19 credits

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG:100</td>
<td>3</td>
</tr>
<tr>
<td>ENG:101</td>
<td>3</td>
</tr>
</tbody>
</table>

II. Physical Education Activity 2 credits

III. Required Courses 26-27 credits

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS:104</td>
<td>3</td>
</tr>
<tr>
<td>ECO:151</td>
<td>3</td>
</tr>
<tr>
<td>ECO:152</td>
<td>3</td>
</tr>
<tr>
<td>ACC:100</td>
<td>3</td>
</tr>
<tr>
<td>ACC:110</td>
<td>4</td>
</tr>
<tr>
<td>ACC:114</td>
<td>3</td>
</tr>
<tr>
<td>BLW:101</td>
<td>3</td>
</tr>
<tr>
<td>BLW:201</td>
<td>3</td>
</tr>
<tr>
<td>IS:123</td>
<td>1</td>
</tr>
<tr>
<td>IS:116</td>
<td>3-4</td>
</tr>
<tr>
<td>IS:151</td>
<td>3-4</td>
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</tbody>
</table>

Students will select one area of concentration from marketing, management, finance or general business.

IV. Areas of Concentration 12 credits

Marketing

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MKT:101</td>
<td>3</td>
</tr>
<tr>
<td>MKT:104</td>
<td>3</td>
</tr>
<tr>
<td>IB:100</td>
<td>3</td>
</tr>
<tr>
<td>MKT:203</td>
<td>3</td>
</tr>
<tr>
<td>COM:104</td>
<td>3</td>
</tr>
</tbody>
</table>

Management

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MGT:101</td>
<td>3</td>
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<tr>
<td>IB:100</td>
<td>3</td>
</tr>
<tr>
<td>MGT:106</td>
<td>3</td>
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<tr>
<td>MGT:120</td>
<td>3</td>
</tr>
<tr>
<td>MGT:204</td>
<td>3</td>
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</table>

Finance

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIN:100</td>
<td>3</td>
</tr>
<tr>
<td>FIN:101</td>
<td>3</td>
</tr>
<tr>
<td>FIN:201</td>
<td>3</td>
</tr>
<tr>
<td>IS:118</td>
<td>1</td>
</tr>
<tr>
<td>IS:125</td>
<td>2</td>
</tr>
</tbody>
</table>
**General Business**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>IB:100</td>
<td>International Business</td>
<td>3</td>
</tr>
<tr>
<td>MKT:203</td>
<td>Principles of Marketing</td>
<td>3</td>
</tr>
<tr>
<td>MGT:204</td>
<td>Business Organization and Management</td>
<td>3</td>
</tr>
<tr>
<td>FIN:201</td>
<td>Fundamentals of Finance</td>
<td>3</td>
</tr>
</tbody>
</table>

**V. Electives**

6 credits

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACC:120</td>
<td>Computer Accounting Applications for Business</td>
<td>3</td>
</tr>
<tr>
<td>ACC:122</td>
<td>Computer Accounting Applications – Spreadsheets</td>
<td>3</td>
</tr>
<tr>
<td>BUS:101</td>
<td>Small Business Management (or)</td>
<td>3</td>
</tr>
<tr>
<td>BUS:116</td>
<td>Entrepreneurship</td>
<td>3</td>
</tr>
<tr>
<td>IS:120</td>
<td>Computer Applications- Spreadsheets</td>
<td>1</td>
</tr>
<tr>
<td>IS:129</td>
<td>HTML</td>
<td>1</td>
</tr>
<tr>
<td>MGT:109</td>
<td>Business Organizational Behavior and Dynamics</td>
<td>3</td>
</tr>
<tr>
<td>MGT:201</td>
<td>Case Studies in Supervision</td>
<td>3</td>
</tr>
<tr>
<td>MGT:205</td>
<td>Purchasing Management</td>
<td>3</td>
</tr>
<tr>
<td>MCM:140</td>
<td>Introduction to Advertising</td>
<td>3</td>
</tr>
<tr>
<td>MCM:141</td>
<td>Public Relations</td>
<td>3</td>
</tr>
<tr>
<td>PSY:200</td>
<td>General Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PHL:112</td>
<td>Business Ethics</td>
<td>3</td>
</tr>
</tbody>
</table>

Electives may be selected from areas of concentration . . . 3-6.

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

**Program total. . . 64-66 credits**

**Business Administration**

**Certificate of Proficiency**

Florissant Valley, Forest Park, Meramec, Wildwood and Online

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

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

<table>
<thead>
<tr>
<th>Courses</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG:101</td>
<td>College Composition I</td>
</tr>
</tbody>
</table>

**Program total. . . 18 credits**

**Chemical Technology**

**Certificate of Proficiency**

Florissant Valley

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

Associate in Applied Science Degree
Florissant Valley

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

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

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

I. Career General Education 38-39 credits

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>COM:101</td>
<td>Oral Communication I</td>
<td>3</td>
</tr>
<tr>
<td>EGR:100</td>
<td>Engineering Drawing</td>
<td>3</td>
</tr>
<tr>
<td>ENG:100</td>
<td>Career English (or)</td>
<td></td>
</tr>
<tr>
<td>ENG:101</td>
<td>College Composition I</td>
<td></td>
</tr>
<tr>
<td>ENG:103</td>
<td>Report Writing (or)</td>
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</tr>
<tr>
<td>ENG:102</td>
<td>College Composition II</td>
<td></td>
</tr>
<tr>
<td>GE:101</td>
<td>Technical Computer Applications</td>
<td></td>
</tr>
<tr>
<td>MTH:144</td>
<td>Technical Algebra and Trigonometry (or)**</td>
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</tr>
<tr>
<td>MTH:185</td>
<td>Precalculus</td>
<td>5</td>
</tr>
<tr>
<td>MTH:154</td>
<td>Technical Analytical Geometry and Calculus (or)**</td>
<td></td>
</tr>
<tr>
<td>MTH:210</td>
<td>Analytic Geometry and Calculus I</td>
<td>4-5</td>
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<tr>
<td>PHY:111</td>
<td>College Physics I</td>
<td>4</td>
</tr>
<tr>
<td>PHY:112</td>
<td>College Physics II</td>
<td>4</td>
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<tr>
<td>SOC:103</td>
<td>Human Behavior at Work and in Business</td>
<td>3</td>
</tr>
<tr>
<td>XXX:xxx</td>
<td>Missouri State Requirement</td>
<td></td>
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</tbody>
</table>

II. Physical Education Activity 2 credits

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>CE:103</td>
<td>Structural Drafting (or)</td>
<td></td>
</tr>
<tr>
<td>CE:104</td>
<td>Civil Drafting</td>
<td></td>
</tr>
<tr>
<td>CE:230</td>
<td>Construction Materials and Testing</td>
<td></td>
</tr>
<tr>
<td>CE:240</td>
<td>Surveying I</td>
<td></td>
</tr>
<tr>
<td>EGR:133</td>
<td>Introduction to AutoCAD I (or)</td>
<td></td>
</tr>
<tr>
<td>EGR:140</td>
<td>Computer Aided Drafting and Design I</td>
<td>2-3</td>
</tr>
<tr>
<td>ME:135</td>
<td>Mechanics-Statics</td>
<td></td>
</tr>
<tr>
<td>ME:243</td>
<td>Strength of Materials</td>
<td></td>
</tr>
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</table>

III. Area of Concentration 17-18 credits

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CE:103</td>
<td>Structural Drafting (or)</td>
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</tr>
<tr>
<td>CE:104</td>
<td>Civil Drafting</td>
<td></td>
</tr>
<tr>
<td>CE:230</td>
<td>Construction Materials and Testing</td>
<td></td>
</tr>
<tr>
<td>CE:240</td>
<td>Surveying I</td>
<td></td>
</tr>
<tr>
<td>EGR:133</td>
<td>Introduction to AutoCAD I (or)</td>
<td></td>
</tr>
<tr>
<td>EGR:140</td>
<td>Computer Aided Drafting and Design I</td>
<td>2-3</td>
</tr>
<tr>
<td>ME:135</td>
<td>Mechanics-Statics</td>
<td></td>
</tr>
<tr>
<td>ME:243</td>
<td>Strength of Materials</td>
<td></td>
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</table>

IV. Electives (either group required) 9 credits

**Students who are planning to pursue a BS in Civil Engineering should take the MTH:185/MTH:210 sequence.

<table>
<thead>
<tr>
<th>Group A</th>
<th>Course</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>CE:234</td>
<td>Structural Analysis</td>
<td>3</td>
</tr>
<tr>
<td>CE:236</td>
<td>Reinforced Concrete Design</td>
<td>3</td>
</tr>
<tr>
<td>CE:237</td>
<td>Structural Steel Design</td>
<td>3</td>
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</tbody>
</table>

**Group B**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tr>
<td>CE:250</td>
<td>Surveying II</td>
<td>3</td>
</tr>
<tr>
<td>CE:233</td>
<td>Hydraulics</td>
<td></td>
</tr>
<tr>
<td>CE:238</td>
<td>Environmental Systems</td>
<td></td>
</tr>
</tbody>
</table>

**Program total... 66-68 credits**

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

Clinical Laboratory Technology

(Medical Laboratory Technician)

Associate in Applied Science Degree
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, blood banking, clinical chemistry, serology, immunology and routine analysis.

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.

Graduates are eligible to take the National Certifying Registry Examination. Positions are available in hospitals, clinics, doctors’ offices, independent laboratories, and public health, research and industrial laboratories.

I. Career General Education 27 credits

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG:101</td>
<td>College Composition I</td>
<td>3</td>
</tr>
<tr>
<td>ENG:102</td>
<td>College Composition II (or)</td>
<td></td>
</tr>
<tr>
<td>ENG:xx</td>
<td>English Elective</td>
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<tr>
<td>BIO:102</td>
<td>Clinical Physiology</td>
<td>3</td>
</tr>
<tr>
<td>CHM:101</td>
<td>Fundamentals of Chemistry I</td>
<td>5</td>
</tr>
<tr>
<td>CHM:212</td>
<td>Bio-Organic and Analytic Chemistry</td>
<td>4</td>
</tr>
<tr>
<td>MTH:124</td>
<td>Technical Mathematics I</td>
<td>3</td>
</tr>
<tr>
<td>XXX:xx</td>
<td>Missouri State Requirement</td>
<td></td>
</tr>
<tr>
<td>SOC:101</td>
<td>Introduction to Sociology (or)</td>
<td></td>
</tr>
<tr>
<td>XXX:xx</td>
<td>Psychology or Sociology Elective</td>
<td>3</td>
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</table>
## II. Physical Education Activity

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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<td></td>
<td>2</td>
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</table>

## III. Area of Concentration

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>CLT:100</td>
<td>Orientation of the Medical Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>CLT:101</td>
<td>Medical Microbiology</td>
<td>3</td>
</tr>
<tr>
<td>CLT:102</td>
<td>Routine Analysis</td>
<td>2</td>
</tr>
<tr>
<td>CLT:103</td>
<td>Hematology</td>
<td>3</td>
</tr>
<tr>
<td>CLT:104</td>
<td>Pathogenic Bacteriology I</td>
<td>4</td>
</tr>
<tr>
<td>CLT:105</td>
<td>Basic Medical Laboratory Skills</td>
<td>4</td>
</tr>
<tr>
<td>CLT:200</td>
<td>Pathogenic Bacteriology II</td>
<td>4</td>
</tr>
<tr>
<td>CLT:201</td>
<td>Clinical Chemistry I</td>
<td>5</td>
</tr>
<tr>
<td>CLT:202</td>
<td>Clinical Practice I</td>
<td>4</td>
</tr>
<tr>
<td>CLT:204</td>
<td>Blood Bank</td>
<td>2</td>
</tr>
<tr>
<td>CLT:205</td>
<td>Pathology-Correlation Conference</td>
<td>1</td>
</tr>
<tr>
<td>CLT:206</td>
<td>Clinical Chemistry II</td>
<td>4</td>
</tr>
<tr>
<td>CLT:207</td>
<td>Clinical Practice II</td>
<td>4</td>
</tr>
<tr>
<td>CLT:210</td>
<td>Immunology and Serology</td>
<td>2</td>
</tr>
</tbody>
</table>

**Program total. . . . . 72 credits**

## Computer Accounting Technology

### Certificate of Specialization

**Florissant Valley, Forest Park and Meramec**

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

<table>
<thead>
<tr>
<th>Courses</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACC:110</td>
<td>Financial Accounting I</td>
</tr>
<tr>
<td>ACC:120</td>
<td>Computer Accounting Applications for Business</td>
</tr>
<tr>
<td>ACC:122</td>
<td>Computer Accounting Applications - Spreadsheets</td>
</tr>
<tr>
<td>ACC:124</td>
<td>Computer Accounting Applications - Databases</td>
</tr>
<tr>
<td>ACCxxx</td>
<td>Accounting Elective(s) (Cannot be ACC:100) (or)</td>
</tr>
<tr>
<td>ISxxx</td>
<td>Information System Elective(s)</td>
</tr>
</tbody>
</table>

**Program total. . . . . 16 credits**

### Computer Aided Design (CAD)

#### Certificate of Specialization

**Florissant Valley**

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

<table>
<thead>
<tr>
<th>Courses</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EGR:100</td>
<td>Engineering Drawing</td>
</tr>
<tr>
<td>GE:101</td>
<td>Technical Computer Applications (or)</td>
</tr>
<tr>
<td>GE:121</td>
<td>Principles of Engineering (or)</td>
</tr>
<tr>
<td>ESC:100</td>
<td>Engineering Computer Applications and Design</td>
</tr>
</tbody>
</table>

#### CAD Sequence

*Choose at least one in each area for a total of at least 9 credit hours from the following lists:*

##### 2-D CAD

<table>
<thead>
<tr>
<th>Courses</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>EGR:104</td>
<td>Electronic Drafting</td>
</tr>
<tr>
<td>EGR:133</td>
<td>Introduction to AutoCAD I</td>
</tr>
<tr>
<td>EGR:140</td>
<td>Computer Aided Drafting and Design I</td>
</tr>
<tr>
<td>EGR:141</td>
<td>Introduction to AutoCAD II</td>
</tr>
<tr>
<td>EGR:143</td>
<td>Introduction to Microstation</td>
</tr>
</tbody>
</table>

##### 3-D CAD

<table>
<thead>
<tr>
<th>Courses</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EGR:147</td>
<td>Introduction to Engineering Design</td>
</tr>
<tr>
<td>EGR:145</td>
<td>Computer Solids Modeling</td>
</tr>
<tr>
<td>EGR:139</td>
<td>3-D AutoCAD with AutoShade</td>
</tr>
<tr>
<td>ME:230</td>
<td>Introduction to 3-D Solid Modeling for Design</td>
</tr>
<tr>
<td>EGR:148</td>
<td>Solid Modeling with Unigraphics</td>
</tr>
<tr>
<td>EGR:256</td>
<td>Solid Modeling with CATIA</td>
</tr>
</tbody>
</table>

##### CAD Applications

<table>
<thead>
<tr>
<th>Courses</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ME:230</td>
<td>Introduction to 3-D Solid Modeling for Design</td>
</tr>
<tr>
<td>EGR:255</td>
<td>Advanced Computer Aided Drafting</td>
</tr>
<tr>
<td>GE:122</td>
<td>Engineering Design and Development</td>
</tr>
<tr>
<td>EGR:257</td>
<td>Unigraphics for Part Design</td>
</tr>
</tbody>
</table>

##### Technical Elective

*Select course(s) from Engineering and Technology department (prefixes: BE, CE, EE, EGR, ESC, GE, ME, QC).*

**Program total. . . . . 18 credits**
Computer Aided Manufacturing (CAM)

Certificate of Specialization
Florissant Valley

This program upgrades skills of persons currently employed in numerical control programming. It provides persons currently employed in manufacturing with a specialty in numerical control programming and provides students in technical areas with specialization in a specific area of manufacturing. Students learn the basics of numerical control programming through the use of computers and computer graphics with an orientation toward fabrication and assembly of a product after the design phase is completed.

Persons interested in this program should consult the Engineering and Technology department at Florissant Valley to determine whether they have the necessary prerequisites needed for the program.

Graduates are qualified for positions in computer-aided drafting, numerical control programming and/or numerical control machine operators, and related mechanical/manufacturing areas.

Courses Credits
GE:101 Technical Computer Applications ............... 3
ME:230 Introduction to 3-D Solid Modeling for Design .... 4
EGR:133 Introduction to AutoCAD I ...................... 2
ME:140 EE:236
Introduction to Robotics (or)
PLC/Programmable Logic Controller ............... 3
ME:241 Numerical Control Programming ................ 3
ME:152 Manufacturing Processes II ................. 3

Program total. .......... 18 credits

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.

I. Core Courses 8 credits

<table>
<thead>
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<th>Courses</th>
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<td>IS:116</td>
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<td>IS:123</td>
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<td>IS:124</td>
<td>1</td>
</tr>
<tr>
<td>IS:132</td>
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</tr>
<tr>
<td>IS:136</td>
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</table>

Applications Electives 4 credits

Choose one of these four-hour options:

Option A:

<table>
<thead>
<tr>
<th>Courses</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>IS:118 Computer Applications-Databases</td>
<td>1</td>
</tr>
<tr>
<td>IS:119 Computer Applications-Word Processing</td>
<td>1</td>
</tr>
<tr>
<td>IS:125 Excel for Windows</td>
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</table>

Option B:

<table>
<thead>
<tr>
<th>Courses</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>IS:151 Microcomputer Applications in Business</td>
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Program Conclusion: 3 credits

<table>
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<tr>
<th>Courses</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>IS:209 Computer Applications-Advanced</td>
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</tbody>
</table>

Total 7 credits

II. Electives 3 credits

<table>
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<tr>
<th>Courses</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>IS:126 E-Mail and Information Management</td>
<td>1</td>
</tr>
<tr>
<td>IS:129 HTML</td>
<td>1</td>
</tr>
<tr>
<td>IS:156 Computer Applications-Intermediate Databases</td>
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<tr>
<td>IS:157 Computer Applications-Intermediate Word Processing</td>
<td>1</td>
</tr>
<tr>
<td>IS:161 Computer Applications-Advanced Word Processing</td>
<td>1</td>
</tr>
<tr>
<td>IS:214 Spreadsheet Macros and Advanced Topics</td>
<td>1</td>
</tr>
</tbody>
</table>

Program total. .......... 18 credits
Computer Integrated Manufacturing
Associate in Applied Science Degree
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.

I. Career General Education  18 credits

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG:101</td>
<td>College Composition I</td>
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</tr>
<tr>
<td>COM:101</td>
<td>Oral Communication I</td>
<td>3</td>
</tr>
<tr>
<td>MTH:140</td>
<td>Intermediate Algebra or higher</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>except MTH:165 and MTH:166</td>
<td></td>
</tr>
<tr>
<td>XXXxxxx</td>
<td>Missouri State Elective</td>
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</tr>
<tr>
<td>XXXxxxx</td>
<td>Social Science Elective</td>
<td>3</td>
</tr>
<tr>
<td>XXXxxxx</td>
<td>Life or Physical Science elective</td>
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II. Physical Education Activity  2 credits

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
</table>

III. Area of Concentration  28 credits

<table>
<thead>
<tr>
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<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>GE:131</td>
<td>Engineering Technology Orientation</td>
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</tr>
<tr>
<td>EGR:100</td>
<td>Engineering Drawing</td>
<td>3</td>
</tr>
<tr>
<td>EGR:133</td>
<td>Introduction to AutoCAD I</td>
<td>2</td>
</tr>
<tr>
<td>GE:101</td>
<td>Technical Computer Applications (or)</td>
<td></td>
</tr>
<tr>
<td>GE:121</td>
<td>Principles of Engineering</td>
<td></td>
</tr>
<tr>
<td>ME:133</td>
<td>Production Control</td>
<td>3</td>
</tr>
<tr>
<td>ME:151</td>
<td>Manufacturing Processes I</td>
<td>3</td>
</tr>
<tr>
<td>ME:152</td>
<td>Manufacturing Processes II</td>
<td>3</td>
</tr>
<tr>
<td>ME:249</td>
<td>Materials and Metallurgy</td>
<td>3</td>
</tr>
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<td>QC:212</td>
<td>Quality Tools for Advanced Manufacturing</td>
<td>3</td>
</tr>
<tr>
<td>GE:240</td>
<td>Product Design and Fabrication</td>
<td>4</td>
</tr>
</tbody>
</table>

3-D CAD Requirement
Select one of the following:  2-4 credits

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>EGR:147</td>
<td>Introduction to Engineering Design (or)</td>
<td>3</td>
</tr>
<tr>
<td>ME:230</td>
<td>Introduction to 3-D Solid Modeling for Design (or)</td>
<td>4</td>
</tr>
<tr>
<td>EGR:145</td>
<td>Computer Solids Modeling (or)</td>
<td>2</td>
</tr>
<tr>
<td>EGR:148</td>
<td>Solid Modeling with Unigraphics</td>
<td>2</td>
</tr>
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</table>

Fundamentals Course
Select one of the following:  3 credits

<table>
<thead>
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<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>ME:140</td>
<td>Introduction to Robotics (or)</td>
<td>3</td>
</tr>
<tr>
<td>ME:121</td>
<td>Computer Integrated Manufacturing (or)</td>
<td>3</td>
</tr>
<tr>
<td>GE:151</td>
<td>Introduction to Aerospace Engineering</td>
<td>3</td>
</tr>
</tbody>
</table>

IV. Electives  9-11 credits

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ME:101</td>
<td>Welding Technology</td>
<td>3</td>
</tr>
<tr>
<td>ME:223</td>
<td>Basic Hydraulics I</td>
<td>2</td>
</tr>
<tr>
<td>ME:103</td>
<td>Mechanical Maintenance</td>
<td>3</td>
</tr>
<tr>
<td>ME:110</td>
<td>HVAC Operator I</td>
<td>3</td>
</tr>
<tr>
<td>ME:211</td>
<td>Programmable Logic Controllers</td>
<td>3</td>
</tr>
<tr>
<td>ME:241</td>
<td>Numerical Control Programming</td>
<td>3</td>
</tr>
<tr>
<td>ME:135</td>
<td>Mechanics - Statics</td>
<td>3</td>
</tr>
<tr>
<td>ME:210</td>
<td>Robotics Subsystems and Components</td>
<td>3</td>
</tr>
<tr>
<td>ME:223</td>
<td>Basic Hydraulics I</td>
<td>2</td>
</tr>
<tr>
<td>ME:230</td>
<td>Introduction to 3-D Solid Modeling for Design</td>
<td></td>
</tr>
<tr>
<td>ME:232</td>
<td>Geometric Dimensioning and Tolerancing</td>
<td>4</td>
</tr>
<tr>
<td>ME:242</td>
<td>Mechanics-Dynamics</td>
<td>3</td>
</tr>
<tr>
<td>ME:243</td>
<td>Strength of Materials</td>
<td>3</td>
</tr>
<tr>
<td>ME:244</td>
<td>Mechanical Design I</td>
<td>3</td>
</tr>
<tr>
<td>ME:253</td>
<td>Energy Conversion</td>
<td>2</td>
</tr>
<tr>
<td>EGR:145</td>
<td>Computer Solids Modeling</td>
<td>2</td>
</tr>
<tr>
<td>EGR:255</td>
<td>Advanced Computer Aided Drafting</td>
<td>3</td>
</tr>
<tr>
<td>EGR:148</td>
<td>Solid Modeling with Unigraphics (or)</td>
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<tr>
<td>EGR:257</td>
<td>Unigraphics for Part Design (or)</td>
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<tr>
<td>EGR:256</td>
<td>Solid Modeling with CATIA</td>
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<tr>
<td>QC:100</td>
<td>Introduction to Quality Control</td>
<td>3</td>
</tr>
<tr>
<td>QC:102</td>
<td>Quality Cost Analysis</td>
<td>3</td>
</tr>
<tr>
<td>QC:202</td>
<td>Inspection Methods</td>
<td>3</td>
</tr>
<tr>
<td>QC:206</td>
<td>Statistical Quality Control I</td>
<td>3</td>
</tr>
<tr>
<td>QC:208</td>
<td>Statistical Quality Control II</td>
<td>3</td>
</tr>
<tr>
<td>EE:233</td>
<td>Digital Logic</td>
<td>4</td>
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<tr>
<td>EE:242</td>
<td>Introduction to Microprocessors</td>
<td>3</td>
</tr>
<tr>
<td>SAF:100</td>
<td>Safety Program Organization and Administration</td>
<td></td>
</tr>
<tr>
<td>EGR:140</td>
<td>Computer Aided Drafting and Design</td>
<td>3</td>
</tr>
<tr>
<td>SAF:101</td>
<td>Safety and Health Standards, Regulations and Codes</td>
<td></td>
</tr>
</tbody>
</table>

Program total.... 64 credits
**Construction Management Technology**  
**Associate in Applied Science Degree**  
**Florissant Valley**

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

**I. Career General Education**  
20 credits

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG:101</td>
<td>College Composition I</td>
<td>3</td>
</tr>
<tr>
<td>COM:101</td>
<td>Oral Communication I</td>
<td>3</td>
</tr>
<tr>
<td>MTH:140</td>
<td>Intermediate Algebra</td>
<td>3</td>
</tr>
<tr>
<td>MTH:144</td>
<td>Technical Algebra and Trigonometry (or)</td>
<td></td>
</tr>
<tr>
<td>MTH:185</td>
<td>Precalculus**</td>
<td>5</td>
</tr>
<tr>
<td>SOC:xxx</td>
<td>Social Science Elective</td>
<td></td>
</tr>
<tr>
<td>XXX:xxx</td>
<td>Missouri State Requirement</td>
<td></td>
</tr>
</tbody>
</table>

**II. Physical Education Activity**  
2 credits

**III. Area of Concentration**  
28 credits

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACC:100</td>
<td>Applied Accounting</td>
<td>3</td>
</tr>
<tr>
<td>GE:131</td>
<td>Engineering Technology Orientation</td>
<td>1</td>
</tr>
<tr>
<td>EGR:100</td>
<td>Engineering Drawing</td>
<td>3</td>
</tr>
<tr>
<td>GE:101</td>
<td>Technical Computer Applications</td>
<td>3</td>
</tr>
<tr>
<td>CE:230</td>
<td>Construction Materials and Testing</td>
<td>3</td>
</tr>
<tr>
<td>CE:235</td>
<td>Construction Office Practice</td>
<td>3</td>
</tr>
<tr>
<td>ME:135</td>
<td>Mechanics-Statics</td>
<td>3</td>
</tr>
<tr>
<td>ME:243</td>
<td>Strength of Materials</td>
<td>3</td>
</tr>
<tr>
<td>MGT:xxx</td>
<td>Management Elective</td>
<td>3</td>
</tr>
<tr>
<td>CE:116</td>
<td>Construction Blueprint Reading</td>
<td>3</td>
</tr>
</tbody>
</table>

**IV. Electives**

Choose 15 credits from the following:

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

**Program total . . . . . . 65 credits**

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

**Construction Office Management**  
**Certificate of Specialization**  
**Florissant Valley**

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

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

**Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CE:116</td>
<td>Construction Blueprint Reading</td>
<td>3</td>
</tr>
<tr>
<td>CE:131</td>
<td>Construction Estimating</td>
<td>3</td>
</tr>
<tr>
<td>CE:132</td>
<td>Construction Scheduling</td>
<td>3</td>
</tr>
<tr>
<td>CE:235</td>
<td>Construction Office Practice</td>
<td>3</td>
</tr>
<tr>
<td>GE:101</td>
<td>Technical Computer Applications</td>
<td>3</td>
</tr>
</tbody>
</table>

**Program total . . . . . . 15 credits**

**Students who are planning to pursue a BS degree in construction after completing the AAS degree should take the MTH:185/MTH:210 sequence.**
Criminal Justice: Corrections Option

Associate in Applied Science Degree
Forest Park

This program will prepare students for entry-level employment in the Criminal Justice/Corrections field. Also it will help those currently employed in the field to gain promotion and will provide a solid academic foundation for those wishing to transfer to other institutions of higher education to finish their academic goals. Students will study the correctional system as it relates to the total criminal justice system, i.e., law enforcement, courts, private security, etc. Probation, parole and rehabilitation will be covered and students will gain a working knowledge of these options to incarceration.

Persons interested in this program should be capable of working effectively with others. Prior course work in psychology, sociology, human services and social studies will be beneficial.

Graduates will be qualified for entry-level positions at the city, county and state level for correctional officers.

I. Career General Education 34-36 credits

<table>
<thead>
<tr>
<th>Courses</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG:101  College Composition I.</td>
<td>3</td>
</tr>
<tr>
<td>ENG:102  College Composition II.</td>
<td></td>
</tr>
<tr>
<td>COM:101  Oral Communication I.</td>
<td>3</td>
</tr>
<tr>
<td>SOC:101  Introduction to Sociology</td>
<td>3</td>
</tr>
<tr>
<td>PSY:200  General Psychology</td>
<td></td>
</tr>
<tr>
<td>ANT:103  Cultural Variations (or)</td>
<td>3</td>
</tr>
<tr>
<td>SOC:203  Crime and Society</td>
<td></td>
</tr>
<tr>
<td>PSC:101  Introduction to American Politics</td>
<td>3</td>
</tr>
<tr>
<td>MTH:xxx Math Elective (100 level or above)</td>
<td>3-4</td>
</tr>
<tr>
<td>XXX:xxx Science Elective</td>
<td>3-4</td>
</tr>
<tr>
<td>PHL:104  Ethics</td>
<td>3</td>
</tr>
<tr>
<td>IS:101   Keyboarding (and)</td>
<td>1</td>
</tr>
<tr>
<td>IS:106   Computer Literacy (or)</td>
<td>3</td>
</tr>
<tr>
<td>IS:151   Microcomputer Applications in Business</td>
<td>4</td>
</tr>
</tbody>
</table>

Program total........ 33 credits

II. Physical Education Activity 2 credits

III. Area of Concentration 30 credits

<table>
<thead>
<tr>
<th>Courses</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRJ:101  American Correctional System</td>
<td>3</td>
</tr>
<tr>
<td>CRJ:102  Rehabilitation, Parole and Probation</td>
<td></td>
</tr>
<tr>
<td>CRJ:111  Rules of Criminal Evidence</td>
<td></td>
</tr>
<tr>
<td>CRJ:122  Introduction to Criminal Justice</td>
<td>3</td>
</tr>
<tr>
<td>CRJ:123  Juvenile Justice</td>
<td></td>
</tr>
<tr>
<td>CRJ:124  Criminal Law and Procedures</td>
<td>3</td>
</tr>
<tr>
<td>CRJ:208  Correctional Policies and Procedures</td>
<td>3</td>
</tr>
<tr>
<td>CRJ:209  Criminal Justice Practicum</td>
<td></td>
</tr>
<tr>
<td>CRJ:211  Criminal Justice Practicum Seminar</td>
<td>3</td>
</tr>
<tr>
<td>CRJ:xxx  Criminal Justice Elective</td>
<td></td>
</tr>
</tbody>
</table>

Program total........ 66-68 credits

Criminal Justice: Law Enforcement Option

Associate in Applied Science Degree
Florissant Valley, Forest Park, Meramec and Online

This program is designed to prepare students for entry-level employment in the criminal justice system; prepare those currently employed by a law enforcement agency for promotion; provide a background in law enforcement for those preparing for studies such as pre-law and advanced study in police management, criminology or social welfare. The program introduces students to the criminal justice system and its components. Students will obtain a working knowledge of the laws and procedures of the Missouri Juvenile Code.

Persons interested in this program should be capable of working effectively with others. Previous participation in team sports, military service and other group experiences are helpful. Prior course work in psychology, sociology, social studies and law is also beneficial.

Graduates are qualified for positions in law enforcement agencies, private security organizations and businesses such as insurance companies, banks and retail operations.

I. Career General Education 30-33 credits

<table>
<thead>
<tr>
<th>Courses</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG:101  College Composition I.</td>
<td>3</td>
</tr>
<tr>
<td>ENG:102  College Composition II.</td>
<td></td>
</tr>
<tr>
<td>COM:101  Oral Communication I.</td>
<td>3</td>
</tr>
<tr>
<td>XXX:xxx Missouri State Requirement</td>
<td>3</td>
</tr>
<tr>
<td>XXX:xxx Social Science (PSY or SOC)</td>
<td>6</td>
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</tbody>
</table>
II. Physical Education Activity  

2 credits

III. Area of Concentration  

21 credits

Choose one course:

- HST:101 United States History to 1865 (or)
- HST:102 United States History from 1865 to the Present (or)
- PSC:101 Introduction to American Politics (or)
- PSC:103 State and Local Politics

Electives  

3 credits

Recommended electives include courses in criminal justice, human services, and sociology as related to the Criminal Justice field.

Program total. . . . . . 64-67 credits

Criminal Justice:  

Law Enforcement Option

Certificate of Proficiency

Florissant Valley, Forest Park, Meramec and Online

This program prepares students for employment and advancement in Law Enforcement. Students are provided with a sound background in legal procedures, a strong base of writing skills and a basic understanding of the government process.

Courses  

Credits

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRJ:111</td>
<td>Rules of Criminal Evidence</td>
</tr>
<tr>
<td>CRJ:122</td>
<td>Introduction to Criminal Justice</td>
</tr>
<tr>
<td>CRJ:123</td>
<td>Juvenile Justice</td>
</tr>
<tr>
<td>CRJ:124</td>
<td>Criminal Law and Procedures</td>
</tr>
<tr>
<td>CRJ:207</td>
<td>Police Supervision</td>
</tr>
<tr>
<td>CRJ:206</td>
<td>Management of Human Conflicts (or)</td>
</tr>
<tr>
<td>SOC:203</td>
<td>Crime and Society</td>
</tr>
<tr>
<td>CRJ:212</td>
<td>Criminal Investigation</td>
</tr>
</tbody>
</table>

Culinary Arts

Associate in Applied Science Degree

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.

I. Career General Education  

18 credits

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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<tbody>
<tr>
<td>ENG:101</td>
<td>College Composition I</td>
</tr>
<tr>
<td>COM:101</td>
<td>Oral Communication I (or)</td>
</tr>
<tr>
<td>COM:107</td>
<td>Public Speaking</td>
</tr>
<tr>
<td>MTH:108</td>
<td>Elementary Applied Mathematics (or)</td>
</tr>
<tr>
<td>MTH:xxx</td>
<td>Higher Level Mathematics</td>
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<td>XXX:xxx</td>
<td>Natural Science or Mathematics</td>
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<tr>
<td>XXX:xxx</td>
<td>Missouri State Requirement</td>
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<tr>
<td>XXX:xxx</td>
<td>Social Science</td>
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</table>

II. Physical Education Activity  

2 credits

III. Area of Concentration  

17 credits

<table>
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<tr>
<th>Course</th>
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<tbody>
<tr>
<td>HTM:100</td>
<td>Introduction to the Hospitality Industry</td>
</tr>
<tr>
<td>HTM:120</td>
<td>Supervision and Leadership in the Hospitality Industry</td>
</tr>
<tr>
<td>HTM:210</td>
<td>Hospitality Financial Planning and Cost Control</td>
</tr>
<tr>
<td>HTM:200</td>
<td>Procurement in the Hospitality Industry</td>
</tr>
<tr>
<td>HTM:125</td>
<td>Nutrition for the Culinarian</td>
</tr>
<tr>
<td>HTM:105</td>
<td>Professionalism in the Hospitality Industry</td>
</tr>
<tr>
<td>CUL:101</td>
<td>Safety and Sanitation</td>
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</tbody>
</table>
IV. Culinary Arts Courses 27 credits

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>CUL:110</td>
<td>Food Preparation Theory &amp; Practical I</td>
<td>3</td>
</tr>
<tr>
<td>CUL:115</td>
<td>Food Preparation Theory &amp; Practical II</td>
<td>3</td>
</tr>
<tr>
<td>CUL:120</td>
<td>Food Preparation Theory &amp; Practical III</td>
<td>3</td>
</tr>
<tr>
<td>BAP:150</td>
<td>Bakeshop Basics for Culinarians</td>
<td>3</td>
</tr>
<tr>
<td>CUL:201</td>
<td>Garde Manger</td>
<td>3</td>
</tr>
<tr>
<td>CUL:205</td>
<td>Global Cuisine</td>
<td>3</td>
</tr>
<tr>
<td>CUL:215</td>
<td>American Regional Cuisine</td>
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<tr>
<td>CUL:250</td>
<td>Culinary Arts Capstone</td>
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</table>

Program total........... 64 credits

Deaf Communication Studies: Interpreter Education

Associate in Applied Science Degree
Florissant Valley

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

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

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

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

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

I. Career General Education 15 credits

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
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<tbody>
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<td>ENG:101</td>
<td>College Composition I</td>
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<tr>
<td>ENG:102</td>
<td>College Composition II</td>
<td>3</td>
</tr>
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<td>MTH:xxx</td>
<td>100 level or higher</td>
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</tr>
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<td>XXX:xxx</td>
<td>Missouri State Requirement</td>
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</tr>
<tr>
<td>XXX:xxx</td>
<td>Biological/Physical Science</td>
<td>3</td>
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II. Physical Education Activity 2 credits

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
</table>

III. Area of Concentration 51 credits

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>DCS:106</td>
<td>American Sign Language III</td>
<td>5</td>
</tr>
<tr>
<td>DCS:112</td>
<td>American Sign Language IV</td>
<td>3</td>
</tr>
</tbody>
</table>

Program total........... 68 credits

Deaf Communication Studies: American Sign Language

Certificate of Specialization
Florissant Valley

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

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

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

<table>
<thead>
<tr>
<th>Courses</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>DCS:104</td>
<td>American Sign Language I</td>
</tr>
<tr>
<td>DCS:105</td>
<td>American Sign Language II</td>
</tr>
<tr>
<td>DCS:107</td>
<td>Fingerspelling</td>
</tr>
<tr>
<td>DCS:120</td>
<td>Fingerspelling Lab</td>
</tr>
<tr>
<td>DCS:111</td>
<td>Theory of American Sign Language</td>
</tr>
<tr>
<td>DCS:119</td>
<td>Theory of American Sign Language Lab</td>
</tr>
<tr>
<td>DCS:115</td>
<td>Introduction to Deaf Communication Studies</td>
</tr>
<tr>
<td>DCS:116</td>
<td>American Sign Language Semantics</td>
</tr>
</tbody>
</table>

Program total........... 24 credits
Dental Assisting

Certificate of Proficiency
Forest Park

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

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

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

Courses

<table>
<thead>
<tr>
<th>Courses</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>COM:101 Oral Communication I</td>
<td>3</td>
</tr>
<tr>
<td>DA:143 Chairside Assisting: Operative Dentistry</td>
<td>2</td>
</tr>
<tr>
<td>DA:144 Preclinical Practice</td>
<td>1</td>
</tr>
<tr>
<td>DA:149 Dental Terminology</td>
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<tr>
<td>DA:150 Infection Control in Dentistry</td>
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<tr>
<td>DA:151 Fundamentals of Chairside Assisting</td>
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</tr>
<tr>
<td>DA:157 Dental Radiology</td>
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</tr>
<tr>
<td>DA:159 Dental Office Procedures</td>
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</tr>
<tr>
<td>DA:161 Dental Assisting Practicum</td>
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</tr>
<tr>
<td>DA:162 Dental Systems Management</td>
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</tr>
<tr>
<td>DA:164 Clinical Applications I</td>
<td>2</td>
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<tr>
<td>DA:165 Dental Materials</td>
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<td>DA:166 Dental Lab Procedures</td>
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<tr>
<td>DA:167 Dental Radiology II</td>
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<tr>
<td>DA:168 Integrated Dental Sciences</td>
<td>2</td>
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<td>DA:169 Preventive Dental Health</td>
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<tr>
<td>DA:172 Dental Practice Management</td>
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<tr>
<td>DA:173 Chairside Assisting: Dental Specialties</td>
<td>2</td>
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<tr>
<td>DA:174 Clinical Applications II</td>
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<td>DA:175 Dental Assisting Practicum II</td>
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<td>DA:176 Dental Assisting Practicum III</td>
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</table>

DA:175 Dental Assisting Practicum II... 2 credits
DA:174 Clinical Applications II... 2 credits
DA:175 Dental Assisting Practicum II... 2 credits
DA:176 Dental Assisting Practicum III... 2 credits

Program total... 40 credits

Dental Hygiene

Associate in Applied Science Degree
Forest Park

This program prepares students to practice dental hygiene under the supervision of a practicing dentist. Through classroom work and laboratory and clinical experience in the on-campus public dental hygiene clinic, students learn to conduct patient assessments, take medical and dental histories, perform diagnostic tests and examinations, instruct patients in preventive dental health practices, perform various dental procedures, and to design and implement community and school health programs. Persons interested in this program should enjoy working with people from all age groups. An interest in biology and the health sciences is important. Good eye/hand coordination and attention to detail is necessary.

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

Dental Hygiene Program Prerequisites:

<table>
<thead>
<tr>
<th>Courses</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO:207 Anatomy and Physiology I</td>
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<tr>
<td>BIO:208 Anatomy and Physiology II</td>
<td>4</td>
</tr>
<tr>
<td>CHM:101 Fundamentals of Chemistry I</td>
<td>5</td>
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</table>

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

I. Career General Education 19 credits

<table>
<thead>
<tr>
<th>Courses</th>
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</thead>
<tbody>
<tr>
<td>BIO:203 General Microbiology I</td>
<td>4</td>
</tr>
<tr>
<td>COM:101 Oral Communication I</td>
<td>3</td>
</tr>
<tr>
<td>ENG:101 College Composition I</td>
<td>3</td>
</tr>
<tr>
<td>PSY:200 General Psychology</td>
<td>3</td>
</tr>
<tr>
<td>SOC:101 Introduction to Sociology</td>
<td>3</td>
</tr>
<tr>
<td>XXX:xxx Missouri State Requirement</td>
<td>3</td>
</tr>
</tbody>
</table>

II. Physical Education Activity 2 credits
Diagnostic Medical Sonography

Certificate of Proficiency

Forest Park

This 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. Positions are available in hospital ultrasound departments, clinics, mobile services and private physicians’ offices.

III. Area of Concentration          53 credits

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>DHY:120</td>
<td>Concepts of Pre-Clinical Dental Hygiene I.</td>
<td>3</td>
</tr>
<tr>
<td>DHY:121</td>
<td>Clinical Applications Lab I.</td>
<td>1</td>
</tr>
<tr>
<td>DHY:125</td>
<td>Periodontics I</td>
<td>2</td>
</tr>
<tr>
<td>DHY:126</td>
<td>Dental Radiology I</td>
<td>2</td>
</tr>
<tr>
<td>DHY:127</td>
<td>Oral Anatomy</td>
<td>3</td>
</tr>
<tr>
<td>DHY:128</td>
<td>Biomedical Sciences for the Dental Hygienist</td>
<td>2</td>
</tr>
<tr>
<td>DHY:129</td>
<td>Dental Medical Emergencies</td>
<td>1</td>
</tr>
<tr>
<td>DHY:130</td>
<td>Concepts of Clinical Dental Hygiene II</td>
<td>3</td>
</tr>
<tr>
<td>DHY:131</td>
<td>Clinical Applications Lab II.</td>
<td>1</td>
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<tr>
<td>DHY:132</td>
<td>Clinical Dental Hygiene II</td>
<td>4</td>
</tr>
<tr>
<td>DHY:136</td>
<td>Dental Nutrition and Biochemistry</td>
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</tr>
<tr>
<td>DHY:137</td>
<td>Anatomy and Embryology of the Head and Neck</td>
<td>2</td>
</tr>
<tr>
<td>DHY:138</td>
<td>General and Oral Pathology</td>
<td>2</td>
</tr>
<tr>
<td>DHY:142</td>
<td>Clinical Dental Hygiene Summer</td>
<td>2</td>
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<tr>
<td>DHY:215</td>
<td>Pain Control</td>
<td>2</td>
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<td>DHY:220</td>
<td>Concepts of Clinical Dental Hygiene III</td>
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<td>DHY:221</td>
<td>Clinical Applications Lab III.</td>
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<td>DHY:222</td>
<td>Clinical Dental Hygiene III</td>
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<td>DHY:223</td>
<td>Community Public Health</td>
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<td>DHY:225</td>
<td>Periodontics II</td>
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<tr>
<td>DHY:226</td>
<td>Dental Radiology II</td>
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</tr>
<tr>
<td>DHY:228</td>
<td>Dental Pharmacology</td>
<td>2</td>
</tr>
<tr>
<td>DHY:230</td>
<td>Transition into Professional Dental Hygiene Practice</td>
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<tr>
<td>DHY:232</td>
<td>Clinical Dental Hygiene IV</td>
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</table>

Program total.          74 credits

Core Curriculum          12 credits

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>DMS:101</td>
<td>Clinical Foundations of Ultrasound</td>
<td>2</td>
</tr>
<tr>
<td>DMS:102</td>
<td>Medical Ethics and Professional Issues</td>
<td>2</td>
</tr>
<tr>
<td>DMS:103</td>
<td>Ultrasound Physics and Instrumentation I</td>
<td>2</td>
</tr>
<tr>
<td>DMS:104</td>
<td>Ultrasound Physics and Instrumentation II</td>
<td>3</td>
</tr>
<tr>
<td>DMS:201</td>
<td>Ultrasound Physics and Instrumentation III</td>
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Options:

Cardiac Sonography          30 credits

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>DMS:112</td>
<td>Cardiac Sonography I</td>
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<tr>
<td>DMS:113</td>
<td>Cardiac Sonography Scanning Techniques I.</td>
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</tr>
<tr>
<td>DMS:114</td>
<td>Cardiac Sonography Practicum I</td>
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</tr>
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<td>DMS:115</td>
<td>Cardiac Sonography II</td>
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<tr>
<td>DMS:116</td>
<td>Cardiac Sonography Scanning Techniques II.</td>
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<td>DMS:117</td>
<td>Cardiac Sonography Clinical Applications I.</td>
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</tr>
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<td>DMS:118</td>
<td>Cardiac Sonography Practicum II</td>
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<td>DMS:207</td>
<td>Cardiac Sonography III</td>
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</tr>
<tr>
<td>DMS:208</td>
<td>Cardiac Sonography Practicum III</td>
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<td>DMS:209</td>
<td>Cardiac Sonography IV</td>
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<td>DMS:210</td>
<td>Cardiac Sonography Clinical Applications II</td>
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<tr>
<td>DMS:211</td>
<td>Cardiac Sonography Practicum IV</td>
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</table>

Medical Sonography          30 credits

<table>
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<tr>
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<tr>
<td>DMS:105</td>
<td>Medical Sonography I</td>
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<td>DMS:106</td>
<td>Medical Sonography Scanning Techniques I.</td>
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<tr>
<td>DMS:107</td>
<td>Medical Sonography Practicum I</td>
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<tr>
<td>DMS:108</td>
<td>Medical Sonography II</td>
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</tr>
<tr>
<td>DMS:109</td>
<td>Medical Sonography Scanning Techniques II.</td>
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</tr>
<tr>
<td>DMS:110</td>
<td>Medical Sonography Clinical Applications I.</td>
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<td>Medical Sonography Practicum II</td>
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<td>DMS:202</td>
<td>Medical Sonography III</td>
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</tr>
<tr>
<td>DMS:203</td>
<td>Medical Sonography Practicum III</td>
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<td>DMS:204</td>
<td>Medical Sonography IV</td>
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<td>DMS:205</td>
<td>Medical Sonography Clinical Applications II</td>
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<tr>
<td>DMS:206</td>
<td>Medical Sonography Practicum IV</td>
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</table>

Vascular Technology          30 credits

The Diagnostic Medical Technology; Vascular Technology option is not accepting new students at this time. Please consult an advisor for more information.

Program total.          42 credits
Diesel Technology

Certificate of Proficiency
Forest Park

Courses
Credits
ENG:101 College Composition I (or) 3
MTH:108 Elementary Applied Mathematics (or) 3
BUS:104 Introduction to Business Administration 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:104 Electronic Information Systems and Manuals 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

Program total 45 credits

Certificate of Specialization
Forest Park

Courses
Credits
ENG:101 College Composition I (or) 3
MTH:108 Elementary Applied Mathematics (or) 3
BUS:104 Introduction to Business Administration 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:104 Electronic Information Systems and Manuals 3
DIE:206 Medium/Heavy Truck Drivetrains 3

Program total 18 credits

Diesel Technology

Associate in Applied Science Degree
Forest Park

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

I. Career General Education 21 credits

<table>
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<tr>
<td>ENG:101</td>
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<td>MTH:108</td>
<td>Elementary Applied Mathematics 3</td>
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<tr>
<td>SOC:101</td>
<td>Introduction to Sociology 3</td>
</tr>
<tr>
<td>BUS:104</td>
<td>Introduction to Business Administration 3</td>
</tr>
<tr>
<td>COM:101</td>
<td>Oral Communication I 3</td>
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<td>PSI:101</td>
<td>Physical Science Lecture I 3</td>
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<td>XXXxxx</td>
<td>Missouri State Requirement 3</td>
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II. Physical Education Activity 2 credits

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<th>Course</th>
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<tr>
<td>DIE:101</td>
<td>Diesel Engine Operation and Repair 3</td>
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<tr>
<td>DIE:102</td>
<td>Medium/Heavy Truck Suspension and Steering 3</td>
</tr>
<tr>
<td>DIE:103</td>
<td>Medium/Heavy Truck Electricity 3</td>
</tr>
<tr>
<td>DIE:104</td>
<td>Electronic Information Systems and Manuals 3</td>
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<td>DIE:105</td>
<td>Diesel Fuel Systems 3</td>
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<td>DIE:106</td>
<td>Medium/Heavy Truck Brakes 3</td>
</tr>
<tr>
<td>DIE:107</td>
<td>Medium/Heavy Truck Electronics 3</td>
</tr>
<tr>
<td>DIE:201</td>
<td>Preventive Maintenance Inspection 3</td>
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<tr>
<td>DIE:202</td>
<td>Co-op Work Experience I-Diesel Technology 3</td>
</tr>
<tr>
<td>DIE:203</td>
<td>Truck Heating, Ventilation, and Air Conditioning 3</td>
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<td>DIE:204</td>
<td>Service and Parts Management 3</td>
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<td>DIE:205</td>
<td>Co-op Work Experience II-Diesel Technology 3</td>
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<td>DIE:206</td>
<td>Medium/Heavy Truck Drivetrains 3</td>
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<tr>
<td>ME:101</td>
<td>Welding Technology 3</td>
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Program total 65 credits
Dietetic Technology: Nutrition Care

Associate in Applied Science Degree

Florissant Valley

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

I. Career General Education 19-20 credits

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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<tbody>
<tr>
<td>ENG:101</td>
<td>College Composition I</td>
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<tr>
<td>COM:101</td>
<td>Oral Communication I</td>
</tr>
<tr>
<td>MTHxxxx</td>
<td>Mathematics Elective (MTH:108 or higher)</td>
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<td>BIO/CHM:</td>
<td>Biology/Chemistry Elective</td>
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<tr>
<td>PSY:200</td>
<td>General Psychology</td>
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<td>XXXxxxx</td>
<td>Missouri State Requirement</td>
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II. Physical Education Activity 2 credits

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<tr>
<td>DIT:108</td>
<td>Food: Preparation and Science Lecture</td>
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<tr>
<td>DIT:109</td>
<td>Food: Preparation and Science Lab</td>
</tr>
<tr>
<td>DIT:103</td>
<td>Food Management</td>
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<tr>
<td>DIT:104</td>
<td>Clinical Nutrition</td>
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<tr>
<td>DIT:214</td>
<td>Nutrition Through the Life Cycle</td>
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<td>DIT:106</td>
<td>Food Management Practicum</td>
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<td>DIT:107</td>
<td>Clinical Nutrition Practicum</td>
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<td>DIT:115</td>
<td>Principles of Nutrition</td>
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<tr>
<td>DIT:201</td>
<td>Food Systems Management</td>
</tr>
<tr>
<td>DIT:202</td>
<td>Medical Nutrition Therapy</td>
</tr>
<tr>
<td>DIT:204</td>
<td>Seminar: Strategies for Professional Practice</td>
</tr>
<tr>
<td>DIT:206</td>
<td>Seminar: Dietetic Practitioner Issues</td>
</tr>
<tr>
<td>DIT:207</td>
<td>Quantity Foods</td>
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<tr>
<td>DIT:209</td>
<td>Community Nutrition Practicum</td>
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<tr>
<td>DIT:210</td>
<td>Community Nutrition</td>
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<tr>
<td>DIT:225</td>
<td>The Cultural Feast: An Introduction to Food and Society</td>
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III. Area of Concentration 46 credits

<table>
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<tr>
<th>Course</th>
<th>Credits</th>
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<tbody>
<tr>
<td>DIT:207</td>
<td>Community Nutrition Practicum</td>
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<tr>
<td>DIT:210</td>
<td>Community Nutrition</td>
</tr>
<tr>
<td>DIT:225</td>
<td>The Cultural Feast: An Introduction to Food and Society</td>
</tr>
</tbody>
</table>

IV. Program Elective 3 credits

(Program director has list of approved courses.)

Program total... 70-71 credits

Digital Media: Animation

Certificate of Specialization

Meramec

This program prepares the working professional for a career option in three-dimensional design and animation. Realistic sculptural creations are constructed on the computer and subsequently animated. High-end computer hardware and software, similar to those found in commercial studios, are used. Graduates will be prepared to enter a career direction in this exciting medium.

<table>
<thead>
<tr>
<th>Courses</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART:131</td>
<td>Computer Art Studio</td>
</tr>
<tr>
<td>ART:126</td>
<td>Introduction to Adobe Flash</td>
</tr>
<tr>
<td>ART:275</td>
<td>Photo Imaging I: Photoshop</td>
</tr>
<tr>
<td>AT:100</td>
<td>Hardware Configuration and Troubleshooting: Macintosh/Windows</td>
</tr>
<tr>
<td>AT:146</td>
<td>3D Modeling I: Surface Modeling</td>
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<tr>
<td>AT:234</td>
<td>Computer Animation I</td>
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<tr>
<td>AT:283</td>
<td>Digital Media Portfolio</td>
</tr>
</tbody>
</table>

Program total........ 17 credits

Digital Media: Digital Photography

Certificate of Specialization

Florissant Valley and Meramec

This program is designed to prepare the returning photographic professional for digital applications in photography. Study includes the use of computers, scanners, digital cameras, printers, and related hardware and software, with creativity as a principal goal. Instruction emphasizes ways in which traditional photographic visualization and processing can be cultivated and enhanced with advanced computer technology and software. The purpose of this certificate is to provide students with expertise in the new tools for creating and adapting images made available by the computer.

<table>
<thead>
<tr>
<th>Courses</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART:131</td>
<td>Computer Art Studio</td>
</tr>
<tr>
<td>ART:172</td>
<td>Digital Photography</td>
</tr>
<tr>
<td>ART:275</td>
<td>Photo Imaging I: Photoshop</td>
</tr>
<tr>
<td>AT:100</td>
<td>Hardware Configuration and Troubleshooting: Macintosh/Windows</td>
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<tr>
<td>AT:105</td>
<td>Digital Printing</td>
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<tr>
<td>AT:276</td>
<td>Photo Imaging II: Photoshop</td>
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<tr>
<td>AT:283</td>
<td>Digital Media Portfolio</td>
</tr>
</tbody>
</table>

Program total........ 17 credits
Digital Media: Interactive Design
Certificate of Specialization
Meramec

This program is designed to meet the needs of those professionals currently working in the various fields on interactive and web page development and students wanting to enter those fields. Students will learn ways in which traditional design methods can be enhanced by computer technology. Study focuses on aesthetic and dynamic design while utilizing the most current hardware and software available for construction and publishing in web, social media and other interactive formats. Graduates will be prepared to enter this career field as Web and interactive designers for personal or professional purposes.

<table>
<thead>
<tr>
<th>Courses</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART:131 Computer Art Studio</td>
<td>3</td>
</tr>
<tr>
<td>ART:125 Interactive Design I</td>
<td>3</td>
</tr>
<tr>
<td>AT:100 Hardware Configuration and Troubleshooting: Macintosh/Windows</td>
<td>1</td>
</tr>
<tr>
<td>AT:135 Communication and Design for the WWW I</td>
<td>3</td>
</tr>
<tr>
<td>AT:143 Communication and Design for the WWW II</td>
<td>3</td>
</tr>
<tr>
<td>ART:126 Introduction to Adobe Flash</td>
<td>3</td>
</tr>
<tr>
<td>ART:283 Digital Media Portfolio</td>
<td>1</td>
</tr>
</tbody>
</table>

Program total: ........ 17 credits

Digital Media: Video Art
Certificate of Specialization
Florissant Valley and Meramec

This program is designed to prepare those involved or interested in video editing for the effective use of digital applications in the medium. Study includes the use of computers, scanners, digital cameras, and related hardware and software, with creativity as a principal goal. Instruction emphasizes ways in which traditional videography can be enhanced by advanced computer technology and software. The purpose of this certificate is to provide students with expertise in new technological tools.

<table>
<thead>
<tr>
<th>Courses</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART:131 Computer Art Studio</td>
<td>3</td>
</tr>
<tr>
<td>MCM:126 Video Production – Field (or)</td>
<td>3</td>
</tr>
<tr>
<td>AT:175 Video Art I</td>
<td>3</td>
</tr>
<tr>
<td>ART:275 Photo Imaging I: Photoshop</td>
<td>3</td>
</tr>
<tr>
<td>ART:280 Final Cut</td>
<td>3</td>
</tr>
<tr>
<td>AT:100 Hardware Configuration and Troubleshooting: Macintosh/Windows</td>
<td>1</td>
</tr>
<tr>
<td>AT:106 Motion Media Design</td>
<td>3</td>
</tr>
<tr>
<td>AT:283 Digital Media Portfolio</td>
<td>1</td>
</tr>
</tbody>
</table>

Program total: ........ 17 credits

Early Care and Education
Associate in Applied Science Degree
Florissant Valley, Forest Park and Meramec

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

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

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

The Early Care and Education program is aligned with education standards for Associate Degree programs set forth by the National Association for the Education of Young Children. The profession offers opportunities for teaching and working in a wide range of programs and agencies that serve young children and their families. St. Louis Community College prepares students to work with young children from infancy through age eight in a variety of settings such as preschool, day care, Head Start programs, youth development, as teacher assistants in elementary school settings, or for management positions such as program director, or as child and family advocates for community agencies.
I. Career General Education  18 credits

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG:101</td>
<td>College Composition I</td>
<td>3</td>
</tr>
<tr>
<td>MTH:108</td>
<td>Elementary Applied Mathematics or higher</td>
<td>3</td>
</tr>
<tr>
<td>XXXxxxx</td>
<td>Missouri State Requirement</td>
<td>3</td>
</tr>
<tr>
<td>XXXxxxx</td>
<td>Social Science Elective</td>
<td>3</td>
</tr>
<tr>
<td>XXXxxxx</td>
<td>Science Elective</td>
<td>3</td>
</tr>
<tr>
<td>XXXxxxx</td>
<td>Humanities or Communications Elective</td>
<td>3</td>
</tr>
</tbody>
</table>

II. Area of Concentration  42 credits

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>ECE:101</td>
<td>Introduction to Early Care and Education</td>
<td>3</td>
</tr>
<tr>
<td>ECE:102</td>
<td>Creative Experiences in Early Care and Education</td>
<td>3</td>
</tr>
<tr>
<td>ECE:103</td>
<td>Language and Literacy in Early Care and Education</td>
<td>3</td>
</tr>
<tr>
<td>ECE:104</td>
<td>Principles of Early Care and Education</td>
<td>3</td>
</tr>
<tr>
<td>ECE:105</td>
<td>Child Development Laboratory</td>
<td>3</td>
</tr>
<tr>
<td>ECE:124</td>
<td>Child Nutrition, Health and Safety</td>
<td>3</td>
</tr>
<tr>
<td>ECE:125</td>
<td>Child Growth and Development I</td>
<td>3</td>
</tr>
<tr>
<td>ECE:127</td>
<td>Family and Teacher Interactions</td>
<td>3</td>
</tr>
<tr>
<td>ECE:200</td>
<td>Guiding Young Children</td>
<td>3</td>
</tr>
<tr>
<td>ECE:201</td>
<td>Math and Science in Early Care and Education</td>
<td>3</td>
</tr>
<tr>
<td>ECE:202</td>
<td>Movement and Music in Early Care and Education</td>
<td>3</td>
</tr>
<tr>
<td>ECE:203</td>
<td>Early Care and Education Practicum I</td>
<td>3</td>
</tr>
<tr>
<td>ECE:205</td>
<td>Child and Society</td>
<td>3</td>
</tr>
<tr>
<td>ECE:206</td>
<td>Early Care and Education Practicum II</td>
<td>3</td>
</tr>
</tbody>
</table>

II. Physical Education Activity  2 credits

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECE:101</td>
<td>Introduction to Early Care and Education</td>
<td>3</td>
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</table>

III. Electives  6 credits

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>XXXxxxx</td>
<td>Social Science Elective</td>
<td>3</td>
</tr>
<tr>
<td>XXXxxxx</td>
<td>Humanities or Communications Elective</td>
<td>3</td>
</tr>
</tbody>
</table>

Program total. . . . . .  30 credits

Early Care and Education—
Developmental Disabilities

Associate in Applied Science Degree
Florissant Valley and Meramec

This option prepares students to work in preschools, residential centers and other programs having developmentally disabled children. 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.

I. Career General Education  18 credits

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG:101</td>
<td>College Composition I</td>
<td>3</td>
</tr>
<tr>
<td>XXXxxxx</td>
<td>Humanities/Communications Elective</td>
<td>3</td>
</tr>
<tr>
<td>XXXxxxx</td>
<td>Missouri State Requirement</td>
<td>3</td>
</tr>
<tr>
<td>MTH:108</td>
<td>Elementary Applied Math</td>
<td>3</td>
</tr>
<tr>
<td>XXXxxxx</td>
<td>Science Elective</td>
<td>3</td>
</tr>
<tr>
<td>XXXxxxx</td>
<td>Social Science Elective</td>
<td>3</td>
</tr>
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</table>

II. Physical Education Activity  2 credits

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECE:101</td>
<td>Introduction to Early Care and Education</td>
<td>3</td>
</tr>
</tbody>
</table>

III. Area of Concentration  48 credits

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECE:101</td>
<td>Introduction to Early Care and Education</td>
<td>3</td>
</tr>
</tbody>
</table>

Program total. . . . . .  65 credits

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.
ECE:102 Creative Experiences in Early Care and Education ........................................3
ECE:103 Language and Literacy in Early Care and Education .....................................3
ECE:104 Principles of Early Care and Education .........................................................3
ECE:105 Child Development Laboratory .................................................................3
ECE:107 Early Care and Special Education ..............................................................3
ECE:124 Child Nutrition, Health and Safety ............................................................3
ECE:125 Child Growth and Development I ..............................................................3
ECE:126 Child Growth and Development II .............................................................3
ECE:200 Guiding Young Children .........................................................................3
ECE:201 Math and Science in Early Care and Education ...........................................3
ECE:202 Movement and Music in Early Care and Education ....................................3
ECE:203 Early Care and Education Practicum I .......................................................3
ECE:205 Child and Society .........................................................................................3
ECE:206 Early Care and Education Practicum II ......................................................3
ECE:207 Activities for Special Individuals ...............................................................3

Program total ........ 68 credits

Electrical/Electronic Engineering Technology
Associate in Applied Science Degree 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 ABET, 111 Market Place, Suite 1050, Baltimore, Md. 21202-4012, telephone 410-347-7700, ABET.org.

I. Career General Education 12 credits

ENG:101 College Composition I ............................................................. 3
ENG:102 College Composition II (or) ......................................................... 3
ENG:103 Report Writing (or) ................................................................. 3
COM:101 Oral Communication I ............................................................ 3
XXX:xxx Missouri State Requirement .................................................. 3
XXX:xxx Social Science Requirement .................................................. 3

II. Physical Education Activity 2 credits

III. Math Requirement 5-7 credits

MTH:185 Precalculus (or) ................................................................. 5
MTH:144 Technical Algebra and Trigonometry (or) .................................. 5
MTH:160C College Algebra (and) ....................................................... 4
MTH:170 Trigonometry ................................................................. 3

IV. Science Requirement 4-5 credits

Select one of the following science courses:

PHY:111 College Physics I ................................................................. 4
CHM:101 Fundamentals of Chemistry I ................................................ 5
BIO:111 Introductory Biology ............................................................ 4
BIO:207 Anatomy and Physiology I ................................................... 4

V. Area of Concentration 24 credits

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

VI. Electives .......... 17 credits

Select 17 or more credit hours from the following:

GE:133 Quantitative Methods in Engineering Technologies ................. 2
EE:242 Introduction to Microprocessors ............................................. 3
EE:236 PLC/Programmable Logic Controller ...................................... 3
BE:254 Biomedical Applications ........................................................ 4
EE:260 Electronic Project Design and Fabrication ......................... 3
EE:240 Electrical Machines ................................................................. 4
GE:240 Product Design and Fabrication ............................................. 4
EE:241 Transmission and Distribution of Power ................................... 3
EE:204 Three-Phase Power ................................................................. 4
EE:235 Electronic Communications ................................................... 4
ME:210 Robotics Subsystems and Components ................................... 3
ME:254 Electricity and Controls ............................................................ 3
BE:153 Workplace Learning: Biomedical Engineering Technology .......... 4
GE:290 Workplace Learning: General Engineering Technology .............. 1-6

Program total ....... 64-67 credits

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.
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.

<table>
<thead>
<tr>
<th>Required Courses</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EMT:121 Emergency Care, Principles and Techniques</td>
<td>10</td>
</tr>
<tr>
<td>EMT:122 EMT Internship</td>
<td>6</td>
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</tbody>
</table>

Program total. . . . . 16 credits

Event Planning
Certificate of Specialization
Forest Park

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

<table>
<thead>
<tr>
<th>Courses</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core Courses</td>
<td></td>
</tr>
<tr>
<td>HTM:100 Introduction to the Hospitality Industry</td>
<td>3</td>
</tr>
<tr>
<td>HTM:105 Professionalism in the Hospitality Industry</td>
<td>1</td>
</tr>
<tr>
<td>HTM:110 Negotiations in the Hospitality Industry</td>
<td>2</td>
</tr>
<tr>
<td>HTM:205 Legal Aspects of Hospitality</td>
<td>3</td>
</tr>
<tr>
<td>ACC:100 Applied Accounting</td>
<td>3</td>
</tr>
</tbody>
</table>

Focus Courses

<table>
<thead>
<tr>
<th>Courses</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HTM:245 Event Planning I</td>
<td>3</td>
</tr>
<tr>
<td>HTM:250 Event Planning II</td>
<td>3</td>
</tr>
<tr>
<td>HTM:255 Event Planning III</td>
<td>3</td>
</tr>
</tbody>
</table>

Program total. . . . . 21 credits

Fire Protection Technology
Associate in Applied Science Degree
Forest Park and Online

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

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

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

I. Career General Education  21 credits

<table>
<thead>
<tr>
<th>Courses</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG:101 College Composition I</td>
<td>3</td>
</tr>
<tr>
<td>ENG:103 Report Writing</td>
<td>3</td>
</tr>
<tr>
<td>COM:101 Oral Communication I</td>
<td>3</td>
</tr>
<tr>
<td>MTH:124 Technical Mathematics I</td>
<td>3</td>
</tr>
<tr>
<td>CHM:114 Industrial Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>XXXxxxx Missouri State Requirement</td>
<td>3</td>
</tr>
<tr>
<td>SOC:101 Introduction to Sociology</td>
<td>3</td>
</tr>
</tbody>
</table>

II. Physical Education Activity  2 credits

III. Area of Concentration  46-47 credits

<table>
<thead>
<tr>
<th>Courses</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIR:100 Fire Department Apparatus</td>
<td>2</td>
</tr>
<tr>
<td>FIR:102 Fire Characteristics</td>
<td>3</td>
</tr>
<tr>
<td>FIR:103 Fire Service Management and Administration</td>
<td>3</td>
</tr>
<tr>
<td>FIR:105 Inspection and Fire Prevention</td>
<td>3</td>
</tr>
<tr>
<td>FIR:106 Teaching Techniques for Fire Department Personnel</td>
<td>3</td>
</tr>
<tr>
<td>FIR:110 Basic Fire Protection and Alarm Systems</td>
<td>3</td>
</tr>
<tr>
<td>FIR:111 Fire Fighter I</td>
<td>4</td>
</tr>
<tr>
<td>FIR:112 Fire Fighter II</td>
<td>4</td>
</tr>
<tr>
<td>FIR:202 Fire Investigation</td>
<td>3</td>
</tr>
<tr>
<td>FIR:204 Fire Fighting Tactics and Strategy</td>
<td>3</td>
</tr>
<tr>
<td>FIR:205 Fire Science Hydraulics</td>
<td>3</td>
</tr>
<tr>
<td>FIR:207 Codes and Ordinances</td>
<td>3</td>
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<tr>
<td>FIR:208 Hazardous Materials</td>
<td>3</td>
</tr>
<tr>
<td>FIR:210 Architectural Structural Representation-Materials</td>
<td>3</td>
</tr>
<tr>
<td>IS:103 Information Systems for Business (or)</td>
<td>3-4</td>
</tr>
<tr>
<td>IS:116 Computer Literacy (or)</td>
<td>3</td>
</tr>
<tr>
<td>IS:151 Microcomputer Applications in Business</td>
<td>3</td>
</tr>
</tbody>
</table>

Program total. . . . . 69-70 credits
Fire Protection Technology

Certificate of Proficiency

Forest Park

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

<table>
<thead>
<tr>
<th>Courses</th>
<th>Credits</th>
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<tbody>
<tr>
<td>FIR:xxx</td>
<td>Approved Fire Protection Courses .......... 18</td>
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<tr>
<td>MTH:124</td>
<td>Technical Mathematics I .................. 3</td>
</tr>
<tr>
<td>PSI:101</td>
<td>Physical Science Lecture I (or) .......... 3</td>
</tr>
<tr>
<td>CHM:114</td>
<td>Industrial Chemistry ..................... 3</td>
</tr>
<tr>
<td>XXX:xx</td>
<td>Approved electives from AAS (3) ........... 9</td>
</tr>
</tbody>
</table>

Program total. ......... 27 credits

Funeral Directing

Certificate of Specialization

Forest Park and Online

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

Funeral directors use counseling skills to assist families in coping with grief, adjusting to new situations, and making appropriate funeral arrangements. The successful funeral director possesses emotional stability, the desire to serve others, and good physical health to withstand the irregular working hours and the obvious stresses of the job. Good grooming habits are essential, as the funeral director must reflect the high standards of care the families will receive at the funeral home. Prior coursework in public speaking, accounting, and business would be helpful for students interested in this program.

This academic program is designed to meet specific state or professional needs. It is not accredited by the American Board of Funeral Service Education. Students graduating from this program are not eligible to take the National Board Examination or any state board examination for which graduation from an ABFSE accredited program is required.

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

<table>
<thead>
<tr>
<th>Courses</th>
<th>Credits</th>
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<tbody>
<tr>
<td>ACC:100</td>
<td>Applied Accounting ........................................... 3</td>
</tr>
<tr>
<td>COM:101</td>
<td>Oral Communication I ........................................ 3</td>
</tr>
<tr>
<td>FD:101</td>
<td>Funeral Management/Merchandising ...................... 6</td>
</tr>
<tr>
<td>FD:102</td>
<td>Funeral Service Psychology ................................ 3</td>
</tr>
<tr>
<td>FD:103</td>
<td>History of Funeral Service ................................ 3</td>
</tr>
<tr>
<td>FD:104</td>
<td>Funeral Service Law ......................................... 3</td>
</tr>
<tr>
<td>IS:103</td>
<td>Information Systems for Business (or) ............... 3</td>
</tr>
<tr>
<td>IS:116</td>
<td>Computer Literacy ............................................ 3</td>
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<tr>
<td>SOC:101</td>
<td>Introduction to Sociology .................................. 3</td>
</tr>
</tbody>
</table>

Program total. ......... 33 credits

Funeral Service Education

Associate in Applied Science Degree

Forest Park

The Funeral Service Education program at St. Louis Community College at Forest Park is a “Candidate” for accreditation with the American Board of Funeral Service Education (ABFSE), 3414 Ashland Avenue, Suite G, St. Joseph, MO 64506, telephone 816-233-3747, www.abfse.org.

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

National Board Examination scores, graduation rates and employment rates for this and other ABFSE accredited programs are available at www.abfse.org. To request a printed copy of this program’s scores and rates, go to the Funeral Service Education program office, Room E-411, or by email at dcoughran@stlcc.edu, or by telephone, 314-644-9327.

Caution: Students applying for admission to the Funeral Service program at St. Louis Community College should contact their respective state boards of funeral service regarding that state board's approval of this particular program of instruction.

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

I. Career General Education .... 25 credits

<table>
<thead>
<tr>
<th>Courses</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG:100</td>
<td>Career English (or) ........................................ 3</td>
</tr>
<tr>
<td>ENG:101</td>
<td>College Composition I ..................................... 3</td>
</tr>
<tr>
<td>COM:101</td>
<td>Oral Communication I ...................................... 3</td>
</tr>
<tr>
<td>BIO:103</td>
<td>Problems in Anatomy ........................................ 3</td>
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### III. Area of Concentration 39 credits

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>ACC:100</td>
<td>Applied Accounting</td>
<td>3</td>
</tr>
<tr>
<td>FSE:101</td>
<td>History and Sociology of Funeral Service</td>
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</tr>
<tr>
<td>FSE:103</td>
<td>Funeral Directing</td>
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</tr>
<tr>
<td>FSE:107</td>
<td>Funeral Service Merchandising</td>
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<tr>
<td>FSE:104</td>
<td>Funeral Directing Practicum I</td>
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</tr>
<tr>
<td>FSE:106</td>
<td>Mortuary Law and Ethics</td>
<td>3</td>
</tr>
<tr>
<td>FSE:105</td>
<td>Funeral Directing Practicum II</td>
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</tr>
<tr>
<td>FSE:102</td>
<td>Dynamics of Grief Management</td>
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<td>FSE:201</td>
<td>Funeral Home Management</td>
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</tr>
<tr>
<td>FSE:202</td>
<td>Embalming I</td>
<td>2</td>
</tr>
<tr>
<td>FSE:203</td>
<td>Embalming Practicum I</td>
<td>2</td>
</tr>
<tr>
<td>FSE:204</td>
<td>Embalming II</td>
<td>2</td>
</tr>
<tr>
<td>FSE:205</td>
<td>Embalming Practicum II</td>
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</tr>
<tr>
<td>FSE:207</td>
<td>Microbiology and Pathology for Funeral Service</td>
<td>3</td>
</tr>
<tr>
<td>FSE:206</td>
<td>Restorative Art</td>
<td>2</td>
</tr>
<tr>
<td>FSE:208</td>
<td>Funeral Service Seminar</td>
<td>2</td>
</tr>
</tbody>
</table>

**Program total. . . . 66 credits**

### Graphic Communications

**Associate in Applied Science Degree**  
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.

### I. Career General Education 18 credits

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG:100</td>
<td>Career English (or)</td>
<td>3</td>
</tr>
<tr>
<td>ENG:101</td>
<td>College Composition I</td>
<td>3</td>
</tr>
<tr>
<td>ENG:102</td>
<td>College Composition II (or)</td>
<td>3</td>
</tr>
<tr>
<td>ENG:103</td>
<td>Report Writing (or)</td>
<td>3</td>
</tr>
<tr>
<td>MCM:217</td>
<td>Publications Writing (or)</td>
<td>3</td>
</tr>
<tr>
<td>COM:101</td>
<td>Oral Communication I (or)</td>
<td>3</td>
</tr>
<tr>
<td>XXX:xxx</td>
<td>Approved Writing Intensive Course</td>
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</table>

### II. Physical Education Activity 2 credits

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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### III. Area of Concentration 23 credits

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>ENG:101</td>
<td>Career English (or)</td>
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</tr>
<tr>
<td>ENG:102</td>
<td>College Composition I</td>
<td>3</td>
</tr>
<tr>
<td>ENG:103</td>
<td>Report Writing (or)</td>
<td>3</td>
</tr>
<tr>
<td>MCM:217</td>
<td>Publications Writing (or)</td>
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</tr>
<tr>
<td>COM:101</td>
<td>Oral Communication I (or)</td>
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</tr>
<tr>
<td>XXX:xxx</td>
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### II. Physical Education Activity 2 credits

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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### III. Area of Concentration 23 credits

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
</table>

**Complete one of the following focus areas:**

#### Illustration 27-29 credits

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
</table>

#### Animation 27-29 credits

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
</table>

(3-6 credits must be in animation area.)

#### Graphic Design 27-29 credits

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
</table>

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Health Information Technology

Associate in Applied Science degree
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 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 HIM education.

I. Career General Education 21 credits

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG:101</td>
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</tr>
<tr>
<td>COM:101</td>
<td>Oral Communication I</td>
<td>3</td>
</tr>
<tr>
<td>XXX:xxx</td>
<td>Missouri State Requirement</td>
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<tr>
<td>MTH:160</td>
<td>College Algebra</td>
<td>4</td>
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<tr>
<td>BIO:215</td>
<td>Human Body Systems</td>
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<tr>
<td>XXX:xxx</td>
<td>Social Science Elective</td>
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II. Physical Education Activity 2 credits

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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<tbody>
<tr>
<td>HIT:101</td>
<td>Medical Terminology</td>
</tr>
<tr>
<td>HIT:102</td>
<td>Health Information Management Technology</td>
</tr>
<tr>
<td>HIT:103</td>
<td>Healthcare Delivery Systems</td>
</tr>
<tr>
<td>HIT:104</td>
<td>Basic Principles of Disease</td>
</tr>
<tr>
<td>HIT:105</td>
<td>Pharmacology for Health Information Technology Professionals</td>
</tr>
<tr>
<td>HIT:106</td>
<td>Diagnosis Coding Systems I</td>
</tr>
<tr>
<td>HIT:107</td>
<td>Procedure Coding Systems I</td>
</tr>
<tr>
<td>HIT:110</td>
<td>Healthcare Legal and Ethical Issues</td>
</tr>
<tr>
<td>XXX:xxx</td>
<td>Missouri State Requirement</td>
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</table>

III. Area of Concentration 38 credits

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>HIT:201</td>
<td>Health Insurance Billing and Reimbursement</td>
<td>3</td>
</tr>
<tr>
<td>HIT:210</td>
<td>Professional Practice Experience</td>
<td>3</td>
</tr>
<tr>
<td>HIT:211</td>
<td>Electronic Health Systems</td>
<td>2</td>
</tr>
<tr>
<td>HIT:213</td>
<td>Quality and Performance Improvement in Healthcare</td>
<td>3</td>
</tr>
<tr>
<td>HIT:214</td>
<td>Calculating and Reporting Healthcare Statistics</td>
<td>3</td>
</tr>
<tr>
<td>HIT:291</td>
<td>Workplace Learning: Health Information Technology</td>
<td>2</td>
</tr>
</tbody>
</table>

IV. New Media 27-29 credits

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>ART:275</td>
<td>Photo Imaging I: Photoshop</td>
<td>3</td>
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<tr>
<td>ART/AT:xxx</td>
<td>Photography Elective</td>
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<tr>
<td>AT:135</td>
<td>Communication and Design for the WWW I</td>
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<td>Approved Electives</td>
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V. Information Systems Component 8 credits

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>IS:103</td>
<td>Information Systems for Business</td>
<td>3</td>
</tr>
<tr>
<td>IS:116</td>
<td>Computer Literacy</td>
<td>3</td>
</tr>
<tr>
<td>IS:136</td>
<td>Internet Fundamentals</td>
<td>1</td>
</tr>
<tr>
<td>IS:151</td>
<td>Microcomputer Applications in Business</td>
<td>4</td>
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</table>

Program total... 70-72 credits

Horticulture

Associate in Applied Science Degree
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.

I. Career General Education 19 credits

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG:100</td>
<td>Career English (or) College Composition I</td>
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</tr>
<tr>
<td>ENG:101</td>
<td>College Composition I</td>
<td>3</td>
</tr>
<tr>
<td>COM:101</td>
<td>Oral Communication I</td>
<td>3</td>
</tr>
<tr>
<td>CHM:109</td>
<td>Chemistry for Environmental Careers I</td>
<td>4</td>
</tr>
<tr>
<td>MTH:140</td>
<td>Intermediate Algebra</td>
<td>3</td>
</tr>
<tr>
<td>PSY:200</td>
<td>General Psychology</td>
<td>3</td>
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<tr>
<td>XXX:xxx</td>
<td>Missouri State Requirement</td>
<td>3</td>
</tr>
</tbody>
</table>

II. Physical Education Activity 2 credits

Program total... 69 credits
### III. Area of Concentration 39-40 credits

Choose 6-7 credits from:

| ACC:100 | Applied Accounting (or)         |
| ACC:110 | Financial Accounting I           |
| BLV:101 | Business Law I                   |
| BUS:101 | Small Business Management        |
| MGT:101 | Introduction to Supervision       |
| MKT:104 | Principles of Selling            |

**Horticulture Core 24 credits**

| HRT:101 | Introductory Horticulture (or) |
| BIOS:124 | General Botany I               |
| HRT:102 | Soils                         |
| HRT:105 | Workplace Learning: Horticulture |
| HRT:206 | Ornamental Plants – Trees and Vines |
| HRT:207 | Ornamental Plants – Shrubs and Evergreens |
| HRT:230 | Ornamental Plants – Herbaceous Perennials |
| HRT:214 | Grounds Management             |
| HRT:227 | Plant Pest Management          |

**Choose one focus area: 9 credits**

- **Turfgrass Management**
  
  HRT:201 Turfgrass Management
  HRT:240 Golf Course Management
  HRT:220 Landscape Irrigation

- **Landscape Design**
  
  HRT:104 Landscape Design I
  HRT:217 Landscape Design II
  HRT:218 Landscape Design III

- **Plant Production and Marketing**
  
  HRT:103 Plant Propagation
  HRT:205 Nursery and Garden Center Practices
  HRT:241 Greenhouse Management

- **Landscape Management**
  
  HRT:201 Turfgrass Management
  HRT:220 Landscape Irrigation
  HRT:242 Urban Tree Management

- **General Horticulture**
  
  Choose 9 credit hours from above focus areas...

**IV. Horticulture Electives 6 credits**

| HRT:245 | Special Applications in Landscape Design |
| HRT:235 | Annuals and Ornamental Grasses            |

Program total . . . 66-67 credits
Horticulture
Certificate of Specialization
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.

Entry-level jobs are available with state and city park departments, nurseries, landscape contracting firms, golf courses and retail sales.

Courses  Credits
BIO:124  General Botany I (or)  4
HRT:101  Introductory Horticulture  4
HRT:125  Plant Identification: Trees  1
HRT:126  Plant Identification: Shrubs and Vines  1
HRT:127  Soil Management  1
HRT:128  Turfgrass Culture  1
HRT:129  Propagation Principles and Practices  1
HRT:130  Principles of Landscape Design  1
HRT:132  Plant Pest Identification and Management  1
HRT:133  Landscape Management  1

Program total. . . . . . . . . . 12 credits

Hospitality and Tourism
Associate in Applied Science Degree
Forest Park

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

I. Career General Education  18 credits
ENG:101  College Composition I  3
COM:101  Oral Communication I (or)  3
COM:107  Public Speaking  3
MTH:108  Elementary Applied Mathematics (or)  3
MTH:xxx  Higher Level Mathematics  3
XXX:xxx  Social Science  3
XXX:xxx  Natural Science or Mathematics  3
XXX:xxx  Missouri State Requirement  3

II. Physical Education Activity  2 credits

III. Core  32 credits
ACC:100  Applied Accounting  3
IS:123  Introduction to Windows  1
IS:151  Microcomputer Applications in Business  4
HTM:200  Procurement in the Hospitality Industry  3
HTM:100  Introduction to the Hospitality Industry  3
HTM:105  Professionalism in the Hospitality Industry  1
HTM:110  Negotiations in the Hospitality Industry  2
HTM:120  Supervision and Leadership in the Hospitality Industry  1
HTM:205  Legal Aspects of Hospitality  3
HTM:210  Hospitality Financial Planning and Cost Control  3
HTM:215  Hospitality Sales and Marketing  3
HTM:215  Hospitality Customer Service and Guest Relations  3

Choose one of the following four focus areas:

Hotel Management  12 credits
CUL:101  Safety and Sanitation  1
HTM:240  Workplace Learning: Hospitality  2
HTM:220  Hotel Facilities Management  3
HTM:225  Hotel Operations  3
Elective  3

Food and Beverage Management  12 credits
CUL:101  Safety and Sanitation  1
HTM 240 Workplace Learning: Hospitality  2
HTM:230  Bar and Beverage Management  3
HTM:235  Foodservice Design and Layout  3
Elective  3

Event Planning Management  12 credits
HTM:245  Event Planning I  3
HTM:250  Event Planning II  3
HTM:255  Event Planning III  3
Elective  3

Travel and Tourism  14 credits
HTM:260  Travel and Tourism Foundations  6
HTM:270  Travel and Tourism Computer Systems  5
HTM:265  Travel and Tourism Destination Geography  3

Program total. . . . 64-66 credits
Human Services

Associate in Applied Science Degree
Florissant Valley, Forest Park and Meramec

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

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

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

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

Persons in this field should enjoy working with people and their challenges. They should possess good communication and problem solving skills and have a positive attitude about themselves and others.

Graduates may expect to work in the areas of special or regular education; supported living; day care centers; leisure and recreation programs; or any other inclusionary community setting.

<table>
<thead>
<tr>
<th>I. Career General Education</th>
<th>30 credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG:101 College Composition I</td>
<td>3</td>
</tr>
<tr>
<td>ENG:102 College Composition II (or)</td>
<td>3</td>
</tr>
<tr>
<td>ENG:103 Report Writing</td>
<td>3</td>
</tr>
<tr>
<td>SOC:101 Introduction to Sociology</td>
<td>3</td>
</tr>
<tr>
<td>XXX:xxx Missouri State Requirement</td>
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</tr>
<tr>
<td>XXX:xxx Humanities Requirements</td>
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</tr>
<tr>
<td>XXX:xxx Science/Mathematics Requirements (MTH:100 or above; laboratory science course recommended)</td>
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<tr>
<td>PSY:200 General Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSY:205 Human Growth and Development</td>
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</table>

| II. Physical Education Activity | 2 credits |

<table>
<thead>
<tr>
<th>III. Area of Concentration</th>
<th>24 credits</th>
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</thead>
<tbody>
<tr>
<td>HMS:100 Introduction to Human Services</td>
<td>3</td>
</tr>
<tr>
<td>HMS:101 Human Services: Theories and Skills</td>
<td>3</td>
</tr>
<tr>
<td>HMS:102 Human Services: Policy and Politics</td>
<td>3</td>
</tr>
<tr>
<td>HMS:201 Workplace Learning I: Human Services</td>
<td>3</td>
</tr>
<tr>
<td>HMS:202 Workplace Learning II: Human Services</td>
<td>3</td>
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<tr>
<td>HMS:203 Human Services Workplace Learning Seminar I</td>
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<tr>
<td>HMS:204 Human Services Workplace Learning Seminar II</td>
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<tr>
<td>Choose one course from:</td>
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<tr>
<td>HMS:111 Group Practice in Human Services</td>
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<tr>
<td>SOC:100 Human Relations</td>
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<tr>
<td>SOC:103 Human Behavior at Work and in Business</td>
<td>3</td>
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</table>

<table>
<thead>
<tr>
<th>IV. Electives</th>
<th>8 credits</th>
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</thead>
<tbody>
<tr>
<td>Recommended electives include courses with prefixes HMS, SOC, PSY, ECE, CRJ as well as computer, business and personal development courses related to the human services field.</td>
<td></td>
</tr>
</tbody>
</table>

Program total........ 64 credits

Human Services: Disabilities Studies

Associate in Applied Science Degree
Forest Park and Online

This program provides students with a basic knowledge of persons with disabilities and a perspective of the service delivery model and the field of disabilities. Students entering the profession may want to work in entry level positions. Persons already working in the field of disabilities may want to upgrade their already existing skills. Persons with degrees in related fields may want to gain more specialized knowledge in the field.

Persons in this field should enjoy working with people and their challenges. They should possess good communication and problem solving skills and have a positive attitude about themselves and others.

Graduates may expect to work in the areas of special or regular education; supported living; day care centers; leisure and recreation programs; or any other inclusionary community setting.

<table>
<thead>
<tr>
<th>I. Career General Education</th>
<th>30-31 credits</th>
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</thead>
<tbody>
<tr>
<td>ENG:101 College Composition I</td>
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<tr>
<td>ENG:102 College Composition II (or)</td>
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<td>ENG:103 Report Writing</td>
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<tr>
<td>SOC:101 Introduction to Sociology</td>
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<tr>
<td>PSY:200 General Psychology</td>
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<tr>
<td>PSY:205 Human Growth and Development</td>
<td>3</td>
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<tr>
<td>XXX:xxx Humanities Electives</td>
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</tr>
<tr>
<td>XXX:xxx Science/Math Electives (Math 100 level or above; lab science course recommended)</td>
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| II. Physical Education Activity | 2 credits |

<table>
<thead>
<tr>
<th>III. Area of Concentration</th>
<th>27 credits</th>
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</thead>
<tbody>
<tr>
<td>HMS:119 Introduction to the Field of Disabilities</td>
<td>3</td>
</tr>
<tr>
<td>HMS:120 Team Building: Working with Care Givers</td>
<td>3</td>
</tr>
<tr>
<td>HMS:121 Working with Challenging Behaviors</td>
<td>3</td>
</tr>
<tr>
<td>HMS:122 Health Issues and Persons with Disabilities (or)</td>
<td>3</td>
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<tr>
<td>HMS:118 Aging and Disabilities</td>
<td>3</td>
</tr>
<tr>
<td>HMS:123 Inclusion in the Community</td>
<td>3</td>
</tr>
<tr>
<td>HMS:201 Workplace Learning I: Human Services</td>
<td>3</td>
</tr>
<tr>
<td>HMS:202 Workplace Learning II: Human Services</td>
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</tr>
<tr>
<td>HMS:203 Human Services Workplace Learning Seminar I</td>
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</tr>
<tr>
<td>HMS:204 Human Services Workplace Learning Seminar II</td>
<td>3</td>
</tr>
</tbody>
</table>
IV. Electives 6 credits

HMS:101 Human Services: Theory and Skills ................... 3
HMS:110 Introduction to Gerontology ........................... 3
HMS:205 Crisis Intervention .................................... 3
HMS:112 Interviewing in the Helping Relationship .......... 3
IS:103 Information Systems for Business .................. 3
IS:116 Computer Literacy ...................................... 3
PSY:208 Abnormal Psychology ................................ 3
SOC:100 Human Relations ....................................... 3

Program total... 65-66 credits

Information Reporting Technology:
Judicial

Associate in Applied Science Degree
Meramec and Online
The Information Reporting: Judicial (AAS) is not accepting
new students at this time. Please consult an advisor for more
information.

Information Reporting Technology:
Judicial

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

Information Systems:
Office Information Coordinator

Associate in Applied Science Degree
Florissant Valley, Forest Park and Meramec
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 personal digital assistants, voice
recognition technology and scanners. Students in this program will
become proficient at using microcomputer office applications and
desktop computer systems. 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.

I. Career General Education 19 credits

ENG:101 College Composition I. ............................... 3
COM:101 Oral Communication I. .............................. 3
XXX:xxx Natural Science/Mathematics Elective ............ 3
MTH:160 College Algebra ..................................... 4
XXX:xxx Missouri State Requirement ........................ 3

Choose one of the following courses:
ECO:151 Principles of Macroeconomics
PSY:200 General Psychology
PSY:206 Introduction to Social Psychology
SOC:101 Introduction to Sociology
SOC:103 Human Behavior at Work and Business .......... 3

II. Physical Education Activity 2 credits

III. Area of Concentration 44 credits

ACC:100 Applied Accounting ................................. 3
BUS:104 Introduction to Business Administration .......... 3
IS:103 Information Systems for Business (or)
IS:116 Computer Literacy ..................................... 3
IS:123 Introduction to Windows ................................ 1
IS:124 Windows—Advanced Topics .......................... 1
IS:132 Windows—Intermediate Topics ....................... 1
IS:129 HTML ...................................................... 1
IS:130 Hardware and Software Support ..................... 3
IS:136 Internet Fundamentals ................................ 1
IS:102 Keyboarding and Formatting ......................... 3
IS:210 Office Procedures ...................................... 3
IS:200 Electronic Records Management ..................... 2
IS:157 Computer Applications—Intermediate Word Processing .... 1
IS:126 E-Mail and Information Management .......... 1
IS:109 Proofreading and Editing Skills ...................... 1
IS:155 Office Technology ...................................... 2
IS:161 Computer Applications—Advanced Word Processing .... 1
IS:156 Computer Applications—Intermediate Databases .... 1
IS:164 Voice Recognition Technology ......................... 1
MGT:101 Introduction to Supervision ......................... 3

Choose one of the following four courses:
IS:139 Web Publishing ......................................... 3
IS:135 Communication and Design for the WWW 1...... 3
IS:141 Graphics for the Web .................................... 3

Choose one of the following 5-credit-hour options:
IS:151 Microcomputer Applications in Business (and) .... 4
IS:158 Computer Application—Intermediate Spreadsheets .... 1
IS:118 Computer Applications—Databases (and) ........ 1
IS:119 Computer Applications—Word Processing (and) .... 1
IS:125 Excel for Windows (and) ............................. 2
IS:137 Computer Applications—Presentation Software .......... 1
The demonstration of hands-on skills is critical to employers. Students learning and intensive, classroom-based, hands-on skills development. The courses in the program provide a combination of online, distance configuration, problem diagnosis and resolution and computer security. application software, hardware and software installation, system principles of end-user support including client operating system and desktop support technician positions in the enterprise. The foundational Meramec Certificate of Specialization IT Help Desk/End User Support

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

Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>IT:102</td>
<td>Desktop Client Support</td>
</tr>
<tr>
<td>IT:103</td>
<td>Help Desk Principles</td>
</tr>
<tr>
<td>IS:130</td>
<td>Hardware and Software Support</td>
</tr>
<tr>
<td>IS:151</td>
<td>Microcomputer Applications in Business</td>
</tr>
<tr>
<td>IT:101</td>
<td>Cisco Networking Academy I: Networking Basics</td>
</tr>
<tr>
<td>IS:237</td>
<td>Fundamentals of Information Assurance/Security</td>
</tr>
<tr>
<td>IS:291</td>
<td>Workplace Learning: Information Systems (or) Unix/Linux I</td>
</tr>
</tbody>
</table>

Program total: 24 credits

Interior Design

Associate in Applied Science Degree Meramec

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

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

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

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

I. Career General Education 18 credits

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG:101</td>
<td>College Composition I</td>
</tr>
<tr>
<td>ENG:102</td>
<td>College Composition II (or)</td>
</tr>
<tr>
<td>ENG:103</td>
<td>Report Writing</td>
</tr>
<tr>
<td>PSY:200</td>
<td>General Psychology</td>
</tr>
<tr>
<td>XXX</td>
<td>Missouri State Requirement</td>
</tr>
<tr>
<td>XXX</td>
<td>Science/Mathematics Requirement</td>
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</table>

II. Physical Education Activity 2 credits

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 102</td>
<td>Art History II</td>
</tr>
<tr>
<td>ART 109</td>
<td>Drawing I</td>
</tr>
<tr>
<td>ART 107</td>
<td>Design I</td>
</tr>
<tr>
<td>ART 108</td>
<td>Design II</td>
</tr>
<tr>
<td>ART 150</td>
<td>Design Communication for Interior Design and Architecture I (or)</td>
</tr>
<tr>
<td>ART 111</td>
<td>Drawing II</td>
</tr>
<tr>
<td>ARC 110</td>
<td>Architectural Graphics</td>
</tr>
<tr>
<td>ART 151</td>
<td>Interior Design I</td>
</tr>
<tr>
<td>ART 251</td>
<td>Interior Design II</td>
</tr>
<tr>
<td>ART 252</td>
<td>Interior Design III</td>
</tr>
<tr>
<td>ART 253</td>
<td>Interior Design IV</td>
</tr>
<tr>
<td>ART 152</td>
<td>Textiles (or)</td>
</tr>
<tr>
<td>AT 151</td>
<td>Interior Specifications, Materials, and Methods</td>
</tr>
<tr>
<td>ART 153</td>
<td>History of Cultural Environments I</td>
</tr>
<tr>
<td>ART 254</td>
<td>History of Cultural Environments II</td>
</tr>
<tr>
<td>ART 154</td>
<td>Computer Aided Interior Design</td>
</tr>
<tr>
<td>ART 186</td>
<td>Building Systems and Construction for Interior Designers</td>
</tr>
</tbody>
</table>

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

Select one of the following 3 credit hour electives:

IV. Approved Elective* 3 credits

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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<tbody>
<tr>
<td>ART:101</td>
<td>Art History I (or)</td>
</tr>
<tr>
<td>ART:103</td>
<td>History of Modern Art (or)</td>
</tr>
<tr>
<td>ART:131</td>
<td>Computer Art Studio (or)</td>
</tr>
</tbody>
</table>

2015-2016 St. Louis Community College Catalog • stlcc.edu
ART:150  Design Communication for Interior Design and Architecture I (or)  3
ART:152  Textiles (or)  3
ART:155  Bath Design (or)  3
ART:156  Advanced Kitchen Design (or)  3
AT:151  Interior Specifications, Materials, and Methods (or)  3
AT:152  Lighting Design (or)  3
AT:251  Computer Aided Kitchen and Bath Design (or)   3
AT:254  Workplace Learning: Interior Design (or)  3
ARC:102  Introduction to Sustainable Environments (or)  3
ARC:114  Architectural History and Theory (or)  3
ARC:124  Introduction to Building Information Modeling (or)  3
ARC:125  Sustainable Materials and Technologies in the Built Environment (or)  3
ARC:228  Architectural Computer Rendering, Modeling, and Animation  3

Program total.................. 66 credits

Kitchen and Bath Design

Certificate of Proficiency
Meramec

This skill-oriented program emphasizes visual and oral communication skills necessary for the development of functional and aesthetically pleasing residential kitchen and bath design. Students will become familiar with trade, professional and industry resources available both locally and nationally.

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

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

<table>
<thead>
<tr>
<th>Courses</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARC:101  Architectural Graphics</td>
<td>3</td>
</tr>
<tr>
<td>ART: 186  Building Systems and Construction for Interior Designers</td>
<td>3</td>
</tr>
<tr>
<td>ART:151  Interior Design I</td>
<td>3</td>
</tr>
<tr>
<td>ART:155  Bath Design</td>
<td>3</td>
</tr>
<tr>
<td>ART:156  Advanced Kitchen Design</td>
<td>3</td>
</tr>
<tr>
<td>AT:151  Interior Specifications, Materials, and Methods</td>
<td>3</td>
</tr>
<tr>
<td>AT:152  Lighting Design</td>
<td>3</td>
</tr>
<tr>
<td>AT:251  Computer Aided Kitchen and Bath Design</td>
<td>3</td>
</tr>
<tr>
<td>ART:158  Workplace Learning: Kitchen and Bath Design</td>
<td>3</td>
</tr>
<tr>
<td>MKT:104  Principles of Selling (or)</td>
<td>3</td>
</tr>
<tr>
<td>MKT:203  Principles of Marketing (or)</td>
<td>3</td>
</tr>
<tr>
<td>ART:150  Design Communication for Interior Design and Architecture I</td>
<td>3</td>
</tr>
</tbody>
</table>

Program total.................. 30 credits

Landscape Design

Certificate of Proficiency
Meramec

This program allows for training specific to design of landscape and garden environments. Creative thinking, problem solving and increased acuity in visualization will be stressed in studies within the areas of design, plant science and general horticulture. This program will also provide training in one of the most current software products utilized in designing and planning landscape spaces. Upon completion, graduates will be able to effectively compete in the job market and be qualified for entry level positions or develop a new business featuring landscape design and general landscaping.

<table>
<thead>
<tr>
<th>I.  Courses</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART:131  Computer Art Studio</td>
<td>3</td>
</tr>
<tr>
<td>HRT:101  Introductory Horticulture</td>
<td>4</td>
</tr>
<tr>
<td>HRT:102  Soils</td>
<td>3</td>
</tr>
<tr>
<td>HRT:104  Landscape Design I</td>
<td>3</td>
</tr>
<tr>
<td>HRT:206  Ornamental Plants-Trees and Vines</td>
<td>3</td>
</tr>
<tr>
<td>HRT:207  Ornamental Plants-Shrubs and Evergreens</td>
<td>3</td>
</tr>
<tr>
<td>HRT:217  Landscape Design II</td>
<td>3</td>
</tr>
<tr>
<td>HRT:218  Landscape Design III</td>
<td>3</td>
</tr>
<tr>
<td>HRT:230  Ornamental Plants-Herbarious Perennials</td>
<td>3</td>
</tr>
<tr>
<td>HRT:235  Annuals and Ornamental Grasses</td>
<td>3</td>
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<tr>
<td>AT:283  Electronic Portfolio</td>
<td>1</td>
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</tbody>
</table>

Program total.................. 32 credits

Legal Studies for the Paralegal

Associate in Applied Science Degree
Florissant Valley and Meramec

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

Students may obtain a certificate or an associate degree.

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

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

<table>
<thead>
<tr>
<th>I.  Career General Education</th>
<th>33 credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG:101  College Composition I</td>
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</tr>
<tr>
<td>ENG:102  College Composition II</td>
<td>3</td>
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</table>
I. Required Courses 15 credits

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
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<tbody>
<tr>
<td>LGL:104</td>
<td>Introduction to Civil Trial Procedures</td>
<td>3</td>
</tr>
<tr>
<td>LGL:106</td>
<td>Introduction to Law for the Paralegal</td>
<td>3</td>
</tr>
<tr>
<td>LGL:108</td>
<td>Computers and the Law</td>
<td>3</td>
</tr>
<tr>
<td>LGL:217</td>
<td>Legal Research</td>
<td>3</td>
</tr>
<tr>
<td>LGL:218</td>
<td>Legal Writing</td>
<td>3</td>
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</table>

II. Electives 12 credits

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
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<tbody>
<tr>
<td>LGL:202</td>
<td>Wills, Trusts and Probate Administration</td>
<td>3</td>
</tr>
<tr>
<td>LGL:205</td>
<td>Law of Real Property and Real Estate Transactions</td>
<td>3</td>
</tr>
<tr>
<td>LGL:206</td>
<td>Business Organization and Government Regulation</td>
<td>3</td>
</tr>
<tr>
<td>LGL:228</td>
<td>Family Law</td>
<td>3</td>
</tr>
<tr>
<td>LGL:211</td>
<td>Torts</td>
<td>3</td>
</tr>
<tr>
<td>LGL:229</td>
<td>Advanced Computer Utilization</td>
<td>3</td>
</tr>
<tr>
<td>LGL:230</td>
<td>Employment Law</td>
<td>3</td>
</tr>
<tr>
<td>LGL:216</td>
<td>Advanced Civil Trial Procedures</td>
<td>3</td>
</tr>
<tr>
<td>LGL:219</td>
<td>Workplace Learning: Paralegal</td>
<td>3</td>
</tr>
<tr>
<td>LGL:233</td>
<td>Bankruptcy</td>
<td>1</td>
</tr>
<tr>
<td>LGL:234</td>
<td>Uniform Commercial Code</td>
<td>1</td>
</tr>
<tr>
<td>LGL:232</td>
<td>Contracts</td>
<td>1</td>
</tr>
<tr>
<td>LGL:220</td>
<td>Criminal Law and Procedure for the Paralegal</td>
<td>1</td>
</tr>
<tr>
<td>LGL:221</td>
<td>Advanced Online-Database Legal Research</td>
<td>1</td>
</tr>
<tr>
<td>LGL:222</td>
<td>Legal Research on the Internet</td>
<td>1</td>
</tr>
<tr>
<td>LGL:231</td>
<td>CD-ROM Legal Research</td>
<td>1</td>
</tr>
<tr>
<td>LGL:223</td>
<td>Evidence</td>
<td>1</td>
</tr>
<tr>
<td>LGL:107</td>
<td>Alternative Dispute Resolution</td>
<td>1</td>
</tr>
<tr>
<td>LGL:224</td>
<td>Environmental Law</td>
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</table>

III. Area of Concentration 27 credits

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>LGL:225</td>
<td>Administrative Law</td>
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</tr>
<tr>
<td>LGL:226</td>
<td>Law Office Administration</td>
<td>1</td>
</tr>
<tr>
<td>LGL:227</td>
<td>Remedies</td>
<td>1</td>
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</tbody>
</table>

IV. Elective 3 credits

(Business course recommended but not required.)

Program total 65 credits

Legal Studies for the Paralegal

Certificate of Proficiency

Florissant Valley and Meramec

Students may obtain a certificate or an associate degree. Persons interested in this program should have an interest in the law. They should be self-motivated, able to work without supervision and have good oral and written communication skills.

The certificate is designed for students who have the following:

- a college degree, either an associate or bachelor, in any subject matter; or
- a minimum of 60 college credit hours which include Communications (6 credits), Social Science (12 credits) and Business (9 credits); 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.

I. Required Courses 15 credits

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>LGL:104</td>
<td>Introduction to Civil Trial Procedures</td>
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<tr>
<td>LGL:108</td>
<td>Introduction to Law for the Paralegal</td>
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</tr>
<tr>
<td>LGL:106</td>
<td>Computers and the Law</td>
<td>3</td>
</tr>
<tr>
<td>LGL:217</td>
<td>Legal Research</td>
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</tr>
<tr>
<td>LGL:218</td>
<td>Legal Writing</td>
<td>3</td>
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</tbody>
</table>

II. Electives 15 credits

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
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<td>LGL:206</td>
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<tr>
<td>LGL:228</td>
<td>Family Law</td>
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</tr>
<tr>
<td>LGL:211</td>
<td>Torts</td>
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</tr>
<tr>
<td>LGL:219</td>
<td>Workplace Learning: Paralegal</td>
<td>3</td>
</tr>
<tr>
<td>LGL:233</td>
<td>Bankruptcy</td>
<td>1</td>
</tr>
<tr>
<td>LGL:234</td>
<td>Uniform Commercial Code</td>
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</tr>
<tr>
<td>LGL:232</td>
<td>Contracts</td>
<td>1</td>
</tr>
<tr>
<td>LGL:220</td>
<td>Criminal Law and Procedure for the Paralegal</td>
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<tr>
<td>LGL:221</td>
<td>Advanced Online-Database Legal Research</td>
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</tr>
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<td>LGL:231</td>
<td>CD-ROM Legal Research</td>
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</tr>
<tr>
<td>LGL:222</td>
<td>Legal Research on the Internet</td>
<td>1</td>
</tr>
</tbody>
</table>
Mass Communications

Associate in Applied Science Degree
Florissant Valley, Forest Park and Meramec

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

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

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

I. Career General Education 27-28 credits

<table>
<thead>
<tr>
<th>Courses</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>COM:101  Oral Communication I (or)</td>
<td>3</td>
</tr>
<tr>
<td>COM:107  Public Speaking</td>
<td>3</td>
</tr>
<tr>
<td>ENG:101  College Composition ......</td>
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</tr>
<tr>
<td>ENG:102  College Composition II</td>
<td>3</td>
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<tr>
<td>XXXxxx  Math or Science Elective</td>
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<tr>
<td>XXXxxx  Missouri State Requirement</td>
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<tr>
<td>ECO:140  Introduction to Economics</td>
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<td>XXXxxx  Humanities Elective</td>
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<td>MCM:102  Media Elective</td>
<td>3</td>
</tr>
<tr>
<td>PHL:104  Ethics</td>
<td>3</td>
</tr>
</tbody>
</table>

II. Physical Education Activity 2 credits

<table>
<thead>
<tr>
<th>Courses</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MCM:101  Introduction to Mass Communications</td>
<td>3</td>
</tr>
<tr>
<td>MCM:110  Journalism I: Writing and Reporting</td>
<td>3</td>
</tr>
<tr>
<td>MCM:124  Radio Production (or)</td>
<td>3</td>
</tr>
<tr>
<td>MUS:150  Fundamentals of Music Technology</td>
<td>2-3</td>
</tr>
<tr>
<td>MCM:121  Television Production (or)</td>
<td>3</td>
</tr>
<tr>
<td>MCM:126  Video Production – Field</td>
<td>3</td>
</tr>
<tr>
<td>MCM:143  Convergence Media Production (or)</td>
<td>3</td>
</tr>
<tr>
<td>ART:125  Introduction to Interactive Design I</td>
<td>3</td>
</tr>
<tr>
<td>MCM:140  Introduction to Advertising</td>
<td>3</td>
</tr>
<tr>
<td>MCM:141  Public Relations</td>
<td>3</td>
</tr>
<tr>
<td>MCM:113  Applied Journalism (or)</td>
<td>3</td>
</tr>
<tr>
<td>MCM:122  Applied Broadcasting (or)</td>
<td>3</td>
</tr>
<tr>
<td>MCM:142  Applied Advertising (or)</td>
<td>3</td>
</tr>
<tr>
<td>MCM:211  Applied Public Relations</td>
<td>3</td>
</tr>
<tr>
<td>MCM:201  Workplace Learning I: Media</td>
<td>3</td>
</tr>
<tr>
<td>MCM:221  Media Portfolio Review</td>
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</table>

III. Area of Concentration 27-28 credits

<table>
<thead>
<tr>
<th>Courses</th>
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<tbody>
<tr>
<td>MCM:143  Introduction to Mass Communications</td>
<td>3</td>
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<tr>
<td>MCM:141  Public Relations</td>
<td>3</td>
</tr>
<tr>
<td>MCM:113  Applied Journalism (or)</td>
<td>3</td>
</tr>
<tr>
<td>MCM:122  Applied Broadcasting (or)</td>
<td>3</td>
</tr>
<tr>
<td>MCM:142  Applied Advertising (or)</td>
<td>3</td>
</tr>
<tr>
<td>MCM:211  Applied Public Relations</td>
<td>3</td>
</tr>
<tr>
<td>MCM:201  Workplace Learning I: Media</td>
<td>3</td>
</tr>
<tr>
<td>MCM:221  Media Portfolio Review</td>
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</tbody>
</table>
Mechanical Engineering Technology

Associate in Applied Science Degree
Florissant Valley

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

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

Graduates are qualified for positions as engineering assistants, laboratory technicians, designers, tool designers and plant engineering technicians in the automotive, aerospace, heavy equipment, chemical, electrical, petroleum and food processing industry.

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

I. Career General Education  25 credits

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Credits</th>
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<tbody>
<tr>
<td>ENG:100</td>
<td>Career English (or)</td>
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<tr>
<td>ENG:101</td>
<td>College Composition I</td>
<td>3</td>
</tr>
<tr>
<td>ENG:103</td>
<td>Report Writing (or)</td>
<td>3</td>
</tr>
<tr>
<td>ENG:102</td>
<td>College Composition II</td>
<td>3</td>
</tr>
<tr>
<td>GE:101</td>
<td>Technical Computer Applications</td>
<td>3</td>
</tr>
<tr>
<td>GE:131</td>
<td>Engineering Technology Orientation</td>
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<tr>
<td>MTH:144</td>
<td>Technical Algebra and Trigonometry</td>
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</table>

Program total. . . . . 64 credits

II. Physical Education Activity  2 credits

Program total. . . . . 71 credits

Medical Billing and Coding

Certificate of Proficiency
Forest Park and Online

This program prepares students for entry-level positions as medical billing specialists, medical coders, claims examiners, healthcare reimbursement specialists and health insurance specialists. Students will learn ICD-9-CM, ICD-10-CM, CPT-4 Surgical and CPT-4 Non-Surgical coding procedures and will prepare for the AAPC (American Academy of Professional Coders), CDPC (Certified Professional Coder) certification. Students will also gain preparation for the AHIMA (American Health Information Management Association), CCS (Certified Coding Specialist) and CCA (Certified Coding Associate) certifications, and the HRS (Healthcare Reimbursement Specialist) credential offered by the National Electronic Billers Alliance (NEBA). This certificate program provides the foundation to pursue additional study in Health Information Technology.

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

Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Credits</th>
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<tbody>
<tr>
<td>BIO:215</td>
<td>Human Body Systems</td>
<td>5</td>
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<tr>
<td>HIT:101</td>
<td>Medical Terminology</td>
<td>4</td>
</tr>
</tbody>
</table>
Program total. . . . 45 credits

Network Engineering
Associate in Applied Science Degree
Forest Park

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

I. Career General Education 20 credits

<table>
<thead>
<tr>
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<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>ENG:101</td>
<td>College Composition I</td>
<td>3</td>
</tr>
<tr>
<td>ENG:102</td>
<td>College Composition II (or)</td>
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</tr>
<tr>
<td>ENG:103</td>
<td>Report Writing</td>
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<tr>
<td>MTH:160</td>
<td>College Algebra</td>
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<tr>
<td>MTH:186</td>
<td>Survey of Calculus</td>
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<tr>
<td>XXXxxxx</td>
<td>Missouri State Requirement</td>
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<td>XXXxxxx</td>
<td>Social Science Elective</td>
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II. Physical Education Activity 2 credits

III. Area of Concentration 31 credits

<table>
<thead>
<tr>
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<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>IS:112</td>
<td>Software and Hardware Concepts</td>
<td>3</td>
</tr>
<tr>
<td>IS:130</td>
<td>Hardware and Software Support</td>
<td>3</td>
</tr>
<tr>
<td>IS:237</td>
<td>Fundamentals of Information Assurance/... Security</td>
<td>3</td>
</tr>
<tr>
<td>IS:229</td>
<td>Unix/Linux I</td>
<td>3</td>
</tr>
<tr>
<td>IS:264</td>
<td>Unix/Linux II</td>
<td>3</td>
</tr>
<tr>
<td>IT:101</td>
<td>Cisco Networking Academy I: Networking Basics</td>
<td>5</td>
</tr>
<tr>
<td>IT:102</td>
<td>Desktop Client Support</td>
<td>3</td>
</tr>
<tr>
<td>IT:202</td>
<td>Cisco Networking Academy III: LAN Switching and Wireless Technologies</td>
<td>5</td>
</tr>
<tr>
<td>IT:210</td>
<td>Firewall and VPN Security</td>
<td>3</td>
</tr>
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</table>

Choose from one of the following three focus areas: 13-14 credits

Server Focus

<table>
<thead>
<tr>
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<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>IT:140</td>
<td>Windows Server Configuring Active Directory (and)</td>
<td>3</td>
</tr>
<tr>
<td>IT:142</td>
<td>Windows Server Configuring Infrastructure (and)</td>
<td>3</td>
</tr>
<tr>
<td>IT:246</td>
<td>Windows Server Administration (and)</td>
<td>3</td>
</tr>
<tr>
<td>IT:211</td>
<td>Introduction to Virtualization and Cloud Computing</td>
<td>4</td>
</tr>
</tbody>
</table>

or

Infrastructure Focus

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>IT:201</td>
<td>Cisco Networking Academy II: Routers/Routing Basics (and)</td>
<td>5</td>
</tr>
<tr>
<td>IT:203</td>
<td>Cisco Networking Academy IV: WAN Technologies (and)</td>
<td>5</td>
</tr>
<tr>
<td>IT:235</td>
<td>Network Infrastructure Design</td>
<td>3</td>
</tr>
</tbody>
</table>

or

Security Focus

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>IT:120</td>
<td>Enterprise Security Management (and)</td>
<td>3</td>
</tr>
<tr>
<td>IT:121</td>
<td>Secure E-Commerce and E-Government (and)</td>
<td>3</td>
</tr>
<tr>
<td>IT:208</td>
<td>Cisco Networking Academy: CCNA Security (and)</td>
<td>5</td>
</tr>
<tr>
<td>IT:216</td>
<td>Digital Forensics</td>
<td>3</td>
</tr>
</tbody>
</table>

Program total. . . 66–67 credits
Network Engineering
Certificate of Proficiency
Forest Park

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

Courses

<table>
<thead>
<tr>
<th>Network Infrastructure</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>IS:130 Hardware and Software Support</td>
<td>3</td>
</tr>
<tr>
<td>IT:102 Desktop Client Support</td>
<td>3</td>
</tr>
<tr>
<td>IT:142 Windows Server Configuring Infrastructure</td>
<td>3</td>
</tr>
<tr>
<td>IT:101 Cisco Networking Academy I: Networking Basics</td>
<td>5</td>
</tr>
<tr>
<td>IT:202 Cisco Networking Academy III: LAN Switching and Wireless Technologies</td>
<td>5</td>
</tr>
<tr>
<td>Network Servers</td>
<td></td>
</tr>
<tr>
<td>IS:229 Unix/Linux I</td>
<td>3</td>
</tr>
<tr>
<td>IS:264 Unix/Linux II</td>
<td>3</td>
</tr>
<tr>
<td>Network Security</td>
<td></td>
</tr>
<tr>
<td>IS:237 Fundamentals of Information Assurance/Security</td>
<td>3</td>
</tr>
<tr>
<td>IT:210 Firewall and VPN Security</td>
<td>3</td>
</tr>
<tr>
<td>Network Virtualization</td>
<td></td>
</tr>
<tr>
<td>IT:211 Introduction to Virtualization and Cloud Computing</td>
<td>4</td>
</tr>
</tbody>
</table>

Program total........ 35 credits

Nursing
Associate in Applied Science Degree
Florissant Valley, Forest Park and Meramec

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

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

The Nursing program on each campus is approved by the Missouri State Board of Nursing and accredited by the Accreditation Commission for Education in Nursing (ACEN). Persons considering a career in nursing should have an interest in the health sciences and in working closely with people. In addition, they should be able to meet the academic demands of a program that requires a commitment of time, energy and motivation to learn.

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

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

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

Prerequisites:

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

Cumulative GPA of 2.5 or higher on a 4.0 scale.

Pre-entry:

BIO:207 Anatomy and Physiology I
ENG:101 College Composition I
Math proficiency at or above the MTH:140 level
PSY:200 General Psychology
COM:200 Communication Between Cultures
LIB:101 Introduction to Library and Online Research

I. Career General Education........ 28 credits

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<tr>
<th>Course</th>
<th>Title</th>
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<tr>
<td>ENG:100</td>
<td>Career English (or)</td>
</tr>
<tr>
<td>ENG:101</td>
<td>College Composition I</td>
</tr>
<tr>
<td>COM:200</td>
<td>Communication Between Cultures</td>
</tr>
<tr>
<td>PSY:200</td>
<td>General Psychology</td>
</tr>
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<td>PSY:205</td>
<td>Human Growth and Development</td>
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<tr>
<td>BIO:203</td>
<td>General Microbiology I</td>
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II. Physical Education Activity 2 credits

III. Area of Concentration 39 credits

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<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
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<td>NUR:151</td>
<td>Fundamentals of Nursing</td>
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<tr>
<td>NUR:152</td>
<td>Nursing Laboratory Practicum I</td>
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<tr>
<td>NUR:154</td>
<td>Nursing Laboratory Practicum II</td>
<td>1</td>
</tr>
<tr>
<td>NUR:153</td>
<td>Nursing of Adults and Children I</td>
<td>9</td>
</tr>
<tr>
<td>NUR:251</td>
<td>Nursing of Adults and Children II</td>
<td>10</td>
</tr>
<tr>
<td>NUR:253</td>
<td>Management Skills in Nursing</td>
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</tr>
<tr>
<td>NUR:252</td>
<td>Nursing of Adults and Children III</td>
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</tbody>
</table>

Program total: 69 credits

Occupational Therapy Assistant
Associate in Applied Science Degree
Meramec

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

The Occupational Therapy Assistant Program is accredited by the Accreditation Council for Occupational Therapy Education (ACOTE) of the American Occupational Therapy Association (AOTA), located at 4720 Montgomery Lane, Suite 200, Bethesda, MD 20824-1220. AOTA’s phone number is 301-652-2682. Graduates of the program will be able to sit for the national certification examination for the occupational therapy assistant administered by the National Board for Certification in Occupational Therapy (NBCOT). After successful completion of this exam, the individual will be a Certified Occupational Therapy Assistant (COTA). Most states require licensure in order to practice; however, state licenses are usually based on the results of the NBCOT Certification Examination. This program has many prerequisites based on professional standards. See an advisor for further information.

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

I. Career General Education 29 credits

<table>
<thead>
<tr>
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<th>Course Title</th>
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<td>ENG:100</td>
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<tr>
<td>ENG:101</td>
<td>College Composition I</td>
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</tr>
<tr>
<td>COM:101</td>
<td>Oral Communication I</td>
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<tr>
<td>PSY:200</td>
<td>General Psychology</td>
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<td>PSY:205</td>
<td>Human Growth and Development</td>
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<td>SOC:201</td>
<td>Aspects of Aging</td>
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<td>XXX:xxx</td>
<td>Missouri State Requirement</td>
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II. Physical Education Activity 2 credits

III. Area of Concentration 36 credits

<table>
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<th>Course Title</th>
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<tbody>
<tr>
<td>OTA:101</td>
<td>Fundamentals of Occupational Therapy Assistant I</td>
<td>3</td>
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<td>OTA:102</td>
<td>Fundamentals of Occupational Therapy Assistant II</td>
<td>4</td>
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<td>OTA:103</td>
<td>Adaptive Activities I</td>
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<tr>
<td>OTA:104</td>
<td>Adaptive Activities II</td>
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<tr>
<td>OTA:203</td>
<td>Fundamentals of Occupational Therapy III</td>
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<td>OTA:204</td>
<td>Fundamentals of Occupational Therapy IV</td>
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<td>OTA:207</td>
<td>Health and Disease</td>
<td>4</td>
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<td>OTA:208</td>
<td>Adaptive Living Skills</td>
<td>2</td>
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<td>OTA:213</td>
<td>Occupational Therapy Assistant Practicum I</td>
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<tr>
<td>OTA:214</td>
<td>Occupational Therapy Assistant Practicum II</td>
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<td>OTA:215</td>
<td>The Management of Occupational Therapy</td>
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<tr>
<td>OTA:216</td>
<td>Level II Field-Work Seminar</td>
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Program total: 67 credits

Oracle Developer
Certificate of Proficiency
Florissant Valley, Forest Park and Meramec

This certificate is designed for individuals who are interested in developing skills to create and manage an Oracle database. It will empower the student with the tools, knowledge, and practical experience needed to design, develop, program, implement and administer an Oracle database. Graduates will be qualified for the high demand positions of developer, analyst, administrator or programmer in the Oracle environment.

Core Courses 9 credits

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>IS:225</td>
<td>Database Management</td>
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<td>IS:257</td>
<td>Advanced Database Design</td>
<td>3</td>
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<td>IS:246</td>
<td>Visual Basic Programming (or)</td>
<td>3</td>
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<td>IS:227</td>
<td>C Programming (or)</td>
<td>3</td>
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<tr>
<td>IS:251</td>
<td>Java Programming</td>
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Oracle Focus 18 credits

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<tbody>
<tr>
<td>IS:133</td>
<td>Introduction to SQL</td>
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<tr>
<td>IS:270</td>
<td>Oracle PLSQL</td>
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</tr>
<tr>
<td>IS:272</td>
<td>Oracle Database Administration</td>
<td>3</td>
</tr>
<tr>
<td>IS:271</td>
<td>Oracle User Interface Design</td>
<td>3</td>
</tr>
<tr>
<td>IS:273</td>
<td>Oracle Design and Implementation</td>
<td>3</td>
</tr>
<tr>
<td>IS:262</td>
<td>Advanced Software Development</td>
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Electives (choose one course) 3 credits
III. Area of Concentration 38 credits

<table>
<thead>
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<th>Title</th>
<th>Credits</th>
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<tr>
<td>PAR:201</td>
<td>Principles of Paramedic Technology I</td>
<td>8</td>
</tr>
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<td>PAR:202</td>
<td>Principles of Paramedic Technology II</td>
<td>8</td>
</tr>
<tr>
<td>PAR:226</td>
<td>Principles of Paramedic Technology III</td>
<td>3</td>
</tr>
<tr>
<td>PAR:227</td>
<td>Principles of Paramedic Technology IV</td>
<td>4</td>
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<td>PAR:203</td>
<td>Pharmacology for Paramedics</td>
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<td>PAR:211</td>
<td>Paramedic Laboratory I</td>
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</tr>
<tr>
<td>PAR:212</td>
<td>Paramedic Laboratory II</td>
<td>1</td>
</tr>
<tr>
<td>PAR:221</td>
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<td>PAR:222</td>
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<td>Paramedic Clinical III</td>
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<td>PAR:223</td>
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<tr>
<td>PAR:225</td>
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</table>

Program total: 69 credits

Physical Therapist Assistant

Associate in Applied Science Degree
Meramec

This program prepares students for positions as physical therapist assistants who work under the direction and supervision of the physical therapist. Students 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. Students acquire knowledge and technical skills necessary to help people of all ages regain their ability to move and perform functional activities in their daily lives after illness or trauma. Care provided by the PTA may include teaching patients exercises for mobility, strength, and coordination; training for activities such as walking with an artificial limb, using crutches, walkers, braces; helping patients learn to manage or relieve pain; and use physical modalities and electrotherapy.

Persons interested in this program should be comfortable working with 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 as defined in the Physical Therapist Assistant Handbook and available through the academic advising office. 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.

I. Career General Education 29 credits

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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<tbody>
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<tr>
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<tr>
<td>ENG:102</td>
<td>College Composition II (or)</td>
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<td>Fundamentals of Chemistry I (or)</td>
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II. Physical Education Activity 2 credits

Program total: 30 credits
I. Career General Education 29 credits

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<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<td>ENG:100</td>
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</tr>
<tr>
<td>ENG:101</td>
<td>College Composition I</td>
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</tr>
<tr>
<td>COM:101</td>
<td>Oral Communication I</td>
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<td>General Psychology</td>
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<tr>
<td>PSY:205</td>
<td>Human Growth and Development (or)</td>
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<td>PSY:203</td>
<td>Child Psychology</td>
<td>3</td>
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<td>SOC:201</td>
<td>Aspects of Aging</td>
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<tr>
<td>BIO:207</td>
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<td>BIO:208</td>
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Program total . . . . 68 credits

II. Physical Education Activity 2 credits

III. Area of Concentration 37 credits

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<td>PTA:104</td>
<td>Clinical Experience I</td>
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<td>PTA:105</td>
<td>Fundamentals of Patient Care for the PTA</td>
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<td>PTA:208</td>
<td>Health Occupation Seminar</td>
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<td>PTA:211</td>
<td>Physical Agents</td>
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<td>PTA:212</td>
<td>Therapeutic Exercise and Rehabilitation Concepts I</td>
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<td>PTA:213</td>
<td>Therapeutic Exercise and Rehabilitation Concepts II</td>
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<tr>
<td>PTA:215</td>
<td>Medical Conditions in Rehabilitation</td>
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<td>PTA:216</td>
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<tr>
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<td>Clinical Education IIB</td>
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Program total . . . . 36 credits

Program total . . . . 68 credits

Quality Technology
Certificate of Proficiency
Florissant Valley
This certificate provides the student with a general background in technical methods and measurements associated with quality control. It qualifies the student for entry-level positions in quality where an understanding of quality techniques combined with comprehension of math and computer applications.

<table>
<thead>
<tr>
<th>Course</th>
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<td>QC:102</td>
<td>Quality Cost Analysis</td>
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<td>QC:202</td>
<td>Inspection Methods</td>
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<td>ENG:101</td>
<td>College Composition I</td>
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</table>

Program total . . . . 18 credits

Quality Technology
Certificate of Specialization
Florissant Valley
This certificate provides the student with a general background in technical methods and measurements associated with quality control. It qualifies the student for entry-level positions in quality where an understanding of quality techniques combined with comprehension of math and computer applications.

<table>
<thead>
<tr>
<th>Course</th>
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<tr>
<td>QC:100</td>
<td>Introduction to Quality Control</td>
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<td>QC:102</td>
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Program total . . . . 18 credits
I. General Education 23-24 credits

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<td>Technical Mathematics I</td>
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<td>BIO:207 **</td>
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**Note: 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.

II. Physical Education Activity 2 credits

III. Area of Concentration 50 credits

<table>
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<td>XRT:101</td>
<td>Radiographic Procedures I</td>
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<tr>
<td>XRT:102</td>
<td>Radiographic Procedures II</td>
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<td>XRT:103</td>
<td>Radiographic Procedures III</td>
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<td>XRT:104</td>
<td>Principles of Radiographic Exposure I</td>
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<td>Principles of Radiographic Exposure II</td>
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<td>XRT:107</td>
<td>Radiologic Physics I</td>
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<td>Radiologic Physics II</td>
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<td>XRT:112</td>
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<td>XRT:116</td>
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<td>XRT:121</td>
<td>Radiographic Image Evaluation I</td>
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<td>XRT:122</td>
<td>Radiographic Image Evaluation II</td>
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<td>Radiologic Pathology</td>
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<td>XRT:208</td>
<td>Advanced Imaging Modalities</td>
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<td>XRT:209</td>
<td>Radiobiology</td>
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<td>XRT:211</td>
<td>Radiologic Technology Review</td>
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<td>XRT:212</td>
<td>Professional Development In Radiography</td>
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<td>XRT:213</td>
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<td>Clinical Education V</td>
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<td>XRT:215</td>
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*Except MTH:165 or MTH:166

**Prerequisite for XRT:101.

Program total... 75-76 credits

Respiratory Therapy

Associate in Applied Science Degree

Forest Park

This program prepares students for positions as respiratory therapists. Students learn to administer treatment(s) or conduct tests on persons with lung and heart ailments, as ordered by a patient's physician. The program includes natural sciences, humanities, and respiratory therapy courses, in addition to clinical practice at area health facilities.

Persons interested in the program should be team-oriented, compassionate individuals who derive satisfaction from helping others in time of crisis. They also should be able to tolerate moderate physical activity, long hours of standing, and be able to work effectively under stress.

Graduates are eligible to challenge the entry-level (CRT), and advance practitioner’s (RRT) examinations offered through the National Board for Respiratory Care. Employment is available through hospitals, clinics, home care agencies, education, equipment sales and marketing. This program has many prerequisites based on professional standards. See an advisor for further information.
I. Career General Education 32-33 credits

<table>
<thead>
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<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>ENG:101</td>
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<td>ENG:102</td>
<td>College Composition II</td>
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<td>CHM:101</td>
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<td>Anatomy and Physiology II</td>
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<td>PSY:200</td>
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II. Physical Education Activity 2 credits

III. Area of Concentration 44 credits

<table>
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<th>Course Title</th>
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<tr>
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<td>Introduction to Respiratory Care and Respiratory Physics</td>
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<td>RTH:121</td>
<td>Orientation to the Hospital</td>
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<td>RTH:125</td>
<td>Airway Management</td>
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<td>RTH:126</td>
<td>Introduction to Mechanical Ventilation</td>
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<tr>
<td>RTH:127</td>
<td>Respiratory Pharmacology</td>
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<td>RTH:128</td>
<td>Arterial Blood Gases</td>
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<td>RTH:131</td>
<td>Pediatric Respiratory Care</td>
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<td>Respiratory Care Clinical I</td>
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<td>RTH:220</td>
<td>Pulmonary Pathophysiology</td>
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<td>RTH:221</td>
<td>Critical Care Monitoring</td>
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<td>RTH:222</td>
<td>Cardiopulmonary Physiology</td>
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<td>RTH:223</td>
<td>Mechanical Ventilation: A Clinical Approach</td>
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<td>Pulmonary Function Testing</td>
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<td>RTH:240</td>
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<td>RTH:245</td>
<td>Respiratory Care Clinical IV</td>
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Program total... 78-79 credits

Skilled Trades Industrial Occupations Technology

Associate in Applied Science Degree Florissant Valley

This program allows individuals to earn an associate degree tailored to their occupational/career needs. College credit for technical areas may be earned through established articulation agreements with apprenticeship programs recognized by the college or individualized programs of study developed in consultation with the Engineering and Technology department. In addition, on-the-job training and/or supervised work-based learning may be included in the student's degree program. Areas of concentration may include: aerospace assembly worker, carpenter apprenticeship, electronic alarm technician, machine technician apprenticeship and sheet metal worker.

I. Career General Education 18-20 credits

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
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<td>Oral Communication I</td>
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II. Physical Education Activity 2 credits

III. Area of Concentration 44-45 credits

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<tr>
<td>IS:116</td>
<td>Computer Literacy</td>
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</table>

Choose one focus area:

Apprenticeship Program Agreement 41-42 credits

Where St. Louis Community College has an agreement with an apprenticeship training program, students will receive credit as per the apprenticeship agreement. Depending on the credit awarded based on the articulation agreement; additional technical course approved by the department may be required. Transcription of credit for apprenticeship training programs will be done as per the college procedures in place at that time.

Technical Electives 41-42 credits

This option allows individuals to tailor their area of concentration based on the skilled trades by selecting course(s) from the department prefixes: BE, CE, EE, EGR, ESC, GE, ME, QC, SKT, TEL and MGT – with at least 9 hours from one of the above prefixes. The individual's program of study must be developed in consultation with the Engineering and Technology department.

Program total... 64-67 credits
Skilled Trades Industrial Occupations Technology
Certificate of Specialization

Florissant Valley

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
- Sheet Metal Worker
- PLC/Robotics
- Manufacturing Assembly Worker

**Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
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<tbody>
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</table>

**Program total . . . 12-15 credits**

Software Developer
Associate in Applied Science Degree
Florissant Valley, Forest Park and Meramec

This program provides students with the technical skills and knowledge required to design, write, implement, secure, and maintain business software systems in the enterprise. It teaches the principles of software architecture using current development tools, languages, and environments. The courses in the web, software developer and database focus areas enable students to pursue in-depth skill and expertise within one of these three areas while preparing for industry recognized certifications. The courses in the program provide a combination of online, distance learning and intensive, classroom-based, hands-on skills development. Students completing the program are prepared for a variety of industry certification exams as well as entry-level employment as software developer or to pursue advanced studies in software design and development.

I. Career General Education  19 credits

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<tr>
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<th>Course Name</th>
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<td>ENG:102</td>
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II. Physical Education Activity  2 credits

<table>
<thead>
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<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
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III. Area of Concentration  31 credits

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<tr>
<td>IS:112</td>
<td>Software and Hardware Concepts</td>
<td>3</td>
</tr>
<tr>
<td>IS:139</td>
<td>Web Publishing</td>
<td>3</td>
</tr>
<tr>
<td>IS:225</td>
<td>Database Management</td>
<td>4</td>
</tr>
<tr>
<td>IS:229</td>
<td>Unix/Linux</td>
<td>3</td>
</tr>
<tr>
<td>IS:241</td>
<td>Systems Analysis and Design</td>
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<table>
<thead>
<tr>
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<tr>
<td>IS:237</td>
<td>Fundamentals of Information Assurance/Security</td>
<td>3</td>
</tr>
<tr>
<td>IS:153</td>
<td>C# Programming I (or)</td>
<td>4</td>
</tr>
<tr>
<td>IS:187</td>
<td>Java Programming I.</td>
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</tbody>
</table>

Complete either 8 credit hours of C# or Java

C# Language

<table>
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<th>Course Name</th>
<th>Credits</th>
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<tr>
<td>IS:253</td>
<td>C# Programming II (and)</td>
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<tr>
<td>IS:283</td>
<td>C# Programming III</td>
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Java Language

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<tbody>
<tr>
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<td>Java Programming II (and)</td>
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<td>IS:288</td>
<td>Java Programming III</td>
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Focus Areas:  12 credits

Language

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<tr>
<td>IS:290</td>
<td>C# Frameworks: .NET Web App Framework (or)</td>
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<td>IS:296</td>
<td>Java Frameworks: Spring</td>
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Choose an additional 9 credit hours of approved IS electives.

Web

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<td>Graphics for the Web</td>
<td>3</td>
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<tr>
<td>IS:265</td>
<td>Web Scripting Technologies</td>
<td>3</td>
</tr>
<tr>
<td>IS:142</td>
<td>Web Development I</td>
<td>3</td>
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</table>

Choose an additional 3 credit hours of approved IS electives.

Database

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<tbody>
<tr>
<td>IS:268</td>
<td>SQL Server Programming (and)</td>
<td>3</td>
</tr>
<tr>
<td>IS:269</td>
<td>SQL Server Applications Programming (or)</td>
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<tr>
<td>IS:276</td>
<td>Oracle Programming (and)</td>
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<tr>
<td>IS:277</td>
<td>Oracle Applications Programming</td>
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</table>

Choose an additional 6 credit hours of approved IS electives.

Program total . . . . 64 credits
Surgical Technology
Certificate of Proficiency
Forest Park

This program prepares students for entry-level positions as surgical technologists. Students learn aseptic technique, instrumentation, surgical procedures and patient care through classroom, laboratory practice and at a clinical affiliate. Students learn to assist the surgeon by passing instruments and sutures, holding retractors and cutting sutures.

Persons interested in this program should be able to work well with others in a team environment. They should have good manual dexterity, enjoy the operating room situation, and function effectively under intense and stressful situations.

This program is CAAHEP accredited and graduates are qualified to take the National Certification Exam offered by the National Board of Surgical Technology and Surgical Assisting (NBSTSA) to become a Certified Surgical Technologist (CST). Commission on Accreditation of Allied Health Education Programs: 1361 Park Street, Clearwater, FL 33756; phone 727-210-2350; fax 727-210-2354, www.caahep.org.

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

<table>
<thead>
<tr>
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<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
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<tr>
<td>BIO:203</td>
<td>General Microbiology I</td>
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<tr>
<td>BIO:207</td>
<td>Anatomy and Physiology I</td>
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</table>

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

<table>
<thead>
<tr>
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<th>Course Title</th>
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<tr>
<td>BIO:208</td>
<td>Anatomy and Physiology II</td>
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<td>ENG:101</td>
<td>College Composition I</td>
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<td>PSY:200</td>
<td>General Psychology (or)</td>
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<td>SOC:101</td>
<td>Introduction to Sociology</td>
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<tr>
<td>ST:104</td>
<td>Pharmacology for Surgical Technologists</td>
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<td>Fundamentals of Surgical Technology</td>
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<td>ST:108</td>
<td>Introduction to Surgical Technology</td>
<td>6</td>
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<tr>
<td>ST:109</td>
<td>Principles of Operating Room Communication</td>
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<tr>
<td>ST:110</td>
<td>Surgical Procedures I</td>
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<td>ST:111</td>
<td>Surgical Technology Clinical I</td>
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<td>ST:210</td>
<td>Surgical Procedures II</td>
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<tr>
<td>ST:211</td>
<td>Surgical Technology Clinical II</td>
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</table>

Program total ....... 42 credits

Sustainable Construction
Certificate of Specialization
Florissant Valley

This program is designed to provide students with a fundamental knowledge of the construction industry and building sustainability. Students will learn to read and analyze construction drawings and other documents, evaluate building materials, examine building systems, and apply principles and practices of sustainability to decision-making processes in all phases of construction. This program will be beneficial for individuals preparing for entry-level positions as well as those already working in related fields. Though a stand-alone certificate, it is designed to complement the existing Construction Management Technology AAS degree program. The courses in this certificate can count either as core or elective courses in the AAS degree program.

**Courses**

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<td>Construction Materials and Methods</td>
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<td>CE:116</td>
<td>Construction Blueprint Reading</td>
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<tr>
<td>CE:118</td>
<td>Sustainable Construction</td>
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<tr>
<td>ME:261</td>
<td>Building Systems - A Holistic Approach</td>
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<tr>
<td>GE:163</td>
<td>Construction Documents and Communications</td>
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</table>

Program total ....... 14 credits

Sustainable Environmental Design
Certificate of Specialization
Meramec

This program will provide students with the knowledge and skills necessary to work in the emerging and rapidly growing field of sustainable environmental design. Students will learn to utilize core concepts, design strategies and green building technologies for the design, construction and maintenance of buildings that minimize our impact on the natural environment, are more energy efficient and healthy for both humans and natural environmental systems. This program will prepare students to apply for the LEED (Leadership in Energy and Environmental Design) Green Associate exam administered by an independent third party.

**Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tr>
<td>ARC:102</td>
<td>Introduction to Sustainable Environments</td>
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<tr>
<td>ARC:125</td>
<td>Sustainable Materials and Technologies in the Built Environment</td>
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<tr>
<td>ARC:116</td>
<td>Green Design Strategies and Applications in Architecture (or)</td>
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</tr>
<tr>
<td>ARC:117</td>
<td>Green Design Strategies and Applications in Interior Design (or)</td>
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</tr>
<tr>
<td>ARC:118</td>
<td>Green Design Strategies and Applications in Landscape Design</td>
<td>3</td>
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<tr>
<td>ARC:119</td>
<td>Sustainable Design Certification Systems and LEED GA Preparation</td>
<td>3</td>
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</tbody>
</table>

Program total ....... 42 credits
College Programs

**ARC:206** Topics in the Sustainable Architectural Environment (or)
**ARC:207** Topics in the Sustainable Interior Environment (or)
**ARC:208** Topics in the Sustainable Landscaped Environment

**ARC:231** Applications in Integrated Sustainable Design

*Program total . . . . . . 16 credits*

**Telecommunications Engineering Technology:**

**Basic Electronics Certificate of Specialization**
Florissant Valley

This program offers basic courses in the fundamentals of electricity, electronics, computers and telecommunications to support entry-level positions in the telecommunications industry.

**Courses**

<table>
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<tr>
<th>Course</th>
<th>Credits</th>
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<tr>
<td>GE:131</td>
<td>Engineering Technology Orientation .......... 1</td>
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<tr>
<td>EE:110</td>
<td>Technical Electric Circuits I ............... 4</td>
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<tr>
<td>EE:111</td>
<td>Technical Electric Circuits II ............... 4</td>
</tr>
<tr>
<td>EE:112</td>
<td>Technical Electronics I ..................... 5</td>
</tr>
<tr>
<td>EE:230</td>
<td>Analog and Digital Electronics .............. 3</td>
</tr>
<tr>
<td>EE:106</td>
<td>IBM Personal Computer Installation and Repair . 1</td>
</tr>
<tr>
<td>TEL:103</td>
<td>Introduction to Telecommunications .......... 3</td>
</tr>
</tbody>
</table>

*Program total . . . . . . 21 credits*

**Travel and Tourism**

**Certificate of Specialization**
Forest Park

This course of study is designed for students seeking entry-level positions in the field of travel and tourism. The curriculum is intended as a two-semester program covering travel industry segments, terms and definitions, codes, and tourism geography, along with computer automation and Internet use as related to the profession.

Persons interested in this program should possess keyboarding and computer navigation abilities, an aptitude for memorization, along with developed interpersonal and organizational skills.

Graduates are eligible to pursue entry-level employment opportunities with travel agencies, tour companies, airlines, car rental firms, incentive travel organizations, and Internet travel entities.

**Courses**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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<tr>
<td>IS:123</td>
<td>Introduction to Windows ..................... 1</td>
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<tr>
<td>IS:151</td>
<td>Microcomputer Applications in Business ...... 4</td>
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<tr>
<td>HTM:105</td>
<td>Professionalism in the Hospitality Industry .... 1</td>
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<tr>
<td>HTM:110</td>
<td>Negotiations in the Hospitality Industry ...... 2</td>
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<tr>
<td>GEG:106</td>
<td>U.S. and World Geography ..................... 3</td>
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**Total Core Courses Credit Hours**

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**Focus Courses**

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<tr>
<th>Course</th>
<th>Credits</th>
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<tr>
<td>HTM:260</td>
<td>Travel and Tourism Foundations ............. 6</td>
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<tr>
<td>HTM:270</td>
<td>Travel and Tourism Computer Systems ....... 5</td>
</tr>
<tr>
<td>HTM:265</td>
<td>Travel and Tourism Destination Geography ... 3</td>
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</table>

**Total Focus Courses Credit Hours**

<table>
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<tr>
<th>Credits</th>
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<tbody>
<tr>
<td>14</td>
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</table>

*Program total . . . . . . 25 credits*

**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.

**Required Courses**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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<tbody>
<tr>
<td>IS:139</td>
<td>Web Publishing .................................. 3</td>
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<tr>
<td>IS:153</td>
<td>C# Programming I (or) ......................... 3</td>
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<td>IS:187</td>
<td>Java Programming I .......................... 4</td>
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<tr>
<td>IS:265</td>
<td>Web Scripting Technologies .................. 3</td>
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<td>IS:142</td>
<td>Web Development I ............................ 3</td>
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<tr>
<td>IS:141</td>
<td>Graphics for the Web ......................... 3</td>
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**Electives**

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<tr>
<td>IS:253</td>
<td>C# Programming II (or) ..................... 4</td>
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<td>IS:287</td>
<td>Java Programming II ......................... 4</td>
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*Program total . . . . . . 20 credits*
Course Descriptions
## KEY TO ABBREVIATIONS

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<th>Subject Area</th>
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<td>Horticulture</td>
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<td>Hospitality and Tourism</td>
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<tr>
<td>HUM</td>
<td>Humanities</td>
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<tr>
<td>IRT</td>
<td>Information Reporting Technology</td>
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<tr>
<td>IS</td>
<td>Information Systems</td>
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<tr>
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<td>PAR</td>
<td>Paramedic Technology</td>
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<tr>
<td>WMS</td>
<td>Women's Studies</td>
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</tbody>
</table>
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 June 2012. For descriptions of courses approved after this date, consult the website at stlcc.edu/programs.

All of the courses listed in this section are not offered every semester. Information on where and when these courses are available may be found in each semester’s course schedule available online at stlcc.edu/schedule. 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, Introduction to College Reading. 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, Academic English for Non-native Speakers I.

COURSE LEVELS

The course numbering system uses an abbreviation to identify subject matter area and a three-digit number to identify course level. Course levels are defined as follows:

- **001-079** Developmental courses
- **080-099** Special problems developmental credit courses
- **100-199** Beginning level credit courses
- **200-299** Advanced level credit courses
- **500-599** Special problems credit courses
- **600-699** Special problems credit courses
- **700-799** Non-credit continuing education courses

**Example**

**DA:144 PRECLINICAL PRACTICE**

DA indicates the subject area of Dental Assisting. The number 103 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.
ACCOUNTING

ACC:100 APPLIED ACCOUNTING
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
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:111 FINANCIAL ACCOUNTING II
Reinforces ACC:110 Financial Accounting topics on reporting corporate long term liabilities, intercompany investments and the Statement of Cash Flows. Introduces Managerial Accounting with coverage of cost accounting systems, cost-volume-profit analysis, capital budgeting and other current managerial accounting topics. Prerequisites: ACC:110 with grade of “C” or better or department approval and Reading Proficiency.

ACC:114 MANAGERIAL ACCOUNTING
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
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
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
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
A study of the general principles of cost accounting with emphasis on process and job order cost accounting; methods of collection, preparation and interpretation of data, as well as preparation of records and reports. Prerequisites: ACC:111 or ACC:114 and Reading Proficiency.

ACC:204 INCOME TAX ACCOUNTING
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
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
Study of financial accounting theory relating to asset, liability and owner’s equity accounts, including methods of valuation and the related effects on financial statements. Prerequisites: ACC:111 or ACC:114 with a grade of “C” or better or department approval and Reading Proficiency.

ACC:209 INTERMEDIATE ACCOUNTING II
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
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
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
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 taxes and property taxes. Prerequisites: ACC:110 or department approval and Reading Proficiency.

ACC:214 BUSINESS TAXES: RESEARCH AND PLANNING
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
This course 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:206 and Reading Proficiency.

ACC:291 ACCOUNTING INTERNSHIP
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
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
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:101 INTRODUCTION TO PHYSICAL ANTHROPOLOGY AND ARCHAEOLOGY
This course is designed to present the principles, theories, data and methods used by anthropologists and archaeologists in their attempts to study human evolutionary development. Generally speaking, three broad topics are covered: the mechanisms of evolution, human prehistory, and the fossil evidence of Homo Sapiens and ancestral forms. Prerequisite: Reading Proficiency.

ANT:102 INTRODUCTION TO CULTURAL ANTHROPOLOGY
In this course, students are introduced to the great diversity of human cultures. Economic, social, political and religious systems are compared, including such topics as the nature of culture, cultural ecology, magic and witchcraft, disease and curing, sex roles, and rites of passage. Problems resulting when traditional societies confront industrial societies or industrialization are discussed. Prerequisite: Reading Proficiency.

ANT:103 CULTURAL VARIATIONS
This course focuses on culture as a prime determinant of human behavior. To understand how culture “works” helps us to understand better the people who live in that culture. The basic concepts of culture are presented including adaptation to the environment, language and communication, social stratification, values and attitudes, customs and habits, and social change. Economics, politics, religion and social systems are compared and evaluated with special application to living, visiting, and doing business in another culture. Prerequisite: Reading Proficiency.

ANT:104 FIELD STUDY IN ARCHAEOLOGY
This course is designed to introduce students to field methods in archaeology and to the methods of recording, storing, analyzing, and reporting archaeological findings. Experience is gained through participation in a field project. Prerequisite: Reading Proficiency.

ANT:105 FOUNDATIONS OF ARCHAEOLOGY
A basic introduction to archaeology as an interpretive discipline. Why and how do archaeologists determine how old things are and which ancient cultures they belong to? How do they reconstruct the religions, economy, and politics of ancient civilizations? Using cases from ancient cultures around the world, this course will answer these and many other questions about the study of archaeology. Prerequisite: Reading Proficiency.
ANT:201 NORTH AMERICAN ARCHAEOLOGY 3
This course is an introductory survey of the prehistory of North America, covering the ten thousand years of New World cultural development from the original entry of man through the entrance of Europeans. Attention will be focused on the development of civilization in Mesoamerica and in the Eastern U.S., the Midwest and the Southwest. Laboratory sessions and field excavation techniques will be introduced in actual situations. Prerequisite: Reading Proficiency.

ANT:202 ETHNOGRAPHY: NORTH AMERICAN INDIANS 3
This course presents an introduction to the beliefs, customs and social organization of the Indians of North America. The course will deal with the Indians as they were before Columbus, their life ways, world views, and religion, economic patterns and technology, patterns of family life, warfare and confrontations with Europeans. Prerequisite: Reading Proficiency.

ANT:203 BIBLICAL ARCHAEOLOGY 3
Archaeological discoveries and their relationship to the historical, cultural and religious traditions of the Old and New Testaments. Included will be Sodom and Gomorrah, Exodus, Conquest, Dead Sea Scrolls, and the Early Church. Prerequisite: Reading Proficiency.

ANT:205 CULTURAL CONTEXT OF EARLY CHRISTIANITY 3
The study of Roman culture, Jewish culture, and the Jesus Movement analyzing their material culture (tombs, temples, art, coins) and non-material culture (kinship system, political organization, economic system). Artifacts, architecture, and written records are our primary sources. Prerequisite: Reading Proficiency.

ANT:206 THE INCAN, AZTEC, AND MAYAN CULTURES 3
A survey of the cultural evolution of Meso America and Andean South America, from the early hunters to the high civilizations. This course will conclude with the sixteenth century Spanish conquest of these civilizations. Prerequisite: Reading Proficiency.

ANT:207 ANCIENT CIVILIZATION OF THE OLD WORLD 3
A survey of the earliest complex societies in the Old World during the Neolithic and Bronze Ages. Emphasis will be focused on the cultures in Mesopotamia, Egypt, India, and China. Prerequisite: Reading Proficiency.

ARABIC
ARA:101 MODERN ARABIC I 4
This is a practical, beginning course in speaking and understanding modern-Arabic. It is designed for persons who want to learn some Arabic, who want to travel to an Arabic-speaking country, or who have previous limited experience in Arabic. Attention is given to proper pronunciation, to practicing the words and basic structures most frequently in daily conversation and to learning the social conventions and Arabic culture necessary for interpersonal communication with native speakers of contemporary Arabic. Prerequisite: Reading Proficiency.

ARA:102 MODERN ARABIC II 4
Modern Arabic II is a continuation of Modern Arabic I. Students complete the basic elements of Arabic grammar, increase their vocabulary and gain added facility in speaking and reading Arabic. Prerequisites: ARA:101 or the permission of the instructor and Reading Proficiency.

ARCHITECTURAL TECHNOLOGY
ARC:102 INTRODUCTION TO SUSTAINABLE ENVIRONMENTS 3
This is a foundation course in which a broad spectrum of issues in sustainable environments are discussed. Environmental and economic issues including stewardship, healthy environments, building culture, community development, and high performing building technologies will be explored. Prerequisite: Reading Proficiency.

ARC:110 ARCHITECTURAL GRAPHICS 3
Foundation course in which quality drafting in the areas of line weight and quality, lettering, dimensioning, notes is taught. Drafting procedures such as orthographics, axometrics, 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
A small project is designed and detailed. Topics covered include: design method, design presentation techniques, construction details, and construction document set production. Verbal and graphic communication of ideas is developed. A portfolio of student work is begun. Additional lab hours required. Prerequisites: ARC:110 with a grade of “C” or better and Reading Proficiency.

ARC:114 ARCHITECTURAL HISTORY AND THEORY 3
This course presents a survey of the history of shelter, monuments, other building types, towns and cities, and site design in relation to current architectural trends. Forces which shape the built environment are studied. Tours of area sites or buildings may be included. Prerequisite: Reading Proficiency.

ARC:115 ARCHITECTURAL RENDERING AND PRESENTATION 3
Students gain experience in color and pattern rendering and presentation drawing technology. A variety of media and concepts is explored. Finished projects can be included in the architectural portfolio. Additional hours required. Prerequisite: Reading Proficiency.

ARC:116 GREEN DESIGN STRATEGIES AND APPLICATIONS IN ARCHITECTURE 3
This is a studio course emphasizing the application of green site and sustainable design strategies in architectural environments. Students will utilize their knowledge of regional green materials, best management practices, and the local context as they investigate sustainable architectural solutions to given design problems. Additional studio hours required. Prerequisites: ARC:112 with a minimum grade of “C” or approval by instructor, and Reading Proficiency.

ARC:117 GREEN DESIGN STRATEGIES AND APPLICATIONS IN INTERIOR DESIGN 3
This course introduces the use of sustainable and green design buildings, assemblies, materials, and approaches for their interior environment. Interior design problems based on client criteria, goals and intent will utilize the application of sustainable design theory, methods and product knowledge to deliver healthy sustainable design solutions. Additional studio hours required. Prerequisites: ARC:112 with a minimum grade of “C” or approval of instructor, and Reading Proficiency.

ARC:118 GREEN DESIGN STRATEGIES AND APPLICATIONS IN LANDSCAPE DESIGN 3
This is a studio course emphasizing the application of green building and sustainable design strategies in landscape environments. Students will utilize their knowledge of regional green materials, best management practices, and the local context as they investigate sustainable landscape solutions to given design problems. Additional studio hours required. Prerequisites: ARCH:104 with a minimum grade of “C” or department approval, and Reading Proficiency.

ARC:119 SUSTAINABLE DESIGN CERTIFICATION SYSTEMS AND LEED GA PREPARATION 3
This course surveys multiple sustainable design certification systems of both buildings and products, and provides preparation for the LEED (Leadership in Energy and Environmental Design) Green Associate Examination. Core concepts and performance criteria across building types, product requirements, and rating systems will be stressed. Prerequisite: Reading Proficiency.

ARC:123 INTRODUCTION TO COMPUTER-AIDED ARCHITECTURAL DRAFTING 3
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
This is a hands-on introduction to the use of building information modeling (BIM) software for architecture. Instruction will focus on how both graphic and non-graphic architectural information for a building is produced through the creation of a single project database represented in a 3D model. Prerequisite: Reading Proficiency.

ARC:125 SUSTAINABLE MATERIALS AND TECHNOLOGIES IN THE BUILT ENVIRONMENT 3
This foundational course examines the process for producing high performing, sustainable built environments. The student will learn how to research, evaluate, select, and specify appropriate materials and systems at all scales within the built environment. Code and Certification process criteria will be discussed as it relates to environmental performance. Prerequisite: Reading Proficiency.

ARC:126 TOPICS IN THE SUSTAINABLE ARCHITECTURAL ENVIRONMENT 3
This course is an in depth discipline specific course on sustainable environmental design topics. Topics could include: green roofing systems, sustainable building envelopes, innovative energy or water conservation systems, product or material innovations, or specific design strategies for the built environment. Prerequisite: Reading Proficiency.

ARC:127 TOPICS IN THE SUSTAINABLE INTERIOR ENVIRONMENT 3
This course is an in depth discipline specific course on sustainable interior design topics. Topics could include: innovative energy or water conservation systems and fixtures, product or material innovations, and specific topical interior design strategies. Prerequisite: Reading Proficiency.

ARC:128 TOPICS IN THE SUSTAINABLE LANDSCAPED ENVIRONMENT 3
This course is an in depth discipline specific course on sustainable landscaped environmental design topics. Topics could include: green roofing systems, specialty irrigation systems, innovative energy or water conservation systems, product or material innovations, or specific topical design strategies. Prerequisite: Reading Proficiency.

ARC:129 MECHANICAL AND ELECTRICAL SYSTEMS I 3
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.

Course Descriptions

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ART:211 ARCHITECTURAL DESIGN AND PRODUCTION II 3
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.

ART:219 PROFESSIONAL ARCHITECTURAL PRACTICE 2
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.

ART:220 ARCHITECTURAL DESIGN AND PRODUCTION III 3
Students will work on commercial/institutional projects designed to reinforce skills in building design, architectural rendering, and construction document production. The student portfolio is completed. Additional lab hours required. Prerequisites: ARC:114, ARC:115, ARC:211 with grades of "C" or better and Reading Proficiency.

ART:222 SITE PLANNING AND LANDSCAPE DRAFTING 3
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.

ART:228 ARCHITECTURAL COMPUTER RENDERING, MODELING, AND ANIMATION 3
This course provides an introduction to the use of computers in digital modeling and rendering for architecture. The student will gain experience in the use of 3-D, image editing, and CAD software to produce 3-D models and 2-D renderings of architectural projects. Prerequisites: ARC:123 or department approval and Reading Proficiency.

ART:229 ARCHITECTURAL SPECIFICATIONS, MATERIALS, AND METHODS 3
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:231 APPLICATIONS IN INTEGRATED SUSTAINABLE DESIGN 3
This course is an advanced studio class where architectural technology, interior design and horticulture students collaboratively investigate environmentally conscious solutions to design problems. Charettes will be used to generate holistic sustainable strategies leading to the integrated design of the site, the building envelope and systems, and the interior environment. Additional studio hours required. Prerequisites: ARC:102 and ARC:125, and ARC:116 or ARC:117 or ARC:118, all with minimum grades of "C" or better or approval of instructor or program director, and Reading Proficiency.

ART:109 DRAWING I 3
This is a beginning course in fundamentals of drawing that includes an introduction to drawing principles, construction, proportion, form, value, perspective, composition, tools and media. Perception, visual awareness, sensitivity, attitude and judgment are all stressed. Additional studio hours required. Prerequisites: Reading Proficiency.

ART:110 DRAWING II 3
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
Introduction to drawing from the human figure, analysis of structure, proportion and basic forms. Additional studio hours required. Prerequisite: Reading Proficiency.

ART:112 FIGURE DRAWING II 3
Continuation of ART:111. Emphasizes the use of various drawing media. Analysis of the structure of the human figure through anatomy. Additional studio hours required. Prerequisites: ART:111 and Reading Proficiency.

ART:113 CERAMICS I 3
A study of the basic principles of ceramics and ceramic sculpture with emphasis on hand-built techniques. As the student progresses, there will be study on the kick wheel. Additional studio hours required. Prerequisite: Reading Proficiency.

ART:114 PAINTING I 3
An introduction to oil painting from still-life objects, with emphasis on technique and the effective use of color. Composition and drawing will be stressed as they relate to painting. Additional studio hours required. Prerequisites: ART:109 and Reading Proficiency.

ART:115 PRINTMAKING I 3
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, litho and woodblocks, collagraphs, dry points, and solvents transfers. Additional studio hours required. Prerequisite: Reading Proficiency.

ART:116 SCULPTURE I 3
A course based on individual development stressing the elements of sculpture: form, space, light, movement, proportion in relation to the basic methods associated with the sculpture field. Additional studio hours required. Prerequisite: Reading Proficiency.

ART:125 INTERACTIVE DESIGN I 3
This course introduces students to the methods and practices of creating graphics for use in interactive digital media. Students will create graphics used in video, mobile devices, web, social media sites and other formats of digital communication. Software used will include Photoshop, Illustrator, After Effects, iMovie, Second Life and others. Additional lab hours required. Prerequisites: ART:131 or ART:275 and Reading Proficiency.

ART:126 INTRODUCTION TO ADOBE FLASH 3
This course covers basic Flash tools, menu bars and panels. Students will learn the timeline, keyframing, tweening and Flash workflow with Illustrator and Photoshop. Students will create an animated character sequence, import and edit audio, insert a Flash movie into Dreamweaver, and create a Flash website. Additional lab hours required. Prerequisites: ART:131 and Reading Proficiency.

ART:131 COMPUTER ART STUDIO 3
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. Additional lab hours required. Prerequisite: Reading Proficiency.

ART:133 GRAPHIC DESIGN I 3
This course is an introduction to graphic design with an emphasis on its history and its place in the advertising world. It will cover basic layout processes, typography, and the use of materials required in the field. Issues such as client needs, concept development, and ethical considerations will also be covered. Additional studio hours required. Prerequisite: Reading Proficiency.

ART:134 GRAPHIC DESIGN II 3
Students in this course will further explore the area of graphic design with an emphasis on various layout formats, the creative use of typography, and the historic aspects of graphic design. Concept origination and development are also addressed. The use of computers as a design tool will be employed. Additional studio hours required. Prerequisites: ART:131 and ART:133 with grades of "C" or better, ART:107 and Reading Proficiency.
ART:135 GRAPHIC PRODUCTION I 2
Students in this class will study the history of printing and the basics of how the various commercial printing processes work. The major emphasis will be on understanding mechanical art procedures, the selection of printing papers, and the development of dialog with printing suppliers. The proper use and preparation of art for spot color, multicolor and process color printing and pre-press file preparation will be stressed. Binding and finishing techniques as well as layout and design concepts will be discussed in relation to the finished printed product. Additional studio hours required. Prerequisites: ART:131 and ART:133 with grades of “C” or better and Reading Proficiency.

ART:138 DRAWING FOR GRAPHICS I 2
This drawing course fulfills the specific needs of graphic design students. It emphasizes the study of composition and design as they apply to the solution of graphic design and illustration problems. Additional studio hours required. Prerequisites: ART:107, ART:109 and ART:111 with grades of “C” or better and Reading Proficiency.

ART:150 DESIGN COMMUNICATION FOR INTERIOR DESIGN AND ARCHITECTURE I 3
This course provides an introduction to graphic communication techniques as a way to communicate architecture and interior design processes and solutions. Students will gain experience in perspective drawing, rendering, sketching, layout and composition utilizing traditional and digital methods. Additional studio hours required. Prerequisite: Reading Proficiency.

ART:151 INTERIOR DESIGN I 3
An introduction to interior space planning through the use of scaled floor plans and elevations. Emphasis is placed on the design and selection of furnishings, textiles, accessories, and other interior components. Additional studio hours required. Prerequisite: Prior or concurrent enrollment in ARC:110 and Reading Proficiency.

ART:152 TEXTILES 3
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
The history of furniture styles, decorative arts, and architecture from Mesoamerica to French Empire will be taught. The emphasis is on materials, techniques, and aesthetics that make environments unique within their historical cultural environments. Prerequisite: Reading Proficiency.

ART:154 COMPUTER AIDED INTERIOR DESIGN 3
This course is an introduction to hardware and software used in the practice of interior design. AutoCAD will be used to create scaled drawings, specifications and programming documents. Additional lab hours required. Prerequisites: Prior or concurrent enrollment in ARC:110 and Reading Proficiency.

ART:155 BATH DESIGN 3
This course explores how to apply design principles and presentation standards in the planning and designing of safe and functional bathrooms. This course meets the standards established by the National Kitchen and Bath Association. Prerequisites: ART:151, prior or concurrent enrollment in ARC:110 and Reading Proficiency.

ART:156 ADVANCED KITCHEN DESIGN 3
This course applies design principles and presentation standards in the planning and designing of efficient kitchen layouts. Following National Kitchen and Bath Association (NKBA) guidelines, students obtain experience studying proper cabinet, appliance, and fixture selection. Prerequisites: ARC:110, ART:151 and Reading Proficiency.

ART:157 PERSPECTIVE DRAWING AND RENDERING FOR INTERIOR DESIGNERS 2
This course will allow students to gain experience in perspective drawing of interior spaces. A variety of media are explored in color and pattern rendering. Students will also explore an introduction to design using digital media. Additional hours required. Prerequisite: Reading Proficiency.

ART:158 WORKPLACE LEARNING: KITCHEN AND BATH DESIGN 3
This experiential course provides the student the opportunity to apply theory and skills learned in the classroom, learn new skills, and explore career possibilities while supervised by a professional in the field and a faculty member. Students will observe and participate in functions of the kitchen and bath industry in order to enhance their preparation for entering the kitchen and bath design field. Minimum of 160 hours in the workplace throughout the term. Prerequisites: ART:155, ART:156 and Reading Proficiency.

ART:165 PHOTOGRAPHY I 3
This course provides an introduction to the settings and creative controls of the camera, as well as the craft of black and white printing. Students will learn traditional darkroom techniques, as well as methods for approaching a variety of subjects and improving photographic compositions. Additional studio hours required. Prerequisite: Reading Proficiency.

ART:166 PHOTOGRAPHY II 3
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
The materials of color photography, color theories, and the techniques associated with color printing will be explored in this course. Sets of color images that explore a variety of technical and aesthetic issues will be produced by the student. Additional lab hours required. Prerequisites: ART:165 and Reading Proficiency.

ART:168 HISTORY OF PHOTOGRAPHY 3
An introduction to the understanding of photography through the study of significant historical events, pioneers, techniques, equipment, and aesthetic trends that have influenced and modulated this art form. Prerequisite: Reading Proficiency.

ART:169 VISUAL LANGUAGE 3
Perception and photography will be the central concern of this course, beginning with the ways in which we gather information from visual, particularly photographic, images and use of visual elements to form mental constructs. While the implications are vital to visual communicators, this exploration would be valuable to anyone with a desire to further their critical perception. Students will examine publications, films, photographs and television as forces affecting twentieth century thought. Prerequisite: Reading Proficiency.

ART:172 DIGITAL PHOTOGRAPHY 3
This course is an introduction to digital photography. Students will learn digital camera basics, including the mechanics of the camera and printing with the computer. Students will follow guided exercises and projects and produce a portfolio of prints using digital printers. No darkroom work is included in this course. Students must provide their own digital cameras. Additional studio hours required. Prerequisite: Reading Proficiency.

ART:186 BUILDING SYSTEMS AND CONSTRUCTION FOR INTERIOR DESIGNERS 3
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
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:165, ART:166 and Reading Proficiency.

ART:207 DESIGN III 2
An introduction to 3-D work, exploring the spatial qualities of mass, shape, volume. Additional studio hours required. Prerequisites: ART:108 and Reading Proficiency.

ART:208 DESIGN IV 2
Advanced problems in various aspects of design. Additional studio hours required. Prerequisites: ART:207 and Reading Proficiency.

ART:209 DRAWING III 3
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
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
Advanced figure drawing from the model. Additional studio hours required. Prerequisites: ART:112 and Reading Proficiency.

ART:213 CERAMICS II 3
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
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
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 colle and mixed media. Additional studio hours required. Prerequisites: ART:115 and Reading Proficiency.
ART:216 SCULPTURE II 3
A continuation of the study of the elements of sculpture, stressing the more creative approach in terms of new methods and materials. Emphasis will be on the human and natural forms as a basis for academic and subjective analysis. Additional studio hours required. Prerequisites: ART:116 and Reading Proficiency.

ART:221 PAGE LAYOUT: QUARK/INDESIGN 3
This course is designed to provide students with an advanced exploration and understanding of the QuarkPress and Adobe InDesign digital page design and layout software programs. Principles of page layout design and the graphic synthesis of typographic elements will be studied with these programs on an advanced level. Additional lab hours required. Prerequisites: ART:131 and Reading Proficiency.

ART:224 PACKAGE DESIGN 2
This course explores the concepts, techniques and concerns of graphic design as applied to package design and presentation display. Students will produce three-dimensional packaging solutions. Issues covered will include the functions of effective package design, special production processes and the creation of three-dimensional package mock-ups. Additional studio hours required. Prerequisites: ART:233 and Reading Proficiency.

ART:228 WORKPLACE LEARNING: PHOTOGRAPHY 3
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
This class will continue to examine the subject of graphic design with the emphasis upon the "hands-on" approach to finding creative solutions to complex visual communications problems. A professional approach to the discipline will be stressed. 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
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 logo design, package design, point of purchase and publication design. Additional studio hours required. Prerequisites: ART:235 and ART:233 with grades of "C" or better and Reading Proficiency.

ART:235 GRAPHIC PRODUCTION II 2
This course is a continuation of Graphic Production I but with a greater emphasis on the proper preparation of electronic pre-press files for spot-color, multi-color and process-color print production. Students will execute print projects using the computer to create pre-press files for print production. They will also examine many advanced printing techniques, multiple page document preparation and the proper methods for sending files to printers. Additional studio hours required. Prerequisites: ART:134 and ART:135 with grades of "C" or better and Reading Proficiency.

ART:236 TYPOGRAPHY 2
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
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
This course is a comprehensive exposure to the methods and theories of illustrative drawing and painting as it is used in reproduction. A special emphasis will be placed on its application to advertising and publication design. Additional studio hours required. Prerequisites: ART:131 and ART:138 with grades of "C" or better, or concurrent enrollment in same and Reading Proficiency.

ART:240 ILLUSTRATION II 3
This class exposes students to an experimental approach to illustrative drawing and painting with a strong emphasis on the creative use of materials and design principles. The use of computer drawing and painting programs may be stressed. Additional studio hours required. Prerequisites: ART:239 with grade of "C" or better and Reading Proficiency.

ART:241 PUBLICATION DESIGN 3
This course will introduce the student to the computer software used in the development of page design and layout. Emphasis will be placed on the production of basic business publications including newsletters, fliers, brochures, etc. General principles of page layout design will be studied including the placement of text, illustrations and logos and the important synthesis of these typographic elements. Additional lab hours required. Prerequisites: ART:131 and ART:133 with a "C" or better, or permission of program coordinator and Reading Proficiency.

ART:242 DRAWING FOR GRAPHICS III 2
Students in this class will build upon the principles covered in Drawing for Graphics II and will learn techniques and materials required to explore drawing solutions using the human figure to fulfill critical needs in the illustration profession. Additional studio hours required. Prerequisites: ART:238 and Reading Proficiency.

ART:243 FIGURE ILLUSTRATION 2
Students in this class will learn to draw the human figure emphasizing the purpose or function needed for advertising or publishing assignments. Analysis will be made of the ideal human figure through structure, anatomy, expression and its placement in an environment. Additional studio hours required. Prerequisites: ART:111 and Reading Proficiency.

ART:245 PORTFOLIO DESIGN AND PROFESSIONAL PRACTICES 2
This course will discuss the opportunities and procedures in the various fields of graphic design, illustration and advertising design. Students will be guided in the preparation of a portfolio of their work, in the development of a resume and related documents, and will learn practical interviewing techniques. The intent will be to prepare students to enter the art field with a confident and professional attitude. Additional studio hours required. Prerequisites: Permission of program coordinator and Reading Proficiency.

ART:249 DIGITAL PHOTOGRAPHY II 3
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
This course focuses on creating functional and aesthetically pleasing commercial and residential interiors using a systematic approach to the design process. Special emphasis is placed on commercial and residential planning guidelines and the impact of building and life safety codes on interior environments. Additional studio hours required. Corequisite: ART:154. Prerequisites: ART:110 and ART:151 and Reading Proficiency.

ART:252 INTERIOR DESIGN III 3
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
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
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
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 2
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
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 current topics will be central to the course. Additional studio hours may be required. Prerequisites: ART:165 or ART:172 and Reading Proficiency.

ART:268 LARGE FORMAT PHOTOGRAPHY 3
An introduction to view camera techniques as it is used indoors and outdoors. Hand held light meters will be required, their use explained and practiced. Use of view camera controls, printing from large format negatives, the making of fine quality prints and appropriate print presentation will be emphasized. Additional studio hour required. Prerequisites: ART:165 or department approval and Reading Proficiency.
**Course Descriptions**

**ART:269 FIELD PHOTOGRAPHY**
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 FIGURE FASHION PHOTOGRAPHY**
Students will set up, light and photograph models in the studio. Control of lighting composition, props, different films and other materials will be included. Additional assignments will involve photographing models in a variety of situations outdoors and other locations. Evaluation of final photographs will encourage the development of professional standards. Additional studio hours required. Prerequisites: ART:166 and Reading Proficiency.

**ART:271 PORTRAIT PHOTOGRAPHY**
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**
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**
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**
This course is an investigation of processing of continuous tone image files. Software tools and adjustment controls will be learned. Students will investigate scanning, color and tonal management, image repair and compositing, and printing. A portfolio of prints will be created emphasizing the individual expressiveness of the student. Additional lab hours required. Prerequisite: Reading Proficiency.

**ART:280 FINAL CUT**
Students will produce professional quality video content using Macintosh Final Cut non-linear editing software. Students will create digital video content and process project through the software. Clips will be edited; sound, transitions and titles will be added. Students will conceive, photograph, edit and complete a short movie. Additional lab hours required. Prerequisites: ART:275 and Reading Proficiency.

**AT:100 HARDWARE CONFIGURATION AND TROUBLESHOOTING: MACINTOSH/WINDOWS**
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:101 COLOR MANAGEMENT**
This course investigates the use of dedicated software to analyze and color calibrate the computer monitor with related peripheral devices such as cameras, scanners, printers and film recorders. Students will learn the principles of color management, and how to create color signatures or profiles for each device and to integrate the system for color accuracy and consistency. Additional lab hours required. Prerequisites: ART:275 and Reading Proficiency.

**AT:105 DIGITAL PRINTING**
This course is a survey of digital printing possibilities. Methodologies for converting electronic files to printed media are investigated. Various of printing technologies are evaluated for appearance, color fidelity, resolution, saturation and permanence. Where applicable to the process examined, variations in media (paper, canvas or films) will be tested. Additional lab hours required. Prerequisites: ART:275, ART:172 and Reading Proficiency.

**AT:106 MOTION MEDIA DESIGN**
This course will instruct students 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:275 and Reading Proficiency.

**AT:108 COMPUTER PAINTING AND DRAWING: COREL PAINTER**
Students will utilize a variety of computer drawing software programs to create life drawings utilizing digitizing tablets. Assignments will include still life as well as the human figure. The techniques of using the pressure sensitive drawing tablet will be investigated to allow the creation of expressive line, mass and shading. A portfolio of drawings in both color and monochrome will be submitted at the conclusion of the course. Additional lab hours required. Prerequisites: ART:131 with a grade of “C” or better, ART:109 and Reading Proficiency.

**AT:109 UNIVERSAL DOCUMENT EXCHANGE: ADOBE ACROBAT**
Students will create documents that can be exchanged in multiple software and web applications, while preserving fonts, colors, images, layouts and all original formats. Students will explore linking and logic tree structure for the production of interactive computer based training as well as interactive business communication and collaboration. Additional lab hours required. Prerequisites: ART:131 and Reading Proficiency.

**AT:120 COMPUTER DRAWING I: ILLUSTRATOR**
This course is an introduction 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**
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, drawing 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:124 BOOKMAKING**
Students will learn about the history and aesthetics of books, and will explore (through hands-on studio production) bookmaking and binding techniques. Form, concept, craft, problem-solving ability, creative experimentation, and historical knowledge will all be stressed. Additional lab hours required. Prerequisite: Reading Proficiency.

**AT:131 AIRBRUSH I**
A comprehensive study of the airbrush and its specialized uses. Illustrations, technical rendering, and advertising design projects will be demonstrated through airbrush technique. Additional studio hours may be required. Prerequisite: Reading Proficiency.

**AT:135 COMMUNICATION AND DESIGN FOR THE WORLD WIDE WEB I**
Students will learn to use the elements of graphic design to produce Web pages that effectively deliver art and information for business/organizational communications. Additional lab hours required. Prerequisites: ART:133 and ART:131 or ART:227 and Reading Proficiency.

**AT:143 COMMUNICATION AND DESIGN FOR THE WORLD WIDE WEB II**
Expand Web site interactivity. This course explores methods of refining basic web site creation and incorporating sophisticated techniques such as cascading style sheets, animation and sound plug-ins, and addressing browser differences. Additional lab hours required. Prerequisites: MCM:135 or AT:135 or IS:135 and Reading Proficiency.

**AT:144 WWW SPECIAL TOPICS**
This course specializes in advanced enhancements to World Wide Web design. Students will learn to encode properties that make the web site more dynamic and interactive. Students will use the latest software to enhance web pages with interactive and animation techniques. Additional lab hours required. Prerequisites: MCM:135 or AT:135 or IS:135 and Reading Proficiency.

**AT:146 3D MODELING I: SURFACE MODELING**
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**
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**
This is a lecture/studio course where students will learn methods of successful lighting design and applications of lighting details to working drawings for residential and commercial environments. Students will learn specifications and how to write a lighting schedule. Additional studio hours required. Prerequisite: Reading Proficiency.
AT:175 VIDEO ART I
An introduction into video art as a personal expressive media for the individual artist, including
work with specific software programs, sound equipment, film, 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. Prerequisites: ART:165 and Reading Proficiency.

AT:176 PHOTOGRAPHY WORKSHOP
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: black-and-white
processing, darkroom work, photography theory, etc. Additional studio hours required. Prerequisite: Reading Proficiency.

AT:177 JEWELRY AND METALSMITHING
This course will introduce students to jewelry design and metalworking 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-back systems, casting, and surface finishing. Additional lab hours required. Prerequisite: Reading Proficiency.

AT:201 MIXED MEDIA
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
Students interested in Comic Book Illustration learn the basics and techniques associated with
this popular genre. Various materials and techniques will be explored to produce formatted comic strips.
Additional studio hours required. Prerequisites: ART:138 and Reading Proficiency.

AT:205 DIMENSIONAL ILLUSTRATION I
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
Students interested in creating 3D Miniature Studio Sets will learn the basics of designing and
constructing miniature sets for numerous 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 I
Digital Illustration I is a comprehensive exposure to the methods and theories of creating
Illustrations using the computer as the final medium. A special emphasis will be placed on creative
processes and using computer graphic software to produce illustrations for portfolio presentation.
Additional lab hours required. Prerequisites: ART:131 and Reading Proficiency.

AT:208 FANTASY ILLUSTRATION I
Students interested in Illustration will learn the basics and techniques of this popular genre used
on book and gaming covers. The student will utilize skills learned in drawing for graphics and
illustration to execute imaginative and creative Illustrations. Additional studio hours required.
Prerequisites: ART:138 and Reading Proficiency.

AT:210 DRAWING PROBLEMS
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
This course allows for advanced and specialized study within the medium of photography.
Focusing on specific subject matter, the course demonstrates the elements of the art. A variety of
topics, outside of the normal curriculum studies, can be offered on a rotating basis.
Additional studio hours required. Prerequisites: ART:165, ART:166 and Reading Proficiency.

AT:213 ADVANCED CERAMICS
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
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:219 FIGURE SCULPTURE
This course is an intensive exposure to creating figurative sculpture. Students will build basic
armatures for both portraits and figures and work in clay from the model. Basic methods of plaster
casting (waste molds) may be offered as an option at the end of the semester. Additional studio
hours required. Prerequisites: ART:111 and Reading Proficiency.

AT:221 WATERCOLOR II
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
An extension 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
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
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:228 FIGURE PAINTING
Drawing and painting from observation of the model in a variety of media. Emphasis will be placed
on understanding the inherent structural and formal problems involved with depicting the human
figure in its environment. Additional studio hours required. Prerequisites: ART:112 with a grade of
"C" or better and Reading Proficiency.

AT:229 ADVANCED PAINTING PROJECTS
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:230 FIGURE SCULPTURE II
This course is a continuation of AT:219 and will more intensely explore methods for creating
figurative sculpture. Students will continue to work from models, increasing their understanding
of structural anatomy and how it relates to surface forms. Additional studio hours required.
Prerequisites: AT:219 and Reading Proficiency.

AT:233 STORYBOARDING/ANIMATICS
This course is an introduction to pre-production planning for special effects and animation
as applied to multimedia, interactive media, video and film. The focus of the class will be
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:131 and ART:238 with
grades of "C" or better and Reading Proficiency.

AT:234 COMPUTER ANIMATION I
This course is an introduction to 3D computer animation. Students will learn basic computer
animation techniques. By producing short animated segments, students will learn animation
fundamentals such as: keyframing, lighting, camera work, texturing, sequencing, rendering, and
post-production. Additional lab hours required. Prerequisites: ART:111 and AT:146 and Reading Proficiency.

AT:235 COMPUTER ANIMATION II
A continuation of 3D Animation I. Students further their skills in 3D Animation II by studying
new techniques such as: 3D camera tracking, advanced keyframing, photo realistic rendering,
advanced post production, and an introduction to character animation. Additional lab hours
required. Prerequisites: AT: 234 and Reading Proficiency.

AT:237 FIGURE SCULPTURE III
This is a continuation of AT:230, Figure Sculpture II. As students gain experience through advanced
projects, emphasis will shift from acquiring foundation skills in three-dimensional figurative
sculpture to concept development and individual direction. Additional studio hours required.
Prerequisites: AT:230 and Reading Proficiency.

AT:242 HISTORY OF GRAPHIC COMMUNICATIONS
This is a survey course on the history of Graphic Communications. This course will begin with the
development of language and will trace the evolution of word and image throughout history using
the works of designers and illustrators that have influenced the continuing development of the
discipline. Prerequisite: Reading Proficiency.

AT:246 ADVANCED COMPUTER ART APPLICATIONS
This course is for individuals who wish to further explore the use of computer graphics as they
can be applied to the advertising and business communication industries. Considerable latitude
will be given as to areas of concentration, but all studies will stress the creative possibilities of the
medium. Additional lab hours required. Prerequisites: ART:131 with a grade of "C" or better and Reading Proficiency.
AT:251 COMPUTER AIDED KITCHEN AND BATH DESIGN 3
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:252 ADVANCED AUTOCAD FOR INTERIOR DESIGN 3
This course will reinforce AutoCAD use by designing on the computer. The students will integrate auxiliary software, do basic perspectives and color plotting of representation, and will learn vendor type add-on software. The students will use the Internet for research and drawing transmission. Prerequisites: ART:154 and Reading Proficiency.

AT:254 WORKPLACE LEARNING: INTERIOR DESIGN 3
This experiential course provides the student the opportunity to apply theory and skills learned in the classroom, learn new skills, and explore career possibilities while supervised by a professional in the field and a faculty member. Students will observe and participate in the functions of the interior design industry to enhance their preparation for entering the field. Minimum 150 hours in the workplace throughout the term. Prerequisites: Satisfactory completion of the first year of program, department approval and Reading Proficiency.

AT:267 COLOR PHOTOGRAPHY II 3
Advanced instruction in the theory of color, materials of color photography, and techniques of color printing. Students will work with transparencies and color reversal materials and explore large format color processes. A portfolio of color prints will be created by the student. Additional studio hours required. Prerequisites: ART:167 and Reading Proficiency.

AT:275 VIDEO ART II 3
A continued investigation into video art as a personal expressive media for the individual artist, including work with computers, sound equipment, photography, and other tools used in the contemporary art world. Students will have the opportunity to investigate these technologies as they combine the various media to make artistic statements based on personal concerns and aesthetic decisions. The course is specifically for the fine artist who wishes to use "low end" and/or "consumer" equipment as a creative media. Emphasis is on relatively complex projects and collaborative ventures, and further developing an individual style of personal expression with these strategies and technologies. Additional lab hours required. Prerequisites: AT:175 or permission of instructor and Reading Proficiency.

AT:276 PHOTO IMAGING II: PHOTOSHOP 3
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:277 PHOTO IMAGING III: PHOTOSHOP 3
This course explores advanced methods of working with continuous tone images. In addition to a general review of the image processing software, topics include such subjects as incorporating color management into the workflow, predictive evaluation of numeric density readings, and a survey of printing device parameters. A portfolio of color images will be produced by the end of the course emphasizing the individual expressiveness of the student. Additional lab hours required. Prerequisites: AT:276 and Reading Proficiency.

AT:279 NON-SILVER PHOTOGRAPHY 3
An introduction to processes which use light sensitive materials other than silver bromide paper to produce imagery. Working from photographic negatives, students will have the opportunity to produce prints using the following methods: Van Dyke Brown printing, Cyanotype, Kwik-print and Photoscreen printing. Additional studio hours may be required. Prerequisites: ART:165 or department approval and Reading Proficiency.

AT:280 ADVANCED PHOTOGRAPHY 1-4
This course is an advanced studio course that will emphasize both the conceptual and technical challenges of creating a cohesive, related body of work for either a portfolio or exhibition. Additional studio hours required. Prerequisites: ART:165, ART:166 and Reading Proficiency.

AT:281 SCULPTURAL MOLD MAKING 1-3
This course offers students individual attention in the variety of approaches to mold making within the field of art. Instruction may focus on any number of applications, including plaster waste, alginite, rubber, silicone, or fiberglass mold making. Objects to be molded and cast will vary along with the appropriate approach. Additional studio hours required. Prerequisites: ART:116, ART:219 and Reading Proficiency.

AT:282 WORKPLACE LEARNING: GRAPHIC COMMUNICATIONS 1-3
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. Prerequisites: ART:134, ART:139 or department approval and Reading Proficiency.

AT:283 DIGITAL MEDIA PORTFOLIO 1
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. Additional lab hours required. Prerequisites: ART:131 and Reading Proficiency.

AUT:150 AUTOMOTIVE FUEL AND INDUCTION SYSTEMS 3
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
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
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
This course teaches the use of handbooks, with emphasis upon interpreting specifications and automatic charts and diagrams.

AUT:163 WORKPLACE LEARNING I: FORD ASSET PROGRAM 7
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. Minimum of 350 hours in the workplace throughout the term. Prerequisites: AUT:156 and AUT:168.

AUT:164 WORKPLACE LEARNING II: FORD ASSET PROGRAM 7
This experiential course provides the student an additional 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. Minimum of 350 hours in the workplace throughout the term. Prerequisites: AUT:163, AUT:167 and AUT:169.

AUT:165 WORKPLACE LEARNING III: FORD ASSET PROGRAM 7
This experiential course provides the student an additional 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. Minimum of 350 hours in the workplace throughout the term. Prerequisites: AUT:164, AUT:150 and AUT:151.

AUT:166 WORKPLACE LEARNING IV: FORD ASSET PROGRAM 7
This experiential course provides the student an additional 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. Minimum of 350 hours in the workplace throughout the term. Prerequisites: AUT:165, AUT:258 and AUT:259.

AUT:167 AUTOMOTIVE ELECTRONICS 3
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
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
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:170 INTRODUCTION TO DEALERSHIP SERVICE 2
This course will introduce the students to electronic service information and software used in the service department as well as warranty procedures and service labor time standards. Emphasis will include the place of safety procedures and MS&G sheets. Additional lab hours required. Corequisites: AUT:156, AUT:163 and AUT:168. Prerequisite: Only open to students currently enrolled in the Ford ASSET Program.

AUT:256 AUTOMOTIVE POWERTRAIN 3
AVI:104 FEDERAL REGULATIONS AND GROUND OPERATIONS
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 encompass 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
This course covers principles of physics with applications in aviation maintenance. Topics include material, 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
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
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, Welding. Additional lab hours required. Prerequisites: AVI:103 and Reading Proficiency.

AVI:122 AIRCRAFT WELDING
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 included 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
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
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
This course covers the principles of hydraulic and pneumatic systems in aircraft and their purpose, inspection, service and repair. This includes in dept 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:103 and Reading Proficiency.

AVI:126 RIGGING, INSPECTION, CABIN ENVIRONMENT, ICE AND RAIN
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 an dprocedures 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
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
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 Aviation Regulations (FAR) Part 147, Appendix D, is Aircraft Electrical Systems. Additional lab hours required. Prerequisites: AVI:102 and Reading Proficiency.

AVI:131 POWER PLANT ELECTRICAL SYSTEMS
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:132 IGNITION AND STARTING SYSTEMS
This course covers 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:133 AIRFLOW, EXHAUST, LUBRICATION AND ENGINE INSTRUMENTS
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 Engine Electrical Systems. Additional lab hours required. Prerequisites: AVI:101 and Reading Proficiency.

AVI:134 RECIPROCATING ENGINES
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 Engine Electrical Systems. Additional lab hours required. Prerequisites: AVI:101 and Reading Proficiency.

AVI:135 PROPELLER SYSTEMS
Students learn the theories of baking science, mathematics, and production required. Prerequisites: AVI:102 and Reading Proficiency.

AVI:136 POWER PLANT FUEL AND FIRE PROTECTION SYSTEMS
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 Propellers. Additional lab hours required. Prerequisites: AVI:101 and Reading Proficiency.

AVI:137 TURBINE ENGINES
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 subject included in this course and required by Federal Aviation Regulations (FAR) Part 147, Appendix D, is Turbine Engines, Auxiliary Power Systems and Unducted Fans. Additional lab hours required. Prerequisites: AVI:101 and Reading Proficiency.

AVI:138 POWER PLANT INSPECTIONS
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:101 INTRODUCTION TO BAKING THEORY
This course introduces the principles of food science and nutrition as they apply to baking and pastry arts. The science of baking is used to explain fundamental baking principles and their function in product preparation and storage. Emphasis will be placed on formulation, ingredients, and sensory evaluations. Additional lab hours required. Prerequisites: CUL:101 and Reading Proficiency.

BAP:105 BREADS, ROLLS, AND BAKERIES
This course introduces the techniques in preparation of assorted breads: quick breads, yeast-raised, laminated, and enriched doughs for the bake shop as well as cookies, pies, and basic bakery staples. The use of baking equipment, scaling and shaping techniques, inventory control, baker’s mathematics, and sanitation are covered. Additional lab hours required. Prerequisites: BAP:101 with a minimum grade of “C” and Reading Proficiency.

BAP:110 PRODUCTION PASTRY TECHNIQUES
This course is designed to give the student working knowledge of traditional and contemporary methods of producing puff pastry, pate a choux, creams, custards, tarts, and mousses. Fundamentals of production and finishing techniques are introduced. Additional lab hours required. Prerequisites: BAP:105 with a minimum grade of “C” and Reading Proficiency.

BAP:115 CAKE PRODUCTION AND DECORATION
This course is designed to expose students to the proper procedures for producing traditional and contemporary cakes. Emphasis will be placed on mixing methods of batters, fillings, and icsings. Skills taught include cake decoration, piping techniques, writing with chocolate, and proper use of a pastry bag. Additional lab hours required. Prerequisites: BAP:110 with a minimum grade of “C” and Reading Proficiency.

BAP:150 BAKESHOP BASICS FOR CULINARY ARTISTS
This course is an introduction to the fundamentals of baking and pastry utilized in the culinary industry. Students will learn the theories of baking science, mathematics, and production techniques. The techniques of production utilizing various processes of fermentation. Elements of basic baking techniques will be emphasized. Emphasis will be placed on mixing methods of batters, fillings, and icsings. Skills taught include cake decoration, piping techniques, writing with chocolate, and proper use of a pastry bag. Additional lab hours required. Prerequisites: CUL:101, HRM:134 and Reading Proficiency.

BAP:160 DESIGN FOR THE PASTRY ARTS
This course will introduce students to the basic principles of drawing and design as it relates to the baking and pastry industry. Students will work with two-dimensional and three-dimensional formats to create a series of assigned projects. The study of color and color theories will be explored. Additional lab hours required. Prerequisites: CUL:101, HRM:134 and Reading Proficiency.

BAP:201 ARTISANAL AND DECORATIVE BREAD
This course will cover various styles of producing artisan and decorative bread. Students will learn the fundamentals of balancing formulations, controlling texture, and developing flavor profiles, with an emphasis on the creation of classical and modern frozen desserts. Consumer marketing and evaluation will also occur during this class. Additional lab hours required. Prerequisites: BAP:201 with a minimum grade of “C” and Reading Proficiency.

BAP:205 ICE CREAM AND FROZEN DESSERTS
This course introduces the multiple production techniques of frozen desserts. Students will learn the fundamentals of balancing formulations, controlling texture, and developing flavor profiles, with an emphasis on the creation of classical and modern frozen desserts. Consumer marketing and evaluation will also occur during this class. Additional lab hours required. Prerequisites: BAP:205 with a minimum grade of “C” and Reading Proficiency.

BAP:210 CHOCOLATE CANDIES AND SHOWPIECES
During this course, students will learn and utilize proper tempering techniques of chocolate. Hand-dipped and molded candies will be produced utilizing various methods. Variations of chocolates, fillings for decorating chocolates, and decorations will be utilized in daily activities. Cocoa-based coloring and texturing mediums will be introduced and used to produce showpieces. Additional lab hours required. Prerequisites: BAP:205 with a minimum grade of “C” and Reading Proficiency.

BAP:215 PLATED DESSERTS
This course focuses on the preparation and presentation of plated desserts. Contemporary versions of traditional desserts will be created utilizing several styles of plate presentation. Advanced flavor development and menu planning will be introduced. Students will simulate a à la carte restaurant plating techniques to present finished desserts. Additional lab hours required. Prerequisites: BAP:215 with a minimum grade of “C” and Reading Proficiency.

BAP:220 SUGAR CANDIES AND SHOWPIECES
This course introduces students to the process of artistic design, drawing, and creation of two- and three-dimensional centerpieces utilizing sugar and pastillage. Students will also produce sugar-based candies utilizing various production methods. Additional lab hours required. Prerequisites: BAP:215 with a minimum grade of “C” and Reading Proficiency.

BAP:260 BAKING AND PASTRY ARTS CAPSTONE
This culminating course focuses on the synthesis and application of the knowledge and skills necessary to successfully obtain the Certified Pastry Culinary certification through the American Culinary Federation. Coursework will include written and practical baking assessments in preparation for this industry-recognized examination. Additional lab hours required. Prerequisites: BAP:220 with a minimum grade of “C”, CUL:150, HRM:112, HRM:128, HRM:134, HRM:146, HRM:201, HRM:205 and Reading Proficiency.
BIO:003 BRIDGES TO BIOLOGY
Bridges to Biology is a non-transferable, preliminary course which prepares students for Introductory Biology. This course gives students experience in applying information management and study skills necessary for success in laboratory and coursework in the natural sciences. Additional lab hours required.

BIO:100 INTRODUCTION TO LIFE SCIENCE LABORATORY SKILLS
This course is part of the Certificate of Specialization in Life Science Laboratory Assistant program. Students will practice basic lab skills in a research laboratory setting. Pipetting, solution and media preparation, dilutions, sterile technique, separation methods, lab math, quality control, documentation, and other appropriate skills are taught with an emphasis on standard lab instrumentation, calibration or verification, and maintenance. Additional lab hours required. Prerequisites: BIO:111, MTH:030 and Reading Proficiency.

BIO:103 PROBLEMS IN ANATOMY
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
This course introduces basic laboratory skills in preparation for Biotechnology I. Topics and techniques include safety, sterile technique, laboratory math, quality systems, documentation, collection of data, metrology, filtration, solution and mini prep, and other appropriate laboratory methods. Additional lab hours required. Prerequisites: MTH:030 or MTH:040 with a minimum grade of "C" and Reading Proficiency.

BIO:105 TOPICS IN EVOLUTION
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
This course will introduce students to basic concepts in human heredity. Areas of emphasis will include patterns of inheritance, population genetics, the genetics of immunity and cancer, genetic engineering, gene therapy, and reproductive technologies. Additional lab hours required. Prerequisite: Reading Proficiency.

BIO:109 HUMAN BIOLOGY
This is an introduction to basic human structure, function and the human body's interaction with its surroundings, including cell theory, genetics, systems biology, ecology and evolution. This course does not fulfill any of the Allied Health and Nursing program requirements at St Louis Community College. This course may fulfill Allied Health and Nursing program requirements at other institutions. Prerequisite: Reading Proficiency.

BIO:110 GENERAL ZOOLOGY
This course provides a survey of the animal kingdom with emphasis on comparative anatomy, physiology, ecology and evolution of the major invertebrate and vertebrate groups. Additional lab hours required. Prerequisite: Reading Proficiency.

BIO:111 INTRODUCTORY BIOLOGY I
Introductory Biology provides a consideration of the principles of biology, with emphasis on the molecular approach to the structure and function of living organisms. This course is for liberal arts students and majors in physical education, physical and occupational therapy, nursing, and other allied health areas. (Credit is not allowed for both BIO:111 and BIO:140). Additional lab hours required. Prerequisite: Reading Proficiency.

BIO:113 MODERN ASPECTS OF BIOLOGY
This course provides a consideration of the principles of biology as they relate to socially relevant issues in nutrition, reproduction, sexuality, heredity, and disease. Prerequisite: Reading Proficiency.

BIO:117 CONSERVATION AND ECOLOGY
This course focuses on the environment and the effects that mankind is having on the Earth. Interrelationships of living things to their environment and to each other are discussed with particular focus on the impact of humans on the environment. Mankind’s use and abuse of renewable and non-renewable natural resources are also considered. Prerequisite: Reading Proficiency.

BIO:120 FIELD ZOOLOGY
A natural history of animals using a wide variety of Missouri habitats. Topics will include insects and other invertebrates, fish, amphibians, reptiles, birds, mammals, conservation and the history of wildlife populations in Missouri. Techniques for collection, preservation or live maintenance and identification will be covered. Not intended for Biology majors. Prerequisite: Reading Proficiency.

BIO:122 HUMAN SEXUALITY
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
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
Students will be introduced to the biological aspects of plant life, including cell structure and function, anatomy, morphology, physiology, taxonomy. The laboratory reinforces some of the topics and concepts covered in the lecture. Additional lab hours required. Prerequisite: Reading Proficiency.

BIO:140 PRINCIPLES OF BIOLOGY I
Quantitatively oriented for pre-medicine, pre-dentistry, pharmacy, biology and other science majors. A consideration of the principles of biology, with emphasis on the molecular approach to the structure and function of living organisms. (Credit is not allowed for both BIO:111 and BIO:140). Additional lab hours required. Prerequisites: CHM:105 and Reading Proficiency.

BIO:141 PRINCIPLES OF BIOLOGY II
A continuation of BIO:140 with emphasis on selected topics in biology covering population genetics, evolution, survey of living plants and animals, ecology and conservation of natural resources. (Credit is not allowed for both BIO:112 and BIO:141). Additional lab hours required. Prerequisites: BIO:140 and Reading Proficiency.

BIO:144 MARINE BIOLOGY
This course introduces students to marine organisms and ecosystems. The interplay of organisms and their environment and other aspects of marine ecology are stressed. Prerequisite: Reading Proficiency.

BIO:145 FIELD EXPERIENCE IN MARINE BIOLOGY 1-2
This course consists of field experiences in marine biology either in Florida or a Caribbean destination. Students learn field techniques for collecting and studying a variety of marine organisms. Emphasis is placed on ecology and identification of marine organisms. The course is only offered in conjunction with or following BIO:144 Marine Biology (the prerequisite course). This course may be taken for 1 hour credit (1 week field experience) or 2 credit hours (2 week field experience). Prerequisites: BIO:144 with grade of "C" or better and Reading Proficiency.

BIO:146 DESERT ECOLOGY
This course is designed to acquaint the student with the special geologic and climatic conditions necessary for the creation of a desert. It will familiarize students with the unique adaptations of plants and animals to the desert environments in various parts of the world. Emphasis will be placed on characterizing and comparing the four North American desert ecosystems. Prerequisite: Reading Proficiency.

BIO:147 FIELD EXPERIENCE IN DESERT BIOLOGY 1-2
This course will be a field experience to the desert southwest. The emphasis will be identification of landforms, plants and animals of the desert habitat. May be 1 or 2 credits depending on length of field trip. Additional hours required. Prerequisite: BIO:146 with grade of "C" or better and consent of instructor. Reading Proficiency.

BIO:148 OZARK ECOLOGY
This course introduces students to one of the most biologicallly 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:149 FIELD EXPERIENCE IN OZARK ECOLOGY 1-2
This course focuses on first-hand field experience in the Ozark mountains and valleys. Emphasis will be placed upon field identification of plants and animals associated with the diverse Ozark natural communities and these organisms’ adaptations to these ecosystems. This field experience may be taken for 1 or 2 credit hours depending upon the length of the field trip (1 or 2 weeks). Prerequisites: BIO:148 with grade of "C" or better or approval of instructor and Reading Proficiency.

BIO:151 BIOLOGY OF HUMAN HEALTH AND DISEASE
This course examines human health and disease from a biological perspective. It will also explore the evolution of microbes and human disease and the influences that regular exercise, diet, and genetic factors have on every day good health. The course will also explore mechanisms, manifestations, and prevention of common diseases, such as heart disease and cancer. Prerequisite: Reading Proficiency.

BIO:152 QUANTITATIVE METHODS IN BIOTECHNOLOGY 2
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:153 INTRODUCTION TO TROPICAL BIOLOGY 3
This course investigates the biological and ecological processes that generate and maintain biodiversity in tropical systems. Issues of conservation, disturbance and management, as well as the sustainable use of natural resources, such as medicinal plants, by indigenous cultures are addressed. Prerequisite: Reading Proficiency.

BIO:154 THE BIOLOGY OF HUMAN SEX 3
This course covers the biological aspects of human sexuality. Topics include male and female reproductive systems, sexual gender, sexually transmitted infections, contraception, assisted reproductive techniques and the development of the fetus. This course will also cover typical and atypical behaviors of sexuality. Prerequisite: Reading Proficiency.

BIO:155 ZOOS AND AQUARIA: PRESERVING NATURE 3
This course introduces students to the application of biological concepts to captive aquatic and terrestrial species. The course will investigate the role that zoos and aquariums play in maintaining biodiversity, animal rehabilitation, assisted reproduction, conservation, and public education. This course will also address skills required for employment opportunities in these fields. Prerequisite: Reading Proficiency.

BIO:156 NATIVE LANDSCAPING FOR WILDLIFE AND PEOPLE 3
The field study course focuses on which native wildflowers, grasses, shrubs, and trees furnish food and cover for wildlife and provide attractive native landscapes of flowers, fruits, and leaves for people. Highlights include 1) investigating biodiversity and sustainability of natural communities, 2) selecting best-adapted species, and 3) designing, planting, and maintaining native landscapes. Prerequisite: Reading Proficiency.

BIO:203 GENERAL MICROBIOLOGY I 4
Introduction to microbes with emphasis on morphology, culture techniques and biochemical activities of bacteria, viruses and fungi. A consideration of human disease producing organisms with regard to their infection and resistance. Additional lab hours required. Prerequisites: BIO:111 with grade of "C" or better; or one year of high school biology and chemistry (with labs) within previous five years of registration date; or permission of the department chairperson of Biology and Reading Proficiency.

BIO:207 ANATOMY AND PHYSIOLOGY I 4
A study of the organization of cells into tissues, organs, and organ systems, with special in-depth study of the integumentary, skeletal, muscular, nervous and endocrine system, and the sensory receptors. Additional lab hours required. Prerequisites: BIO:111 with grade of "C" or better; or one year of high school biology and chemistry (with labs) within previous five years of registration date; or permission of the department chairperson of Biology and Reading Proficiency.

BIO:208 ANATOMY AND PHYSIOLOGY II 4
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 3
Kinesiology is the study of human movement. It involves applying the anatomy of the musculoskeletal system to functional movement as a basis to understanding exercise. Additional lab hours required. Prerequisites: BIO:207 and Reading Proficiency.

BIO:215 HUMAN BODY SYSTEMS 5
This course is a study of the organization and integration of the body's systems. The course progresses from the organization of cells into tissues, organs, and organ systems, to an in-depth study of the physiology, diseases, and other abnormal conditions of the body. Additional hours required. Prerequisites: BIO:111 with a C or better or approval of department chair and Reading Proficiency.

BIO:218 MICROBIOLOGY FOR BIOTECHNOLOGY 4
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
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, CHM:101, all with a minimum grade of "C" and Reading Proficiency.

BIO:220 BIOTECHNOLOGY II 5
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
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
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:224 INTRODUCTION TO BIOINFORMATICS 2
This course provides the Biotechnology undergraduate major with an understanding and preliminary working knowledge of the concepts, methods and tools used in Bioinformatics. Prerequisites: BIO:219 or consent of the instructor and Reading Proficiency.

BIO:225 GENETICS 5
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
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.

BIOMEDICAL ENGINEERING TECHNOLOGY

BE:153 WORKPLACE LEARNING: BIOMEDICAL ENGINEERING TECHNOLOGY 4
This workplace-based course provides the student the opportunity to apply theory and skills learned in the classroom, learn new skills, and explore career possibilities while supervised by a professional in the field and a faculty member. Students will observe and participate in the functions of the industry to enhance their preparation for entering the field. Minimum 50 hours per credit hour in the workplace throughout the term. Prerequisites: BE:150, BIO:102, and EE:132 and Reading Proficiency.

BE:160 WORKPLACE LEARNING: BIOMEDICAL ELECTRONICS TECHNOLOGY 4
This workplace-based course provides the student the opportunity to apply theory and skills learned in the classroom, learn new skills and explore career possibilities while supervised by a professional in the field and a faculty member. Students will observe and participate in the functions of the industry to enhance their preparation for entering the field. Minimum 50 hours per credit hour in the workplace throughout the term. Prerequisites: EE:132 or EE:133, and Reading Proficiency.

BE:254 BIOMEDICAL APPLICATIONS 5
This course develops competencies, including maintenance, troubleshooting and repair, with such basic hospital equipment as transducers, amplifiers, processors, display modules, and respiratory and radiography instruments. Additional lab hours required. Prerequisites: BE:251 and Reading Proficiency.

BUILDING INSPECTION TECHNOLOGY

BIC:101 BASIC BUILDING INSPECTION TECHNIQUES 3
This course offers the student an introduction to the general principles of building inspection. It includes current techniques of field inspections with emphasis on wood, steel frames, modern masonry and concrete design as employed in construction of buildings. Prerequisite: Reading Proficiency.

BIC:102 HOUSING INSPECTIONS AND PROGRAMS 3
A course covering housing codes and housing inspection techniques. The need for the implementation of housing programs and their impact on the community is included. Prerequisite: Reading Proficiency.

BIC:103 BUILDING CODES AND ORDINANCES 3
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

This course introduces students 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:202 STATISTICAL ANALYSIS

This course introduces the student to statistical concepts and techniques used by management in the decision-making process. Descriptive statistics includes the display and summary of data, discrete and continuous probability distributions and random variables. Inferential statistics includes parametric and nonparametric tests of significance, correlation and regression analysis, confidence intervals, and analysis of the variance. Forecasting tools include time series analysis and the derivation and use of index numbers. Prerequisites: MTH:177 and Reading Proficiency.

BUS:250 WORKPLACE LEARNING: BUSINESS AND ECONOMICS

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 30 hours per credit hour in the workplace throughout the term. Prerequisites: Department approval and Reading Proficiency.

BIC:200 PLUMBING AND MECHANICAL INSPECTION

This course covers the 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.

BUS:201 ELECTRICAL INSPECTION

Electrical insulation 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:201 ADMINISTRATION OF BUILDING REGULATIONS

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.

BUS:203 PLAN REVIEW I (NON-STRUCTURAL)

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: FR:210, BIC:103 and Reading Proficiency.

BIC:204 PLAN REVIEW II (STRUCTURAL)

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 string of structural elements of a building, including footings, foundations, beams and columns, walls, roofs, and floors. Prerequisites: BIC:203, ME:243 and Reading Proficiency.

BIC:205 SOILS, GRADING AND WASTE WATER CONTROL

This course offers the student the technical information necessary for the inspection of construction sites. It includes site investigations, soil analysis, solid mechanics, geology, grading, drainage, and retaining wall design and inspection. Prerequisites: MTH:124 and Reading Proficiency.

BUSINESS ADMINISTRATION

BUS:101 SMALL BUSINESS MANAGEMENT

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. 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

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

A survey course, designed to give the student a general knowledge of the modern business world and the environment within which it exists and an awareness of the principles of the major functions in managing a business, such as finance, personnel, production, and marketing. Prerequisite: Reading Proficiency.

BUS:116 ENTREPRENEURSHIP

This comprehensive course deals with the theoretical and practical aspects of the student entering business for himself/herself. Covers opportunities, evaluations, operations, and expansion of entrepreneurial situations. Prerequisite: Reading Proficiency.

BUS:201 ELEMENTARY STATISTICS

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

This course covers an introduction to law and the judicial system, business organizations, contracts, torts, property, agency or principal law, antitrust, labor-management, international and other topics such as law related to energy, health, safety and the environment. Prerequisites: Student must have sophomore standing with a cumulative GPA of 2.0 or higher and Reading Proficiency.

CHEMISTRY

CHM:002 PREPARATION FOR CHEMISTRY

This course presents some basic science and mathematical concepts and skills which students need to prepare them to take a college chemistry course. Prerequisite: Previous or concurrent enrollment in MTH:030, or one year of high school algebra.

CHM:101 FUNDAMENTALS OF CHEMISTRY I

Fundamental of Chemistry I is a one semester course which presents the fundamental concepts and symbolism of chemistry with applications to everyday life. The course is suited for allied health students and for students not planning to major in science. Laboratory work presents opportunities to use laboratory equipment, emphasizes observations and measurements, and provides elementary quantitative and qualitative analysis. Additional hours required. Prerequisites: MTH:030 with a minimum grade of “C”, placement into MTH:140 or higher on the Math placement test and Reading Proficiency.

CHM:102 FUNDAMENTALS OF CHEMISTRY II

Continuation of CHM:101. Topics covered are of particular interest to students in respiratory therapy, nursing, and health-related areas in general. Additional lab hours required. Prerequisites: CHM:101 or CHM:102 with a grade of “C” or better and Reading Proficiency.

CHM:105 GENERAL CHEMISTRY I

General Chemistry I is a one-semester course designed for science-related majors that emphasizes the fundamental principles of chemistry. Topics include measurement, physical and chemical processes, nomenclature, atomic structure, quantum theory, stoichiometry, molecular structure, bonding theory, physical properties of gases, thermochemistry, and properties of solutions. Upon completion of the course, students should be able to demonstrate an understanding of the fundamental chemical laws and concepts and will obtain prerequisite chemical knowledge needed for advancement to General Chemistry II. Additional lab hours required. Prerequisites: MTH:140 (or at least one and a half years of high school algebra) and CHM:101 with a minimum grade of “C” or one year of high school chemistry, and Reading Proficiency.

CHM:106 GENERAL CHEMISTRY II

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 to 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:110 or higher on the Math placement test and Reading Proficiency.

CHM:109 CHEMISTRY AND THE ENVIRONMENT

This course is a one-semester course presenting the concepts and symbolism of chemistry with an emphasis on the natural environment and applications to everyday life. This course is suited for students who have a general interest in the study of chemistry in a course containing a laboratory component and is not intended for students planning to major in science or enter an allied health field. Additional lab hours required. Prerequisites: MTH:030 with a minimum grade of “C” or testing into MTH:140 or higher on the Math placement test and Reading Proficiency.
CHM:114 INDUSTRIAL CHEMISTRY
This is a non-laboratory lecture and demonstration course covering elementary chemistry with emphasis on potentially dangerous chemicals in fires and in other industrial situations. The course is not intended for chemistry or engineering majors. Prerequisite: Reading Proficiency.

CHM:121 CHEMICAL TECHNOLOGY I
The specific purpose of this course is to provide part of two years of training for a career as a chemical technician. An inorganic chemistry review will be provided with the following topics covered: statistical analysis, physical properties, and gravimetric analysis. Additional hours required. Corequisite: GE:101. Prerequisites: CHM:101, MTH:140 and Reading Proficiency.

CHM:122 CHEMICAL TECHNOLOGY II
This course is an introduction to the laboratory work in organic chemistry. The emphasis of the course is on the more 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:206 ORGANIC CHEMISTRY LECTURE I
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
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
This course is an introduction to the laboratory work in organic chemistry. The emphasis of the course is on the more 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
This course is a continuation of CHM:210 Organic Chemistry Lab I. The emphasis of the course is on synthesis of organic compounds, including multiple-step syntheses, and on characterization and analysis of organic compounds and exploration of instrumental methods. Additional lab hours required. Prerequisites: Concurrent or prior enrollment of CHM:207 with a minimum grade of “C” and CHM:210 with a minimum grade of “C” and Reading Proficiency.

CHM:212 BIO-ORGANIC AND ANALYTICAL CHEMISTRY
An introduction to analytical chemistry, organic chemistry and biochemistry. Laboratory work is primarily quantitative analysis. Primarily for students interested in the clinical laboratory technology program. Not intended for students in pre-medicine or planning to major in chemistry. Prerequisites: CHM:101 or CHM:105 and Reading Proficiency.

CHM:213 CHEMICAL TECHNOLOGY SEMINAR
Present basic electricity and electronic theory, techniques, and hardware to chemical technology students who have no previous formal training in this area. Manual skills (soldering, wire splicing, minor electrical repairs, troubleshooting) will be emphasized. This course presents a practical exposure to simple electronic schematic interpretations, location of test points and component identification. Some elementary breadboarding using commercially available training kits will be presented. The use of various volt/ohm meters and test equipment will be introduced. Real and simulated electrical/electronic troubleshooting situations will be presented using actual analytical chemistry instrumentation. Prerequisites: Concurrent enrollment in CHM:221 or permission from instructor and Reading Proficiency.

CHM:214 ADVANCED CHEMICAL TECHNOLOGY SEMINAR
Emphasis on specialized laboratory techniques and procedures in advances in analytical chemistry instrumentation. An introduction to chemical literature searches both manually and by computer will be presented using both in-house and external consultants and facilities. This course will explore the opportunities and profession of chemical technicians. Specialized resources, advances, and professionals will be presented in seminar format. Specialized topics (ethics, chemical waste disposal and separations) will be included. Prerequisite: Concurrent enrollment in CHM:221 or permission from the instructor and Reading Proficiency.

CHM:221 CHEMICAL TECHNOLOGY III
The specific purpose of this course is to provide part of two years of training for a career as a chemical technician. Organic chemistry theory is introduced with laboratory work focusing on organic separation and synthesis techniques. Infrared spectrophotometric analysis of a variety of samples complements the laboratory work. Additional hours required. Prerequisites: CHM:122 and Reading Proficiency.

CHM:222 CHEMICAL TECHNOLOGY IV
The specific purpose of this course is to provide part of two years of training for a career as a chemical technician. Organic chemistry theory is continued with nuclear magnetic resonance spectrophotometric analysis complementing the laboratory work. Gas chromatographic techniques are covered for both qualitative and quantitative analysis. Additional hours required. Prerequisites: CHM:221 and Reading Proficiency.

CHM:231 CHEMICAL TECHNOLOGY V
This course is a continuation of CHM:221 Chemical Technology III. The specific purpose of this course is to provide part of two years of training for a career as a chemical technician. Organic chemistry theory and lab practice is introduced complemented with mass spectrophotometric analysis. High pressure liquid chromatographic techniques for both qualitative and quantitative analysis are covered. Additional hours required. Prerequisites: CHM:222 and Reading Proficiency.

CHM:232 CHEMICAL TECHNOLOGY VI
This course is a continuation of CHM:222 Chemical Technology IV. The specific purpose of this course is to provide part of two years of training for a career as a chemical technician. Biochemical theory is introduced with laboratory work focusing on biochemical separation and purification techniques. Electrophoretic analysis of a variety of samples complements the laboratory work. Additional hours required. Prerequisites: CHM:231 and Reading Proficiency.

CHINESE

CHI:101 ELEMENTARY CHINESE I
This course is a beginning course that presents the basic structure and vocabulary necessary to participate in elementary Chinese conversations. Students will communicate in written form using the Pinyin style of writing and will learn the correct tones for spoken Chinese. Prerequisite: Reading Proficiency.

CHI:102 ELEMENTARY CHINESE II
Continuation of CHI:101. Concentration will be placed on vocabulary acquisition and the oral use of the language. Prerequisites: CHI:101 and Reading Proficiency.

CIVIL ENGINEERING TECHNOLOGY

CE:108 CONSTRUCTION METHODS
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
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
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
This course deals with the fundamental principles of structural design. Topics include the analysis of structures to determine internal and external forces and the design of members and connections based on allowable bending, tension, compression and shearing stresses. The graphical analysis of statics problems is included. Students considering careers as architects or engineers should enroll in this course, rather than in Structures for Technicians. Additional lab hours required. Prerequisites: MTH:124 or equivalent and Reading Proficiency.

CE:118 SUSTAINABLE CONSTRUCTION
The emphasis in this class is on the ‘green building’ revolution, its socioeconomic importance and impact, how sustainable construction differs from the traditional approach, the Leadership in Energy and Environmental Design (LEED) and Green Globes rating systems and how these rating systems impact various aspects of a building and its components and systems. Prerequisite: Reading Proficiency.

CE:130 INTRODUCTION TO CONSTRUCTION
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
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
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
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
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:234  STRUCTURAL ANALYSIS 3
Applications of loads and their transmission through structures; stability and determinacy; shear and moment in beam/column structures; analysis of trusses; influence diagrams; deflection of beams. Prerequisites: Concurrent with ME: 243 and Reading Proficiency.

CE:235  CONSTRUCTION OFFICE PRACTICE 3
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:236  REINFORCED CONCRETE DESIGN 3
Design and investigation of reinforced concrete beams, columns, slabs, and footings using the Strength Method in accordance with the 1977 ACI Building Code. Prerequisites: ME: 243 and Reading Proficiency.

CE:237  STRUCTURAL STEEL DESIGN 3
Investigation and design of structural steel beams, columns, tension members, welded and bolted connections. Prerequisites: ME: 243 and Reading Proficiency.

CE:240  SURVEYING I 3
This introductory course in land surveying will explore the theory, history and practice of plane surveying. It includes the use and care of transit, levels, and tapes, as well as their more modern counterparts. The emphasis of the course is placed on laboratory problems including but not limited to: area measurements, elevation determinations, angle collection methods, traverse calculations, and topographic map compilation. Office and field methods are covered. Additional hours required. Prerequisites: MTH:134 or MTH:144 or MTH:170 or MTH:185 and Reading Proficiency.

CE:243  INTRODUCTION TO ENVIRONMENTAL ENGINEERING 3
This course provides an overview of environmental engineering principles as they pertain to water resources, water pollution, air pollution and solid/hazardous wastes. Initially, the focus is on population, energy, ecology, meteorology and human impacts to establish the underlying concepts that are important to the study of environmental engineering. Subsequently, the focus shifts to water resources and supply as well as pollution from water, air, and wastes. Treatment and environmental management methods for the various types of pollution and environmental problems are presented in a quantitative manner. The course is quantitative in nature and relies on a background of chemistry, physics, and mathematics. Prerequisite: Reading Proficiency.

CE:247  LEGAL ASPECTS OF BOUNDARY SURVEYING 3
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
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
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.

CE:253  SURVEYING OFFICE PRACTICES 3
In this course students will gain experience in the software, hardware, techniques and skills necessary to function in a survey or design office. Students will become familiar with: estimating, budgeting, scheduling, personnel management, writing legal descriptions, subdivision and planning procedures applications, as well as typical ordinances and regulations. Prerequisites: CE:240 and Reading Proficiency.

CLT:100  ORIENTATION TO THE MEDICAL LABORATORY 1
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
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:102  ROUTINE ANALYSIS 2
Theory and principles including basic physiology of the kidney and study of the body fluids such as urine, gastric contents, bile, pleural fluid. The techniques and theoretical bases of urine testing and normal and abnormal finding. Practical application will be taught. Prerequisite: Reading Proficiency.

CLT:103  HEMATOLOGY 3
Theory and principles of physiology of blood forming organs, blood cell maturation, blood dyscrasia, techniques of staining, counting and differentiating cell morphology. Also, the theory and principles of the mechanism of coagulation with analysis of the various factors. Prerequisites: CLT:100 or CLT:101 and Reading Proficiency.

CLT:104  PATHOGENIC BACTERIOLOGY I 4
The study of micro-organisms with emphasis on the bacteria in diseases of man. Theory and principles of isolation, identification, biochemical reactions, growth requirements, susceptibility testing will be considered. Theory and practical application will include lecture, demonstration, laboratory practice, slides, films and examinations. Additional lab hours required. Prerequisites: CLT:101 and Reading Proficiency.

CLT:105  BASIC MEDICAL LABORATORY SKILLS 4
Practice of basic skills common to most clinical laboratories with emphasis on “doing” rather than principles of laboratory testing. Skills such as staining, phlebotomy, pipetting, use of the microscope, practice of diagnostic procedures will be stressed. Prerequisites: CLT:100, CLT:101, CLT:102, CLT:103, CLT:104 and Reading Proficiency.

CLT:200  PATHOGENIC BACTERIOLOGY II 4
The role of micro-organisms in diseases of man with emphasis on differential culture methods is presented, also consideration of media, biochemical reactions, sensitivity and growth requirements. Included is bacteria rickettisia, viruses, mycology and parasitology. Theory principles and practical application will include such methodology as lecture, demonstration, laboratory practice, slides, films and examinations. Additional lab hours required. Prerequisites: CLT:101 or CLT:104 or CLT:105 and Reading Proficiency.

CLT:201  CLINICAL CHEMISTRY I 5
Stresses theory and principles of quantitative and qualitative analysis of body fluids such as blood, urine and spinal fluid as well as feces, calculus and other material. Information about physiology will be included to increase understanding of need for testing. Instrumentation and quality control will be taught. Prerequisites: CHM:101, CHM:212, CLT:105 and Reading Proficiency.

CLT:202  CLINICAL PRACTICE I 4
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 laboratory, blood bank, hematology, urinalysis, serology and immunology departments. Prerequisites: CLT:105 and Reading Proficiency.

CLT:204  BLOOD BANK 2
Introduction to the basic immunologic and genetic principles governing blood groups and transfusion reaction. Theory and principles of routine laboratory testing procedures will be presented. Additional lab hours required. Prerequisites: CLT:105 and Reading Proficiency.

CLT:205  PATHOLOGY CORRELATION CONFERENCE 1
The inter-relationships of laboratory tests correlated with the disease will be stressed. Significance of laboratory testing and results will be taught with a dynamic overview to diagnosis, and prognosis. Additional hours required. Prerequisites: CLT:202, CLT:204, CLT:210 and Reading Proficiency.

CLT:206  CLINICAL CHEMISTRY II 4
Continuation of CLT:201. In addition, enzyme, hormone, and automation with some practical application will be taught. Prerequisites: CLT:201 and Reading Proficiency.

CLT:207  CLINICAL PRACTICE II 4
A continuation of CLT:202. Twenty-four hours clinical practice each week in hospital or private laboratories. Prerequisites: CLT:202 and Reading Proficiency.
COLLEGE ORIENTATION

COL:080 ACCESS TO COLLEGE
This course is designed as a pilot project called ATC (Access to College) between St Louis Community College-Floresant Valley and Ferguson-Floresnt Special School District. This course will be for developmental, dual enrolled students in the ATC program. There are two concurrent courses that will be taught in this program-COL:080 and ADA College Preparation Courses. The purpose of the COL:080 course is to facilitate a successful transition experience for students with disabilities who are enrolled in the ATC program. Through interactive learning, ATC students will be introduced to the process of upgrading higher education. Students will learn about college-level study skills and college resources to assist them in their personal and academic adjustment to college. Prerequisite: Students must be enrolled in the ATC (Access to College) Program.

COMMUNICATIONS

COM:101 ORAL COMMUNICATION I
This is the basic course in speech communication. It offers students an opportunity to explore effective one-to-one, small group, and large group oral communication processes. Emphasis is placed on a theoretical/conceptual approach as well as skill development and application or oral communication concepts to various communication settings and relationships. Prerequisites: Reading Proficiency and concurrent enrollment in RDG:030 or ENG:070.

COM:102 ORAL COMMUNICATION II
This course focuses on interpersonal communication skills. The techniques used in this class will include videotaping, class discussion, one-on-one encounters and group interaction. Interpersonal theory will be examined to give the student a comprehensive approach to communication. Prerequisite: Reading Proficiency.

COM:103 SMALL GROUP COMMUNICATION
A study of the principles and concepts of small group communication. Students are encouraged to develop and improve their skills for business management, education, community activities and interpersonal communication. Prerequisite: Reading Proficiency.

COM:104 PERSUASION
This course examines the principles of persuasion as they apply to a wide variety of communication formats and situations. Students are given the opportunity to analyze and create persuasive messages that pertain to work, relationships, the mass media, and the arts. The course focuses on the skills necessary to become a more effective sender and receiver of persuasive communication. Prerequisite: Reading Proficiency.

COM:105 INTERVIEW PROCESS
This course will provide students with an understanding of the interview process, the principles involved, types of interview questions and their uses, and interview structures. Prerequisite: Reading Proficiency.

COM:107 PUBLIC SPEAKING
This course studies the role of public speaking in communication through the theory and practice of researching, organizing, and delivering of public presentations. Audience analysis, critical listening, and the ethical dimensions of communication are also emphasized. Skills are developed through practicing speech fundamentals and analyzing contemporary and classical presentations. Prerequisite: Reading Proficiency or concurrent enrollment in RDG:030 or ENG:070.

COM:110 ORGANIZATIONAL COMMUNICATION IN A GLOBAL AGE
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, styles, sub-systems, role expectations, and their interrelationships; theories of crime, punishment and rehabilitation. Prerequisite: Reading Proficiency.

COM:111 VOICE AND ARTICULATION
Principles and practice of improving voice, articulation, pronunciation, foreign and regional dialects. Primary emphasis on individual speech improvement. Frequent use of audio-record tape for self evaluation. Prerequisite: Reading Proficiency.

COM:114 ORAL INTERPRETATION OF LITERATURE
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 responsible communication style. Prerequisite: Reading Proficiency.

CRJ:101 AMERICAN CORRECTIONAL SYSTEM
A study of the correctional process from law enforcement through the administration of justice, probation, parole, prisons and correctional institutions. A study of the history and philosophy of corrections. Prerequisite: Reading Proficiency.

CRJ:102 REHABILITATION, PAROLE, AND PROBATION
Analysis and evaluation of the concept and practices of rehabilitation in contemporary correctional systems; discussion of correctional institutions and the various faith-based services. Development, organization, operation and result of systems of probation and parole. Prerequisites: CRJ:101 and Reading Proficiency.

CRJ:111 RULES OF CRIMINAL EVIDENCE
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
The history and philosophy of the system of criminal justice in America, identifying the various sub-systems; role expectations, and their interrelationships; theories of crime, punishment and rehabilitation. Prerequisite: Reading Proficiency.

CRJ:123 JUVENILE JUSTICE
The organization, functions and jurisdiction of juvenile agencies; the detention of juveniles and the processing of neglected and abused children. The intent, application, and procedures of the Missouri Juvenile Code; juvenile case disposition, rights of juveniles, crime prevention methods and reporting procedures. Prerequisite: Reading Proficiency.

CRJ:124 CRIMINAL LAW AND PROCEDURES
An introduction to the study of criminal, common, and statutory law within the context of enforcement. Prerequisite: Reading Proficiency.
CRJ:206 MANAGEMENT OF HUMAN CONFLICTS 3
Explores the areas of potential conflict that can occur between members of the criminal justice community and various ethnic, racial, and regional sub-cultures. The root causes of the potential conflicts in both criminal justice organizations and occupational subcultures will be investigated. Issues of prejudice and discriminatory practices, both real and perceived, will be discussed as factors contributing to conflict. Proactive and reactive intervention techniques will be addressed in order to learn how to keep potential conflict from becoming actual conflicts. Prerequisite: Reading Proficiency.

CRJ:207 POLICE SUPERVISION 3
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 line police manager. Emphasis is placed on both individual and organizational development. Prerequisite: Reading Proficiency.

CRJ:208 CORRECTIONAL POLICIES AND PROCEDURES 3
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
A field work experience in Criminal Justice Organizations. Students are expected to commit themselves to 120 hours of work experience during the semester. Prerequisites: Corrections Option—CRJ:122, CRJ:101 and CRJ:102. Law Enforcement Option—CRJ:122, CRJ:124 and CRJ:111. Reading Proficiency. Concurrent enrollment in CRJ:211.

CRJ:211 CRIMINAL JUSTICE PRACTICUM SEMINAR 3

CRJ:212 CRIMINAL INVESTIGATION 3
The study of the criminal act and its investigation, including specific crimes against persons and property. The process of fact-gathering and problem of legally admissible proof will be considered. Prerequisite: Reading Proficiency.

CRJ:213 VICTIMOLOGY 3
This course examines the criminal justice process from the perspective of the victim, their families, and society. Emphasis is placed on the etiology of trauma, motivational issues of offending, the probability and effects of victimization and response patterns to victimization by criminal justice practitioners, the community and the media. Prerequisites: CRJ:122 and PSY:200 with minimum grades of “C” and Reading Proficiency.

CULINARY ARTS

CUL:101 SAFETY AND SANITATION 1
This course will prepare students to take the ServSafe Food Protection Manager Certification exam. Content focuses on 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 and Critical Control Points (HACCP). Additional hours required. Prerequisite: Reading Proficiency.

CUL:110 FOOD PREPARATION PRACTICAL I 3
The student will master competencies for tools and equipment, kitchen organization, converting and following recipes, applying safety and sanitation, vegetable cuts (American Culinary Federation competition cuts), stocks, soups, sauces, basic cooking methods, and introduction to meat, and poultry preparation. Additional hours required. Prerequisites: Grades of “C” or better in CUL:101 and CUL:105 and Reading Proficiency.

CUL:115 FOOD PREPARATION THEORY AND PRACTICAL II 3
This course introduces the student to the subject of meats and their application in foodservice operations. Students will learn about the muscle and bone structure of beef, veal, pork, lamb, poultry and fish; fabrication methods for sub-primal and foodservice cuts; and proper tying and trimming methods. Topics will include meat inspection, quality and yield grading, cooking and yield testing, purchasing specifications, preferred cooking methods for all meats, proper knife selection, and butchery equipment. Sanitation and safety standards will be stressed throughout. Additional hours required. Prerequisites: CUL:110 with a minimum grade of “C” and Reading Proficiency.

CUL:120 FOOD PREPARATION THEORY AND PRACTICAL III 3
The student will master the foundation of cooking techniques and theories from Food Prep Theory 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. Additional hours required. Prerequisites: CUL:115 with a minimum grade of “C” and Reading Proficiency.

CUL:150 CULINARY ESSENTIALS FOR THE PASTRY ARTS 3
This course will introduce students enrolled in the Baking and Pastry Arts curriculum to the fundamentals of savory food production. Proper methods of preparing stocks, soups, sauces, classical vegetable cuts, and basic cooking principles for meat, poultry, seafood, salads, breakfast, starches, vegetables, and salads will be paramount. Additional hours required. Prerequisites: CUL:101, HRM:134 and Reading Proficiency.

CUL:201 GARDE MANGER 3
This course is designed for cold food production and Charcuterie. The course will allow the student to develop fundamental principles of the cold kitchen including methods of salad and sandwich preparation. Aspic Gelee, Chaud Froid, Hors de oeuvres, canapes and appetizers, buffet and platter presentations, ice and vegetable carvings, pickling, smoking and condiments. Students will also gain an understanding of various cheese categories and their culinary uses. Additional hours required. Prerequisites: BAP:150 and CUL:120 with minimum grades of “C” and Reading Proficiency.

CUL:205 GLOBAL CUISINE 3
In this course students prepare, taste, serve, and evaluate traditional, regional dishes of Europe and the Mediterranean, Asia, Africa and Middle East. Emphasis will be placed on ingredients, flavor profiles, preparation, and techniques representative of various global cuisines. Additional hours required. Prerequisites: BAP:150 and CUL:120 with minimum grades of “C” and Reading Proficiency.

CUL:210 NUTRITIONAL COOKING 3
This course is a study of nutritional cooking. We know that a healthy diet is based on eating a wide variety of high quality foods that provide balanced nutrition. This course is designed to acquaint foodservice professionals with the knowledge and skills to do so. Additional hours required. Prerequisites: Grades of “C” or better in HRM:128, CUL:115 and BAP:150 and Reading Proficiency.

CUL:215 AMERICAN REGIONAL CUISINE 3
This course introduces the student to regional American cuisine from nine distinct regional culinary and two specialty traditions within North American cuisine. Students will gain the opportunity to develop professional culinary skills in classic and contemporary formats. Additional hours required. Prerequisites: CUL:120 and BAP:150 with minimum grades of “C” and Reading Proficiency.

CUL:250 CULINARY ARTS CAPSTONE 6
The course will be operational in nature by requiring the student to use both technical knowledge and managerial ability to organize and complete a commercial simulation of a one meal operation. The application of the theory will be used and tested in the lab setting. Additional hours required. Prerequisites: CUL:201, CUL:205, CUL:215 all with a minimum grade of “C” and HRM:205 and Reading Proficiency.

DEAF COMMUNICATION STUDIES

DCS:001 CONVERSATIONAL SIGN II 3
This course is designed for anyone interested in taking only one or two courses to converse with a deaf friend, colleague, fellow student, etc. Students will learn fingerspelling, approximately 1000 words organized into conversational themes or topics. This is not a preliminary course to the Deaf Communication Studies program.

DCS:104 AMERICAN SIGN LANGUAGE I 5
This course is for students planning to pursue sign language studies in depth. Intensive exposure is given to ASL, allowing development of beginning level communication skills used with deaf persons. Comprehension of target language is emphasized. ASL linguistic and cultural features are presented in the context of learning experiences. Prerequisite: Reading Proficiency

DCS:105 AMERICAN SIGN LANGUAGE II 5
Intensive exposure is given to ASL, allowing continued development of intermediate level communication skills utilized in interaction by deaf persons. Emphasis is given to comprehension and production skills. Linguistic and cultural features are presented in the context of language learning experiences. Prerequisites: DCS:104 with grade of “C” or better or permission of department and Reading Proficiency.

DCS:106 AMERICAN SIGN LANGUAGE III 5
Continued exposure is given to ASL, allowing greater development of expressive and receptive ASL communication skills. Linguistic features of ASL and cultural features of the American Deaf community are presented in the context of language learning experiences. Prerequisites: Department permission and Reading Proficiency.

DCS:107 FINGERSPELLING 3
This course develops expressive and receptive fingerspelling skills based on word and phrase recognition principles. Because a manual alphabet is used by deaf people, it is essential to develop communication skills in ASL or PSE. Prerequisites: DCS:104 and Reading Proficiency.

DCS:108 ORIENTATION TO INTERPRETING 3
An overview of interpreting as an occupation. Topics include interpersonal skills, professional ethics, parameters of responsibility of the paraprofessional, examination of community resources, and legal ramifications. Prerequisites: DCS:106, DCS:109 with a grade of “C” or better and Reading Proficiency.

DCS:109 ETYMOLOGY FOR INTERPRETERS 3
This course instructs students in the fundamentals of language building, interpreting, translating and legal ramifications. Prerequisites: Reading Proficiency in English and sign vocabulary development. Students will learn discourse and comparative analysis techniques. Corequisite: DCS:106. Prerequisites: ENG:101 with a grade of “C” or better and department permission and Reading Proficiency.
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<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>DCS:109</td>
<td>COMMUNICATIONS STUDY</td>
<td>3</td>
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<tr>
<td>DCS:110</td>
<td>DEAF THEATRE STUDIES</td>
<td>3</td>
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<tr>
<td>DCS:111</td>
<td>THEORY OF AMERICAN SIGN LANGUAGE</td>
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<tr>
<td>DCS:112</td>
<td>SIGN THEATRE</td>
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<td>DCS:113</td>
<td>SIGN SEMINAR</td>
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<td>DCS:114</td>
<td>THEORY OF AMERICAN SIGN LANGUAGE SEMANTICS</td>
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<tr>
<td>DCS:115</td>
<td>FINGERSPELLING LAB</td>
<td>3</td>
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<td>DCS:116</td>
<td>AMERICAN SIGN LANGUAGE IV</td>
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<td>DCS:117</td>
<td>CONSECUTIVE INTERPRETING</td>
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<td>DCS:118</td>
<td>TRANSLATION APPLICATIONS OF ASL</td>
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<td>DCS:119</td>
<td>PRE-WORKPLACE LEARNING</td>
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<td>DCS:120</td>
<td>TRANSLATION APPLICATIONS OF ASL</td>
<td>3</td>
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<tr>
<td>DCS:121</td>
<td>WORKPLACE LEARNING: DEAF COMMUNICATION STUDIES</td>
<td>3</td>
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**Course Descriptions**

**DCS:109 COMMUNICATIONS STUDY**
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:110 DEAF THEATRE STUDIES**
This course addresses the special considerations of sign language performance. Emphasis is placed on developing theatrical sign and mime skills. Lectures and field trips are included. The course is open to Deaf and non-Deaf students. Prerequisites: Department permission and Reading Proficiency.

**DCS:111 THEORY OF AMERICAN SIGN LANGUAGE**
A course to examine the structural and grammatical principles of ASL. An introductory study of the linguistic and semantic problems of equivalency in English and American Sign Language will be studied. By incorporating linguistic information into the text analysis process, quality interpretation of English and ASL will result. Prerequisites: Prior or concurrent enrollment in DCS:104 with a grade of "C" or better and Reading Proficiency.

**DCS:112 SIGN THEATRE**
This course will explore and mount a small theatre of the deaf production. Theatrical sign and mime skills will be utilized. All students will be involved in developing the ASL translation of a script, building sets and props and performing. The show will perform for elementary school children on Fridays during class time. Prerequisites: DCS:106 and DCS:110 with grades of "C" or better and Reading Proficiency.

**DCS:113 SIGN SEMINAR**
This course is designed to provide increased interactive opportunities for students to continue development of their knowledge of vocabulary and grammatical features of ASL. Instructional approaches include discussion, expansion and explanation in the target language. In addition, the course focuses on colloquialisms, varying registers and socially restricted vocabulary in numerous contexts. Prerequisites: DCS:105 with a grade of "C" or better and Reading Proficiency.

**DCS:114 THEORY OF AMERICAN SIGN LANGUAGE LAB**
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:115 FINGERSPELLING LAB**
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:116 AMERICAN SIGN LANGUAGE IV**
This course provides continued and in-depth exposure to ASL allowing greater development of expressive and receptive ASL communication skill. Advanced linguistic and cultural features are presented in the context of language learning experiences. Prerequisites: DCS:106 with a grade of "C" or better. Reading Proficiency.

**DCS:117 CONSECUTIVE INTERPRETING**
Introduces basic skills necessary for an individual to interpret ASL to English or English to ASL. The course is built around a sequencing of drills and incorporates video and deaf signers. The Code of Ethics is enforced in the classroom. Prerequisites: DCS:106 and DCS:109 with grades of "C" or better or permission of department and Reading Proficiency.

**DCS:118 TRANSLATION APPLICATIONS OF ASL**
Introduces basic skills necessary to simultaneously transcribe Contact/PSE to English or English to Contact/PSE. The course is built around sequencing of drills and exercises and incorporates video 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:119 PRE-WORKPLACE LEARNING**
This course will prepare students to enter the workplace learning experience. Topics will include: professional organizations, certification, contractual factors, market analysis, time management, business management, consumer attitudes and minority accommodations. Prerequisites: DCS:206 and DCS:207 with grades of "C" or better and Reading Proficiency.

**DCS:120 WORKPLACE LEARNING: DEAF COMMUNICATION STUDIES**
This experiential course provides the student the opportunity to apply theory and skills learned in the classroom, learn new skills, and explore career possibilities while supervised by a professional in the field and a faculty member. Students will observe and participate in the functions of interpreting to enhance their preparation for entering the field. Minimum of 150 hours in the workplace throughout the term. Prerequisites: DCS:206, DCS:207, DCS:218 with grades of "C" or better and Reading Proficiency.
DENTAL ASSISTING

DA:143 CHAIRSIDE ASSISTING: OPERATIVE DENTISTRY 2
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
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
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
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
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
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
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 1
This course introduces the student to the dental office and provides an opportunity for the application of basic dental assisting skills and clinical support functions. Additional hours required. Prerequisites: DA:144, DA:164, and current enrollment in the Dental Assisting program and Reading Proficiency.

DA:162 DENTAL SYSTEMS MANAGEMENT 1
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
Theoretical knowledge is applied in the clinical lab setting. Emphasis is on developing skill in assisting with restorative procedures and manipulating dental materials. Additional lab hours required. Corequisites: DA:143, DA:157 and DA:165. Prerequisites: DA:144, current enrollment in Dental Assisting program and Reading Proficiency.

DA:165 DENTAL MATERIALS 1
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
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 manipulating the 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
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
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
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 intrarural procedures. Corequisite: DA:174. Prerequisites: Current enrollment in the Dental Assisting program and Reading Proficiency.

DA:172 DENTAL PRACTICE MANAGEMENT II 1
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
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

DA:175 DENTAL ASSISTING PRACTICUM II 2
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
The student will assume the role and responsibilities of the dental assistant as an integral member of the dental team during this final phase of clinical experience. Emphasis is placed on the application of theoretical knowledge and practical skills in performing advanced dental assisting procedures and clinical support functions. Additional hours required. Corequisite: DA:174. Prerequisites: DA:161, DA:175, current enrollment in Dental Assisting program and Reading Proficiency.

DA:201 EXPANDED FUNCTIONS I 1
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: placement of retainer 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:202 EXPANDED FUNCTIONS II 1
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: 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:203 EXPANDED FUNCTIONS III 1
Techniques and concepts of orthodontic expanded function procedures delegated to dental assistants in the state of Missouri as specified in the rules and regulations set forth in the Missouri Dental Practice Act. Procedures include: preliminary bending of archwires, placement and cementation of bands and brackets, removal of orthodontic bands and brackets, palliative care of orthodontic emergencies. Additional lab hours required. Prerequisites: Current enrollment in the Dental Assisting program or department approval and Reading Proficiency.

DENTAL HYGIENE

DHY:120 CONCEPTS OF PRE-CLINICAL DENTAL HYGIENE I 3
Development of basic foundations for competent delivery of preventive, therapeutic and educational dental hygiene services to the public. Establish a solid knowledge base for assessment, planning, implementation and evaluation of patient care. Theory and practical aspects of prevention of dental caries, gum disease, and prevention of disease transmission and pre-treatment patient evaluation are emphasized. Basic instrumentation design and technique for use are covered in depth. Additional lab hours required. Prerequisites: Current enrollment in the Dental Hygiene program, CPR health care provider level and Reading Proficiency.
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<tr>
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<tr>
<td>DHY:121</td>
<td>CLINICAL APPLICATIONS LAB I</td>
<td>1</td>
<td>Application of introductory clinical assessment techniques. Theory and application of pit and fissure sealants. Proper positioning for the patient, operator, and dental unit for rendering effective patient treatment. Additional lab hours required. Prerequisites: Current enrollment in the Dental Hygiene program, CPR health care provider level and Reading Proficiency.</td>
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<tr>
<td>DHY:125</td>
<td>PERIODONTICS I</td>
<td>2</td>
<td>A study of the healthy periodontium and an introduction to gingival conditions and diseases. Acquired soft and hard deposits as well as the microbiology of periodontal diseases are covered in depth. Methods of basic oral physiotherapy are introduced. Prerequisites: Current enrollment in the Dental Hygiene program and Reading Proficiency.</td>
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<tr>
<td>DHY:126</td>
<td>DENTAL RADIOLOGY I</td>
<td>2</td>
<td>A study of the production and effects of radiation. Emphasis is given to the effects of variations in exposure control factors, personnel and patient safety measures, and dental radiographic film and film processing. Anatomical landmarks, and their radiographic presentation are introduced. Techniques for placing, positioning, exposing, processing and mounting intraoral radiographs are covered in depth. Additional lab hours required. Prerequisites: Current enrollment in the Dental Hygiene program and Reading Proficiency.</td>
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<tr>
<td>DHY:127</td>
<td>ORAL ANATOMY</td>
<td>3</td>
<td>Introductory study of the teeth, as well as intraoral and perioral structures. Anatomical features of the teeth and oral cavity are covered in depth. Processes and techniques for constructing dental chartings and dentition findings documentations are detailed. The dental caries process is introduced. Rationales and techniques for the use of pit and fissure sealants, as a supportive primary preventive procedure, are presented. Prerequisites: Current enrollment in the Dental Hygiene program and Reading Proficiency.</td>
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<tr>
<td>DHY:128</td>
<td>BIOMEDICAL SCIENCES FOR THE DENTAL HYGIENIST</td>
<td>2</td>
<td>This course is designed to acquaint the dental hygiene student with the basic concepts of pathophysiology. It will deal with selected conditions of the cardiovascular, respiratory, immune, nervous and endocrine systems. Emphasis is on the relationship between these conditions and potential actions and treatment modifications in the dental health care setting. Prerequisites: Current enrollment in the Dental Hygiene program, BIOL:207, BIOL:208, CHM:101 and Reading Proficiency.</td>
</tr>
<tr>
<td>DHY:129</td>
<td>DENTAL-MEDICAL EMERGENCIES</td>
<td>1</td>
<td>Survey of defects/medical problems that have dental management implications and/or possible medical emergency sequelae. Prompt, accurate and ethical emergency prevention, preparation and management techniques are detailed with related legal implications. Prerequisites: Current enrollment in the Dental Hygiene program and Reading Proficiency. One lecture hour per week.</td>
</tr>
<tr>
<td>DHY:130</td>
<td>CONCEPTS OF CLINICAL DENTAL HYGIENE II</td>
<td>3</td>
<td>Techniques for the assessment of medical status and dental conditions as a basis for the dental hygiene diagnosis, and learning theory as a basis for patient education, are covered. Fluoride, as an individual and a community primary preventive measure, is emphasized. Extrinsic stain removal principles are included. Prerequisites: Current enrollment in the Dental Hygiene program, CPR health care provider level, DHY:120, DHY:121 and Reading Proficiency.</td>
</tr>
<tr>
<td>DHY:131</td>
<td>CLINICAL APPLICATIONS LAB II</td>
<td>1</td>
<td>Application of clinical assessment techniques and carries prevention agents, and instrument care and maintenance. Theory and application of periodontal probe instrumentation, and prophylaxis and appliances care and maintenance. Additional lab hours required. Prerequisites: Current enrollment in the Dental Hygiene program, CPR health care provider level. DHY:120, DHY:121 and Reading Proficiency.</td>
</tr>
<tr>
<td>DHY:132</td>
<td>CLINICAL DENTAL HYGIENE II</td>
<td>4</td>
<td>Patient contact is established and coordinates with application of the theories, principles, and responsibilities related to dental hygiene practice at the student's current level of knowledge. Additional lab hours required. Prerequisites: Current enrollment in the Dental Hygiene program, CPR health care provider level, DHY:120, DHY:121 and Reading Proficiency.</td>
</tr>
<tr>
<td>DHY:136</td>
<td>DENTAL NUTRITION AND BIOCHEMISTRY</td>
<td>3</td>
<td>This course is designed to acquaint the student with the concepts of biochemistry and cell metabolism, especially those which are required for a clear understanding of nutrition. Major topics of the course include energy balance and the chemistry, digestion, and metabolism of proteins, carbohydrates and fats. Emphasis is on the importance and function of nutrients for health and disease prevention and the relation of nutrition and oral health. Prerequisites: Current enrollment in the Dental Hygiene program, BIOL:207, BIOL:208, CHM:101 and Reading Proficiency.</td>
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<tr>
<td>DHY:137</td>
<td>ANATOMY AND EMBRYOLOGY OF THE HEAD AND NECK</td>
<td>2</td>
<td>This course covers the gross morphology and embryology of the structures of the head and neck. Lectures in embryology emphasize development of the face and oral structures. Lectures on gross morphology emphasize the cranial nerves (especially the trigeminal and facial), the muscles of mastication and facial expression, and the blood and lymphatic vessels of the head and neck. Prerequisites: Current enrollment in the Dental Hygiene program, BIOL:207, BIOL:208 and Reading Proficiency.</td>
</tr>
<tr>
<td>DHY:138</td>
<td>GENERAL AND ORAL PATHOLOGY</td>
<td>2</td>
<td>An introduction to general pathology with emphasis on oral pathosis. Oral diseases and oral manifestations of systemic diseases are studied in depth. Prerequisites: Current enrollment in the Dental Hygiene program, DHY:127 and Reading Proficiency.</td>
</tr>
<tr>
<td>DHY:142</td>
<td>CLINICAL DENTAL HYGIENE SUMMER</td>
<td>2</td>
<td>Students continue to apply the learned theories, principles and responsibilities related to the field of dental hygiene practice in the dental hygiene clinic. Additional lab hours required. Prerequisites: Current enrollment in the Dental Hygiene program, CPR health care provider level. DHY:132, DHY:130, DHY:131 and Reading Proficiency.</td>
</tr>
<tr>
<td>DHY:215</td>
<td>PAIN CONTROL</td>
<td>2</td>
<td>Theory and clinical applications of pain control interventions appropriate for use within the context of dental hygiene care delivery. The psychology, physiology, and pharmacology of pain control are covered, with emphasis on the prevention, recognition and management of adverse reactions. Interventions within the legal scope of dental hygiene practice in Missouri are the focus of this course. Additional lab hours required. Prerequisites: Current enrollment in the Dental Hygiene program, CPR health care provider level, DHY:137 and Reading Proficiency.</td>
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<tr>
<td>DHY:220</td>
<td>CONCEPTS OF CLINICAL DENTAL HYGIENE III</td>
<td>2</td>
<td>Introduction of additional clinical dental hygiene procedures including advanced periodontal instrumentation and skills to further develop the assessment and implementation of the dental hygiene diagnosis and treatment plan. Theories and principles for the use of power scalers, air polishers, pulp vitality testers, cast and models, tooth bleaching, and tray fabrication and use of the intraoral camera are covered. Research assignments for review of the current literature will continue. Prerequisites: Current enrollment in the Dental Hygiene program, DHY:142, DHY:215, ENG:101 and Reading Proficiency.</td>
</tr>
<tr>
<td>DHY:221</td>
<td>CLINICAL APPLICATIONS LAB III</td>
<td>1</td>
<td>Application of clinical dental hygiene concepts learned in Clinical Dental Hygiene II, Additional lab hours required. Prerequisites: Current enrollment in the Dental Hygiene program, CPR health care provider level, DHY:142, DHY:215 and Reading Proficiency.</td>
</tr>
<tr>
<td>DHY:222</td>
<td>CLINICAL DENTAL HYGIENE III</td>
<td>4</td>
<td>Students continue to apply the learned theories, principles and responsibilities related to the field of dental hygiene practice in the dental hygiene clinic and at community dental health facilities. Additional dental hygiene modalities will be implemented into patient treatment care. Additional lab hours required. Prerequisites: Current enrollment in the Dental Hygiene program, CPR health care provider level, DHY:142, DHY:215, COM:101 and Reading Proficiency.</td>
</tr>
<tr>
<td>DHY:223</td>
<td>COMMUNITY PUBLIC HEALTH</td>
<td>2</td>
<td>This course is designed to provide a study of the history, economics, and management of the public health organization, its delivery, and supportive services. included are the assessment and control of dental disease through dental personnel roles in schools, industry, civic, and public organizations. Emphasis is placed on examinations of the principles of public health, epidemiological methods of investigation, the US health care system, basic concepts in research and biostatistics and community based program planning. Introduction to techniques for evaluating dental/dental hygiene literature is established. Prerequisites: Current enrollment in the Dental Hygiene program, ENG:101, COM:101 and Reading Proficiency.</td>
</tr>
<tr>
<td>DHY:225</td>
<td>PERIODONTICS II</td>
<td>2</td>
<td>Advanced study of the periodontium in disease. Periodontitis, and its various presentations, is covered in depth, with emphasis on assessment methods and dental hygiene interventions. Basic surgical concepts are introduced. Prerequisites: Current enrollment in the Dental Hygiene program, DHY:125, DHY:138, BIOL:203, ENG:101 and Reading Proficiency.</td>
</tr>
<tr>
<td>DHY:226</td>
<td>DENTAL RADIOLOGY II</td>
<td>1</td>
<td>Advanced study of supplemental dental radiographic techniques and procedures used in contemporary dental practices and facilities. Emphasis is given to extrarad and digital radiography techniques. Supplemental procedures for edentulous and pediatric dental patients are presented. Additional lab hours required. Prerequisites: Current enrollment in the Dental Hygiene program, DHY:126 and Reading Proficiency.</td>
</tr>
<tr>
<td>DHY:228</td>
<td>DENTAL PHARMACOLOGY</td>
<td>2</td>
<td>A study of pharmaceutical classifications, properties and effects. Emphasis is given to the systemic effects of drugs and their dental implications in the management of various medical conditions. Prerequisites: Current enrollment in the Dental Hygiene program, BIOL:203 and Reading Proficiency.</td>
</tr>
<tr>
<td>DHY:230</td>
<td>TRANSITION INTO PROFESSIONAL DENTAL HYGIENE PRACTICE</td>
<td>2</td>
<td>Dental hygiene care for cancer patients, dental implants and suspected cases of child abuse are introduced. The health care provider-patient legal relationship and state rules and regulations for the practice of dentistry and dental hygiene are emphasized. Employment-seeking skills are covered. This course includes a community service practicum learning component. Additional hours required. Prerequisites: Current enrollment in the Dental Hygiene program, DHY:220, DHY:221, DHY:222, DHY:223 and Reading Proficiency.</td>
</tr>
</tbody>
</table>
DHY:232 CLINICAL DENTAL HYGIENE IV 4
Patient care continues and coordinates with the application of the theories, principles, and responsibilities related to dental hygiene practice in the dental clinic and at off-campus community rotation sites. Students will also complete a community service practicum field experience as a component of this course. Additional lab hours required. Prerequisites: Current enrollment in the Dental Hygiene program, CPR health care provider level, DHY:220, DHY:221, DHY:222 and Reading Proficiency.

DIAGNOSTIC MEDICAL SONOGRAPHY

DMS:101 CLINICAL FOUNDATIONS OF ULTRASOUND 2
Topics covered in this course include general pathology and pathophysiology, ultrasound terminology, clinical laboratory tests and diagnostic procedures, patient interview and examination techniques, chart and referral evaluation and embryology. Prerequisites: Current enrollment in the Diagnostic Medical Sonography program or permission of the program director and Reading Proficiency.

DMS:102 ETHICAL PRACTICES AND PROFESSIONAL ISSUES 2
This course will examine a number of topics including principles of 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 Diagnostic Medical Sonography program or permission of the program director and Reading Proficiency.

DMS:103 ULTRASOUND PHYSICS AND INSTRUMENTATION I 2
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 3
Topics in the course include transducer parameters, principles of ultrasound instruments and modes of operation, principles of Doppler techniques, methods of Doppler flow analysis and acoustical artifacts. Prerequisites: Current enrollment in the Diagnostic Medical Sonography program or permission of the program director and Reading Proficiency.

DMS:105 MEDICAL SONOGRAPHY I 3
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 1
Laboratory demonstration 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 Diagnostic Medical Sonography program or permission of the program director and Reading Proficiency.

DMS:107 MEDICAL SONOGRAPHY PRACTICUM I 2
Observation and initial scanning experience of abdominal, obstetrical and gynecologic sonographic examinations. Additional hours required. Prerequisites: Current enrollment in the Medical Sonography learning concentration or permission of the program director and Reading Proficiency.

DMS:108 MEDICAL SONOGRAPHY II 3
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
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 I 2
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
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
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 Sonography concentration, Diagnostic Medical Sonography program or permission of the program director and Reading Proficiency.

DMS:113 CARDIAC SONOGRAPHY SCANNING TECHNIQUES I 1
Laboratory demonstration 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 Sonography concentration or permission of the program director and Reading Proficiency.

DMS:114 CARDIAC SONOGRAPHY PRACTICUM I 2
Observation and initial scanning experience of transthoracic adult cardiac sonographic examinations. Additional hours required. Prerequisites: Current enrollment in the Cardiac Sonography concentration, Diagnostic Medical Sonography Program or permission of the program director and Reading Proficiency.

DMS:115 CARDIAC SONOGRAPHY II 3
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
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 I 2
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
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:119 VASCULAR TECHNOLOGY I 3
This course will present 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 Vascular Technology learning concentration or permission of the program director and Reading Proficiency.

DMS:120 VASCULAR TECHNOLOGY SCANNING TECHNIQUES I 1
Laboratory demonstration and student performance of standard protocols for the most common venous and arterial examinations, with emphasis on recognition of normal gray scale and Doppler patterns. Additional lab hours required. Prerequisites: Current enrollment in the Vascular Technology learning concentration or permission of the program director and Reading Proficiency.

DMS:121 VASCULAR TECHNOLOGY PRACTICUM I 2
Observation and initial scanning experience of arterial and venous vascular examinations. Additional hours required. Prerequisites: Current enrollment in the Vascular Technology learning concentration or permission of the program director and Reading Proficiency.

DMS:122 VASCULAR TECHNOLOGY II 3
Further study of the clinical applications of Vascular Technology including the pathophysiologic basis, clinical signs and symptoms, related diagnostic procedures and typical findings of common and rare conditions of the carotid and lower extremity vascular systems. Prerequisites: DMS:119 or permission of the program director and Reading Proficiency.

DMS:123 VASCULAR TECHNOLOGY SCANNING TECHNIQUES II 1
Laboratory demonstration and performance of standard protocols for both common and rare examinations, including transcranial and peripheral Doppler, vein mapping and the upper extremity venous and arterial examinations. Additional lab hours required. Prerequisites: DMS:120 or permission of the program director and Reading Proficiency.
Course Descriptions

**DMS:124 VASCULAR TECHNOLOGY CLINICAL APPLICATIONS I**
2
Review of abnormal vascular examinations of the carotid and lower extremities in order to further develop 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:119 or permission of the program director and Reading Proficiency.

**DMS:125 VASCULAR TECHNOLOGY PRACTICUM II**
3
Clinical performance of vascular procedures under the supervision of an experienced Vascular Technologist. Additional hours required. Prerequisites: DMS:121 or permission of the program director and Reading Proficiency.

**DMS:201 ULTRASOUND PHYSICS AND INSTRUMENTATION III**
3
Topics in this course include 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
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
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
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:205 MEDICAL SONOGRAPHY CLINICAL APPLICATIONS II**
2
A further review of less common 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:110 or permission of the program director and Reading Proficiency.

**DMS:206 MEDICAL SONOGRAPHY PRACTICUM IV**
3
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
Further study of the clinical applications of cardiac sonography including pediatric applications and other advanced and/or imaging techniques. Additional hours required. Prerequisites: DMS:115 or permission of the program director and Reading Proficiency.

**DMS:208 CARDIAC SONOGRAPHY PRACTICUM III**
4
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
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:210 CARDIAC SONOGRAPHY CLINICAL APPLICATIONS II**
2
A further review of more rare abnormal cardiac sonographic examinations in order to further develop the critical thinking skills required to correlate the clinical history, clinical signs and symptoms and the results of other diagnostic tests with the results of the sonographic examination. Prerequisites: DMS:117 or permission of the program director and Reading Proficiency.

**DMS:211 CARDIAC SONOGRAPHY PRACTICUM IV**
3
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.

**DMS:212 VASCULAR TECHNOLOGY III**
2
Further study of the clinical applications of vascular technology including abdominal Doppler applications and other advanced and/or rare examinations. Additional hours required. Prerequisites: DMS:122 or permission of the program director and Reading Proficiency.

**DMS:213 VASCULAR TECHNOLOGY PRACTICUM III**
4
A continuation of clinical experience with achievement of minimal competency in the most common vascular examinations. Additional hours required. Prerequisites: DMS:125 or permission of the program director and Reading Proficiency.

**DMS:214 VASCULAR TECHNOLOGY IV**
4
Topics in this course will include therapeutic interventions, intraoperative monitoring and the use of ultrasound contrast agents. The remainder of the course will consist of review in preparation for the certification examinations in Vascular Technology. Prerequisites: DMS:212 or permission of the program director and Reading Proficiency.

**DMS:215 VASCULAR TECHNOLOGY CLINICAL APPLICATIONS II**
2
Review of abnormal vascular examinations of the cerebrovascular system, upper and lower extremity, and the abdomen in order to further develop the critical thinking skills required to correlate the clinical history, clinical signs and symptoms and the results of other diagnostic tests with the results of the sonographic examination. Prerequisites: DMS:124 and Reading Proficiency.

**DMS:216 VASCULAR TECHNOLOGY PRACTICUM IV**
3
Students will complete all clinical competency requirements for the specialty of Vascular Technology. Additional hours required. Prerequisites: DMS:213 and Reading Proficiency.

**DIE:101 DIESEL ENGINE OPERATION AND REPAIR**
3
This course examines through practical application the theories of operation, construction, maintenance, disassembly, and assembly of the diesel engine and its supporting systems; including lubrication system, cooling system, and engine brakes. Additional lab hours required. Prerequisite: Reading Proficiency.

**DIE:102 MEDIUM/HEAVY TRUCK SUSPENSION AND STEERING**
3
This course examines through practical application the types of suspension and steering systems found on medium and heavy trucks. Emphasis will be in areas of manual steering gears and columns, power steering gears, suspension system components, wheel alignment diagnosis, and wheel and tire diagnosis and repair. Additional lab hours required. Prerequisite: Reading Proficiency.

**DIE:103 MEDIUM/HEAVY TRUCK ELECTRICITY**
3
This course examines through practical application the theories of basic electricity and the diagnostic equipment used to perform general electrical system diagnosis of medium and heavy truck batteries, starting systems, charging systems, and lighting systems. Additional lab hours required. Prerequisite: Reading Proficiency.

**DIE:104 ELECTRONIC INFORMATION SYSTEMS AND MANUALS**
3
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
This course examines through practical application 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. Additional lab hours required. Prerequisite: Reading Proficiency.

**DIE:106 MEDIUM/HEAVY TRUCK BRAKES**
3
This course examines through practical application the types of brake systems found on medium and heavy trucks. Emphasis will be in areas of air brakes, foundation brakes, parking brakes, anti-lock brakes, and power brakes. Additional lab hours required. Prerequisite: Reading Proficiency.

**DIE:107 MEDIUM/HEAVY TRUCK ELECTRONICS**
3
This course 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, anti-lock brakes, and electrical accessories. Additional lab hours required. Prerequisites: DIE:103 and Reading Proficiency.

**DIE:201 PREVENTIVE MAINTENANCE INSPECTION**
3
This course 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. Additional lab hours required. Prerequisite: Reading Proficiency.

**DIE:202 CO-OP WORK EXPERIENCE I-DIESEL TECHNOLOGY**
3
A cooperative education work experience at a local 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 and by a faculty member. Additional hours required. Prerequisites: 15 credit hours of DIE courses or department approval and Reading Proficiency.
DIE:203 TRUCK HEATING, VENTILATION AND AIR CONDITIONING 3
This course examines through practical application 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. Additional lab hours required. Prerequisite: Reading Proficiency.

DIE:204 SERVICE AND PARTS MANAGEMENT 3
This course will introduce the student to current management practices of parts and service departments in modern truck repair shops. Shop tools, equipment, and safety will also be emphasized. Prerequisite: Reading Proficiency.

DIE:205 CO-OP WORK EXPERIENCE II-DEISEL TECHNOLOGY 3
Continuation of DIE:202. Additional hours required. Prerequisites: DIE:202 and Reading Proficiency.

DIE:206 MEDIUM/HEAVY TRUCK DRIVETRAINS 3
This course examines through practical application the types of manual and automatic transmission drivetrains found on medium and heavy trucks. To include: clutches, drive shaft and universal joints, and drive axles. Additional lab hours required. Prerequisite: Reading Proficiency.

DIETETIC TECHNOLOGY

DIT:103 FOOD MANAGEMENT 3
Students will study the components of food service management. Course emphasis is on menu planning and evaluation with a basic overview and application of concepts in procurement and receiving, production, distribution, meal service, equipment, facility design, cost control, quality control, and sanitation. Sanitation certification exam is given. Prerequisite: Reading Proficiency.

DIT:104 CLINICAL NUTRITION 3
Study of the roles of dietitians 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
Experience in food service departments of designated food service facilities. Assigned experiences are designed to complement and reinforce the corresponding lecture courses. Additional hours required. Prerequisites: Prior or concurrent enrollment in DIT:103, permission of the program coordinator and Reading Proficiency.

DIT:107 CLINICAL NUTRITION PRACTICUM 3
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
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 to nutrition and health will be emphasized. Discussion 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
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
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:201 FOOD SYSTEMS MANAGEMENT 3
Students will study the organization and management in the field of dietetics, with an emphasis on personnel management, staffing, scheduling, labor relations, diversity issues, communication, and performance appraisal. Management and leadership theories and concepts will be explored. Students will use computer software to assist with management functions. Prerequisites: DIT:103 and Reading Proficiency.

DIT:202 MEDICAL NUTRITION THERAPY 3
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:204 SEMINAR: STRATEGIES FOR PROFESSIONAL PRACTICE 2
This course covers techniques for teaching and learning in the field of dietetics, including the development of curricula, use of audio-visual materials, and public speaking. Communication with diverse populations, behavior modification and motivational skills in nutrition counseling will be addressed. Ethical practice in dietetics, personal management, and care of the terminally ill patient will also be covered. Prerequisite: 20 hours into the Dietetic Technology program or permission of program coordinator and Reading Proficiency.

DIT:206 SEMINAR: DIETETIC PRACTITIONER ISSUES 2
Discussion of the components of the health care delivery system, including alternative medicine, and private and governmental regulatory and provider agencies. Professional self-development, health care issues and trends, preparation for employment, and registration examination information will also be included. Prerequisites: DIT:204 and Reading Proficiency.

DIT:207 QUANTITY FOODS 3
Students will apply food preparation and management skills to a quantity food production system. Food preparation, sensory evaluation, menu planning, recipe development and expansion, food production and procurement, personnel management, sanitation, quality improvement, equipment, food cost calculation/control, and marketing techniques are emphasized. Facility design and financial management are discussed. Additional lab hours required. Prerequisites: DIT:103 and Reading Proficiency.

DIT:208 FOOD SYSTEMS MANAGEMENT PRACTICUM 4
Practical application of management concepts and tools. Provides an opportunity to observe and participate in food service management situations and use management tools, especially those related to budget and personnel administration. Additional hours required. Prerequisites: DIT:106. DIT:201 (may be taken concurrently), permission of the program coordinator and Reading Proficiency.

DIT:209 COMMUNITY NUTRITION PRACTICUM 4
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
Study of the roles and responsibilities of community 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
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
This course will examine, through the common ground of food, how cultural influences mold society. A central goal of the course is 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:101 INTRODUCTION TO EARLY CARE AND EDUCATION 3
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
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

This course examines the role of language and literacy in the development of young children. 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:104 PRINCIPLES OF EARLY CARE AND EDUCATION

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

This course is designed to examine the historical, philosophical, sociological, political, economic, and legal foundations of American public education. Students will explore the nature of school environments, design and organization of school curricula, and characteristics of effective schools and instruction in grades P-12. Educational structures, practices, and projections for the future will be studied. Prerequisites: ENG:101 and Reading Proficiency.

ECE:107 EARLY CARE AND SPECIAL EDUCATION

This course is designed to examine 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 all with minimum grades of “C” and Reading Proficiency or concurrent enrollment in RDG:030 or ENG:070.

ECE:108 INFANT, TODDLER AND TWO-YEAR-OLD CHILDREN

This course is designed to examine the historical, philosophical, sociological, political, economic, and legal foundations of American public education. Students will explore the nature of school environments, design and organization of school curricula, and characteristics of effective schools and instruction in grades P-12. Educational structures, practices, and projections for the future will be studied. Prerequisites: ENG:101 and Reading Proficiency.

ECE:124 CHILD NUTRITION, HEALTH AND SAFETY

This course explores the cultural and social context of nutrition and the role of food in promoting health. Students will learn to critically evaluate food systems and nutritional information. Prerequisite: Reading Proficiency or concurrent enrollment in RDG:030 or ENG:070.

ECE:125 CHILD GROWTH AND DEVELOPMENT I

This course is designed to examine the historical, philosophical, sociological, political, economic, and legal foundations of American public education. Students will explore the nature of school environments, design and organization of school curricula, and characteristics of effective schools and instruction in grades P-12. Educational structures, practices, and projections for the future will be studied. Prerequisites: ENG:101 and Reading Proficiency.

ECE:127 FAMILY AND TEACHER INTERACTIONS

This course explores the cultural and social context of nutrition and the role of food in promoting health. Students will learn to critically evaluate food systems and nutritional information. Prerequisite: Reading Proficiency or concurrent enrollment in RDG:030 or ENG:070.

ECE:200 GUIDING YOUNG CHILDREN

This course explores the cultural and social context of nutrition and the role of food in promoting health. Students will learn to critically evaluate food systems and nutritional information. Prerequisite: Reading Proficiency or concurrent enrollment in RDG:030 or ENG:070.

ECE:201 MATH AND SCIENCE IN EARLY CARE AND EDUCATION

This course explores the cultural and social context of nutrition and the role of food in promoting health. Students will learn to critically evaluate food systems and nutritional information. Prerequisite: Reading Proficiency or concurrent enrollment in RDG:030 or ENG:070.

ECE:202 MOVEMENT AND MUSIC IN EARLY CARE AND EDUCATION

This course explores the cultural and social context of nutrition and the role of food in promoting health. Students will learn to critically evaluate food systems and nutritional information. Prerequisite: Reading Proficiency or concurrent enrollment in RDG:030 or ENG:070.

ECE:203 EARLY CARE AND EDUCATION PRACTICUM I

This course explores the cultural and social context of nutrition and the role of food in promoting health. Students will learn to critically evaluate food systems and nutritional information. Prerequisite: Reading Proficiency or concurrent enrollment in RDG:030 or ENG:070.

ECE:204 MANAGEMENT OF EARLY CARE AND EDUCATION SETTINGS

This course focuses on the development of effective professional competencies in early childhood settings, with an emphasis on 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. Prerequisites: Reading Proficiency or concurrent enrollment in RDG:030 or ENG:070.

ECE:205 CHILD AND SOCIETY

This course is designed to examine the historical, philosophical, sociological, political, economic, and legal foundations of American public education. Students will explore the nature of school environments, design and organization of school curricula, and characteristics of effective schools and instruction in grades P-12. Educational structures, practices, and projections for the future will be studied. Prerequisites: ENG:101 and Reading Proficiency.

ECE:206 EARLY CARE AND EDUCATION PRACTICUM II

This course is designed to examine the historical, philosophical, sociological, political, economic, and legal foundations of American public education. Students will explore the nature of school environments, design and organization of school curricula, and characteristics of effective schools and instruction in grades P-12. Educational structures, practices, and projections for the future will be studied. Prerequisites: ENG:101 and Reading Proficiency.

ECE:207 ACTIVITIES FOR SPECIAL INDIVIDUALS

This course is designed to examine the historical, philosophical, sociological, political, economic, and legal foundations of American public education. Students will explore the nature of school environments, design and organization of school curricula, and characteristics of effective schools and instruction in grades P-12. Educational structures, practices, and projections for the future will be studied. Prerequisites: ENG:101 and Reading Proficiency.

ECONOMICS

ECO:140 INTRODUCTION TO ECONOMICS

This course is designed to examine the historical, philosophical, sociological, political, economic, and legal foundations of American public education. Students will explore the nature of school environments, design and organization of school curricula, and characteristics of effective schools and instruction in grades P-12. Educational structures, practices, and projections for the future will be studied. Prerequisites: ENG:101 and Reading Proficiency.

ECO:151 PRINCIPLES OF MACROECONOMICS

This course is designed to examine the historical, philosophical, sociological, political, economic, and legal foundations of American public education. Students will explore the nature of school environments, design and organization of school curricula, and characteristics of effective schools and instruction in grades P-12. Educational structures, practices, and projections for the future will be studied. Prerequisites: ENG:101 and Reading Proficiency.

ECO:152 PRINCIPLES OF MICROECONOMICS

This course is designed to examine the historical, philosophical, sociological, political, economic, and legal foundations of American public education. Students will explore the nature of school environments, design and organization of school curricula, and characteristics of effective schools and instruction in grades P-12. Educational structures, practices, and projections for the future will be studied. Prerequisites: ENG:101 and Reading Proficiency.

EDUCATION

EDU:120 ART FOR CHILDREN

This course is designed to examine the historical, philosophical, sociological, political, economic, and legal foundations of American public education. Students will explore the nature of school environments, design and organization of school curricula, and characteristics of effective schools and instruction in grades P-12. Educational structures, practices, and projections for the future will be studied. Prerequisites: ENG:101 and Reading Proficiency.

EDU:210 TEACHING PROFESSION WITH FIELD EXPERIENCE

This course is designed to examine the historical, philosophical, sociological, political, economic, and legal foundations of American public education. Students will explore the nature of school environments, design and organization of school curricula, and characteristics of effective schools and instruction in grades P-12. Educational structures, practices, and projections for the future will be studied. Prerequisites: ENG:101 and Reading Proficiency.

EDU:211 FOUNDATIONS OF EDUCATION

This course is designed to examine the historical, philosophical, sociological, political, economic, and legal foundations of American public education. Students will explore the nature of school environments, design and organization of school curricula, and characteristics of effective schools and instruction in grades P-12. Educational structures, practices, and projections for the future will be studied. Prerequisites: ENG:101 and Reading Proficiency.
EDU:218 TECHNOLOGY FOR TEACHERS
In this course students will learn how to integrate technological instruction into the P-12 classroom. Students will study a variety of software programs, presentation technology, and telecommunications tools. The focus will be on social, ethical, legal, and human issues surrounding the use of technology. Prerequisites: ENO:101 and Reading Proficiency.

EDU:219 EDUCATION OF EXCEPTIONAL LEARNERS
This survey course is an introduction to exceptional learners and their education in grades P-12. Students will attain knowledge, skills, and dispositions that will enable them to work effectively with exceptional learners in general education or special education. Prerequisites: EDU:227 and Reading Proficiency.

EDU:226 CHILDREN’S LITERATURE
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
This course is designed to help students apply psychological principles to teaching, learning, assessment and other educational practices in P-12 classrooms. It will focus on the learner and the learning process, teacher characteristics, and classroom processes that increase student motivation. Student diversity and appropriate instructional strategies for students with special needs will also be introduced. Prerequisites: EDU:210 and PSY:203, PSY:205 or PSY:214 and Reading Proficiency.

ELECTRICAL/ELECTRONIC ENGINEERING TECHNOLOGY
EE:106 IBM PERSONAL COMPUTER INSTALLATION AND REPAIR
This course will help you learn how to install and repair the popular IBM series of personal computers. Connection and setup of monitors, printers, hard disks, and memory will be covered. Some previous electronics or computer experience is recommended but not required. Prerequisite: Reading Proficiency.

EE:109 PERSONAL COMPUTER CONFIGURATION
This course is designed to teach the student to configure the IBM-compatible personal computer for optimum performance. Emphasis will be placed on the interaction between peripheral equipment and applications. Prior experience with personal computers and DOS is highly recommended. Additional hours required. Prerequisites: EE:106 and Reading Proficiency.

EE:110 TECHNICAL ELECTRIC CIRCUITS I
This combination classroom and laboratory course is a study of the basics of electricity and electrical circuits. It includes such fundamentals as static electricity, resistance, Ohm’s Law, Kirchhoff’s Laws, power, series and parallel circuits, voltage dividers, magnetism and electromagnetic induction as well as an introduction to generators. Additional lab hours required. Prerequisites: Concurrent enrollment in MTH:124 and Reading Proficiency.

EE:111 TECHNICAL ELECTRIC CIRCUITS II
This course is the continuation of EE:110. The basic meter types as to construction and operation are first studied. The concepts of alternating current as to frequency, period, amplitude wave length, phase relationship, maximum instantaneous, average and peak values are then considered. Inductance, capacitance and reactance are then studied from simple parallel or series circuits to complex circuits. Transformers, power and resources are also included. Additional lab hours required. Prerequisites: EE:110 and Reading Proficiency.

EE:112 TECHNICAL ELECTRONICS I
The basic principles of electronics will be introduced in this course. Semi-conductor theory with emphasis on diodes and transistors. The diode and bipolar devices will be studied, as well as lab exercises utilizing test equipment and simulator circuits. Additional lab hours required. Prerequisites: Concurrent enrollment in EE:110 and EE:111 and Reading Proficiency.

EE:130 ELECTRIC CIRCUITS I
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
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:144 or MTH:170 or MTH:185, and Reading Proficiency.

EE:132 ELECTRONIC DEVICES
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:133 ELECTRICAL/ELECTRONIC BRIDGE
This course covers single and three phase electrical power connections, electronics, DC and AC circuitry, and basic operational amplifiers, with a special emphasis on application to medical devices. Safety aspects of power circuits and electrostatic discharge (ESD) will also be covered, as well as lab exercises utilizing test equipment and simulator circuits. Additional lab hours required. Prerequisites: Approval of department chair or program coordinator and Reading Proficiency.

EE:203 OPERATING SYSTEMS
This course consists of a study of the relations between microprocessors, bus structures, interfacing procedures, input output networks, digital communication systems, and programming languages. This information should provide the student with a knowledge of how digital subsystems are combined to form operating systems. Prerequisites: EE:233, EE:242 and Reading Proficiency.

EE:204 THREE-PHASE POWER
This course includes a study of single- and three-phase systems and transformer theory. Practical applications of single- and three-phase loads are also covered. The circuit concepts of wye and delta connections shall be discussed using the two-wattmeter and three-wattmeter methods of measuring power, emphasizing analysis of circuit concepts. Prerequisites: EE:131, and MTH:144, or MTH:124 and MTH:134, or MTH:160 and MTH:170, or MTH:185 or program department approval. Reading Proficiency.

EE:211 TECHNICAL POWER TRANSMISSION-DISTRIBUTION
Considers basic wiring fundamentals, applications of series and parallel circuits, purpose of electrical testing instruments, feeder and branch circuit protection, fuse and circuit breaker protection, grounding practices and lightning protection; outline various types of power generating plants, hydro, steam, nuclear, and their purposes; defines transmission and distribution circuits and their functions of bringing electrical energy from generating plants to customers. Prerequisites: EE:111 and Reading Proficiency.

EE:230 ANALOG AND DIGITAL ELECTRONICS
A study of the operational amplifier as a scanner and integrator. The “bootstrap method” of analog computer patching. Digital fundamentals include number systems, Boolean algebra, logic circuits, memory devices, binary elements and input/output devices. Additional lab hours required. Prerequisites: PH:115 and Reading Proficiency.

EE:233 DIGITAL LOGIC
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
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
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 MicroLogix 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:240 ELECTRICAL MACHINES
Direct current and alternating current motors and generators construction and characteristics are studied, as well as the associated starting and control circuits. The laboratory experiments will deal with related classroom work. Additional lab hours required. Prerequisites: EE:131 and Reading Proficiency.

EE:241 TRANSMISSION AND DISTRIBUTION OF POWER
This course is a general study of the sources of energy, types of generating stations, their comparative merits, transmission and distribution systems. Topics on transmission and distribution include types of construction, terminal facilities, equipment and protection against faults. Over-all system behavior, stability and industrial utilization of electrical energy are included. Attention is also given to the consideration of electric utility economics. Prerequisites: EE:131 and Reading Proficiency.

EE:242 INTRODUCTION TO MICROPROCESSORS
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.
EMERGENCY MEDICAL TECHNOLOGY

EMT:121 EMERGENCY CARE, PRINCIPLES, AND TECHNIQUES 10
This course 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 Cardiopulmonary Resuscitation (CPR) for Health Care Providers and Reading Proficiency.

EMT:122 EMT INTERNSHIP 6
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:050 FUNDAMENTALS OF DRAFTING 3
First course in drafting for persons with little or no previous drafting coursework. Practice of using drafting tools, board skills, good line work, lettering, geometric construction, accurate layout of multiview and pictorial drawings and basic dimensioning will be emphasized. Additional lab hours required.

EGR:100 ENGINEERING DRAWING 3
This course uses a combination of instruments and CAD systems for making drawings. The course includes use of instruments, lettering, geometrical constructions, technical sketching, principles of orthographic projection, pictorial drawing, descriptive geometry, sectional views and conventions, auxiliary views and dimensioning. Additional lab hours required. Prerequisites: EGR:050, previous drafting work or department approval and Reading Proficiency.

EGR:104 ELECTRONIC DRAFTING 2
Review of basic drafting with emphasis on technical sketching and lettering. Topics include schematic diagrams, block diagrams, electronic symbols, etched circuit layout, wiring diagrams, mechanical and electronic detail and assembly drawings. Additional lab hours required. Prerequisite: Reading Proficiency.

EGR:133 INTRODUCTION TO AUTOCAD I 2

EGR:139 3-D AUTOCAD WITH AUTOSHADE 2
3-D drawing concepts using AutoCAD Version 10, generation of objects using true 3 dimensional database. User coordinate system, X,Y,Z coordinate system and x,y,z point filters. Extensive practice with various 3-D surfaces. Use of viewpoint and view commands to select viewing angle or perspective view. Settings lights, camera, and scenes to generate shaded images and movies. Prerequisites: EGR:133 and Reading Proficiency.

EGR:140 COMPUTER AIDED DRAFTING AND DESIGN I 3
This course provides the student with knowledge and implementation of skills used in Computer Aided Drafting. Computer drawings will include geometric constructions, multiple views, sectional views, and dimensioning. Computer operations will include editing, filing and retrieving drawings to produce an industrial quality drawing using a plotter. Additional lab hours required. Prerequisites: EGR:100 and GE:101 or department approval and Reading Proficiency.

EGR:141 INTRODUCTION TO AUTOCAD II 2
Continuation of Introduction to AutoCAD I. DSS 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:143 INTRODUCTION TO MICROSTATION 2
The student will learn to use Microstation drawing software to set up drawings; control the levels, colors and linetypes; place and modify elements and patterns; dimension; print; and link drawing files. The student should possess basic knowledge of technical drawing. Prerequisite: Reading Proficiency.

EGR:145 COMPUTER SOLIDS MODELING 2
Students will learn to design and model objects using three dimensional solids modeling computer software. Extrusion, revolution, and sweeping are examples of techniques that will be studied. Students will model individual parts and assemblies of parts. The projection of working drawings and shaded pictorials will also be completed. Additional lab hours required. Prerequisite: Reading Proficiency.

EGR:147 INTRODUCTION TO ENGINEERING DESIGN 3
This course is an introduction to the elements of Engineering Design. Students will learn the history of design, design processes and visualization, geometric relationships, and modeling. Elements of manufacturing production, marketing, analysis, and quality control will also be studied. Students will learn presentation techniques and develop a portfolio.

EGR:148 SOLID MODELING WITH UNIGRAPHICS 2
This course teaches the use of 3-D modeling using the Unigraphics CAD package. Students will productively develop solid models, detail drawings and product assemblies. The class introduces assembly modeling in the context of a real-life scenario that includes parts modeled by the student as well as existing part models. Prerequisite: Reading Proficiency.

EGR:255 ADVANCED COMPUTER AIDED DRAFTING 3
Topics covered in this course will include 2-D and 3-D drafting concepts, customizing menus, creating macros, symbol libraries, bill of material extraction, creating production drawings, modeling and shading. Assigned labs will include an extended project and portfolio development. Prerequisites: EGR:141 or EGR:146 or EGR:144 and Reading Proficiency.

EGR:256 SOLID MODELING WITH CATIA 2
This course is designed for students with 3-D modeling experience to learn the use of 3-D solid modeling using the CATIA V5 CAD package. The student will productively develop solid models, detail drawings and product assemblies. Additional hours required. Prerequisite: Reading Proficiency.

EGR:257 UNIGRAPHICS FOR PART DESIGN 2
This course will focus on creating Unigraphics 3-D parametric models that capture design intent. Students will learn the concepts used to make geometry and models associative. Some of these concepts include creating parametric sketches, building assemblies, creating mating conditions and inter-part modeling to link geometry across part files. Additional lab hours required. Prerequisites: EGR:148 and Reading Proficiency.

ENGINEERING SCIENCE

ESC:100 ENGINEERING COMPUTER APPLICATIONS AND DESIGN 3
This course provides the student with basic skills in the use of Computer Aided Drafting (CAD), word-processing, spreadsheets, and computer math software. Students will be divided into teams to solve an engineering related design problem. They will need to conceptualize and build their project/product, and prepare and present a report. They will utilize the computer and applications software they have learned in the class as a tool in preparation and presentation of their report. Prerequisites: MTH:140 or higher and Reading Proficiency.

ESC:101 SCIENTIFIC COMPUTER PROGRAMMING 3
This course emphasizes instruction in computer programming language to solve engineering problems. Instruction will include such topics as: study of digital computer systems, programming languages, computer structure and operation, computer hardware and software, computer applications and problem solving techniques, program structure, coding, execution, debugging and verification of programs. Computer laboratory exercises will be conducted to analyze, interpret and synthesize engineering data. Prerequisites: MTH:160 (A, B or C) and higher and Reading Proficiency.

ESC:200 ENGINEERING CIRCUITS I 4
This is a problem-solving course that develops analytical skills important for all engineering disciplines as well as fundamental circuit theory for electrical engineers. The course covers circuit elements and the fundamental laws governing their behavior, network theorems, and analysis techniques, including transient responses. Circuit simulation using computer models and practical circuit testing are included in the laboratory work. Additional lab hours required. Prerequisites: PH:122, concurrent enrollment in MTH:230 and Reading Proficiency.

ESC:201 ENGINEERING CIRCUITS II 4
This is a problem solving course that develops analytical skills important for all engineering disciplines as well as fundamental circuit theory for electrical engineers. The course covers sinusoidal AC circuit analysis (including AC power and three-phase systems, mutual inductance and transformers, complex frequency, and filters. The primary focus of this course is on phasors and frequency-domain responses. Laboratory work will include circuit simulation using computer models, as well as practical limitations of these models. Additional lab hours required. Prerequisites: ESC:200 and Reading Proficiency.

ESC:203 ENGINEERING MECHANICS I 3
Application of the principles of mechanics to the solution of engineering problems involving particles and systems in equilibrium. Topics include force systems in equilibrium, centers of gravity, friction, moments of inertia. Where appropriate, vector analysis is used. Prerequisites: PH:112 and Reading Proficiency.
ENGLISH

ENG:001 THE SENTENCE
This course will help students master the fundamental of sentence writing and punctuation. It is a skill-building course.

ENG:002 SPELLING
This course will point out to the student specific spelling problems as well as provide the student with the means to eliminate such spelling problems.

ENG:003 SENTENCE COMBINING
Using a selected sequence of sentence building exercises, this course will help students develop a feel for both sentence structure and paragraph organization. It is a “skill-building” course, whose main purpose is to help students hear the stylistic options available to them and to help them see patterns of development, both in sentences and paragraphs.

ENG:004 GRAMMAR REVIEW
This course will provide instruction for students who need extensive help with writing problems which may include punctuation, capitalization, usage, sentence construction, coherence and organization.

ENG:005 WRITING IMPROVEMENT
Students work individually on writing style, documentation, and other problems of advanced expository writing.

ENG:006 WRITING EFFECTIVE PARAGRAPHS
This course will help students who have already mastered the writing of sentences to learn about writing longer forms. Beginning with the writing of good topic sentences, it will proceed to consider such issues as paragraph development, unity and coherence. Thus, it will provide an additional valuable support for students who intend to write essays, business letters, stories and other longer prose forms.

ENG:007 BUSINESS WRITING REVIEW
This course will provide instruction in business writing formats: e-mails, letters, memos, and/or reports.

ENG:013 ESL: ACADEMIC ENGLISH PREP
This course is designed for non-native English speakers who need to improve basic language skills before beginning the ESL Academic English sequence. Students will work individually with the assistance of the designated ESL support staff. Prerequisites: Michigan Test and writing sample.

ENG:014 ESL: ACADEMIC LISTENING COMPREHENSION
This course is designed to help non-native English speakers increase their ability in listening comprehension. Students will work individually with the assistance of the designated ESL support staff.

ENG:015 ESL: VOCABULARY DEVELOPMENT FOR NON-NATIVE SPEAKERS
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:016 ESL: GRAMMAR REVIEW FOR NON-NATIVE ENGLISH SPEAKERS
This course provides practice for non-native English speakers who need supplementary instruction in English grammar. Students will apply grammar rules through writing and editing activities. Students will work individually with the assistance of the designated ESL support staff. Prerequisite(s): ENG:051 and/or ENG:061.

ENG:017 ESL: WRITING SKILLS
This course is designed for students who need to demonstrate improved skills in Academic English outcomes before proceeding to the next level. Students will work individually with the assistance of the designated ESL support staff. Prerequisites: ENG:050, ENG:060 or ENG:070 and recommendation of instructor.

ENG:020 DEVELOPMENTAL ENGLISH
This course provides comprehensive review and development of student ability in English sentences, paragraphs, and multiple paragraph texts. The course focuses on topics such as development, organization, grammar, sentences, paragraphs, and essay structure. Prerequisites: Prior or concurrent enrollment in STR:050 with a minimum grade of “C” or previous or concurrent enrollment in appropriate reading course.

ENG:030 INTRODUCTION TO COLLEGE WRITING
This course is designed primarily to prepare students for College Composition I. The course develops students’ abilities in writing multiple paragraph texts and will focus on topics such as development, organization, grammar, sentences, paragraphs, and essay structure. Prerequisites: ENG:020 with grade of “C” or better or recommendation of department. Prior or concurrent enrollment in STR:050 with a minimum grade of “C”.

ENG:032 INTRODUCTION TO COLLEGE WRITING LAB
Students study a series of grammatical elements in order to eliminate structural and grammatical mistakes in their writing. Topics include sentence patterns, punctuation, and sentence combining.

ENG:050 ACADEMIC ENGLISH FOR NON-NATIVE SPEAKERS I
This course is designed for non-native English speakers who wish to develop English language skills necessary for success in college courses. Instruction in the course will promote overall English language proficiency, with an intensive focus on reading and writing. Additional hours in lab or with an ESL tutor may be required. Prerequisite: Recommendation of ESL staff.

ENG:051 ENGLISH GRAMMAR FOR NON-NATIVE SPEAKERS I
This course provides non-native English speakers with a review of basic English grammar rules, with attention given to form, meaning, and use. Students will apply rules through speaking and writing activities. Prerequisite: Recommendation of ESL staff.

ENG:053 LISTENING AND NOTE-TAKING FOR NON-NATIVE SPEAKERS
This course is designed for non-native speakers who are new to the higher education system in the USA. Students will develop all language skills, with a focus on listening and note-taking skills, vocabulary, and lecture discussion structure and content. Prerequisite: Recommendation of ESL staff.

ENG:060 ACADEMIC ENGLISH FOR NON-NATIVE SPEAKERS II
This course is designed for non-native English speakers who have demonstrated general fluency in reading and writing English, and need to develop clarity in using English for academic purposes. Instruction in the course will focus on reading and writing responses to texts. Additional hours in lab or with an ESL tutor may be required. Prerequisites: ENG:050 and ENG:051 with grades of “C” or better.

ENG:061 ENGLISH GRAMMAR FOR NON-NATIVE SPEAKERS II
This course provides non-native English speakers with an intensive review of basic English grammar, with emphasis on application of rules to academic reading and writing tasks. Prerequisites: ENG:050 and ENG:051 with grades of “C” or better.

ENG:062 SPOKEN COMMUNICATION AND PRONUNCIATION FOR NON-NATIVE SPEAKERS
This course is designed for non-native English speakers who wish to improve their comprehensibility in communicating in English. The course will provide practice in stress, rhythm, and intonation patterns, and in troublesome consonant and vowel sounds. Prerequisite: Recommendation of ESL staff.

ENG:070 ACADEMIC ENGLISH FOR NON-NATIVE SPEAKERS III
This course is designed to facilitate non-native English speakers’ performance in college-level courses which require moderate to heavy amounts of reading, writing, and note-taking. Students recommended to take ENG:070 will have achieved the reading and writing performance outcomes of ENG:050 and ENG:060, but still need to improve grammatical and lexical accuracy in a variety of writing tasks. Reading and writing assignments will be linked to assignments in content areas. Prerequisites: ENG:060 and ENG:061 with grades of “C” or better and ENG:053.

ENG:071 ENGLISH GRAMMAR FOR NON-NATIVE SPEAKERS III
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.
Course Descriptions

ENG:083 BASIC WRITING SKILLS
This course will instruct students in the basic skills required to create grammatically sound, meaningful sentences in formal English. It is a skill-building course that is intended to help students master the fundamentals of sentence writing and punctuation. Students will also work to build upon basic skills in the areas of capitalization, usage, sentence construction, coherence, and organization. Prerequisite: English Accuplacer score of 60-90.

ENG:084 ENGLISH FOR DEAF INTERNATIONAL STUDENTS
This course uses signed communication to teach foundational English vocabulary and grammar to Deaf students from outside of the US. Reading, writing, and associating American Sign Language signs with English meaning is emphasized. Topics include vocabulary for self-care, time, food, travel, clothing, and school. Basic reading and writing are introduced. Corequisite: DCS:104.

ENG:085 ENGLISH FOR DEAF INTERNATIONAL STUDENTS
This course uses signed communication to teach intermediate everyday vocabulary and introduces technical vocabulary of the student’s field of study. Reading focuses on understanding short texts in newspapers, magazines, and books. Writing focuses on basic sentence structure, common verb tenses, and introduces texts pertinent to the student’s field of study. Corequisite: DCS:105. Prerequisite: ENG:084.

ENG:086 READING AND WRITING FOR DEAF INTERNATIONAL STUDENTS
This course uses signed communication to teach: comprehension of longer passages in course textbooks, popular and career-related periodicals, and career-related documents. Students write in response to readings and generate career-related texts such as resumes, memos, and e-mails. Students learn to work with an editor to achieve clarity of written English. Prerequisite: ENG:085.

ENG:100 CAREER ENGLISH
This course primarily focuses on the development of career-related writing techniques. Students will develop writing styles, writing processes, revision practices, and analytical skills necessary for the workplace. Prerequisites: ENG:030 and Reading Proficiency or concurrent enrollment in RDG:030.

ENG:101 COLLEGE COMPOSITION I
This course primarily focuses on the development of writing techniques. Students will develop effective writing styles, writing processes, revision practices, and analytical skills. Prerequisites: ENG:030 or ENG:070 with a grade of “C” or better or recommendation of department and Reading Proficiency or concurrent enrollment in RDG:030.

ENG:102 COLLEGE COMPOSITION II
This course builds on knowledge and skills learned in ENG:101 and primarily focuses on argumentative and persuasive writing techniques. Students will develop effective writing processes, writing styles, research abilities, analytical skills, and argumentative tools. Prerequisites: ENG:100 or ENG:101 with a grade of “C” or better or department approval and Reading Proficiency.

ENG:103 REPORT WRITING
This course builds on knowledge and skills learned in previous writing courses and primarily focuses on the development of writing techniques required in fields such as business, health science, technology, and engineering. Students will develop effective writing styles, writing processes, and analytical skills for business and technical writing. Prerequisites: ENG:100 or ENG:101 with minimum grades of “C” or department approval and Reading Proficiency.

ENG:104 HONORS COLLEGE COMPOSITION I
This course is designed for students who have demonstrated above average ability. It covers the same subject matter as ENG:101, but offers a more challenging and a more rewarding experience for the students recommended for this course. Prerequisites: Permission of Honors coordinator and Reading Proficiency.

ENG:105 HONORS COLLEGE COMPOSITION II
This course is designed for students who have demonstrated above average ability in ENG:101. It covers the same subject matter as ENG:102, that is, argumentative writing, critical analysis, and research papers. But ENG:105 offers a more challenging and a more rewarding experience for the students recommended for this course. Prerequisites: ENG:101 or ENG:104 with a grade of “C” or better, permission of Honors coordinator and Reading Proficiency.

ENG:110 CREATIVE WRITING
This is a workshop for beginning and experienced writers. It is designed to encourage and guide students interested in writing poetry, fiction, and drama. Students will be required to produce a certain number of manuscripts, depending upon the form in which they are writing, and to read occasional brief selections. Prerequisite: Reading Proficiency.

ENG:114 WRITING PLAYS AND FILM SCRIPTS
This course is for beginning and experienced writers of plays and film scripts. The course is designed to illustrate the creative writing process beginning with the importance of drafting, audience feedback, and revision, and ending with the methods of submitting plays and film scripts for publication and production. Prerequisite: ENG:101 and Reading Proficiency.

ENG:201 INTRODUCTION TO FICTION
The enjoyment, appreciation, and understanding of American, European, African, and Oriental fiction are the goals of this course. The class will explore imagery, symbolism and style, as well as other elements of fiction in short stories and novels. Prerequisite: Reading Proficiency.

ENG:202 INTRODUCTION TO POETRY AND PLAYS
This course focuses on the pleasures of poetry and drama. By reading, analysis, discussions and student projects, the student should gain a familiarity with the statements and craft of a selection of American, European, African and Oriental poems and plays. Prerequisite: Reading Proficiency.

ENG:203 AMERICAN LITERATURE
American Literature will provide the students with an opportunity to confront a significant part of their literary heritage. This course examines the broad social and ethnic diversity of American writers; it shows how Americans live now and how they used to live. It covers a broad range of subject matter and literary types. It concentrates on appreciation. Also, it pays some attention to the ways in which the works experienced relate to our historical and cultural values. Prerequisite: Reading Proficiency.

ENG:204 AMERICAN LITERATURE BEFORE 1865
Presenting the literature written prior to 1865 in the United States, this course covers pre-colonial, colonial, revolutionary and national literature through the Civil War. The course includes writers such as Bradford, Bradstreet, Cooper, Emerson, Franklin, Hawthorne, Irving, Melville, Paine, Poe, Thoreau and Wheatley. Prerequisite: Reading Proficiency.

ENG:205 AMERICAN LITERATURE BETWEEN 1865 AND 1945
Presenting United States literature written between 1865 and 1945, this course includes writers such as Adams, Cooper, Crane, Cullen, Cummings, Dickinson, Dubois, Eliot, Faulkner, Fitzgerald, Frost, Gilman, H.D., Hughes, James, Jewett, Millay, Moore, O’Neill, Porter, Pound, Stevens, Twain, Washington, Wharton, Whitman, Williams. Prerequisite: Reading Proficiency.

ENG:206 AMERICAN LITERATURE AFTER 1945
Presenting United States literature after 1945, this course includes writers such as Abbe, Baldwin, Bellow, Bishop, Brooks, Ellison, Enright, Ginsberg, Gluck, Kingston, Levertov, Lowell, Malamud, Miller, Morrison, Plath, Rich, Sexton, Shepard, Silko, Snyder, Tottenham, Vonnegut, Welty, Williams, and Wright. Prerequisite: Reading Proficiency.

ENG:207 HUMOR IN AMERICAN LITERATURE
This course explores American humor primarily in written sketches, short stories, and novels by authors from Twain and Thurber to Bombeck and Vonnegut. It also analyzes jokes, movies, comic strips, stand-up comedians, and television sit-coms. The course questions what American humor is, what forces have shaped its growth, what personal and social functions it serves, and what value it might have for contemporary Americans. Prerequisite: Reading Proficiency.

ENG:211 BRITISH LITERATURE AFTER 1800
This course provides a survey study of representative works of British writers after 1800. Works will be examined in the context of the dominant social, cultural, and artistic concerns of the period as reflected in the literature. Prerequisites: ENG:101 with a minimum grade of “C” and Reading Proficiency.

ENG:213 THE SHORT NOVEL
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 an emphasis on short fiction form, 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
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 POPULAR LITERATURE: FANTASY AND HORROR
The course will focus on major themes and writers in the horror and fantasy genre (science fiction may be discussed but will not be the primary aim of the course). By looking at major works of fantasy and horror from the Gothic romances to the 20th century, students will study the causes, effects and nature of the genre. Readings will be supplemented by films. Prerequisite: Reading Proficiency.

ENG:216 WOMEN IN LITERATURE
This course explores the experiences of women as authors and characters in local, national, and international literature. Topics and reading will focus on the roles, challenges, and contributions women have made in the area of literary studies in various contexts and communities. Prerequisites: ENG:101 and Reading Proficiency.

ENG:217 MAJOR BLACK WRITERS
This course focuses on selected literary works by popular Black writers across the African Diaspora. The writings of the authors have gained public attention by virtue of their excellence or historical significance. Students have the opportunity to examine various literary works, forms, and styles of these writers and the various contexts in which they are placed. Prerequisites: ENG:101 and Reading Proficiency.

ENG:218 LITERATURE OF AMERICAN MINORITIES
A study of American minority (racial and religious) experience and cultural contributions to the nation by explaining them through literature. Prerequisite: Reading Proficiency.
ENG:224 FICTION WRITING 3
This is a workshop for the student who has already experimented with several forms of creative writing and who wishes special, focused work in writing stories. The workshop format will allow for in-depth discussion of student work in class. Some lectures and other kinds of presentations will be given, involving various aspects of the writer's activity from initial inspiration to preparation of manuscripts for publication. Prerequisite: Reading Proficiency.

ENG:225 POETRY WRITING 3
This course is intended for students to further develop their understanding of poetry and their abilities in poetry writing. Students learn about various themes, perspectives, and approaches associated with poetry, as well as the creative writing process and methods of submitting creative work for publication. Prerequisites: ENG:101 and Reading Proficiency.

ENG:226 CHILDREN'S LITERATURE 3
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
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 taken for credit with different topics. Please refer to the Interactive Course Schedule for current course topics. Prerequisites: ENG:101 and Reading Proficiency.

ENG:229 INTERMEDIATE WRITING WORKSHOP 3
This is a workshop for students of all ages and backgrounds with some creative writing experience who want to begin or continue creative writing projects with the support and help of an instructor and peers. Projects may include poetry, fiction, scripts, personal essays, memoirs, and career-related writing. Students will contract to do the kinds of writing projects they choose. Prerequisites: ENG:101 or permission of the instructor and Reading Proficiency.

ENG:230 ENVIRONMENTAL LITERATURE 3
This course explores ecological, sustainable global themes and nature aesthetics in literature. Readings include an interdisciplinary, transnational, and multi-genre mixture of non-fiction prose, prose fiction, and poetry. Prerequisites: ENG:101 and Reading Proficiency.

ENG:231 WORLD LITERATURE 3
This course offers an introduction to the classic writings organized around various national communities. Its geographical focus varies from semester to semester, as do its choices of literary genres. Students will learn how to read and analyze national writers and their works within historical and cultural contexts. Prerequisites: ENG:101 and Reading Proficiency.

ENG:233 WRITING CREATIVE NONFICTION 3
This course is for the student who wants to focus on nonfiction prose forms such as personal essays, travel narratives, and/or biographies. This workshop format will allow for in-depth discussion of students' writings in class. Some lectures and presentations will be given, involving various aspects of the writer's activity from initial inspiration to preparation of manuscripts for publication. Prerequisites: ENG:101 with a grade of "C" or better and equivalent Reading Proficiency.

ENG:234 LITERARY PUBLISHING 3
This course allows students to gain experience in the production practices of literary publications. Students will become exposed to various stages of the editing and publishing process as well as utilize design software to produce a literary publication. Prerequisites: ENG:101 with a minimum grade of "C" and Reading Proficiency.

FIN:100 PERSONAL FINANCE 3
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 tax theory, and stock market options for personal financial planning. Prerequisite: Reading Proficiency.

FIN:201 FUNDAMENTALS OF FINANCE 3
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.

FIN:202 FIRE INVESTIGATION 3
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.

FIN:204 FIRE FIGHTING TACTICS AND STRATEGY 3
Fundamental strategy and method of attack employed for various fire problems. Principles of fire fighting as applied to small and large scale fire problems and problems that are complex or unique in nature. Some practice with problems involving the use of tactics and strategy that employ equipment and manpower at various organizational levels. Prerequisite: Reading Proficiency.

FIN:205 FIRE SCIENCE HYDRAULICS 3
A study of the mechanics of liquids, particularly as pertains to water flow, hydrants, pumps, standpipes, hoes, nozzles, sprinkler systems as adapted to fire fighting practices. This involves interpretation of readings from various kinds of manometers, pressure gauges, and hydrostatic devices. Fluids in motion, head calculations, pumping problems, friction losses, cavitation, velocity of flow, use of pilot and venturi meters, are studied. Also the problems of supplying fire service pumps and efficiently using them is studied. Prerequisites: MTH:124 and Reading Proficiency.

FIN:207 CODES AND ORDINANCES 3
A detailed study of national, state and local ordinances applicable to the fire service and electrical, plumbing and building codes. Some coverage of problems in mutual aid pacts and agreements with other fire departments, and relations with civil defense and other government agencies. Prerequisite: Reading Proficiency.
FIR:208 HAZARDOUS MATERIALS
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
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.

FRENCH
FRE:101 ELEMENTARY FRENCH I
This is the beginning course which introduces the basic sentence structure and vocabulary necessary to participate in elementary French conversations. Additional course topics include: reading short French passages, aspects of contemporary culture, and a variety of grammatical forms useful in writing French prose. Supplemental online lab work is required. Prerequisite: Reading Proficiency.

FRE:102 ELEMENTARY FRENCH II
This course continues to focus on the topics introduced in FRE:101. These include more complex sentence structures and an expanded vocabulary necessary to participate in French conversations. Additional course topics include: reading short French passages of increasing complexity, elements of contemporary culture, and a number of grammatical forms useful when writing in French. Supplemental online lab work is required. Prerequisites: FRE:101 or 2 years of high school French and Reading Proficiency.

FRE:201 INTERMEDIATE FRENCH I
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
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. Additionl lab hours required. Prerequisites: FRE:201 or 4 or more years of high school French and Reading Proficiency.

FUNERAL DIRECTING
FD:101 FUNERAL MANAGEMENT/MERCHANDISING
The practices and procedures of establishing a funeral home are covered including personnel management, vital statistics, records and forms. Government regulations of OSHA, FTC and ADA are studied. An in-depth study of merchandising funeral goods including caskets and vaults is covered. Prerequisites: Admitted to Funeral Directing program and Reading Proficiency.

FD:102 FUNERAL SERVICE PSYCHOLOGY
This course studies the implications of grief and bereavement and the role of the funeral director in counseling the bereaved. The social role of the funeral director in the dynamics of grief and an investigation into the changing attitudes toward death is also studied. Prerequisites: Admitted to Funeral Directing program and Reading Proficiency.

FD:103 HISTORY OF FUNERAL SERVICE
The historic role of the funeral director is investigated from ancient to present day as well as projected directions and functions of the funeral profession. Ethical and legal implications of these changing trends are discussed. Various religious, ethnic, fraternal and military practices are studied. Prerequisites: Admitted to Funeral Directing program and Reading Proficiency.

FD:104 FUNERAL SERVICE LAW
This course identifies the methods of disposing of human remains and the legal responsibilities of the funeral director. Principles of both mortuary and business law are covered from the local, state and federal level. Cemetery regulations, liability and pre-need are also studied. Prerequisites: Admitted to Funeral Directing program and Reading Proficiency.

FUNERAL SERVICE EDUCATION
FSE:101 HISTORY AND SOCIOLOGY OF FUNERAL SERVICE
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
This course explores the topic of funeral service psychology, which includes the theories of grief, the purposes of the funeral rites, and the importance of interpersonal communication skills and basic helping techniques. Prerequisites: FSE:101 and PSY:200 with minimum grades of “C” and Reading Proficiency.

FSE:103 FUNERAL DIRECTING
This course introduces the primary duties and responsibilities of the funeral director. Special emphasis is placed on the funeral director’s role in working with the family of the decedent, as they select options for funeral rites, ceremonies, and committal services. Legal and ethical obligations, as well as the value of effective communication skills, are also examined. Corequisite: FSE:104. Prerequisite: Reading Proficiency.

FSE:104 FUNERAL DIRECTING PRACTICUM I
This course introduces the practical aspects of funeral home operations which includes local, state, and federal laws as they pertain to funeral service. In addition, students will participate in funeral arranging, funeral directing, and committal service procedures. All funeral directing functions will be performed under the direct supervision of a licensed funeral director and the St. Louis Community College Funeral Service Education faculty. Additional hours required. Corequisite: FSE:103. Prerequisite: Reading Proficiency.

FSE:105 FUNERAL DIRECTING PRACTICUM II
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
This course introduces legal and ethical issues in the funeral service profession. This includes the sources of business law, mortuary law, rights and duties regarding disposition of dead bodies, state and federal regulation of funeral homes, funeral directors and cemeteries, probate law, and funeral professional ethics. Prerequisites: FSE:101 with a minimum grade of “C” and Reading Proficiency.

FSE:107 FUNERAL SERVICE MERCHANDISING
This course introduces the practical aspects of product knowledge and merchandising for caskets, outer burial containers, and other related funeral service merchandise. Required minimum course grade: “C” or higher. Prerequisites: FSE:101 with a minimum grade of “C” and Reading Proficiency.

FSE:201 FUNERAL HOME MANAGEMENT
This course introduces management principles for funeral home operations, which includes human resources, financial, marketing, facilities, and office management, as well as their application to the small business environment. Prerequisites: FSE:101 with a minimum grade of “C” and Reading Proficiency.

FSE:202 EMBALMING I
This course will provide discussion of the theoretical aspects of embalming, as well as examining the purpose and need for embalming, types of death, signs of death, tests for death, postmortem changes, ethics of embalming, chemical and physical changes, formulating chemical solutions, and selection and raising of vessels. Corequisite: FSE:203. Prerequisites: BIO:103 with a minimum grade of “C” and Reading Proficiency.

FSE:203 EMBALMING PRACTICUM I
This course applies the theoretical aspects of an embalming operation. All embalming operations are performed under the direct supervision and instruction of a licensed embalmer and the St. Louis Community College Funeral Service Education faculty. Additional hours required. Corequisite: FSE:202. Prerequisites: BIO:103 with a minimum grade of “C” and Reading Proficiency.

FSE:204 EMBALMING II
This course illustrates the advanced theoretical aspects of embalming and is a continuation of FSE:203. Special emphasis is placed on the principles and techniques of embalming, which includes case analysis, methods of injection and drainage, cavity embalming, and special problem cases. Corequisite: FSE:205. Prerequisites: FSE:202 and FSE:203, both with minimum grades of “C” and Reading Proficiency.

FSE:205 EMBALMING PRACTICUM II
This course applies the theoretical aspects of an embalming operation, with emphasis placed upon advanced procedures for embalming autopsy and trauma cases. Embalming operations are performed under the direct supervision and instruction of a licensed embalmer and the St. Louis Community College Funeral Service Education. Additional hours required. Corequisite: FSE:204. Prerequisites: FSE:202 and FSE:203, both with minimum grades of “C” and Reading Proficiency.

FSE:206 RESTORATIVE ART
This course prepares the student to recognize and apply the various restorative and cosmetology techniques used in the restoration of the deceased. Additional hours required. Prerequisites: FSE:202 with a minimum grade of “C” and Reading Proficiency.
FSE:207 MICROBIOLOGY AND PATHOLOGY FOR FUNERAL SERVICE 3
This course introduces the principles of microbiology and pathology, especially as they can be applied to the embalming and restorative art processes. Special emphasis will be placed on tissue pathology and major causative agents of death. Prerequisites: FSE:202 with a minimum grade of "C" and Reading Proficiency.

FSE:208 FUNERAL SERVICE SEMINAR 2
Comprehensive preparation for and completion of the International Conference of Funeral Service Examining Board, Inc. National Board Examination (NBE). Student must pass both the Funeral Service Arts and Funeral Service Sciences section of the NBE to graduate from the Funeral Service program. Prerequisites: Approval of AAS/FSE Program Director, eligibility for completion of and graduation from the AAS/FSE program. Reading Proficiency.

GENERAL EDUCATION

GEN:200 CAPSTONE 1
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. 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. Recommended Preparation: 27 credit hours of general education coursework including completion of the global/intercultural requirement and the interdisciplinary studies requirement.

GENERAL ENGINEERING

GE:056 FUNDAMENTALS OF TECHNOLOGY 3
This course relates the fundamentals of technology to down-to-earth, everyday occurrences, problems, and devices. A unique instructional approach ties together parallel concepts for mechanical, electrical, fluid, and thermal systems. Skills used by all technicians are developed in practical hands-on laboratory experiences.

GE:101 TECHNICAL COMPUTER APPLICATIONS 3
This course is an introduction to the use of personal computers in technology. Topics of this course include PC hardware, operating systems, word processing, spreadsheets, graphics and the Internet. Prerequisite: Reading Proficiency.

GE:122 ENGINEERING DESIGN AND DEVELOPMENT 3
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
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
This is a study of the mathematical and scientific applications found in engineering technologies. Topics include SI (metric) and customary (English) conversions, pythagorean applications and triangular structures, and electrical resistance. Mechanical and electrical systems applications are demonstrated and investigated for each topic area. Prerequisites: MTH:030 or higher and Reading Proficiency.

GE:151 INTRODUCTION TO AEROSPACE ENGINEERING 3
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, and space life sciences, principles of aerodynamics, structures and materials, and systems engineering. Additional lab hours required. Prerequisites: EGR:147 and GE:121 or department approval.

GE:163 CONSTRUCTION DOCUMENTS AND COMMUNICATIONS 2
This course explores the fundamentals of contract documents which communicate design intent to contractors and builders in the construction industry. Students investigate and practice proper communication protocols to document decisions throughout a building’s design, construction and operational phases. Rating systems documentation will be included. Prerequisites: GE:116 with a minimum grade of "C", and Reading Proficiency.

GE:240 PRODUCT DESIGN AND FABRICATION 4
This course presents students with an authentic engineering design challenge. Engineering technology students from a variety of disciplines, work together to define problems, evaluate possible solutions and build a functional prototype. The course brings together skills developed in other engineering and technology courses. Additional lab hours required. Prerequisites: Prior or concurrent enrollment in ME:152 or EE:233 or department approval, and Reading Proficiency.

GE:290 WORKPLACE LEARNING: GENERAL ENGINEERING 1-6
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:100 REGIONAL GEOGRAPHY: THE EASTERN WORLD 3
This geography course surveys the continents of Asia, Africa, Australia and the Pacific World including countries. The survey includes the physical, cultural, economic, and political roles of these countries within the family of nations. Prerequisite: Reading Proficiency.

GEG:101 REGIONAL GEOGRAPHY: THE WESTERN WORLD 3
This geography course includes a survey of the continents of Europe, Anglo-America and Latin America, the area's major countries and their physical, cultural, economic, and political roles within the family of nations. Prerequisite: Reading Proficiency.

GEG:103 PHYSICAL GEOGRAPHY 3
This course introduces the characteristics of the Earth’s surface and the interaction of processes that produce a world pattern of distinctive environments significant to humanity. Topics include Earth surface processes and the development of landforms and landscapes, weather and climate, soils and vegetation and their global distribution. Prerequisite: Reading Proficiency.

GEG:106 WORLD GEOGRAPHY 3
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:100 EARTH SCIENCE 3
This introductory geoscience course emphasizes basic principles of astronomy, geology, oceanography and meteorology. Topics covered include the origin of the Universe, solar system and Earth, minerals and rocks, plate tectonics geologic time, prehistoric life and evolution, ocean structure and life, weather and climate change. Emphasis is placed on how those hazards affect humans and how human activity affects Earth’s environment. Prerequisite: Reading Proficiency.

GEO:101 EARTH SCIENCES (LABORATORY) 2
Laboratory and field experiences illustrating the principles of earth science. Additional lab hours required. Prerequisites: GEO:100 concurrent enrollment and Reading Proficiency.

GEO:103 ENVIRONMENTAL GEOLOGY 3
This introductory geoscience course focuses on natural hazards and the human consequences associated with geologic processes. Topics include the study of plate tectonics, earthquakes, volcanoes, floods, tornadoes, storms, wildfires, climate change and global warming. Emphasis is placed on how those hazards affect humans and how human activity affects Earth’s environment. Prerequisite: Reading Proficiency.

GEO:104 PREHISTORIC LIFE 3
This course is an introductory Historical Geology course that emphasizes paleontology and evolution through the fossil record. Topics covered include the origin of the Universe, the origin and evolution of Earth through geologic processes, plate tectonics, origin and evolution of life on Earth through four billion years of geologic time and hands-on study of fossils including dinosaurs. Prerequisite: Reading Proficiency.

GEO:111 PHYSICAL GEOLOGY 5
This course introduces earth processes and products, including the origin of rocks, volcanoes, landforms, mountain belts, earthquakes, and the structure of Earth within the framework of plate tectonics. The interdependence between humans and the geological environment is emphasized throughout the course. A one-day fieldtrip is required. Additional lab hours required. Prerequisite: Reading Proficiency.

GEO:113 OCEANOGRAPHY 3
This introductory Oceanography course focuses on the geological aspects of oceanography combined with the physical, chemical and biological processes in the ocean. Topics covered include the origin of the Universe, Earth and life, plate tectonics, waves, atmosphere and marine life. Special emphasis is placed on worldwide, human-induced changes within the marine environment. Prerequisite: Reading Proficiency.

GEO:123 GEOLOGIC FIELD EXPERIENCES IN NORTH AMERICA 4
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.
HIT:107  PROCEDURE CODING SYSTEMS I  
This course is an introduction to the clinical coding of ICD-9-CM Volume III, CPT-4 (Anesthesiology, E&M, Surgical, Pathology/Laboratory, Radiology and Medicine), HCPCS Level II codes, ICD-10-PCS and other procedure coding systems. Reading and interpreting healthcare documentation to classify services and procedures, and using computerized encoding software are required. Prerequisites: HIT:101, HIT:102, BIO:215 and Reading Proficiency.

HIT:109  MEDICAL TRANSCRIPTION I  
This course is designed to develop skill in keyboarding/formatting and in transcribing from machine dictation in a variety of medical documents, such as forms, correspondence, consultation and simple reports. Reinforcement of medical terminology and language skills, use of reference materials, ethics, and confidentiality are emphasized. Additional lab hours required. Prerequisites: HIT:101, IS:102 and Reading Proficiency.

HIT:110  HEALTHCARE LEGAL AND ETHICAL ISSUES  
In this course learners investigate 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. Prerequisites: HIT:102 and Reading Proficiency.

HIT:201  HEALTH INSURANCE BILLING AND REIMBURSEMENT  
This course prepares learners to compare and contrast health care payers, illustrate the reimbursement cycle, and comply with regulatory guidelines. Payment methodologies and systems are explored. Using computerized encoding and grouping software, the learner assigns DRGs, APCs, and RUGs. Charge master maintenance and reimbursement monitoring and reporting are emphasized. Prerequisites: HIT:103, HIT:106 and Reading Proficiency.

HIT:206  DIAGNOSIS CODING SYSTEMS II  
This course is a continuation of Diagnosis Coding Systems I. Students are introduced to additional Diagnosis Related Groups (DRGs) and their relationship to coding. Prerequisites: HIT:106 and Reading Proficiency.

HIT:207  PROCEDURE CODING SYSTEMS II  
This course is a continuation of Procedure Coding Systems I. Students use computerized encoding systems and healthcare data/content to assign appropriate CPT/HCPCS codes including Level II National Codes developed by the Centers for Medicare and Medicaid Services. Prerequisites: HIT:107 and Reading Proficiency.

HIT:208  ADVANCED CODING APPLICATIONS  
Students will 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. Prerequisites: HIT:206, HIT:207, and Reading Proficiency.

HIT:209  MEDICAL TRANSCRIPTION II  
This is an intensive course with emphasis on expanding medical terminology related to various specialties and on gaining skill in transcribing medical reports (history and physical examinations, consultations, operative notes, discharge summaries). Professionalism, decision-making, quality/ productivities standards, and work priority are stressed. Additional lab hours required. Prerequisites: HIT:109 and Reading Proficiency.

HIT:210  PROFESSIONAL PRACTICE EXPERIENCE  
This course allows students to experience the AHMA 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. Prerequisites: Permission of department chairperson or program coordinator and Reading Proficiency.

HIT:211  ELECTRONIC HEALTH SYSTEMS  
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). Prerequisites: HIT:102, IS:103, IS:136, IS:151 and Reading Proficiency.

HIT:213  QUALITY AND PERFORMANCE IMPROVEMENT IN HEALTHCARE  
This course introduces students to the theory, practice and management of quality performance and improvement through examination of peer review process, 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. Prerequisites: HIT:102, HIT:103 and Reading Proficiency.

HIT:214  CALCULATING AND REPORTING HEALTHCARE STATISTICS  
The focus of this course is 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 IRB processes. Prerequisites: HIT:102, MTH:140 and Reading Proficiency.
HIT:291  WORKPLACE LEARNING:  HEALTH INFORMATION TECHNOLOGY  2
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 health information technology to enhance their preparation for entering the field. Minimum 100 hours in the workplace throughout the term. Prerequisites: Permission of department chairperson or program coordinator and Reading Proficiency.

HISTORY

HST:101  UNITED STATES HISTORY TO 1865  3
United States History to 1865 surveys the cultural, economic, institutional, political, and social forces and events which have shaped the United States from the colonial period through the Civil War. Prerequisite: Reading Proficiency.

HST:102  UNITED STATES HISTORY FROM 1865 TO THE PRESENT  3
United States History from 1865 to the present surveys the cultural, economic, institutional, political and social forces and events which have shaped the United States from the Civil War to the present. Prerequisite: Reading Proficiency.

HST:105  UNITED STATES IN THE TWENTIETH CENTURY  3
The United States in the Twentieth Century surveys the social, economic, political and intellectual forces which have shaped contemporary American life and institutions. This course will focus on change within America during the period 1890 to the present and will consider the effects of that change on America and on America's relations with the rest of the world. Prerequisite: Reading Proficiency.

HST:107  THE AFRICAN AMERICAN EXPERIENCE, 1619 TO THE PRESENT  3
The African American Experience surveys the cultural, economic, institutional, political, social forces and events that have shaped the African American experience from early America to the present. This course will promote a better understanding of America's past by developing increased awareness of the history of African Americans, their problems and their accomplishments both individually and as a group. Prerequisite: Reading Proficiency.

HST:115  ANCIENT AND MEDIEVAL HERITAGE  3
This course is a survey of the Western World from Antiquity through the Renaissance, with concentrations on Egypt, Mesopotamia, Hebrews, the classical civilizations of Greece and Rome, Christianity and Medieval Europe and Islam. Attention is given to political developments, cultural achievements and literary sources and philosophical impact of each area as it applies to today's world. Prerequisite: Reading Proficiency.

HST:117  EARLY MODERN EUROPE  3
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
This course examines the development of the "modern world" from a variety of global perspectives, including demographics, the human impact on the environment, social transformations and the role 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. This course highlights the nature of changes in global frameworks and their causes and consequences, as well as comparisons among major societies. Prerequisite: Reading Proficiency.

HST:128  WESTERN CIVILIZATION FROM 1500 TO THE PRESENT  3
This course surveys the political, economic, cultural, military, and social forces that have shaped the Western World. The course also examines religious developments, overseas colonization, the Enlightenment, industrialization, imperialism, the world wars, and globalization. Prerequisite: Reading Proficiency.

HST:130  AFRICAN HISTORY I  3
This course will deal with the history of black Africans from the time of ancient Egypt to contemporary Africa. It will be concerned with the chronological progression of African civilization, covering individuals, events and the ideas of the various periods. Prerequisite: Reading Proficiency.

HST:137  AFRICAN AMERICAN HISTORY THROUGH RECONSTRUCTION  3
A survey of African American History from its African background through the Civil War and Reconstruction. The course will investigate African-American leaders, socio-cultural institutions, as well as the Black community's relationship with the larger community. Prerequisite: Reading Proficiency.

HST:138  AFRICAN AMERICAN HISTORY FROM RECONSTRUCTION TO THE PRESENT  3
A survey of African American history from the era of Jim Crow to the present. The course will investigate African-American leaders, socio-cultural institutions, as well as the Black community's relationship with the larger community. Prerequisite: Reading Proficiency.

HST:139  BRITISH HISTORY  3
This course is a survey of British history from the time of Roman rule until the union of England and Scotland in 1707. Through lectures, videos, text assignments, and field trips, students will trace the historical development of the United Kingdom. Prerequisite: Reading Proficiency.

HST:201  HISTORY OF THE FAR EAST  3
A survey of East Asian civilizations focusing on institutional continuity and change, problems of indigenous response and adaptation to western influence, and contemporary problems. Prerequisite: Reading Proficiency.

HST:204  THE U.S. IN CRI~S AND CIVIL WAR  3
An in-depth study of the events and development in U.S. History between 1820 and 1865. The course will highlight the sectional differences and developments which led to the outbreak of the Civil War and the 1862-1865 war itself with all its national and international implications. Prerequisite: Reading Proficiency.

HST:205  THE UNITED STATES AND THE MIDDLE EAST, 1776-PRESENT  3
This course surveys the political, economic, cultural, military, and social forces that have shaped the United States relationship with the Middle East. The course examines American involvement in the Middle East and its impact on domestic politics in the US; how US foreign policy toward the Middle East has evolved over time; and the role the United States has played in shaping the political history of the Arab-Islamic world. Prerequisite: Reading Proficiency.

HST:206  WOMEN IN UNITED STATES HISTORY  3
This course surveys the history of women in what is now the United States, beginning with the era of the first contact between Native American and Europeans to the present. The course focuses upon the ways gender, race, ethnicity, class, religion and region interacted to shape women's lives. It also surveys women's changing family, work, and social roles. The course examines women's political contributions, their quest for equality, and their role in U.S. constitutional changes over time. Prerequisite: Reading Proficiency.

HST:207  AMERICA IN VIETNAM  3
This course surveys the United States involvement in Vietnam from the end of World War II through the fall of Saigon in 1975. This course surveys the social, political, and military history of the Vietnam Era. This course also examines both United States foreign policy and domestic politics within the context of the Vietnam War. Prerequisite: Reading Proficiency.

HORTICULTURE

HRT:101  INTRODUCTORY HORTICULTURE  4
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
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
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
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
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:125 PLANT IDENTIFICATION: TREES  
This course will study deciduous and evergreen landscape trees. Identification through study of botanical characteristics will be emphasized. Landscape uses and plant culture will also be covered. Prerequisites: HRT:110 and Reading Proficiency.

HRT:134 MICROPROPAGATION OF PLANTS  
This course 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. Additional hours required. Prerequisites: HRT:101 or BIO:124 and HRT:103 or BIO:219 and Reading Proficiency.

HRT:201 TURFGRASS MANAGEMENT  
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 PRACTICE  
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  
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  
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  
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  
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  
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  
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  
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  
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 practices will be discussed. Prerequisites: HRT:101 or BIO:124 and Reading Proficiency.

HRT:235 ANNUALS AND ORNAMENTAL GRASSES  
Students will be introduced to the identification of annual landscape plants and their use in private, public and commercial gardens. Ornamental grasses, their identification, use and culture will also be covered. Prerequisites: HRT:101 or BIO:124 and Reading Proficiency.

HRT:240 GOLF COURSE MANAGEMENT  
This course will cover the varied aspects of management of private and public golf courses. Course content will include primary cultural practices of putting greens, tees, fairways, roughs and bunkers as well as address routine course maintenance and operations. Topics in specialized golf course equipment will be presented. Prerequisites: HRT:201 and Reading Proficiency.

HRT:241 GREENHOUSE MANAGEMENT  
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  
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:245 SPECIAL APPLICATIONS IN LANDSCAPE DESIGN  
Students will learn to design specialty gardens such as woody and herbaceous borders, small urban spaces, special access gardens, woodland gardens and public display gardens. Designs may be developed using CAD or traditional drafting methods. Course content will include construction techniques. Additional lab hours required. Prerequisites: HRT:206, HRT:207, HRT:230 and Reading Proficiency.

HOSPITALITY AND TOURISM

HTM:100 INTRODUCTION TO THE HOSPITALITY INDUSTRY  
This course introduces the student to the business of hospitality and presents the exciting career opportunities available in one of the world's largest and most dynamic industries. It focuses on defining hospitality, introducing its various service segments, and presenting possible career paths within each segment. Entry test requirement: Test into ENG:101. Prerequisites: ENG:030 with a minimum grade of “C” or Reading Proficiency.

HTM:105 PROFESSIONALISM IN THE HOSPITALITY INDUSTRY  
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  
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  
This course provides the student with the basic knowledge of “service” and how it applies to managing guest relations in the hospitality industry. Service will be examined from the perspective of those who deliver it and those who manage it. Prerequisites: HTM:100 or HRM:134, and Reading Proficiency.

HTM:120 SUPERVISION AND LEADERSHIP IN THE HOSPITALITY INDUSTRY  
This course offers insight into the various aspects of supervision and leadership in the hospitality industry. Students are introduced to the functions of supervision and how it relates to all stakeholders within a hospitality organization. Supervisory roles, responsibilities, and essential supervisory skills are presented through study and practical applications. Prerequisites: HTM:100 or HRM:134, and Reading Proficiency.

HTM:125 NUTRITION FOR THE CULINARIAN  
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  
This course will prepare students to employ the principles of effective food, beverage, and supply purchasing necessary to support food preparation and service departments of hospitality operations. Students will be exposed to product specifications, food grading, comparative buying, and procedures associated with purchasing, receiving, issuing and inventory control using current industry technology and software. Prerequisites: HTM:100 or HRM:134, MTH:108 or Higher, and Reading Proficiency.

HTM:205 LEGAL ASPECTS OF HOSPITALITY  
This course is a comprehensive study of the legal issues encountered in hospitality management. Pre-employment and compliance are stressed to reduce potential liability in hospitality organizations. Areas of emphasis include government regulations, employment, contractual agreements, insurance, property, safety and security, food and beverage management, and guest liability. Prerequisites: HTM:100 or HRM:134, and Reading Proficiency.
### HTM:210 Hospitality Financial Planning and Cost Control
This course introduces students to common methods of operational cost control found in the hospitality industry. Students will develop operational standards and will determine daily operational levels and break-even points. Costs of food, beverage, labor, and direct expenses are examined. Budgeting, Forecasting, Analysis and Decision Making are examined. Prerequisites: HTM:100 or HRM:134; MTH:106 or higher; and Reading Proficiency.

### HTM:215 Hospitality Sales and Marketing
This course introduces students to fundamental marketing terms, theory, and concepts that are found within the hospitality and tourism industry. Marketing is emphasized as a management philosophy that guides the design and delivery of guest services; a way of doing business. Both short and long-term marketing plans are examined with a focus on how marketing impacts every facet of the organization. Prerequisites: HTM:100 or HRM:134, and Reading Proficiency.

### HTM:220 Hotel Facilities Management
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
This course examines the organization and development of hotel operations. It focuses on the interdependent nature of the major departments within a hotel/resort operation; rooms division, food and beverage, sales and marketing, housekeeping and maintenance, and general administration. There is a concentrated focus on front office operations and procedures. Prerequisites: HTM:100 or HRM:134, and Reading Proficiency.

### HTM:230 Bar and Beverage Management
This course is a study of beverage service and management in a hospitality establishment. Topics include beverage knowledge, purchasing, control, marketing, legislation, staffing, service, and pairing with food. The concept of responsible alcohol beverage service is also covered and offers the student the opportunity to earn the ServSafe Alcohol certification through the National Restaurant Association. Prerequisites: HTM:100 or HRM:134, and Reading Proficiency.

### HTM:235 Foodservice Design and Layout
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
This experiential course provides the student opportunity to apply theory and skills learned in the classroom, learn new skills, and explore career possibilities while supervised by a professional in the field and a faculty member. Students will observe and participate in the functions of the Hospitality industry to enhance their preparation for entering the field. Student is required to complete a minimum of 100 hours of supervised work experience in a position related to their academic or career goal and complete six personally developed learning objectives. Corequisite: Must be concurrently enrolled in at least one class which is related to student's Major or career interest or with permission of the instructor. Prerequisites: HTM:100 or HRM:134, and Reading Proficiency. Be able to obtain a position related to student's academic or career goals (student's present job may qualify); or permission of instructor.

### HTM:245 Event Planning I
This course provides students with a practical overview of the many factors that must be considered in the planning and execution of successful meetings and special events. Students will be exposed to program goals and objectives; basic budget questions; destination options and venue considerations; transportation options; food and beverage decisions; speaker and entertainment selection; and other critical aspects of event planning. Prerequisite: Reading Proficiency.

### HTM:250 Event Planning II
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 HTM:261 with minimum grades of "C", and Reading Proficiency.

### HTM:255 Event Planning III
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 complexities of a guarnass representing a realistic meeting or special event. Prerequisites: HTM:250 or HRM:252 with minimum grades of "C", and Reading Proficiency.

### HTM:260 Travel and Tourism Foundations
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
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
This course is designed to provide automated, foundational knowledge for those entering the travel and tourism industry. Students will learn the basics of using select computer systems and the Internet for the acquisition of travel information, the construction of travel arrangements, and the collection and use of customer data for marketing purposes. Prerequisites: HTM:260 or TUR:104 with minimum grades of "C", IS:123 with a minimum grade of "C" or equivalent experience, and Reading Proficiency.

### HUMAN SERVICES

#### HMS:100 Introduction to Human Services
A survey course to introduce students to human and community needs and to the concepts of the helping profession. Students examine community resources, the relationship of agencies and bureaucracies to the total community, and the worker's role and responsibility in the helping profession. Prerequisite: Reading Proficiency.

#### HMS:101 Human Services: Theories and Skills
An overview of methodology used in the helping profession. Course will include an analysis of helping relationships, a study of interpersonal skills and practice techniques. A process-oriented approach to solving individual, family and community problems will be stressed. Prerequisite: Reading Proficiency.

#### HMS:102 Human Services: Policy and Politics
An analysis of the political process involved in the formulation of social welfare policies from a historical point of view. Federal, state and local programs will be examined in terms of skills and knowledge to affect program planning and delivery. Prerequisite: Reading Proficiency.

#### HMS:110 Introduction to Gerontology
This course will explore the complex forces that shape an older person's experiences and circumstances. It will help students to assess the impact of economics, social forces, cultural value systems, and social institutions on the needs and characteristics of the elderly. Prerequisite: Reading Proficiency.

#### HMS:111 Group Practice in Human Services
This course will focus on the basic issues of group work in Human Services settings. The theory behind group work practice, a study of the various types of groups, ethical issues, group leadership and the process of forming and working with groups will be covered. Prerequisites: HMS:100 recommended and Reading Proficiency.

#### HMS:118 Aging and Disabilities
This course will focus on the aging process and the manifestations of aging in persons with congenital or acquired disabilities. Current habitation, rehabilitation programs and recent technologies will be explored. Discussions will also center on aging care providers and their concerns and needs. Prerequisite: Reading Proficiency.

#### HMS:119 Introduction to the Field of Disabilities
A course designed to provide an overview of issues in the field of disabilities. Discussions focus on the service delivery system and ways in which current legislation, inclusionary models, and other trends impact the lives of persons with disabilities and their care givers. Resources and careers in disabilities will be explored. Prerequisite: Reading Proficiency.

#### HMS:120 Team Building: Working with Care Givers
Focus is on communication, cooperation, and collaboration with care givers of persons with disabilities. Presented will be choices, decision-making, support systems, which aid persons with disabilities and their care givers with full inclusion into society. Prerequisite: Reading Proficiency.

#### HMS:121 Working with Challenging Behaviors
This course provides students with the learning and application of intervention skills to assist individuals with disabilities to achieve their full potential. Focus is on providing support in community settings to persons with disabilities whose behaviors pose challenges. Prerequisite: Reading Proficiency.

#### HMS:122 Health Issues and Persons with Disabilities
Introduction to the basic principles of the health, etiology, and prognosis of specific disabilities. First aid, CPR, medicine administration and other emergency concerns will be explored. Experiences focusing on personal care assistance, positioning, transferring, feeding, etc. for disabled will be learned. Prerequisite: Reading Proficiency.

#### HMS:123 Inclusion in the Community
Designed to help care givers and/or paraprofessionals prepare individuals with disabilities for maximum empowerment and self-advocacy in their respective communities. Introduction to and discussion of alternative living situations and supports needed for inclusion. Staff career competencies explored. Prerequisite: Reading Proficiency.
Course Descriptions

HMS:201 WORKPLACE LEARNING I: HUMAN SERVICES 3
This workplace-based course provides the student the opportunity to apply theory and skills learned in the classroom, learn new skills, and explore career possibilities while supervised by a professional in the field and a faculty member. Students will observe and participate in the function of the organization to enhance their preparation for entering the Human Services field. Minimum 50 hours per credit hour in the workplace throughout the term. Concurrent enrollment in HMS:203 required. Prerequisites: HMS:100 and HMS:101 with grades of “C” or better and Reading Proficiency.

HMS:202 WORKPLACE LEARNING II: HUMAN SERVICES 3
This workplace-based course provides the student the opportunity to apply theory and skills learned in the classroom, learn new skills, and explore career possibilities while supervised by a professional in the field and a faculty member. Students will observe and participate in the function of the organization to enhance their preparation for entering the Human Services field. Minimum 50 hours per credit hour in the workplace throughout the term. Concurrent enrollment in HMS:204 required. Prerequisites: HMS:201 and HMS:203 with grades of “C” or better and Reading Proficiency.

HMS:203 HUMAN SERVICES WORKPLACE LEARNING SEMINAR I 3
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
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:201. 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
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:101 HUMANITIES: PRE-HISTORY TO 1600 4
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
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 arts (architecture, music, philosophy, literature, and religion) which develop from the 17th century to the present. The course will trace the development of classical and popular music, art, literature, 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 created. Prerequisite: Reading Proficiency.

HUM:106 BLACK HUMANITIES 3
This course is an examination of the development of ideas expressed in art, music, literature, philosophy, education, psychology, sociology, and religion of the African Diaspora. Several academic areas will be explored from an Afrocentric perspective to stimulate an interest and kindle a passion for further study. Cultural styles of the African diaspora are explored in the local, global, and intercultural contexts. Prerequisite: Reading Proficiency.

HUM:109 ARTS AND IDEAS IN THE ANCIENT WORLD 3
This humanities course uses the visual arts and literature to trace the development of belief systems from the earliest expressions found in prehistoric remains through the rise of the great civilizations of Egypt, Greece and Rome. Prerequisite: Reading Proficiency.

HUM:110 THE MIDDLE AGES AND THE RENAISSANCE 3
This humanities course explores the arts and ideas, including philosophies and religions, that infused and created the cultural periods known as the Middle Ages and Renaissance in Western Europe, and the ways in which these arts and ideas represented the visible and/or audible expression of the human condition. Prerequisite: Reading Proficiency.

HUM:112 CREATIVE THINKING 3
This interdisciplinary course helps students develop their capacities to observe clearly, to generate ideas and alternatives, to overcome blocks to recognize and solve problems, and to assess results. The skills taught apply to all arts and sciences, to business, and to personal interests. Prerequisite: Reading Proficiency.

HUM:113 INTRODUCTION TO IRISH STUDIES 3
Introduction to Irish Studies is an interdisciplinary survey of Irish history and culture from prehistoric times to the present, with special emphasis on the role of the arts in the struggle for independence and the outstanding achievements of Irish writers and poets. Prerequisite: Reading Proficiency.

HUM:115 LIFE AND DEATH DURING THE NAZI ERA 3
An interdisciplinary approach to the study of life in Nazi Germany. Literary, psychological and historical texts on such topics as education, racial prejudice and propaganda are read and interpreted in class. Supplementary slides and documentary films are used. Prerequisite: Reading Proficiency.

HUM:208 LIBERAL ARTS SEMINAR: THEMES IN THE LIBERAL ARTS 3
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.

HUM:209 BLACKS AND THE WORLD OF CINEMA 3
This course examines the historical and social evolution of blacks in the film industry. It traces the impact of African-Americans as actors, technicians, directors, producers, and audience of short and feature length films. Prerequisites: ENG:101 and Reading Proficiency.

INFORMATION REPORTING TECHNOLOGY

IRT:101 PRINCIPLES OF JUDICIAL REPORTING I 3
This course introduces the student to the role of the reporter in trials, depositions, and administrative hearings. All phases of format and design are taught as it pertains to the production of trials, depositions, and administrative hearings. The student will receive instruction in reference materials, related jobs, NCRA Code of Professional Conduct, and basic proofreading techniques. Prerequisites: IRT:170 and Reading Proficiency.

IRT:138 INTRODUCTION TO COMPUTER-ACQUIRED TRANSCRIPTION 3
This course introduces the student to the Computer-Aided Transcription (CAT) software and gives instruction in the operation of a computer hardware data input device for the creation of a legal document and the development of the dictionaries for their use. Prerequisites: IRT:170, IS:123 and Reading Proficiency.

IRT:140 LEGAL TERMINOLOGY 3
This course will teach the student the meaning of legal and Latin terms. It will also cover instruction on civil and criminal law, the judicial system (including discovery, trial, and appellate processes), the legislative process, hearings, and arbitrations, research and citations, and the notary public law. Prerequisite: Reading Proficiency.

IRT:142 EDITING OF LEGAL DOCUMENTS 3
This course covers the basics of English grammar, punctuation, spelling, numbers, capitalization, vocabulary development, proofreading of the spoken word, and the transcription of legal documents. Prerequisites: IRT:170 and Reading Proficiency.

IRT:150 LITERARY I 3
This course covers speedbuilding of literary dictation at speeds of 100 and 120 words per minute. Instruction will include writing the spoken word with punctuation by means of an NCRA Task Force approved Phase I and Phase II realtime translation theory to provide instantaneous, realtime translation, with special emphasis on dictionary building/management. Prerequisites: IRT:172 and Reading Proficiency.

IRT:169 INFORMATION REPORTING I 3
This course introduces the student to the basic computer-compatible theory for writing on the stenotype machine. The student will develop the ability to write words and sentences. Prerequisites: IS:102 or 30 wpm typing and Reading Proficiency.

IRT:170 INFORMATION REPORTING II 3
This course completes the introduction of the computer-compatible theory for writing on the stenotype machine. The student will continue to develop their ability to write testimony material up to speeds of 60 wpm with 95% accuracy. Prerequisites: IRT:169 and Reading Proficiency.

IRT:171 INFORMATION REPORTING III 3
This course covers speedbuilding of literary testimony, and jury charge material with emphasis on accurate transcription. The student will build speed to 140 wpm on testimony, 120 wpm on jury charge, and 60 wpm on literary. Prerequisites: IRT:170 and Reading Proficiency.

IRT:172 INFORMATION REPORTING IV 3
This course continues to cover speedbuilding of literary, testimony, and jury charge material with emphasis on accurate transcription. The student will build speed to 130 wpm on testimony, 120 wpm on jury charge, and 100 wpm on literary. Prerequisites: IRT:171 and Reading Proficiency.
IRT:173 INFORMATION REPORTING V  
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  
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:175 CART REPORTING I  
This course will introduce the student to real-time translation and its application in the CART environment. Prerequisites: IRT:136, IRT:150 and Reading Proficiency.

IRT:201 PRINCIPLES OF JUDICIAL REPORTING II  
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:202 BROADCAST CAPTIONING I  
This course is designed to teach students the basics of broadcast captioning. Students will learn about dictionary management, researching for a show, captioning style and format, evaluating their writing, and the basic formats for writing news, weather, sports, and other broadcasts. Additional lab hours required. Prerequisites: IRT:174 or IRT:251 and Reading Proficiency.

IRT:203 BROADCAST CAPTIONING II  
This course is designed to teach students the basics of broadcast captioning for all sports captioning. Students will learn about dictionary management, researching for a show, captioning style and format, evaluating their writing, and all the formats for writing all the sports shows. Additional lab hours required. Prerequisites: IRT:202 and Reading Proficiency.

IRT:250 LITERARY II  
This course offers speedbuilding of literary dictation at speeds of 140 and 160 words per minute. Instruction will include writing the spoken word with punctuation by means of an NCRA Task. Force approved Phase I and Phase II real-time transcription theory to provide instantaneous, real-time transcription, with special emphasis on dictionary building/management. Prerequisites: IRT:150 and Reading Proficiency.

IRT:251 LITERARY III  
This course covers speedbuilding of literary dictation at speeds of 180 and 200 words per minute. Instruction will include writing the spoken word with punctuation by means of an NCRA Task. Force approved Phase I and Phase II real-time transcription theory to provide instantaneous, real-time transcription with special emphasis on dictionary building/management. Prerequisites: IRT:250 and Reading Proficiency.

IRT:253 WORKPLACE LEARNING: JUDICIAL REPORTING  
This experiential course provides the student the opportunity to apply theory and skills learned in the classroom, learn new skills, and explore career possibilities while supervised by a professional in the field and a faculty member. Students will observe and participate in the function of the Judicial reporter to enhance the preparation for entering the field. The student shall complete 50 verified hours of actual writing time during the internship. Prerequisites: IRT:174 or one test at 200 wpm testimony and Reading Proficiency.

IRT:254 WORKPLACE LEARNING: CART REPORTING  
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 CART reporter to enhance their preparation for entering the field. The student shall complete 50 verified hours of actual writing time during the internship. Prerequisites: IRT:250 and Reading Proficiency.

IRT:255 WORKPLACE LEARNING: CAPTIONING REPORTING  
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 Captioner to enhance their preparation for entering the field. The student shall complete 50 verified hours of actual writing time during the internship. Prerequisites: IRT:250 and Reading Proficiency.

IRT:256 MEDICAL TESTIMONY/COLOQUY  
This course covers the writing of medical testimony for depositions and trials and the application of writing testimony and medical testimony in multi-voice environments. Prerequisites: IRT:172 and Reading Proficiency.

IRT:257 ADVANCED COMPUTER-AIDED TRANSCRIPTION  
This course will introduce the student to the advanced applications of the Computer-Aided Transcription (CAT) software for information reporting technology. The student will learn about videotaping in depositions for trial purposes and litigation support. Prerequisites: IRT:138 and Reading Proficiency.

**INFORMATION SYSTEMS**

IS:101 KEYBOARDING  
This course is designed for the beginning student to develop touch control of the keyboard, to use proper techniques, to build skill to a minimum of 25 words per minute for one minute. Emphasis is on learning the alphabetic, numeric, and symbol keys and on building basic skill. Pass/Fail grading. Additional hours may be required.

IS:102 KEYBOARDING AND FORMATTING  
Students learn to develop touch control of the keyboard, proper keyboarding techniques, and to apply basic formatting skills to letters, memos, reports, and tables.

IS:103 INFORMATION SYSTEMS FOR BUSINESS  
A study of computers and information systems for business functions. Topics include computer technology and its impact on business organization, role of people in an information system environment, programming fundamentals, information systems and the computer in solving business management problems. Credit not allowed for this course if credit is given for IS:100. Prerequisite: Reading Proficiency.

IS:109 PROOFREADING AND EDITING  
Students learn to produce high-quality business communications through proofreading for accuracy in mechanics, format, and content as well as edit documents for correctness, conciseness, and clarity. Prerequisites: IS:101 or IS:102 and Reading Proficiency.

IS:112 SOFTWARE AND HARDWARE CONCEPTS  
This course is a survey of technical topics related to computer systems with emphasis on the relationships between hardware architecture and systems software. Binary and hexadecimal number systems, data representation, data structures, processor architecture, and operating systems functions and methods will be explored. Prerequisites: MTH:140, Reading Proficiency. Basic computer literacy is expected.

IS:116 COMPUTER LITERACY  
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  
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  
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 COMPUTER APPLICATIONS-SpreadSheETS  
This course focuses on the use of a spreadsheet program for both business and personal applications. Additional lab time may be required. Prerequisites: IS:123 or equivalent experience and Reading Proficiency.

IS:123 INTRODUCTION TO WINDOWS  
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  
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  
An introductory course in using Excel for Windows Worksheet for applications in accounting, budgeting, expense tracking, what-if analysis, charting, database development, queries and other applications. Prerequisite: IS:123.

IS:126 E-MAIL AND INFORMATION MANAGEMENT  
This course examines, through practical application, the creation and management of information received through electronic mail and networks. Prerequisites: IS:123 and IS:102 and Reading Proficiency.
Course Descriptions

IS:129 HTML 1
This course covers the essentials of creating web pages using HyperText Markup Language (HTML) and Cascading Style Sheets (CSS). Students will create and edit basic pages which include text, links, and images. HTML and CSS will be used to control page appearance and layout. Recommended preparation: IS:123 or equivalent experience. Prerequisite: Reading Proficiency.

IS:130 HARDWARE AND SOFTWARE SUPPORT 3
This course covers the theory and hands-on skills necessary to pass the CompTIA A+ exam. Topics covered include hardware fundamentals, networking and security. Students will learn basic operating system functionality and troubleshooting methodology, the practice of proper safety procedures, and how to effectively interact with customers and co-workers. Basic computer literacy is expected. Prerequisite: Reading Proficiency.

IS:131 ADVANCED HTML 2
This course covers advanced web page creation in this continuation of IS:129. HyperText Markup Language (HTML). The student is introduced to advanced techniques of HTML and Cascading Style Sheets (CSS). Students will create and edit web pages which include forms, imagemaps, audio, video, and Application Program Interfaces (API). Additional advanced topics identified by industry and World Wide Web Consortium (W3C) standards may be explored. HTML editors and converters will be presented and may be utilized. Prerequisites: IS:129 and Reading Proficiency.

IS:132 WINDOWS-INTERMEDIATE 3
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:133 INTRODUCTION TO SQL 3
This course covers the concepts of SQL and relational databases. Students will learn how to create tables, enter and manipulate data, query data in tables and format the results using SQL commands. Advanced techniques to retrieve data writing SQL scripts and security issues will also be taught. Additional lab time may be required. Prerequisite: IS:225 and Reading Proficiency.

IS:135 COMMUNICATION AND DESIGN FOR THE WORLD WIDE WEB I 3
Students will learn to use the elements of graphic design to produce Web pages that effectively deliver art and information for business/organizational communications. Additional lab hours required. Prerequisites: ART:133, ART:131 or ART:227 and Reading Proficiency.

IS:136 INTERNET FUNDAMENTALS 1
Students learn how to safely use the Internet. 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 is covered. Prerequisites: IS:123 and Reading Proficiency.

IS:137 COMPUTER APPLICATIONS-PRESENTATION SOFTWARE 1
This course introduces the student to the concept of using a graphics presentation program to create effective, customized business presentations. Students will create on-screen slide shows, audience handouts, speaker's notes and outlines for selected projects. Prerequisite: IS:123 or equivalent experience.

IS:139 WEB PUBLISHING 3
This course introduces 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
This course focuses on generating graphics that can be utilized within the context of the Internet. Topics will include use of graphics at the appropriate times, performance issues, button creation, animated graphics, and multimedia tools. Prerequisites: IS:139 and Reading Proficiency.

IS:142 WEB DEVELOPMENT I 3
This course is an in-depth study of the development and implementation of engaging websites using current industry production tools. Accessibility, security, and website management issues will be addressed. Topics such as file formats, platform standards, user-centered navigation, dynamic content such as streaming video/audio, and search engine concepts will be presented. Prerequisites: IS: 139 and Reading Proficiency.

IS:151 MICROCOMPUTER APPLICATIONS IN BUSINESS 4
Survey of frequently used programs for the business environment. No programming knowledge is required. Software packages from these categories will be studied: operating system, electronic spreadsheet, database management, word processing, and presentation software. Additional lab time may be required. Prerequisites: IS:123 or equivalent experience.

IS:152 COMPUTER APPLICATIONS IN BUSINESS-INTERMEDIATE 3
This class is a continuation of IS:151. Software packages from these categories will be studied: spreadsheets, database management, word processing, and presentation software. Prerequisites: IS:151 or IS:118 and IS:119 and IS:120 and IS:137. Reading Proficiency.

IS:153 C# PROGRAMMING I 4
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 C# language using the current development environment. Prerequisite: Reading Proficiency.

IS:155 OFFICE TECHNOLOGY 2
This course examines electronic equipment utilized to load specialized software, to enter, retrieve, and utilize data on a PDA (Personal Digital Assistant), to scan, fax, and present data on a large screen, and to conduct videoconferencing and teleconferencing sessions. Prerequisites: IS:151 or IS:118, IS:119, IS:125 and IS:137) or (IS:118, IS:119, IS:120 and IS:137) and Reading Proficiency.

IS:156 COMPUTER APPLICATIONS-INTERMEDIATE DATABASES 1
This course is a continuation of IS:118. Students 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
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:158 COMPUTER APPLICATIONS-INTERMEDIATE SPREADSHEETS 1
This class is a continuation of IS:120. In it, students will utilize spreadsheet productivity features to create, modify, and format charts; add and format graphic objects to enhance worksheets and charts; sort and filter data; and include worksheets on web pages. Macros will also be introduced in this course. Prerequisites: IS:120 or IS:151 and Reading Proficiency.

IS:161 COMPUTER APPLICATIONS: ADVANCED WORD PROCESSING 1
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:164 VOICE RECOGNITION TECHNOLOGY 1
This course is an introduction to Voice Recognition Technology, which is a program that trains the computer to recognize voice input as an alternative to typing. Voice Technology is an important tool to assist companies and institutions in meeting ADA requirements. The student will learn how to use voice commands to create, edit and print documents. Time saving macros and templates will be created. Stored documents will be retrieved and edited by voice. Additional lab time will be required. Prerequisites: IS:119 or IS:151 and Reading Proficiency.

IS:165 COMPUTER APPLICATIONS-MICROSOFT PROJECT 1
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:178 JAVA PROGRAMMING I 4
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
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 alphanumeric, numeric, subject, and geographic filing methods are emphasized. Prerequisites: IS:118 or IS:151 and Reading Proficiency.

IS:205 MEDICAL TERMINOLOGY 4
This course provides a broad survey of the language of medicine and health technologies. Students learn to accurately spell and define common medical terms related to major disease processes, diagnostic procedures, laboratory tests, abbreviations, drugs, and treatment modalities. Emphasis is placed on formation, definition and pronunciation. (Same as HIT:101). Prerequisite: Reading Proficiency.

IS:209 COMPUTER APPLICATIONS-ADVANCED 3
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:118, IS:119, IS:137, IS:120 or IS:151 and Reading Proficiency.
IS:210 OFFICE TECHNOLOGY AND PROCEDURES 3
Students learn effective business communication techniques, processing of information via technology, and coordination of office information. Human relations skills and computer-based tools are emphasized. Prerequisites: IS:165, IS:209 and Reading Proficiency.

IS:214 SPREADSHEET MACROS AND ADVANCED TOPICS 1
Students will study more complex functions of spreadsheets including table look-ups, graphics, data base functions, and macros. Prerequisites: IS:120 or IS:125 and Reading Proficiency.

IS:219 INFORMATION SYSTEMS APPLICATIONS AND CONCEPTS FOR BUSINESS 3
The course will cover concepts of information systems and how they relate to business functions. Concepts covered will include web page design, telecommunications, system analysis and design, ethics, information security and foundations of databases. Students will expand their knowledge of productivity applications such as Excel, PowerPoint, Access, Javascript and Word. Prerequisites: IS:103 or IS:116 with minimum grades of “C”, or relevant prior class or work experience, and Reading Proficiency.

IS:225 DATABASE MANAGEMENT 4
This course will cover the concepts, skills, methodology and database technology necessary to design and implement a relational database management system. Topics include relational databases, data structures, relational data modeling and design using current industry techniques and tools. This course emphasizes Structures Query Language (SQL) commands to create a relational database. Prerequisite: Reading Proficiency.

IS:227 C PROGRAMMING 3
Study of the C programming language. Topics to be covered include logic structures, data structures, files, pointers, system and user defined functions, and input arrays. Programs will be written and executed on the computer. Additional lab time may be required. Prerequisites: IS:110 and Reading Proficiency.

IS:229 UNIX/LINUX I 3
This course introduces the Unix/Linux operating system with special emphasis on the creation, organization, and maintenance of the file system. Students are also introduced to basic installation and configuration of the operating system. Students are expected to install, maintain and troubleshoot a stand-alone Unix/Linux machine. Basic computer literacy is expected. Prerequisite: Reading Proficiency.

IS:237 FUNDAMENTALS OF INFORMATION ASSURANCE/ SECURITY 3
This course examines fundamentals of network security involved in creating and managing secure computer network environments. Both hardware and software topics are considered, including authentication methods, remote access, network security architectures and devices, crytography, forensics and disaster recovery plans. This course serves as a preparation basis for CompTIA Security+ exam. Prerequisites: IT:102 and Reading Proficiency.

IS:240 SQL AND DATABASE DEVELOPMENT 3
This course covers the concepts of SQL (Structured Query Language) 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
This course covers the concepts, skills, methodologies, techniques and perspectives essential to analyze and design information systems. Visual and emerging development tools are used to focus on object-oriented and visual development of information systems. Additional lab time may be required. Prerequisites: IS:153 or IS:187 and Reading Proficiency.

IS:246 VISUAL BASIC PROGRAMMING 3
This course is a comprehensive introduction to Visual Basic, one of Microsoft's object-oriented development tools. Topics covered include language syntax, logic and control, data structures, procedures and functions, arrays, event and exception handling, files and database connectivity. Object-oriented principles will be emphasized, including the design and coding of classes. Prerequisites: Prior or concurrent enrollment in IS:110 and Reading Proficiency.

IS:253 C# PROGRAMMING II 4
This course focuses on broadening and deepening the student's understanding of Object Oriented Programming (OOP) as implemented in the C# language. Core elements include creating and deploying Windows programs, form application basics, building user interfaces using basic techniques, .NET fundamentals, basic coding 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: 187 with minimum grades of “C” and Reading Proficiency.

IS:254 ADVANCED MICROCOMPUTER OPERATING SYSTEMS 3
This course presents advanced topics related to the selection, installation and support of operating systems for individual personal computers and computer workstations on a network. Highly technical material covering disk partitioning, I/O interrupts, DLL’s, peripheral drivers, registry editing and security techniques will be presented. Students will master course objectives through a combination of lectures, demonstrations, case studies, and/or hands-on exercises. Prerequisites: IS:103 and IS:124 and Reading Proficiency.

IS:255 ADVANCED VISUAL BASIC PROGRAMMING 3
This course continues Visual Basic Programming focusing on enterprise-level development techniques and tools, including web interfaces. Students participate in a multi-component development project, deploying it in a multi-tier server installation typical of business environments. Topics include advanced database processing, object-oriented component architecture, server-side coding for business processes, and multi-threading. Prerequisites: IS:246 and Reading Proficiency.

IS:256 C++ PROGRAMMING 3
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 client objects. Prerequisites: IS:153 or IS:187 with a minimum grade of “C”, or MTH:160A or MTH:160B or MTH:160C, and MTH:170 or MTH:185 with a minimum grade of “C” or satisfactory score on placement test, and Reading Proficiency.

IS:257 ADVANCED DATABASE DESIGN 3
This course is a continuation of the database design course covering implementation concepts such as n-1 architectures, middleware, SQL functionality, distributed databases, data warehousing and cloud computing. The course focuses on application of both theory and practice. Additional lab time may be required. Prerequisites: IS:225 and Reading Proficiency.

IS:264 UNIX/LINUX II 3
This course is designed to prepare 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. File system configuration and security will also be covered. Prerequisites: IS:229 and Reading Proficiency.

IS:265 WEB SCRIPTING TECHNOLOGIES 3
This course presents current and emerging scripting technologies used for development of state-of-the-art websites and other applications. The primary focus is on client-side technologies. Students will use a variety of technologies in this project-oriented class. Prerequisites: IS:139 and Reading Proficiency.

IS:268 SQL SERVER PROGRAMMING 3
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
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:270 ORACLE PL/SQL 3
This course covers the concepts of Oracle PL/SQL and developing databases applications. Students will learn how to master PL/SQL syntax and the structured programming language. Advanced techniques in table handling, cursors, triggers, procedures and functions will be taught. Additional lab time may be required. Prerequisites: IS:133 and Reading Proficiency.

IS:271 ORACLE USER INTERFACE DESIGN 3
This course covers the development of GUI applications in Oracle. Students will use Developer/2000 tools such as Oracle Forms, Oracle Reports and Oracle Graphics to develop object-based, database applications. Practical solutions for typical business situations will be discussed, demonstrated and developed in a lab environment. Additional lab time may be required. Prerequisites: IS:225 or equivalent business experience and Reading Proficiency.

IS:272 ORACLE DATABASE ADMINISTRATION 3
This course covers the activities performed while administering an Oracle database. Students will be installing and customizing the database, perform backup and recovery procedures, apply database tuning techniques and implement database security methods. Students will be exposed to real world examples of the various tasks that a DBA will perform on a daily basis. Additional lab time may be required. Prerequisites: IS:225 or equivalent business experience and Reading Proficiency.

IS:273 ORACLE DESIGN AND IMPLEMENTATION 3
This course covers the concepts, fundamental issues and techniques for the design and development of an Oracle database. Students will be exposed to all the phases and tasks of the design process, including business modeling, conceptual and physical modeling strategies in developing application systems in Oracle. Requirements of data warehouse design and implementation will be discussed along with design methods for distributed database and Web-based applications. Students will gain hands-on experience in Oracle designer tools. Prerequisites: IS:225 or equivalent business experience and Reading Proficiency.
IS:274 C# PROGRAMMING 3
Students will study the C# object-oriented programming language. Topics to be covered include basic language syntax, primitive and user-defined data types, control structures, classes (including derived classes), encapsulation, inheritance, and abstraction. Prerequisites: IS:246, IS:251 or IS:256 and Reading Proficiency.

IS:275 ADVANCED C++ PROGRAMMING 3
This course is a continuation of IS:256, covering database connectivity, object-oriented data structures, sorting, searching, exception handling, and the Standard 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
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 a minimum grade of “C” and Reading Proficiency.

IS:277 ORACLE DATABASE SECURITY AND ADMINISTRATION 3
This course covers the activities performed while administering an Oracle database. Students install and customize the Oracle database, configure the Oracle Network environment, manage database storage structures, perform database backup and recovery, monitor transactions and resolve locking conflicts, administer users and implement database security. Additional lab hours may be required. Prerequisites: IS:225 with a minimum grade of “C” and Reading Proficiency.

IS:278 ORACLE TUNING AND PERFORMANCE 3
This course is designed to provide an in-depth overview of Oracle’s internal structures and show how to tune Oracle’s internal structures for maximum high performance. Students learn how to use a variety of Oracle tools and automatic tuning features to diagnose and tune the Oracle Instance components. Additional lab hours may be required. Prerequisites: IS:225 with a minimum grade of “C” and Reading Proficiency.

IS:283 C# PROGRAMMING III 4
Students in this course focus on completing the acquisition of the knowledge and skills for developing applications using Windows Forms, Windows Presentation Foundation (WPF) and the .NET Framework 4 in preparation for Microsoft’s Microsoft Certified Technology Specialist (MCTS): .NET Framework 4, Windows Applications certification. Coursework will include developing Windows applications using the C# programming language to access data in Windows forms applications, create Windows services, utilize advanced user interface techniques, implement n-tier applications and implement web applications. Prerequisites: IS:253 with a minimum grade of “C” and Reading Proficiency.

IS:287 JAVA PROGRAMMING II 4
This course focuses on broadening and deepening the student’s understanding of Object Oriented Programming (OOP) as implemented in the Java language. Core elements include design and development of classes, overloaded and overriding methods and constructors, inheritance, encapsulation, and interfaces. Course objectives align with Oracle’s Certified Professional, Java SE Programmer certification. Prerequisites: IS:153 or IS:187 with minimum grades of “C” and Reading Proficiency.

IS:288 JAVA PROGRAMMING III 4
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
Students expand their C# development skills and gain the knowledge and skills required to design and develop Web applications by using the latest version of the Microsoft .NET framework and Microsoft Visual Studio. This course aligns with the Designing and Developing Web Applications by using Microsoft .NET framework certification. Prerequisites: IS:283 with a minimum grade of “C” and Reading Proficiency.

IS:291 WORKPLACE LEARNING: INFORMATION SYSTEMS 3
A workplace learning experience consists of a work 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 are also able to learn new skills and to explore career possibilities while supervised by the employer and a faculty member. Prerequisites: Enrollment in an IS program, department approval, and Reading Proficiency.

IS:294 JAVA FRAMEWORKS: STRUTS AND HIBERNATE 3
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:298 with a minimum grade of “C” and Reading Proficiency.

IS:295 JAVA MOBILE APPLICATIONS DEVELOPMENT 3
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.

INFORMATION TECHNOLOGY

IT:101 CISCO NETWORKING ACADEMY I: INTRODUCTION TO NETWORKS 5
This course focuses on learning the fundamentals of networking. Practical and conceptual skills that build the foundation for understanding basic networking will be covered. This is the first of four (4) courses as preparation for the Cisco Certified Network Associate (CCNA) certification as well as the first of two (2) courses as preparation for the Cisco Certified Entry Networking Technician (CCENT). Prerequisite: Reading Proficiency.

IT:102 DESKTOP CLIENT SUPPORT 3
This course prepares students to take the Microsoft Certified Technology Specialist exam for Windows Configuration, 70-680. Students will learn to implement, administer, and troubleshoot the Microsoft Windows client operating system. Topics include installation, upgrades, restoration, user profiles and accounts, and the TCP/IP protocol. Basic computer literacy is expected. Prerequisite: Reading Proficiency.

IT:103 HELP DESK PRINCIPLES 3
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
This course examines managerial aspects of computer security and assurance for enterprises. Topics include risk management, contingency planning, access control models, and information security governance including FISMA compliance, program assessment and metrics. The student will acquire knowledge of accreditation, certification, procurement and operating principles for secure computing systems. Prerequisites: IS:237 and Reading Proficiency.

IT:121 SECURE E-COMMERCE AND E-GOVERNMENT 3
This course examines the principles and techniques for secure electronic commerce and secure electronic government. Topics include cryptography, certification authorities, public key infrastructure, biometrics, digital signatures, and legal and national policy issues surrounding e-commerce and e-government. Students also develop an e-commerce website using current industry tools. Prerequisites: IS:229 and IS:237, both with a minimum grade of “C” and Reading Proficiency.

IT:140 WINDOWS SERVER CONFIGURING ACTIVE DIRECTORY 3
This course covers the design, implementation, and management of Microsoft’s Active Directory in a distributed network environment under Windows Server. It prepares the student to take the current Microsoft Certified Technology Specialist exam 70-640. Prerequisites: IT:102 and IT:142, both with a minimum grade of “C” and Reading Proficiency.

IT:142 WINDOWS SERVER CONFIGURING INFRASTRUCTURE 3
In this course the student is taught how to design, implement, manage, and troubleshoot a distributed network under Microsoft’s Windows Server Operating System. The installation of primary network services and connectivity from the desktop will be covered. This course prepares students for the Microsoft Certified Technology Specialist exam, 70-642. Prerequisites: Prior or concurrent enrollment in IT:132 with a minimum grade of “C” or better and Reading Proficiency.

IT:201 CISCO NETWORKING ACADEMY II: ROUTING AND SWITCHING ESSENTIALS 5
This course focuses on the architecture, components and operations of routers and switches in a small network. Configuration and troubleshooting routers and switches for basic functionality will be covered. This is the second of four (4) courses offered as preparation for the Cisco Certified Network Associate (CCNA) certification exam as well as the second of two (2) courses as preparation for the Cisco Certified Entry Networking Technician (CCENT). Prerequisites: IT:110 with a minimum grade of “C” and Reading Proficiency.

IT:202 CISCO NETWORKING ACADEMY III: SCALING NETWORKS 3
This course focuses on hierarchical network design, redundant network implementation, first-hop redundancy protocols, and enhanced-switching technologies, spanning tree protocols, IPv4/IPv6 OSPF and EIGRP routing. Basic wireless configuration and concepts are introduced. This is the third of four (4) courses as preparation for the Cisco Certified Network Associate (CCNA) certification.
IT:203 CISCO NETWORKING ACADEMY IV: CONNECTING NETWORKS 5
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: ROUTING 5
This course is offered as preparation for students seeking the Cisco Certified Network Professional (CCNP) certification. This advanced routing course covers, but is not limited to: EIGRP, OSPF, eBGP, IPv6 and path control solutions. This course is a component of the CCNP, CCP, and CCDP certifications. Prerequisites: IT:203 or CCNA certification or department approval and Reading Proficiency.

IT:206 CISCO CCNP: SWITCHING 5
This course is offered as preparation for students seeking the Cisco Certified Network Professional (CCNP) certification. The Switching course instructs the student in the knowledge and skills necessary to plan, configure and verify the implementation of complex enterprise switching solutions. The course will help students to prepare for the CCNP and CCDP certifications. Prerequisites: IT:203 or CCNA certification or department approval and Reading Proficiency.

IT:207 CISCO CCNP: TROUBLESHOOTING 5
This course is offered as preparation for students seeking the Cisco Certified Network Professional (CCNP) certification. This troubleshooting course covers the skills necessary to plan and perform regular maintenance on complex enterprise router and switched networks and to perform network troubleshooting activity. This course will help students to prepare for the CCNP certification. Prerequisites: IT:203 or CCNA certification, IT:204 and IT:206 and Reading Proficiency.

IT:208 CISCO NETWORKING ACADEMY: CCNA SECURITY 5
This course focuses on network security procedures emphasizing hands-on skills for: security policy design and management, security technologies, security products and solutions, firewall and secure router design, installation, configuration, maintenance, Authorization, Authentication, 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 CCNA certification and Reading Proficiency.

IT:210 FIREWALL AND VPN SECURITY 3
This course focuses on security solutions and processes in a network with emphasis on practical skills in the following areas: firewall, Intrusion Prevention (IPS) and VPN design, implementation, configuration and maintenance using ASA and PIX Security Appliance. Prerequisites: IS:237, IT:201 with a minimum grade of “C” and Reading Proficiency.

IT:211 INTRODUCTION TO VIRTUALIZATION AND CLOUD COMPUTING 4
This course explores the installation, configuration and management of virtualization tools, including VMware vSphere using ESX/ESXi and vCenter Server, Microsoft terminal services, and/or other leading virtualization tools. Completion of this hands-on course prepares students to obtain recognized industry certifications, including the VCP (VMware Certified Professional) Prerequisites: IT:101 and IS:229 or IT:102, all with a minimum grade of “C”, and Reading Proficiency.

IT:216 DIGITAL FORENSICS 3
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
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 (PDIOI) through modular design and the relations between modules. Prerequisites: IT:203 with a minimum grade of “C” and Reading Proficiency.

IT:246 WINDOWS SERVER ADMINISTRATION 3
This course covers the design, implementation, and management of network services using Microsoft’s Windows Server in a distributed networking environment. This course prepares the student to take the Microsoft Certified IT Professional (MCTIP) exam, 70-646. Prerequisites: IT:102 with a minimum grade of “C” and Reading Proficiency.

INTERDISCIPLINARY STUDIES

IDS:102 URBAN LEGENDS AND AMERICAN SOCIETY 3
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
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
Fiction and non-fiction texts are explored to examine the U.S. education experience in past and present educational settings. Equity in educational settings and experiences is examined. Teaching and learning theory and leading educational philosophies are introduced and compared to literature-based interpretations. Prerequisites: Reading Proficiency.

IDS:105 LAW GOES TO THE MOVIES 3
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
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
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
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
This course introduces students to global processes influencing and shaping race/ethnicity, gender and religion in 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
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
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
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
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
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
This course focuses on the many ways the problems in sports reflect larger issues of culture, socialization, 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.

INTERNATIONAL BUSINESS
IB:100 INTERNATIONAL BUSINESS
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:103 ELEMENTARY ITALIAN I
Students in this beginning course develop the grammatical knowledge and communicative skills necessary to participate in elementary Italian conversation and to read short passages. Students also explore the richness of historical and contemporary Italian culture. Prerequisite: Reading Proficiency.

ITL:104 ELEMENTARY ITALIAN II
In this continuation of ITL:103, students continue their study of the basic elements of Italian grammar, increase their vocabulary and enhance their ability to read and communicate in Italian. Students enhance their global and intercultural competency through increased fluency in the language and a deeper exploration of historical and contemporary Italian culture. Prerequisites: ITL:103 and Reading Proficiency.

JAPANESE
JPN:101 MODERN JAPANESE I
This course focuses on the construction and practice of fundamental vocabulary, basic sentence structures and social conventions necessary for simple interpersonal communication in Japanese. The emphasis is on the using the Japanese language in everyday situations. Prerequisite: Reading Proficiency.

JPN:102 MODERN JAPANESE II
This course increases students’ vocabulary, grammar, and cultural knowledge necessary to become proficient in Japanese. This course gives students the opportunity to reflect on their own linguistic system and cultural milieu and acquaints them with a different approach to communication and with a different view of the world. The knowledge gained in this course establishes the foundation for further inquiry into the Japanese language, which can happen both in and out of the classroom. Prerequisites: JPN:101 and Reading Proficiency.

LEGAL STUDIES
LGL:104 INTRODUCTION TO CIVIL TRIAL PROCEDURES
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
This course will help the Paralegal become familiar with the possible applications of the computers in law offices of different sizes and provide a general introduction to the varieties of hardware and software available and the creation of appropriate systems for a law office. Prerequisite: Reading Proficiency.

LGL:107 ALTERNATIVE DISPUTE RESOLUTION
Alternative dispute resolution is a method for using out-of-court alternative forums to resolve disputes. This course will examine the historical, statutory, and economic basis of ADR. Topics to be covered in both business and dissolution of marriage are: mediation, arbitration, mini trials, and summary jury trials. Prerequisites: LGL:108 and Reading Proficiency.

LGL:108 INTRODUCTION TO LAW FOR THE PARALEGAL
This course includes a general discourse on the training and purpose of Paralegals, examines the role of the law in modern society, the ethical and professional practice standards applicable to lawyers and paralegals, surveys the various fields of law and examines legal resource materials and the processes of legal research. Prerequisite: Reading Proficiency.

LGL:202 WILLS, TRUSTS AND PROBATE ADMINISTRATION
Study of the more common forms of wills and trusts and a survey of the fundamental principles of law applicable to each; a study of the organization and jurisdiction of a Missouri Probate Court; a detailed analysis of the administration of estates in Missouri Probate; a review of estate and inheritance taxes applicable to such estates. Prerequisites: LGL:108 and Reading Proficiency.

LGL:205 LAW OF REAL PROPERTY AND REAL ESTATE TRANSACTIONS
A study of the law of real property and in-depth survey of the more common types of real estate transaction and conveyances, such as deeds, contracts, leases, deeds of trust; drafting problems involving various of these instruments; and special research projects related to the subject matter; study of the system of recording and search of public documents. Prerequisites: LGL:108 and Reading Proficiency.

LGL:206 BUSINESS ORGANIZATION AND GOVERNMENT REGULATION
A study of the formation and operation of corporations, partnerships, business trusts and other business vehicles, including a survey of the fundamental principles of law applicable to each; special research projects related to the subject matter; a study of the impact and regulation of taxation and other forms of government regulation of business. Prerequisites: LGL:108 and Reading Proficiency.

LGL:211 TORTS
A study of the fundamental principles of the law of torts including special research assignments related to the subject matter; consideration of the techniques of investigation involved in the lawyer’s handling of tort claims; a study of the various forms of pleadings involved in commencing such claims in court actions. Prerequisites: LGL:108 and Reading Proficiency.

LGL:216 ADVANCED CIVIL TRIAL PROCEDURES
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
This course is designed as an introduction to the process of legal research, and an introduction to the connection between research and legal writing. The course involves several research projects to be completed both in the lab (Internet, CD-ROM and CALI) and in a law library. A moderate amount of legal writing will be integrated into the course assignments. This course is a prerequisite to LGL:218, Legal Writing. Both courses are required courses in the Paralegal program. This course requires students to travel off campus to a local law library. Prerequisites: LGL:108 and Reading Proficiency.

LGL:218 LEGAL WRITING
This course is designed as a continuation of LGL:217, Legal Research, and is intended to expand on all principles involved in legal reasoning as it relates to legal analysis and the preparation of legal memoranda. Students will be responsible for completing several writing projects which involve a legal research component. This course requires students to travel off campus to a local law library. Prerequisites: ENG:101 or equivalent, LGL:108, LGL:217 and Reading Proficiency.

LGL:219 WORKPLACE LEARNING: PARALEGAL
This experiential course provides the student the opportunity to apply theory and skills learned in the classroom, learn new skills and supervise 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
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:221 ADVANCED ONLINE-DATABASE LEGAL RESEARCH
Students will learn to use advanced query techniques using Westlaw and Lexis databases. Keyword, term search, and natural language searching skills will be taught. Assignment of complex legal problems will require students to understand and use the extensive library structures of these databases. Additional lab hours will be required. Prerequisites: LGL:108 and LGL:214, or LGL:217 and LGL:216, and Reading Proficiency.

LGL:222 LEGAL RESEARCH ON THE INTERNET
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
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
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
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
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:227 REMEDIES
This course will cover legal and equitable remedies in property, contract and tort litigation and settlement, measurement of damages, injunctive relief, and specific performance. Prerequisites: LGL:108, BLW:101 and Reading Proficiency.

LGL:228 FAMILY LAW
The student will become familiar with statute and case law regarding the dissolution of marriage action, termination of parental rights, adoption law, court appointment of guardians and guardian ad litem. The student will develop skills in client interviewing and counseling; learn in detail the preparation of necessary forms and documentation to be filed in court; and learn the discovery devices such as interrogatories and deposition and emphasize their utilization in family law matters. Prerequisites: LGL:108 and Reading Proficiency.

LGL:229 ADVANCED COMPUTER UTILIZATION
This course will extend the paralegal student’s computer knowledge to the new and advanced areas of computer utilization in law offices and corporate legal departments. Topics will include network based application software, database management, integration of word processing, spreadsheets and databases, and presentation software. Prerequisites: LGL:108, LGL:109 and Reading Proficiency.

LGL:230 EMPLOYMENT LAW
The study of the employer and employee relationship and the laws governing the employment agreement. This course will examine the specific areas of employment discrimination, Worker’s Compensation, and regulation of union activity. Prerequisites: LGL:108 and Reading Proficiency.

LGL:231 CD-ROM LEGAL RESEARCH
This course will demonstrate the use of CD-ROMs as a legal research tool. Using CD-ROMs from West, Lawyer’s Cooperative Publishing and other legal publishers, students will learn the basic skills required for searching these large databases. Students will be expected to develop an organized research process that locates appropriate information relative to the assigned topic. Considerable time will be required in the campus computer labs to meet the requirements for this course. Prerequisites: LGL:108 and Reading Proficiency.

LGL:232 CONTRACTS
A study of the types and kinds of contracts and an in-depth analysis of the basic elements of contract law. The proper form and manner of entering into a lawful contract will be analyzed. Prerequisite: Reading Proficiency.

LGL:233 BANKRUPTCY
A study of the law of bankruptcy and the filing procedures. The elements of bankruptcy and completion of the debtor forms will be emphasis points. Prerequisites: LGL:108, BLW:101 or LGL:232 and Reading Proficiency.

LIBRARY AND INFORMATION STUDIES

LIB:030 INTRODUCTION TO COLLEGE RESEARCH AND INFORMATION LITERACY
This course is designed to develop college-level information literacy skills focusing on library and Internet resources. Students will build critical thinking skills while learning to determine information needs and to effectively and efficiently locate, evaluate, and manage information through lecture and participatory activities. Corequisite: RDG:030.

LIB:101 INTRODUCTION TO LIBRARY AND ONLINE RESEARCH
This course offers students instruction in using library resources, including the Internet, online databases, and the library catalog. Through a combination of hands-on practice and lectures, students will learn to locate, evaluate, and manage information efficiently and effectively. Prerequisite: Reading Proficiency.

LIBRARY AND INFORMATION STUDIES

LIB:030 INTRODUCTION TO COLLEGE RESEARCH AND INFORMATION LITERACY
This course is designed to develop college-level information literacy skills focusing on library and Internet resources. Students will build critical thinking skills while learning to determine information needs and to effectively and efficiently locate, evaluate, and manage information through lecture and participatory activities. Corequisite: RDG:030.

LIB:101 INTRODUCTION TO LIBRARY AND ONLINE RESEARCH
This course offers students instruction in using library resources, including the Internet, online databases, and the library catalog. Through a combination of hands-on practice and lectures, students will learn to locate, evaluate, and manage information efficiently and effectively. Prerequisite: Reading Proficiency.

LGL:101 INTRODUCTION TO SUPERVISION
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.

LGL:106 HUMAN RESOURCES MANAGEMENT
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.

LGL:109 BUSINESS ORGANIZATIONAL BEHAVIOR AND DYNAMICS
The study of organizational behavior and the interplay of individual differences in industrial settings. The course will relate the study of people in organizations to a frame-work designed to promote understanding of the individual by the supervisor. Prerequisite: Reading Proficiency.

MKT:101 ADVERTISING THEORY
A general survey of the values, purposes and techniques of advertising in its many forms, including all of the major and minor media. The managerial viewpoint will be emphasized in the analysis. Prerequisite: Reading Proficiency.

MKT:104 PRINCIPLES OF SELLING
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.
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MCM:142 APPLIED ADVERTISING 3
This course will further the student's knowledge of advertising practices, campaigns, strategies, and production. Along with discussions, lectures, 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
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 MEDIA INTERNSHIP I 3
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 MEDIA INTERNSHIP II 3
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
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
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:212 SPECIALIZED PUBLICATION PRODUCTION 3
Through lectures and demonstrations, students will be exposed to the techniques of writing, editing, designing and having printed specialized publications. Small company newsletters and newspapers, brochures, church bulletins and the like will be emphasized. This course is for both regular students and persons who already have these responsibilities in their job. Prerequisite: Reading Proficiency.

MCM:213 ADVANCED VIDEO PRODUCTION 3
Students will develop their skills in preproduction, production and post-production video work, both multi-camera studio and on location. The course will include concept development, scripting, storyboarding, shooting and editing video projects. Class involves lectures, discussions, and video production activities. Prerequisites: MCM:121, MCM:126 or permission of instructor and Reading Proficiency.

MCM:215 MAJOR FILM DIRECTORS 3
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 WRITINGS WORKSHOP 3
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 articles and press releases. In the technical area, students will learn to write technical reports, brochures, and manuals for a variety of purposes. Additional lab hours are required. All writing requires basic word processing skills. Prerequisites: ENG:102, ENG:103 or equivalent work experience and Reading Proficiency.

MCM:218 ADVANCED FILMMAKING 3
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, scripting, 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
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 taken for credit with different topics. Prerequisite: Reading Proficiency.

MCM:220 ADVANCED AUDIO PRODUCTION 3
Students will develop their skills in Audio Production through usage of computer based digital audio editing systems. This course will include concept development and scripting, recording techniques, and advanced editing techniques. Class includes lectures, discussion, and audio production activities. Prerequisites: MCM:124 or permission of instructor and Reading Proficiency.

MCM:221 MEDIA PORTFOLIO REVIEW 1
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. Reading Proficiency.

MATHS

MTH:004 HANDS-ON ARITHMETIC WORKSHOP 3
This course is designed 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:020 PRE-ALGEBRA 3
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
This course is for students who have experienced difficulty with mathematics in general and algebra in particular. Working individually or 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. This course is also valuable for teachers who want to teach mathematics with a goal of preparing students for algebra. 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:027 BRIDGES TO ELEMENTARY ALGEBRA 1
This course is designed for students who qualify for Elementary Algebra. Completion of this course will greatly enhance a student's chance for success in Elementary Algebra. This course offers a brief review of operations on whole numbers, fractions, decimals and percents. Also included is an intensive review of applications of ratios, geometry, signed numbers, like terms, simplifying algebraic expressions and solving basic equations. Prerequisites: Placement into MTH:030 or completion of MTH:020 with a grade of "C" or better.

MTH:030 ELEMENTARY ALGEBRA 3
This course covers basic algebra. Topics include operations on polynomials, factoring polynomials, linear equations and their applications, graphing lines and solving equations. Prerequisites: MTH:020 with grade of "C" or better or satisfactory score on placement test, and RD:020 with a grade of "C" or better or satisfactory score on placement test.

MTH:040 ELEMENTARY ALGEBRA AND BASIC MATH 5
This course covers the same material as MTH:030 but includes a review of basic arithmetic. Topics include operations on whole numbers, fractions, decimals, percents, signed numbers, and word problem applications. Prerequisites: MTH:020 with grade of "C" or better or satisfactory score on placement test, and RD:020 with a grade of "C" or better or satisfactory score on placement test.

MTH:108 ELEMENTARY APPLIED MATHEMATICS 3
This course will include a review of fractions, decimals and percents. Topics may include ratios, proportions, measurements, metrics, powers, roots, simple equations, estimation, graphing, and applications relevant to many Associate in Applied Science programs. 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
This course will enable students to use 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. Prerequisites: Placement into MTH:140 or completion of MTH:030 with a grade of "C" or better and Reading Proficiency.

MTH:124 TECHNICAL MATHEMATICS I 3
This course includes applications on algebraic expressions, solving linear equations, the Cartesian coordinate system in two dimensions, slope of a line, and graphing techniques. Prerequisites: MTH:020 with a grade of "C" or better or satisfactory score on placement test and Reading Proficiency.
## Course Descriptions

### MTH:134 Technical Mathematics II
The course content includes complex numbers, solution of quadratic equations, and a study of exponential logarithmic and trigonometric functions. Vectors in the Cartesian plane and applications are also among the topics included. Prerequisites: MTH:124 with a grade of "C" or better and Reading Proficiency.

### MTH:137 Bridges to Intermediate Algebra
This course is designed for students who qualify for Intermediate Algebra. Completion of this course will greatly enhance a student's chance for success in Intermediate Algebra. This course offers a brief review of linear equations and inequalities. Also included is an intense review of exponential properties, polynomials, factoring, rational expressions, the rectangular coordinate system and basic linear graphs. Prerequisites: Placement into MTH:140, MTH:030 or MTH:007 with a grade of "C" or better and Reading Proficiency.

### MTH:140 Intermediate Algebra
This course will provide the transition from elementary algebra into college-level math courses. Operations on rational expressions, operations on radicals, solving quadratic equations, and the rectangular coordinate system are among the topics covered. Prerequisites: MTH:030 or MTH:040 with grades of "C" or better or satisfactory score on placement test and Reading Proficiency.

### MTH:144 Technical Algebra and Trigonometry
This course includes basic algebraic skills, complex numbers, quadratic equations, linear systems, and a study of the trigonometric functions. Applications for engineering technology students are included in the course content. Prerequisites: MTH:140 with a grade of "C" or better or satisfactory score on placement test and Reading Proficiency.

### MTH:154 Technical Analytic Geometry and Calculus
This course is designed primarily for engineering technology students. Among the topics included are plane analytic geometry, limits, derivatives, integration, and applications. Prerequisites: MTH:144 with a grade of "C" or better and Reading Proficiency.

### MTH:157 Bridges to College Algebra
This course is designed for students who qualify for College Algebra. Completion of this course will greatly enhance a student's chance for success in College Algebra. This course offers a brief review of rational expressions, exponents, roots and radicals, inequalities, and systems of equations. Also included is an intense review of functions and function notation, including linear and non-linear functions. Prerequisites: Placement into MTH:160A, MTH:160B or MTH:160C or completion of MTH:140 with a grade of "C" or better and Reading Proficiency.

### MTH:160 College Algebra
This college algebra course includes the following topics: theory of equations; systems of equations; functions and graphs including polynomial, rational, exponential, and logarithmic; matrices; sequences and series; and the binomial theorem. Applications will be primarily from science and business. Credit will be granted for only one of the following: MTH:160, MTH:160A, MTH:160B, MTH:160C or MTH:185. Prerequisites: MTH:140 with a grade of "C" or better or score 23 on the Mathematics section of the ACT test or satisfactory score on placement test, Reading Proficiency.

### MTH:161 Applications of College Mathematics
This college-level mathematics course is offered for students pursuing non-STEM (Science, Technology, Engineering, and Mathematics) degrees and career paths. The course focuses on mathematical reasoning and the solving of real-life problems. The following six topics will be covered: sets, logic, consumer mathematics, probability, statistics, and modeling with global data. This course is designed to fulfill general education requirements. Prerequisites: MTH:140 with a minimum grade of "C" or satisfactory scores on placement test, and Reading Proficiency.

### MTH:165 Structures of Mathematical Systems I
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. 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
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. Prerequisites: MTH:165 with a grade of "C" or better and Reading Proficiency.

### MTH:170 Trigonometry
This course uses an analytic approach to the definitions and graphs of the functions of an angle. It includes formulas and identities, trigonometric functions, inverse functions, and radian measure. Note: Credit will not be granted for both MTH:170 and MTH:185. 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
This course includes a study of matrices, linear programming, and probability, along with several types of applications. Prerequisites: MTH:160, MTH:160A, MTH:160B or MTH:160C with grade of "C" or better and Reading Proficiency.

### MTH:185 Precalculus
Precalculus is a unified study of college algebra and trigonometry. Emphasis is placed on the development of algebraic and trigonometric concepts. The topics include: Algebraic, exponential, logarithmic and trigonometric functions and graphs; the solving of equations; systems of equations; trigonometric identities; sequences and series; and the binomial theorem. Note: Students will be granted credit for either MTH:185, 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
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. 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
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. 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
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. Prerequisites: MTH:210 or equivalent with a grade of "C" or better and Reading Proficiency.

### MTH:215 Linear Algebra
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. Prerequisites: MTH:210 with a grade of "C" or better and Reading Proficiency.

### MTH:220 Analytic Geometry and Calculus II
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. Prerequisites: MTH:210 with a grade of "C" or better and Reading Proficiency.

### MTH:230 Analytic Geometry and Calculus III
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. Prerequisites: MTH:220 with a grade of "C" or better and Reading Proficiency.

### MTH:240 Differential Equations
This course introduces methods of solving ordinary differential equations including Laplace transforms and differential operators with applications. Prerequisites: MTH:230 with a grade of "C" or better and Reading Proficiency.

### MECHANICAL ENGINEERING TECHNOLOGY

#### ME:100 Measurement, Materials and Safety
This course prepares students for the National Institute of Metaworking 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 WorkKeys Applied Mathematics Level 4, or, Reading Proficiency or Work Keys Reading for Information Level 4.

#### ME:101 Welding Technology
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:103 Mechanical Maintenance
Identifies and explains the various types and functions of mechanical power transmission components such as gears, couplings, chains, belts, bearings, and clutches. Manufacturer handbooks will be utilized to reinforce the proper installation, inspection, and maintenance specifications. In addition, pumps and compressors will be emphasized including repair and preventive maintenance. Additional lab hours required. Prerequisites: MTH:030 or higher and Reading Proficiency.
ME:108 PRINCIPLES OF PLUMBING/Pipefitting 3
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:109 ELECTRICAL FUNDAMENTALS AND MAINTENANCE 3
Presents basic DC and AC electrical circuitry and electrical schematics. The electrical properties and relationships of voltage-ampere-resistance-power and measurement techniques are covered. The applications portion emphasizes wiring and wiring materials, electric controls and switches, DC and AC motor fundamentals and electrical troubleshooting. Additional lab hours required. Prerequisite: Reading Proficiency.

ME:110 HVAC OPERATOR I 3
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 and LAYOUT 3
This course prepares students for the National Institute for Metalworking Skills (NIMS), Job Planning, Benchwork and Layout credentialing examination. Students will build upon skills learned in the Measurement, Materials and 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 induced geometric dimensioning and tolerancing. Additional hours required. Corequisite: ME:100. Prerequisites: Reading Proficiency or departmental approval.

ME:120 MANUAL MACHINING I 3
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 and Safety class and the Job Planning, Benchwork and 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 lab hours required. Prerequisites: Reading Proficiency or departmental approval.

ME:121 COMPUTER INTEGRATED MANUFACTURING 3
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: EUR:145, EUR:147 or department approval.

ME:135 MECHANICS-STATICS 3
This is a study of forces and their effects on motionless objects. Applications to trusses, beams, frames, and other topics are presented. Basic theory for structural design in mechanical and civil programs is studied. Prerequisites: MTH:140 or higher and Reading Proficiency.

ME:138 MECHANICAL MEASUREMENT 3
This course is designed to provide the fundamentals of dimensional measurement for the technician. Measurement techniques and tools will be explained and laboratory activities will provide the student an opportunity to master the basic skills of measuring devices. Scaled, vernier, micrometer instruments and dial indicators with gage blocks will be used. Measurement standards will be reviewed. Prerequisite: Reading Proficiency.

ME:140 INTRODUCTION TO ROBOTICS 3
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 robotics in education and training, tasks associated with robotic operators, the programming and functioning of robotic simulators. Additional lab hours required. Prerequisite: Reading Proficiency.

ME:151 MANUFACTURING PROCESSES I 3
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
This course is a continuation of Manufacturing Processes I with emphasis in Flexible Manufacturing Systems (FMS). Instruction includes Computer Numerical Control (CNC) programming, Robotics applications of Programmable Logic Controls (PLC), and Computer Integrated Manufacturing (CIM). Students will develop a CIM cell project. Additional lab hours required. Prerequisites: ME:151 and Reading Proficiency.

ME:153 LATHES AND MILL OPERATIONS AND SAFETY 3
This course is designed to teach fundamental machining operations on a Lathe and Mill. The course will emphasize general shop safety practices and machine operating procedures that is safe for the operators and other workers. Prerequisite: Reading Proficiency.

ME:154 MECHANICAL BLUEPRINT READING 2
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:162 OVERVIEW OF BUILDING SUSTAINABILITY 1
This course focuses on the major principles of building sustainability. Students will explore the personal and global impacts of current building practices and review sustainable design and construction strategies to mitigate negative impacts. Though not an exam prep course, it will cover core concepts comprising the LEED Green Associate credential. Prerequisite: Reading Proficiency.

ME:200 MANUAL MACHINING II 3
This course prepares students 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 and Safety and the Job Planning, Benchwork and 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 lab hours required. Corequisite: ME:120. Prerequisites: Reading Proficiency or departmental approval.

ME:210 ROBOTICS SUBSYSTEMS AND COMPONENTS 3
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 departmental approval and Reading Proficiency.

ME:211 PROGRAMMABLE LOGIC CONTROLLERS 3
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. Prerequisite: ME:140 recommended and Reading Proficiency.

ME:212 INTRODUCTION TO COMPUTER NUMERICAL CONTROL (CNC) MACHINING 3
This course prepares students for the National Institute for Metalworking Skills (NIMS) level I Computer Numeric Control (CNC) Milling examinations. Students will build upon skills learned in the Measurement, Materials and Safety class and the Job Planning, Benchwork and 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
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:226 AIR CONDITIONING AND HEATING 3
This course covers the operation of air conditioning and heating equipment and the calculation of cooling/heating loads for residential and commercial buildings. Laboratory experiments will supplement classroom work. Additional lab hours required. Prerequisites: MTH:140 or higher and Reading Proficiency.

ME:230 INTRODUCTION TO 3-D SOLID MODELING FOR DESIGN 4
This course is designed to teach the use of 3D solid modeling CAD packages. Instruction includes how to use a 3D CAD package to develop solid models in order to generate assemblies and 2D drawings. CAD package used in a particular semester or a section of this course may depend on the industry or student's demand. Some of the commonly used 3D solid modeling packages in the industry are: 3DCS I-Deas Master, SolidWorks, Pro-E, and Solid Edge. It is suggested that prior to registering for this course, students would inquire with the department as to which CAD will be emphasized in a given semester or a section of the course. Additional lab hours required. Prerequisites: Department approval and Reading Proficiency.

ME:232 GEOMETRIC DIMENSIONING AND TOLERANCING 2
This course 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: EUR:140 or department approval and Reading Proficiency.
**ME:241 NUMERICAL CONTROL PROGRAMMING** 3
This course will include a brief summary of machine types and their application with movies and local field trips; also, basic CNC programming language and preparation of part programs. Students will program and operate three axis vertical mills with sequential and word address controls. Prerequisites: ME:151 and Reading Proficiency.

**ME:242 MECHANICS-DYNAMICS** 3
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
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 tests on materials in a fully-equipped laboratory. Additional lab hours required. Prerequisites: ME:135 and Reading Proficiency.

**ME:244 MECHANICAL DESIGN I** 3
This course presents the design of various machine elements. The topics include: survey of engineering materials, weldments, fasteners, linkages, indexing mechanisms, cams, belt and chain drives, gears and gear trains, shafts, keys and splines, bearings and lubrication, couplings, clutches, brakes, power units, and springs. Additional lab hours required. Prerequisites: ME:243, ME:244 and Reading Proficiency.

**ME:249 MATERIALS AND METALLURGY** 3
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:253 ENERGY CONVERSION** 2
This course is a fundamental study of the conversion of energy into work and heat. The principles of energy conversions are introduced in the analysis of engines, air conditioning systems, turbines, pumps and fans are reinforced through laboratory experiments. Additional lab hours required. Prerequisites: MTH:140 or higher and Reading Proficiency.

**ME:254 ELECTRICITY AND CONTROLS** 3
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 electromechanical controls. Laboratory experiments parallel classroom material covered. Additional lab hours required. Prerequisite: Reading Proficiency.

**ME:255 FLUID POWER** 3
This course is that portion of fluid mechanics which deals with its application and has been termed “Fluid Power.” It emphasizes the study of components of hydraulics and pneumatics systems as used for industrial power transmission and control purposes. Additional lab hours required. Prerequisites: MTH:144 or equivalent and Reading Proficiency.

**ME:261 BUILDING SYSTEMS-A HOLISTIC APPROACH** 3
This course takes a systems approach to buildings and evaluates the components of a building and how they work most efficiently when managed as an interconnected system. Building envelope, optimization of systems, and building heating and cooling load calculations in an energy audit will be included. Additional hours required. Prerequisites: CE:116 and MTH:124 or MTH:140, all with minimum grades of “C” and Reading Proficiency.

**ME:262 ENERGY IMPACT OF MECHANICAL PRODUCTS** 3
This course will focus on the identification and energy impact of mechanical products utilized in residential and commercial building. Because energy-related equipment in buildings can vary in age and efficiency, this course will include reviewing a variety of products and their features as they relate to overall performance. Additional hours required. Prerequisites: CE:116 and MTH:124 or MTH:140, all with a minimum grade of “C” and Reading Proficiency.

**ME:263 ENERGY CONTROL SYSTEMS** 3
This course provides an overview of basic electrical systems and examines overall building control systems and automation. Students will explore how control systems can effectively monitor and manipulate building systems to achieve maximum efficiency. Additional hours required. Prerequisites: CE:116 and MTH:124 or MTH:140, all with a minimum grade of “C” and Reading Proficiency.

**ME:264 ENERGY CONSERVATION MEASUREMENT AND AUDITING** 3
This course is the culminating experience of the Sustainable Energy Technology Certificate Program integrating material learned in previous classes. A hands on approach will be taken, including Building Energy Auditing, and Testing and Balancing. Additional hours required. Prerequisites: ME:181 and MTH:124 or MTH:140 with minimum grades of “C”. Prior or concurrent enrollment in GE:163, ME:162, ME:263 all with a minimum grade of “C”. Reading Proficiency.

**MUSIC**

**MUS:101 MUSIC THEORY I** 4
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
Continuation of MUS:101. Enlargement of vocabulary to comprise inversion of triads, non-harmonic tones, chord extensions, harmonic analysis and modulation. Additional studio hours required. Prerequisites: MUS:101 or permission of instructor and Reading Proficiency.

**MUS:103 BASIC MUSIC** 3
A course in the fundamentals of music including note reading, scales, keys, intervals, rhythmic activities and simple keyboard study.

**MUS:113 HISTORY OF JAZZ** 3
This class is a review of artists, composers, and other influences associated with the art of Jazz. It will examine the relationship of Jazz on culture in the United States and the world. Prerequisite: Reading Proficiency.

**MUS:114 MUSIC APPRECIATION** 3
This class is a survey of various aspects of music including the philosophy, science, theory, anthropology, sociology, history, and physical act of producing music. A wide variety of musical styles and associative composers will be used to explore these aspects of music. Prerequisite: Reading Proficiency.

**MUS:115 VOICE I** 2
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:116 VOICE II** 2
A continuation of Voice I. Efficient breath control, improvement of tone quality, and song interpretation are stressed. Songs in English and Italian will be studied. Prerequisites: MUS:115 and Reading Proficiency.

**MUS:121 CLASS PIANO I** 2
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
Continuation of MUS:121. Prerequisites: MUS:121 or demonstrated proficiency and Reading Proficiency.

**MUS:128 HISTORY OF ROCK AND ROLL** 3
This class is a review of the music, artists, composers, and other people associated with Rock and Roll and its impact on culture. Prerequisite: Reading Proficiency.

**MUS:129 MUSIC FOR THE CLASSROOM TEACHER** 3
Designed for elementary education students without regard to previous musical training. Students are prepared to use music functionally and developmentally in the elementary classroom through singing, through playing the piano and informal instruments, and through responding to music rhythmically. Creative aspects and values of music are emphasized and materials are studied in relation to their future uses in the classroom. (Same course as EDU:129.) Prerequisite: Reading Proficiency.

**MUS:130 BEGINNING GUITAR** 2
Course objective is to acquire a classical playing technique. Emphasis on correct seating and hand positions, note reading, chords and basic music theory. Students must supply their own guitar (nylon string recommended). Prerequisites: Ability to read music is recommended and Reading Proficiency.

**MUS:131 CHORUS** 1
Study and performance of representative choral literature. Emphasis on vocal technique and development. Additional studio hours required.

**MUS:132 ORCHESTRA** 1
Study and performance of representative chamber and symphonic literature. Additional studio hours required. Prerequisites: Audition and Reading Proficiency.
MUS:133 JAZZ LAB BAND 1
Study and performance of the best in recent big band jazz compositions. Additional studio hours required. Prerequisites: Audition and Reading Proficiency.

MUS:134 SYMPHONIC BAND 1
Study and performance of representative symphonic band literature. Additional studio hours required. Prerequisites: Experience in playing a band instrument and Reading Proficiency.

MUS:135 CHOIR 1
A study of advanced choral literature. Emphasis on vocal technique and development. Additional studio hours required. Prerequisite: Audition.

MUS:138 JAZZ IMPROVISATION I 2
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
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
Individualized study of instrument or voice. Prerequisites: Demonstrated proficiency and Reading Proficiency.

MUS:142 APPLIED MUSIC II 2
Continuation of MUS:141. Prerequisites: MUS:141 and Reading Proficiency.

MUS:144 AFRICAN DRUM ENSEMBLE 1
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, drums, and shakers. Additional hours required. Prerequisite: Reading Proficiency.

MUS:150 FUNDAMENTALS OF MUSIC TECHNOLOGY 2
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
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
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
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

MUS:202 MUSIC THEORY IV 4
Continuation of MUS:201. Advanced chromatic harmony. 19th and 20th century practices. Analysis of written and keyboard harmonization. Development of rhythm, pitch and harmony through sight-singing and dictation. Additional studio hours required. Prerequisites: MUS:201 or permission from instructor and Reading Proficiency.

MUS:211 MUSIC HISTORY I 3
The history of music in Western civilization from its origins to the Baroque era. Emphasis on listening to and analyzing the music with score. Prerequisites: Ability to read music and Reading Proficiency.

MUS:212 MUSIC HISTORY II 3
The history of music in Western civilization from the Baroque era to the present. Emphasis on listening to and analyzing the music with score. Prerequisites: Ability to read music and Reading Proficiency.

MUS:213 THE SYMPHONY 3
Great symphonies analyzed and discussed as to style, form, compositional techniques and content. Directed listening and visits to live rehearsal and concerts. Prerequisite: Reading Proficiency.

MUS:216 JAZZ IMPROVISATION III 2
The study and application of advanced techniques in jazz improvisation in a combo setting with emphasis on concert performance. This course may be elected for additional credit. Additional studio hours required. Prerequisites: MUS:139 or equivalent and Reading Proficiency.

MUS:221 CLASS PIANO III 2
Continuation of MUS:122. Prerequisites: MUS:122 or demonstrated proficiency and Reading Proficiency.

MUS:222 CLASS PIANO IV 2
Continuation of MUS:221. Prerequisites: MUS:221 or demonstrated proficiency and Reading Proficiency.

MUS:241 APPLIED MUSIC III 2
Continuation of MUS:142. Prerequisites: MUS:142 and Reading Proficiency.

MUS:242 APPLIED MUSIC IV 2
Continuation of MUS:241. Prerequisites: MUS:241 and Reading Proficiency.

MUS:254 MUSIC RECORDING WITH PRO TOOLS II 2
Learn to use the Pro Tools digital audio workstation to record music. The second semester emphasizes in-depth study of advanced mixing and mastering techniques used to complete digitally recorded projects. The Audio Engineering class is helpful, but not required. Prerequisites: MUS:154 and Reading Proficiency.

NURSING NUR:151 FUNDAMENTALS OF NURSING 7
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. Corequisites: NUR:152. Prerequisites: Enrollment in Nursing Program and passing of Dosage Calculation Test. PSY:200, LIB:101, BIO:207, COM:200, ENG:101 all with grades of C or better, or concurrent enrollment in BIO:208 and PSY:205. Math Proficiency at or above the MTH:140 level and Reading Proficiency.

NUR:152 NURSING LABORATORY PRACTICUM I 1
This course is designed to provide the student with the practice of nursing skills in the College Nursing Laboratory and to reinforce principles introduced in Fundamentals of Nursing. Additional lab hours required. Corequisite: NUR:151. Prerequisite: Reading Proficiency.

NUR:153 NURSING ADULTS AND CHILDREN I 9
This course is designed to assist the student to acquire knowledge and skills in meeting the needs of adults and children with an emphasis on adaptation to illness and hospitalization in medical-surgical nursing, and mothers and newborns during the maternity cycle. Additional hours required. Corequisite: NUR:154. Prerequisites: BIO:208, NUR:151, PSY:205 all with grades of C or better and Reading Proficiency.

NUR:154 NURSING LABORATORY PRACTICUM II 1
This course is designed to provide the student with the practice of nursing skills in the College Nursing Laboratory and to reinforce nursing principles introduced in NUR:153. Additional hours required. Corequisite: NUR:153. Prerequisites: NUR:151, NUR:152 both with grades of C or better and Reading Proficiency.

NUR:160 LPN TO RN BRIDGE COURSE 7
This course is designed to provide 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. Prerequisites: Enrollment in Nursing program and passing the Dosage Calculation Test. 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.

NUR:161 LPN EXPERIENTIAL CREDIT I 11
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:204 MANAGEMENT SKILLS IN NURSING 3
This course is required 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. Corequisites: NUR:204. Prerequisites: NUR:201 and NUR:203 both with grades of C or better and Reading Proficiency.

NUR:205 NURSING OF ADULTS AND CHILDREN II 8
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. Corequisites: NUR:204. Prerequisites: NUR:201 and NUR:203 both with grades of C or better and Reading Proficiency.
NUR:207 RN FIRST ASSISTANT-CLINICAL INTERNSHIP

This course provides the perioperative nurse the opportunity to apply in the practice setting the expanded functions unique to the RNFA during operative and other invasive procedures. Additional hours required. Prerequisites: Successful completion of all requirements of NUR:206. Evidence of current employer or professional personal liability insurance for RNFA practice. Reading Proficiency.

NUR:251 NURSING OF ADULTS AND CHILDREN II

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.

OCCUPATIONAL THERAPY ASSISTANT

OTA:101 FUNDAMENTALS OF OCCUPATIONAL THERAPY ASSISTANT I

This course is an introduction to occupational therapy, its philosophy, goals and focus in relation to basic treatment in geriatrics, psychosocial dysfunction, physical disabilities and developmental pediatrics. Beginning skills in practice of occupational therapy are learned. (21 clock hours of clinical assignments to be arranged) Prerequisites: Admission to the OTA program and Reading Proficiency.

OTA:102 FUNDAMENTALS OF OCCUPATIONAL THERAPY ASSISTANT II

This course provides students with beginning skills in occupational therapy treatment related to psycho-social dysfunction across the lifespan. Students learn basic psychiatric terms, diagnoses and behaviors as well as how occupational performance is affected. Practice with selecting and implementing group intervention, assessing areas of occupation and analyzing occupational performance as well as clinical experiences in a psychosocial setting are included. Prerequisites: OTA:101, OTA:103, PSY:200, PSY:205; all with a minimum grade of "C" and Reading Proficiency.

OTA:103 ADAPTIVE ACTIVITIES I

This course explores the use of activities in occupational therapy including those that address sensory motor, cognitive, and psycho-social performance components. The student is introduced to activity analysis, methods of instruction, goal setting and cost and supply factors. Prerequisites: Admission to the OTA program and Reading Proficiency.

OTA:104 ADAPTIVE ACTIVITIES II

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 IV

This course presents the principles of assessment, interpretation and intervention implementation for deficits and performance limitations associated with physical dysfunction due to various diagnoses. Students are provided a framework to treat clients with physical, sensorimotor, visual, perceptual, and cognitive dysfunction. Clinical reasoning skills necessary for good client-centered decision-making are taught in order to guide intervention that enhances performance in areas of occupation. Corequisites: OTA:208. Prerequisites: OTA:102, OTA:104, OTA:207 with minimum grades of "C" and Reading Proficiency.

OTA:204 FUNDAMENTALS OF OCCUPATIONAL THERAPY V

The purpose of this course is to provide the student with a foundation in motor development as a basis for selecting treatment techniques and outcomes for the pediatric population. Students are provided opportunities to integrate knowledge of normal development into treatment strategies. Prerequisites: OTA:102, OTA:104, OTA:207 with minimum grades of "C" and Reading Proficiency.

OTA:207 HEALTH AND DISEASE

This course is an overview of disease conditions typically encountered in occupational therapy practice. Biology, symptoms and physical and psychological reactions to these conditions are reviewed as well as basic influences contributing to healthy living. Medical terminology along with the role and function of the OTA within the treatment process is emphasized. Prerequisites: BIO:207, OTA:101, OTA:103, PSY:200, PSY:205; all with a minimum grade of "C" and Reading Proficiency.

OTA:208 ADAPTIVE LIVING SKILLS

The laboratory course presents intervention principles that are utilized in order to improve occupational performance. Students learn skills to develop and modify strategies for self-care, adaptive and compensatory techniques and methods of addressing activities for daily living for clients across the lifespan. Corequisites: 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

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. 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. Reading Proficiency.

OTA:214 OCCUPATIONAL THERAPY ASSISTANT PRACTICUM II

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. 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. Reading Proficiency.

OTA:215 THE MANAGEMENT OF OCCUPATIONAL THERAPY

This course explores the roles of the occupational therapy assistant in health care delivery. Topics include current trends, documentation, reimbursement, credentialing, ethical standards, Total Quality Management, ethical issues, multicultural diversity, OTA/COTA collaboration and supervision, and evidence-based practice. Prerequisites: OTA:102, OTA:104, OTA:207 with minimum grades of "C" and Reading Proficiency.

OTA:216 LEVEL II FIELDWORK SEMINAR

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:201 PRINCIPLES OF PARAMEDIC TECHNOLOGY I

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

This course serves as an overview of paramedic practice as well as integrating the theory behind the use of advanced diagnostic and treatment procedures in the management of organic, life-threatening emergencies. Topics include cardiovascular, cerebrovascular and other medical emergencies and their relationship to their respective disease processes. Corequisite: PAR:212, PAR:222, PAR:224, PAR:226. Prerequisites: PAR:201 and Reading Proficiency.

PAR:203 PHARMACOLOGY FOR PARAMEDICS

This course discusses drug theory and usage by paramedical personnel. Areas of emphasis are the 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

This course covers the practical skills relating to PAR:201 including patient assessment and history taking techniques, parental infusion techniques, antishock shrouds, oxygen administration, airway adjuncts to include endotracheal intubation and cricothyrotomy techniques. Corequisites: PAR:201, PAR:211, PAR:223. Prerequisites: Admission to the Paramedic program and Reading Proficiency.

PAR:212 PARAMEDIC LABORATORY II

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/DYN 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 PARAMEDICAL CLINICAL I

Students provide advanced therapy to hospitalized patients under the supervision of licensed personnel. Additional hours required. Corequisites: PAR:201, PAR:203, PAR:211, PAR:223. Prerequisites: Admission to the Paramedic program and Reading Proficiency.

PAR:222 PARAMEDICAL CLINICAL II

Student provides advanced therapy to hospitalized patients under the supervision of licensed personnel. Additional hours required. Corequisites: PAR:202, PAR:212, PAR:224, PAR:226. Prerequisites: PAR:201 and Reading Proficiency.
PAR:223 PARAMEDEC INTERNSHIP I
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. Corequisites: PAR:201. Prerequisites: Admission to the Paramedic program and Reading Proficiency.

PAR:224 PARAMEDEC INTERNSHIP II
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 PARAMEDEC INTERNSHIP III
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 PARAMEDEC TECHNOLOGY III
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 PARAMEDEC TECHNOLOGY IV
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 PARAMEDEC CLINICAL III
Student provides advanced therapy to hospitalized patients under the supervision of licensed personnel. Additional hours required. Corequisites: PAR:225, PAR:227. Prerequisites: PAR:226 and Reading Proficiency.

PERSONAL DEVELOPMENT

PRD:101 INTERPERSONAL DYNAMICS TRAINING
This course will provide students with an opportunity to assess their competencies and deficiencies in the process of communicating with others. Through role playing and practice, students will utilize the skills and techniques that are valuable in improving their ability to interact in a productive manner with other people. These skills and techniques will include listening, responding and initiating in personal interactions.

PRD:102 CAREER EXPLORATION
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:103 ASSERTIVE TRAINING I
The aim of this course is to make non-assertive or aggressive persons aware of alternative responses and to give them support and experience in trying out new responses. There will be stress on developing a belief system in order to be able to make a choice of what kind of response one wants to make in any situation. Some videotape use in role-playing practice may be utilized.

PRD:106 RELAXATION TRAINING
This is a course for students who are dealing with increasing expectations and pressures. Participants will learn to identify when and how they experience stress in themselves. The material covered will include the causes of stress, individual assessments, relaxation techniques, methods of handling interpersonal stress, and audio tapes. Students will be asked to actively practice and utilize the techniques.

PRD:107 EXPLORATIONS FOR WOMEN I
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 I-2
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
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 overseating, etc. Topics will include the stages of change, twelve change processes, and rebounding from relapse.

PRD:110 LEARNING TO COPE WITH TEST ANXIETY
This course is designed to help students learn to desensitize themselves (systematically) to anxieties associated with the taking of tests. In the academic setting these “tests” may come in the form of quizzes, exams, oral presentations, or contributions to class discussions. Students who will find this course beneficial are those who typically “freeze up” or “go blank” because of excessive anxiety leading up to and during testing situations, and as a result do not attain their level of competence.

PRD:114 COPING WITH STRESS
An exploration of the nature and causes of stress and presentation of alternative ways of relieving stress, to include yoga, meditation, systematic desensitization, hypnosis and biofeedback.

PRD:121 PERSONAL SUCCESS
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:125 COLLEGE ORIENTATION FOR OLDER ADULTS
This course will focus on what may be special interests and concerns of the 65+ population. It is designed to familiarize older persons with relevant St. Louis Community College resources and broader community resources and to discuss interests related to education and aging.

PRD:126 PARENTING
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
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.
PHL:111 ENVIRONMENTAL ETHICS 3
This introductory course examines human beings’ ethical relationship with the natural environment. Topics include environmental ethical frameworks (e.g., biocentrism), animal rights, obligations to future generations, population and consumption, climate change and environmental justice. Some issues are viewed through various cultural and religious lenses. The course incorporates primarily contemporary readings. Prerequisite: Reading Proficiency.

PHL:112 BUSINESS ETHICS 3
This course explores the ethical dimensions of the world of business are analyzed from a philosophical perspective. Using theories drawn from philosophy, students will evaluate business case studies with respect to such topics as personal and corporate responsibility and the obligations of justice. Prerequisite: Reading Proficiency.

PHL:114 PHILOSOPHY OF RELIGION 3
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:100 THE NATIONAL COUNCIL ON STRENGTH AND FITNESS PERSONAL TRAINER 3
The National Council on Strength and Fitness Certified Personal Trainer course is designed to synthesize the knowledge acquired from an exercise science curriculum with practical application for successful job performance in the fitness industry. Students will be prepared to practice as personal trainers with a highly regarded, legally-defensible certification. Additional hours required. Prerequisites: MTH:140 and BIO:111 with minimum grades of “C”. DIT:115 and Reading Proficiency.

PE:101 ADAPTIVE ACTIVITIES I 1
Individual therapeutic exercise programs including aquatic and resistance type activities, limited individual and team games, cardiovascular fitness instruction. Prerequisite: Department chair approval.

PE:102 ADAPTIVES II 1
Continued supervised program involving development of individualized therapeutic exercise programs including aquatic activities, strength building activities, flexibility or cardiovascular fitness instruction and training. Designed for students who may be limited in the amount/type of activity they can do. Prerequisite: PE:101.

PE:103 AEROBIC FITNESS 1
A program of exercise designed to develop cardiovascular fitness. A variety of activities may be involved ranging from walking, jogging, calisthenics, and stretching to stationary cycling. The student is introduced to the basic principles of developing, assessing, and evaluating aerobic fitness.

PE:104 ARCHERY 1
Archery conducted in 25 yard indoor archery area includes shooting techniques, target shooting, Columbia rounds and intramural archery competition. Archery classes sometimes held outdoors.

PE:105 DEEP WATER EXERCISE 1
A program of deep-water exercise designed to promote cardiovascular fitness. Assisted by a flotation device students will engage in warm-up, aerobic, and 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
Introduction to outdoor living skills: menu planning, choice of proper hiking-camping apparel, campsite development, safety and sanitation. Practicum includes two one-day trail walks and one weekend camping trip. (Each student is responsible for his/her own equipment).

PE:107 BASEBALL I 1
Indoor/outdoor instruction in hitting, fielding, throwing, baserunning, conditioning, bunting, strategy, position play.

PE:109 BASIC FITNESS I 1
Cardiovascular-neuromuscular development emphasizing focusing on the individual. Various methods of exercise are introduced.

PE:110 BASIC FITNESS II 1
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
Basics of ball handling, shooting, offense, defense, team play, conditioning.

PE:112 BASKETBALL II 1
Advanced individual and team skills: offenses, defenses, special situations, coaching techniques and strategy. Prerequisite: PE:111 or Instructor approval.

PE:114 BILLIARDS 1
Pocket and cushion billiards techniques, breaking, bridging and cushion shots, individual and partner competition.

PE:116 BOWLING I 1
Bowling is held at a nearby lane (nominal fee). Instruction includes approach, delivery, scoring, handicapping.

PE:117 BOWLING II 1
Continued emphasis on skills including adjustments to lane conditions, approach, developing a strike roll, picking all spare and split combinations; individual and team competition.

PE:118 CAMPING AND FLOATING 1
Students are introduced to fundamentals of outdoor living (i.e. cooking, campsite development, shelter, canoeing, selection and care of equipment). The course includes float trips on Missouri Rivers. Each student should be a confident swimmer.

PE:119 CARE AND PREVENTION OF ATHLETIC INJURIES 3
The course is designed to introduce the student to selected aspects of athletic training. Material of the course provides sufficient background in anatomy, physiology, and kinesiology for those new to the study. Student will observe and participate in the sequence of injury prevention, initial care, and treatment with use of therapeutic modalities, and therapeutic rehabilitation of athletic injuries. Prerequisite: Reading Proficiency.

PE:120 COMMUNITY CPR 1
Physiological principles of cardio-pulmonary function with practice in administering this lifesaving technique. ARC Certification for those who qualify.

PE:121 CYCLING ERGOMETRY FOR FITNESS 1
A complete controlled aerobic training program for any age, sex, or fitness level. Course is designed to improve lung capacity, stimulate metabolism, effect body composition through the loss of fat, and reduce stress. This supervised program involves the development of individualized workload programs. Course is conducted in the Fitness Center and utilizes ergometry equipment especially for stationary bicycles.

PE:122 DANCE AEROBICS 1
Exercise to music. Involves full muscle activity combined with vigorous cardiovascular activity.

PE:123 DANCE AEROBICS II 1
Advanced movements of exercise set to music. Full muscle activity plus cardiovascular activity is a part of the program. A low impact component is included. Prerequisite: PE:122.

PE:124 DANCE–CONTEMPORARY SOCIAL DANCE 1
The student will be exposed to contemporary and social dance steps/patterns. Content may include dance terminology, common step patterns/movements, rhythm and timing, and balance. Examples of dance include: East and West Swing, Imperial, Country Line and Slow Dancing.

PE:126 FENCING I 1
Introduction to fencing. Attacks, parries, strategy, and rules. Intramural competition.

PE:127 FENCING II 1
Refinement of techniques learned in Fencing I. Introduction of advanced parries and attacks. Use of electric equipment.

PE:128 FENCING III 1
Students develop fundamental offensive and defensive techniques for saber fencing. Rules, terminology and etiquette are addressed. The rules and basic strategy of boxing are introduced.

PE:129 FIRST AID 2
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 the physical education requirement for graduation. Prerequisite: Reading Proficiency.

PE:130 FITNESS CENTER I 1
Proper technique and routines are presented for the development of strength, flexibility and endurance. Individualized programs are developed and personal progress is charted by student and monitored by instructor. The program is designed to produce maximal gains in all areas of fitness with a minimal time commitment.

PE:131 FITNESS CENTER II 1
Elements of strength training, flexibility, muscular endurance, cardiovascular conditioning and weight control are introduced. (Some variance by campus). Individualized programs are developed with instructor supervision and students participate and progress in a self-guided manner within parameters set and supervised by the instructor. Prerequisite: PE:130.
PE:132  TOTAL FITNESS  1-2
Participants develop a self-directed program based on sound principles of fitness and wellness. The course may include basic fitness tests and activities outside of the Fitness Center. Prerequisites: PE:130 and PE:131.

PE:133  GOLF  1
Basic fundamentals such as swing, club selection, putting, rules and etiquette are covered. Clubs are not provided.

PE:135  HEALTH AND PERSONAL HYGIENE  3
This is a lecture discussion course covering the interrelatedness of the body systems, the nature and communication of diseases and the recovery process, including healthy eating, fitness, sexuality, drugs, stress, and wellness. Prerequisite: Reading Proficiency.

PE:136  ICE SKATING  1
Instruction in basic fundamentals and techniques of ice skating including proper dress and equipment. Course is held at local skating rink.

PE:137  JUDO I  1
Introduction to the "gentle way"-the basic techniques of Sport Judo. Includes standing throws (Nage Waza), grappling techniques (Katame Waza), choking techniques (Shime Waza) and free exercise (Randori).

PE:138  JUDO II  1
Intermediate techniques preparatory to advancement to higher rankings. Includes personal "kata" development as well as experience teaching peers, which is part of the advancement requirement in Judo.

PE:139  KARATE I  1
Techniques of blocking, striking, punching, kicking. Combinations of techniques emphasizing correct timing, distance and focus. Sparring and "kata" are also added for advancement in rank.

PE:140  KARATE II  1
Continued study of basic language and unwritten laws of Karate. Improved skills in punching, thrusting, striking, kicking and blocking. To learn more sophisticated combination techniques for defensive and offensive situations. To learn second and possibly third Kata as requirements for advancement in rank. To improve stamina and form in Kumite. Prerequisite: PE:139.

PE:142  LIFEGUARD TRAINING  1
This course provides students with the opportunity to complete American Red Cross Lifeguard Certification. Students will gain the knowledge and skills necessary to keep the patrons of aquatic facilities safe in and around the water. First Aid/CPR is included. Additional hours required. Prerequisites: Swimming proficiency in an endurance swim and student must be at least 15 years of age and Reading Proficiency.

PE:143  FITNESS AND FOOD FOR WEIGHT CONTROL  1
This course will educate students on controlling weight by emphasizing fitness activities and exercise while applying the principles of healthy eating. Additional hours required.

PE:145  PERSONAL DEFENSE I  1
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:147  PHYSICAL EDUCATION IN ELEMENTARY SCHOOLS  3
Activities such as game skills, perceptual-motor and manipulative activities, apparatus, stunts, tumbling, relays, combatives and rhythms are presented in progression. Proper use of facilities and equipment with an emphasis on safety is stressed. Classroom management and development of lessons are a focal point of the class. Prerequisite: Reading Proficiency.

PE:150  RECREATIONAL GAMES I  1
Introduction to variety of individual, dual, and team sports popular as recreational activities. Course content may include racquetball, badminton, volleyball, swimming, bowling, golf, tennis-intraclass competition.

PE:153  SCUBA DIVING I-OPEN WATER  2
P.A.D.I. Open Water Diver Course utilizes pool and classroom activities to cover knowledge and skills needed for open water scuba diving. The course introduces the physiological and psychological aspects of using self contained underwater breathing apparatus. Safety, care, and maintenance of equipment are included. Successful completion of the classroom, confined water skills, and four open water dives will lead to P.A.D.I. Open Water Diver Certification. Prerequisites: Ability to swim 200 yards continuously and tread water for 10 minutes, meet P.A.D.I. medical standards and Reading Proficiency.

PE:154  SCUBA DIVING II-ADVANCED OPEN WATER  1
Students participate in classroom and pool sessions as well as five supervised open water dives in various environments, utilizing equipment and skills beyond the scope of Scuba Diving I-Open Water. Course is designed to prepare students for P.A.D.I. Advanced Open Water Certification. Prerequisites: PE:153 or permission of instructor and Reading Proficiency.

PE:158  SOCCER AND HOC-SOC  1
Indoor and outdoor soccer activity- instruction in ball handling, dribbling, trapping, passing, shooting, heading, throwing, goal tending, position play, team play, rules of the game. Hoc-soc is a 6-person game played indoors with modified rules, smaller goal, no out-of bounds or off-side rule.

PE:159  SOFTBALL I  1
Indoor/outdoor instruction in hitting, fielding, throwing, baserunning, bunting, strategy, conditioning, position play.

PE:161  STRESS MANAGEMENT  3
This course presents an overview of the effect of stress on the body including its nature, physiology, role in disease and impact on one's health and wellness. A variety of coping strategies will be explored with an emphasis on exercise, tai chi, yoga, nutrition and diaphragmatic breathing. Prerequisite: Reading Proficiency.

PE:162  SWIMMING I (BEGINNING/ELEMENTARY)  1
Fundamentals of breathing, kicking, strokes, entries, water games, stunts. Strokes covered include crawl, back, side, elementary back, sculling, some endurance swimming and introduction to diving.

PE:163  SWIMMING II (ALL LEVELS)  1
Intermediate course in swimming includes all strokes survival swimming, endurance, elementary rescues, plus recreational water games.

PE:165  TAI CHI I  1
An ancient Chinese form of exercise that is done at a slow rate of speed, repeating forms. Various styles may be introduced.

PE:166  TAI CHI II  1
This course is a continuation of first level activities of Chen Style Taiji Quan. Students will complete the Chen Style form, including Chen Style theory, and will begin to learn other aspects of Taiji Quan practice, including Chen style pushing hand and Taiji Zhuang (Taiji meditation), which will give a base for learning the complete Chen style Taiji Quan system. Prerequisite: PE: 165.

PE:167  TEAM SPORTS I  1
Indoor/outdoor sports activities may include: Flag football, field hockey, softball, volleyball, hoc-soc, modified water polo and basketball.

PE:168  TEAM SPORTS II  1

PE:169  TENNIS I  1
Introduction to basic strokes: forehand, backhand, serve, volley, lob; position play, strategy, singles and doubles matches, history, rules and intraclass competition included.

PE:170  TENNIS II  1
Extension of PE: 169 with added emphasis on competitive aspect singles-doubles, play-serving game, strategy-ladder competition.

PE:171  VOLLEYBALL I  1
Techniques in serving, volleying, setting-up, spiking, position play, scoring, intraclass competition.

PE:172  VOLLEYBALL II  1
Basic competitive skills including bumping, setting, hitting, blocking, serving, passing; plus history, rules and team play. Prerequisite: PE: 171.

PE:173  WALKING FOR FITNESS  1
Emphasis on techniques of walking, cardiovascular fitness, weight control, safety and equipment.

PE:174  WATER AEROBICS  1
Water Aerobics fitness, a program of water exercise designed to develop cardiovascular fitness. A variety of water exercises for all ages and swimming levels. Non-swimmers can participate.

PE:177  WEIGHT TRAINING I  1
General muscular development through circuit weight training utilizing universal weight machines. Progression measured on the 16 stations.

PE:178  WEIGHT TRAINING II  1
Advanced training on newest weight training techniques utilizing the latest weight machines. Increased muscular development through lifting more weight.

PE:180  WELLNESS AND FITNESS CONCEPTS  3
This course is designed to assist the individual to develop a personalized wellness program. Topics will include exercise, nutrition, substance abuse, weight management, stress management, sexually transmitted disease, and other relevant topics. An exercise component will be included. Additional hours required. Prerequisite: Reading Proficiency.

PE:181  YOGA I (BEGINNING)  1
Introduction to Hatha Yoga (the Yoga of physical wellbeing). Designed for students of all physical conditions. Tones and limbers the body, reduces the effects of everyday physical and mental strain. Written observations included in course requirements.
Course Descriptions

PE:182 YOGA II (ALL LEVELS/INTERMEDIATE) 3
Course for beginners and intermediates. Course deals with Hatha Yoga (the Yoga of physical well-being). Improves flexibility and muscle tone, working toward reduction of effects of everyday strain.

PE:191 BODY CONTOURING 3
Exercise class using resistance in the form of free weights and elastic bands to develop the figure, posture, flexibility and muscle tone. Nutrition strategies will be discussed.

PE:192 CARDIO-FLEX 3
Emphasis in cardiovascular fitness, techniques of walking, low impact movement patterns set to music, weight control, and conditioning stresses to improve flexibility.

PED:107 BASIC KAYAKING SKILLS AND WATER SAFETY 3
This course provides the fundamentals of kayaking. Content covered includes environmental safety in an indoor facility, water safety on a lake, and ends with moving water skills on a river. Other topics include boat designing/fitting, paddling and stroke introduction. Additional hours required. Prerequisite: Entry Test Requirements; must demonstrate comfort in swimming in the deep end of the pool and display ability to swim the length of the pool continuously.

PED:116 PILATES 3
Pilates improves core strength and balances the muscles around the joints, improving the way your body functions, looks and feels. It focuses on breathing, pelvic placement, rib-cage placement, scapular movement, and head and cervical spine placement.

PED:134 GOLF II 3
This course provides students with the opportunity to learn and practice advanced skills in driving, pitching, putting, and selected course play. Students will develop skills which will provide them with an enhanced insight and understanding of golf. Additional hours required. Prerequisites: PE:133 or prior golf playing experience.

PED:135 FENCING IV 3
Techniques, target areas, rules and strategy of epee fencing will be introduced. Additional hours required. Prerequisite: PE:126.

PED:140 BEGINNING ROCK CLIMBING 3
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
Sport and exercise psychology is the scientific study of people and behavior in sport and exercise contexts. 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:101 PHYSICAL SCIENCE LECTURE I 3
Lecture survey of the fundamental principles of physics and chemistry with emphasis on science process skills. Designed for students in non-science and career curricula. Content same as lecture portion of PSI:124. Credit may be earned for either PSI:124 or PSI:101, not both. Prerequisites: MTH:007 or MTH:030 with grade of “C” or better; or MTH:106 with grade of “C” or better; or one year high school algebra with grade of “C” or better each semester; and Reading Proficiency.

PSI:105 PHYSICAL SCIENCE II 3
A lecture/laboratory introduction to the sciences with special subject adaptations for students in non-science and career programs. Additional lab hours required. Prerequisite: Reading Proficiency.

PSI:111 INTRODUCTION TO ASTRONOMY I 3
This course introduces the fundamental concepts and principles of our knowledge of the Universe. The topics covered include the Earth, Solar System, stars, galaxies and evolution of the Universe. The course is designed for students in non-science and career curricula. Prerequisites: MTH:030 or test into MTH:140 and Reading Proficiency.

PSI:112 INTRODUCTION TO ASTRONOMY II 3
Selected topics of interest in modern astronomy are covered in-depth. Prerequisites: PSI:111 or consent of instructor and Reading Proficiency.

PSI:115 OBSERVATIONAL ASTRONOMY 3
An introduction to astronomical observations, techniques and instruments, which may accompany PSI:111 or PSI:112 (Introduction to Astronomy I or II) or may be taken independently. No prior knowledge of astronomy is assumed. Additional lab hours required. Prerequisite: Reading Proficiency.

PSI:121 LIGHT AND VISION 3
A descriptive coverage of light, color lighting effects, vision lasers and holography. Prerequisite: Reading Proficiency.

PSI:123 METEOROLOGY 3
This physical science course introduces the student to the basic concepts involved in the analysis of weather phenomena on the global and local scale. Topics include, heat balance, atmospheric stability, precipitation processes, pressure systems, air masses, fronts, clouds, the jet stream, air-ocean interaction (El Nino and La Nina), thunderstorm and severe weather, hurricanes, and an introduction to weather forecasting. Particular attention devoted to current weather analysis. Prerequisite: Reading Proficiency.

PSI:124 PRINCIPLES OF PHYSICAL SCIENCE 3
A survey of the fundamental principles of physics and chemistry with emphasis on science process skills. Laboratory exercises illustrate and reinforce lecture topics. Credit may be earned for either PSI:124 or PSI:101, not both. Additional lab hours required. Prerequisites: MTH:030 with grade of “C” or better; or MTH:108 with grade of “C” or better; or one year of high school algebra with grade of “C” or better and Reading Proficiency.

PHYSICAL THERAPIST ASSISTANT

PTA:100 INTRODUCTION TO PHYSICAL THERAPIST ASSISTANT 2
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
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
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
This course is a study of the health care system and the role of PTA within it. Topics include health care organizations; department policies and procedures; evidence based research; professionalism; legal and ethical issues, community resources, documentation, billing, and coding; and application for licensure and work. Prerequisites: PTA:104 with a grade of “C” or better and Reading Proficiency.

PTA:211 PHYSICAL AGENTS 3
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
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
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
An introductory course on data collection and intervention techniques used by the PTA which includes vital signs, stethoscope 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.

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This course is an overview of disease conditions commonly seen for treatment in physical therapy departments. Prerequisites: BIO:207 with a grade of "C" or better and Reading Proficiency.

PTA:216 CLINICAL EDUCATION IIIA
Students will have the opportunity to practice skills acquired in the first and second year of the program in a clinical facility under the direction and supervision of a clinical instructor for 6 weeks. Prerequisites: PTA:213 with a grade of "C" or better and Reading Proficiency.

PTA:217 CLINICAL EDUCATION IIIB
Students will have the opportunity to practice skills acquired in the first and second year of the program in clinical facility under the direction and supervision of a clinical instructor 6 weeks. Prerequisites: PTA:216 with a grade of "C" or better and Reading Proficiency.

PHYSICS
PHY:111 COLLEGE PHYSICS I
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, MTH:160 or concurrent enrollment in MTH:160A, MTH:160B or MTH:160C and Reading Proficiency.

PHY:112 COLLEGE PHYSICS II
This course is the second semester of a two-semester non-calculus physics sequence. The entire sequence covers topics in mechanics, heat and thermodynamics, optics, electricity and magnetism, with mechanics being one of the topics covered in the first semester. Additional lab hours required. Prerequisites: MTH:210 with a minimum grade of C and Reading Proficiency.

PHY:122 ENGINEERING PHYSICS I
This course is the first semester of a two-semester calculus-level physics sequence. The entire sequence covers topics in mechanics, heat and thermodynamics, optics, electricity and magnetism, with mechanics being one of the topics covered in the first semester. Additional lab hours required. Prerequisites: PHY:111 and Reading Proficiency.

PHY:223 ENGINEERING PHYSICS II
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 mechanics being one of the topics included in the second semester. Additional lab hours required. Prerequisites: PHY:222 and prior or concurrent enrollment in MTH:240 and Reading Proficiency.

POLITICAL SCIENCE
PSC:101 INTRODUCTION TO AMERICAN POLITICS
Introduction to American Politics surveys the American political system. Basic values, past and current Constitutional issues, government processes and institutions, and citizen rights are discussed in a modern framework. National, state, and local political issues are covered. Prerequisite: Reading Proficiency.

PSC:103 STATE AND LOCAL POLITICS
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
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
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:204 POLITICS OF AFRICAN NATIONS
This course is an analysis of representative and current problems of African nations with particular attention to some specific problems of political development and modernization common to all of them. Prerequisite: Reading Proficiency.

PSC:205 CONSTITUTIONAL ISSUES
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 U.S. FOREIGN POLICY
This course traces the evolution of American foreign policy from the origins of World War II to the present. The focus is on the cold war, containment, and contemporary issues. Specific policies and objectives are analyzed and evaluated along with the experiences, thinking, and goals of decision-makers. Prerequisite: Reading Proficiency.

PSYCHOLOGY
PSY:201 GENERAL PSYCHOLOGY
This course is an introduction to the scientific study of human behavior. It attempts to help students gain insights into their own and others' behavior. A variety of topics (such as personality, learning, emotion, motivation, human growth and development, abnormal behavior and psychotherapy) relating to psychological development will be covered. Prerequisite: Reading Proficiency.

PSY:202 CHILD PSYCHOLOGY
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:201 and Reading Proficiency.

PSY:205 HUMAN GROWTH AND DEVELOPMENT
This course is a survey of the basis of human growth and development. Biological, cognitive and socioemotional needs of children, adolescents and adults are reviewed. The multiple factors which influence and shape behavior and personality are analyzed. Prerequisites: PSY:201 and Reading Proficiency.

PSY:206 INTRODUCTION TO SOCIAL PSYCHOLOGY
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:201 and Reading Proficiency.

PSY:207 APPLIED PSYCHOLOGY
This course involves the application of psychological principles to problems of personal and social adjustment in a variety of settings. Prerequisites: PSY:201 and Reading Proficiency.

PSY:208 ABNORMAL PSYCHOLOGY
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:201 and Reading Proficiency.

PSY:210 PERSONALITY AND ADJUSTMENT
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:201 and Reading Proficiency.

PSY:213 PSYCHOLOGY OF AGING
An examination of normal and pathological aging changes in personality, sensory mechanisms, intelligence, creativity, and sexuality with some emphasis on methods of treatment. Prerequisites: PSY:201 and Reading Proficiency.

PSY:214 ADOLESCENT PSYCHOLOGY
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:201 and Reading Proficiency.

PSY:215 BRAIN AND BEHAVIOR
This course examines the basic mechanisms of neuronal structure, function and communication. Behavioral functions studied include: sensations and perception, emotion and drives, learning and memory, vision, sleep and dreams, stress, addiction, language, aging effects, sex differences, and disorders. Prerequisites: PSY:201 and Reading Proficiency.
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XRT:207 RADIOLOGIC PATHOLOGY 2
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
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
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
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:209, XRT:218 and Reading Proficiency.

XRT:212 PROFESSIONAL DEVELOPMENT IN RADIOGRAPHY 2
This course explores topics in the field of radiologic technology. These topics include current trends in the imaging profession, career options, the importance of continuing education to the professional and professional traits of a registered Radiologic Technologist. Corequisites: XRT:211, XRT:215. Prerequisites: XRT:207, XRT:209, XRT:209, XRT:214, Reading Proficiency.

XRT:213 CLINICAL EDUCATION IV 3
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
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
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:012 BASIC READING SKILLS 2
This is an initial reading course with emphasis on word attack skills, basic reading comprehension skills, and basic reading vocabulary development. Corequisite: RDG:013.

RDG:013 BASIC READING SKILLS LAB 1
This is an individualized course encompassing individual diagnostic-prescriptive laboratory reading instruction. Additional lab hours required. Corequisite: RDG:012.

RDG:016 DEVELOPMENTAL READING 2
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
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
This course is designed to help students gain greater understanding of written material and to improve reading vocabulary. Prerequisites: RDG:016 and RDG:017 with grades of “C” or better or appropriate score on placement test. Prior or concurrent enrollment in STR:050 with minimum grade of “C”.

RDG:021 READING IMPROVEMENT LAB 1
This course provides individualized practice under the supervision of a reading instructor. Additional lab hours required.

RDG:030 INTRODUCTION TO COLLEGE READING 3
This course is designed to develop college-level reading comprehension, vocabulary and study skills. Prerequisites: RDG:020 with a grade of “C” or better, or appropriate score on placement test. Prior or concurrent enrollment in STR:050 with minimum grade of “C”.

RDG:031 INTRODUCTION TO COLLEGE READING LAB 1
This course provides individualized practice under the supervision of a reading instructor. Additional lab hours required.

RDG:033 INTRODUCTION TO TECHNICAL READING 3
This is a course designed for students in or entering technical/science programs who wish to improve their reading skills in those content areas. Emphasis will be placed on skills for handling technical/scientific terminology and principles.

RDG:050 SPELLING IMPROVEMENT 1
This course is designed for students who wish to improve their spelling skills. Students are allowed to progress at their own rates.

RDG:051 SPELLING IMPROVEMENT LAB 1
This course is designed for students who wish to improve their spelling skills. In this class, the instruction is individualized. Students are allowed to progress at their own rates. Additional lab hours required.

RDG:052 VOCABULARY IMPROVEMENT 1
This course will promote vocabulary growth through the study of word parts, understanding words in context and specific development of specialized vocabularies.

RDG:053 VOCABULARY IMPROVEMENT LAB 1
This course will promote vocabulary growth through the study of word parts, understanding words in context and specific development of specialized vocabularies. In this class, the instruction is individualized. Students are allowed to progress at their own rates. Additional lab hours required.

RDG:054 STUDY SKILLS AND NOTETAKING 1
This course is designed as an introduction to general study skills.

RDG:055 STUDY SKILLS AND NOTETAKING LAB 1
This course is designed as an introduction to general study skills. In this class, the instruction is individualized. Students are allowed to progress at their own rates. Additional lab hours required.

RDG:061 COMPREHENSION DEVELOPMENT LAB 2
This is an individualized course designed to aid students in getting meaning from their reading. The instruction includes development of comprehension skills using interesting and challenging material. This course is not suitable for students in RDG:012 and RDG:016. Students are allowed to progress at their own rates. Additional lab hours required.

RDG:100 COLLEGE READING AND STUDY SKILLS 3
This is an advanced course emphasizing reading in the content areas. The major focus is on study techniques applicable to transfer level courses. Prerequisite: Reading Proficiency.

RESPIRATORY THERAPY
RTH:120 INTRODUCTION TO RESPIRATORY CARE AND RESPIRATORY PHYSICS 5
This course is an introduction to the field of Respiratory Care. Instruction includes; the historical perspective of respiratory care professional organizations, and the principles of physics, as they apply to respiratory care. The theory and laboratory applications for; cylinders, regulators, flowmeters, analyzers, blenders, oxygen administration devices, aerosol and humidity therapy and nebulizers will be presented. A programmed presentation for medical terminology, mathematics, and computer applications are also presented. Prerequisites: BIO:207, CHM:101, MTH:124 or higher and Reading Proficiency.

RTH:121 ORIENTATION TO THE HOSPITAL 2
Topics to be covered in this course include: hospital and departmental organization, medical ethics, patient's rights, legal responsibilities, and hospital visitation. Theory, application and equipment for patient assessment and life vital signs. Prerequisites: Admission to the program and Reading Proficiency.

RTH:125 AIRWAY MANAGEMENT 3
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
This course will present information relevant to positive pressure techniques, and how they applied in mechanical ventilatory support. Basic indications and hazards of positive pressure therapies will be presented along with the technical components of intermittent positive pressure breathing, non-invasive positive pressure support, adult and pediatric mechanical ventilators. A two-hour per week laboratory session will enable the learner to observe and practice the principles of operation of mechanical ventilators prior to their hospital experience. Practice in the patient simulator laboratory is also included. Prerequisites: RTH:120, RTH:121 and Reading Proficiency.

RTH:127 RESPIRATORY PHARMACOLOGY 2
Basic pharmacologic principles, classification of drugs, the effects, side-effects, and hazards of the medications used in cardiopulmonary medicine. Prerequisites: Admission to program, must hold a certificate or degree from an allied health program or waiver from program director and Reading Proficiency.
RTH:128  ARTERIAL BLOOD GASES  2
The theory and application of Henderson-Hasselbalch 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
This course provides a presentation on pediatric and neonatal respiratory care to include; embryonic development of the cardiorespiratory 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
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
Application of respiratory care principles in the hospital. Additional hours required. Prerequisites: RTH:129, RTH:129, RTH:140 and Reading Proficiency.

RTH:220  PULMONARY PATHOPHYSIOLOGY  3
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
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:128 or waiver from program director and Reading Proficiency.

RTH:222  CARDIOPULMONARY PHYSIOLOGY  3
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
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:128, RTH:129 and Reading Proficiency.

RTH:225  PULMONARY FUNCTION TESTING  3
The theory and application 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
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
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
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:101  ELEMENTARY RUSSIAN I  4
This course introduces students to basic vocabulary and structures necessary to participate in elementary Russian conversations. Students also begin reading short Russian passages and learn about Russian culture. Emphasis is on using the Russian language in everyday situations. Prerequisite: Reading Proficiency.

RUS:102  ELEMENTARY RUSSIAN II  4
A continuation of RUS:101. Students complete the basic elements of Russian grammar, increase their vocabulary and gain added facility in speaking and reading Russian. Prerequisites: RUS:101 and Reading Proficiency.

SAFETY TECHNOLOGY
SAF:100  SAFETY PROGRAM ORGANIZATION AND ADMINISTRATION  3
An introduction to provide the essential knowledge and skills to organize and operate an effective safety program for any size company and type of industry. Course topics include management responsibility, accident investigation and analysis, recording and reporting occupational injuries and illnesses, making safety inspections, personal protective equipment, job safety analysis, fire prevention and control and sources of help for the safety professional and management. Prerequisite: Reading Proficiency.

SKILLED TRADES
SKT:101  AEROSPACE FUNDAMENTALS  4
This course is for students preparing for employment in aircraft production. It covers the fundamental aspects of the aerospace manufacturing industry and aircraft production, including aircraft terminology, safe practices, teamwork, materials used in the production of aircraft, precision measurement, quality principles, process documentation, and technical writing. Additional lab hours required. Prerequisite: Reading Proficiency or a Work Keys Reading Score of at least 4.

SKT:102  AEROSPACE ASSEMBLY-SHEET METAL I  4
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
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
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:104 with a minimum grade of B, and Reading Proficiency.

SKT:105  AEROSPACE ASSEMBLY-ELECTRICAL COMPONENTS  5
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.

SMART START
STR:050  SMART START: STUDENT SUCCESS  3
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
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.
SOCIOLGY

SOC:100 THE SOCIOLOGY OF HUMAN RELATIONS 3
The study of sociology provides a framework for understanding the ways in which social institutions influence how people think about themselves and how they behave with others. This course applies this human relations framework to questions about how to build effective communities in diverse environments. Topics may include: developing open-mindedness toward cultural variations, working in diverse environments, adjusting to change, social responsibility for behavior, and conflict management. Prerequisite: Reading Proficiency.

SOC:101 INTRODUCTION TO SOCIOLOGY 3
This course is a general survey of the discipline of sociology. The course explores the reciprocal relationship between individuals and social institutions. Specifically it examines how social forces both shape and are shaped by beliefs and behaviors regarding ourselves and others. Prerequisite: Reading Proficiency.

SOC:102 INTRODUCTION TO SOCIOLOGY-HONORS 3
The factors which determine social organization and behavior are considered in this course. An in-depth study is concentrated on the social interaction of individuals with one another, of individuals with groups, and of groups with one another. Consideration is given to culture, social classes, population, institutional life and major trends in sociology. Prerequisite: Reading Proficiency.

SOC:103 HUMAN BEHAVIOR AT WORK AND IN BUSINESS 3
Course framework will be the organization and what people must do to become more effective within it. Focus will be in five major areas: self-concept development, listening skills, expression, conflict resolution, and interpersonal skills. Prerequisite: Reading Proficiency.

SOC:126 STUDY OF PSYCHODYNAMIC SUBSTANCES 3
This course will focus on the properties of drugs as chemicals and their impact on the body and mind. The history of drug use and abuse, issues surrounding addiction, factors that indicate a high risk to addiction and the interaction of drugs with each other will be examined. Prerequisite: Reading Proficiency.

SOC:201 ASPECTS OF AGING 3
Examines the factors and forces that affect life quality in the late years. The physiological, psychological, and sociological aspects of aging will be considered, including those influences in the cultural context that enhance and impede continued growth of the person. Prerequisites: SOC:101, PSY:200 or HMS:100 and Reading Proficiency.

SOC:202 SOCIAL PROBLEMS 3
A survey course that offers a sociological examination of select global social problems. Topics of examination may include poverty, delinquency and crime, education, population, racial inequality, healthcare, gender inequality, alcohol and drugs, and environmental degradation, among others. The course also emphasizes research methodologies used to examine these problems as well as theoretical perspectives which can be used to understand the problems and, in turn, to create social change. Prerequisites: SOC:101 and Reading Proficiency, or permission of instructor.

SOC:203 CRIME AND SOCIETY 3
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
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 of contemporary families. The course will also examine dynamics within families, such as parenting, violence and abuse, remarriage, divorce, aging, communication, and dealing with conflicts and crises. Prerequisites: SOC:101 or SOC:102 and Reading Proficiency.

SOC:211 ALCOHOLISM AND DRUG ABUSE 3
Course focuses on nature, causes, treatment and prevention of alcoholism and drug abuse. Strategies of education and treatment will be reviewed. Course designed to deal with problems encountered either personally or professionally. Course also looks at social and cultural factors in alcoholism and drug abuse. Prerequisite: Reading Proficiency.

SOC:212 RACE AND ETHNICITY 3
This course explores the social and historical processes that shape race and ethnicity, focusing on the consequences for students’ everyday lives. Students investigate how each are embedded in societal systems of privilege and oppression. The course ultimately challenges common definitions of race and offers students the opportunity to understand their lives within the context of racial injustice, ethnic diversity, and socially created difference. Prerequisites: SOC:101 or permission of instructor, and Reading Proficiency.

SPANISH

SPA:101 ELEMENTARY SPANISH I 4
This course is a beginning course that presents the basic sentence structure and vocabulary necessary to participate in elementary Spanish conversations. Students also begin reading short Spanish passages. Prerequisite: Reading Proficiency.

SPA:102 ELEMENTARY SPANISH II 4
In this continuation of SPA:101, students continue their study of the basic elements of Spanish grammar, increase their vocabulary and enhance their ability to read and communicate in Spanish. Students enhance their global and intercultural competency through increased fluency in the language and a deeper exploration of historical and contemporary Hispanic culture. Prerequisites: SPA:101 or 2 years of high school Spanish and Reading Proficiency.

SPA:116 COSTA RICA: THE LAND AND ITS PEOPLE 3
This course is designed to give students who participate in “the study abroad” in Costa Rica the opportunity to learn about the land and the cultural heritage of the Costa Rican people. Some samples to present are: racial and religious issues, political system, past and present relationships with neighboring countries and with the U.S. Prerequisite: Reading Proficiency.

SPA:201 INTERMEDIATE SPANISH I 4
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
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.

SPA:206 ADVANCED SPANISH CONVERSATION AND COMPOSITION 3
Designed to increase written and oral fluency in Spanish, this course gives the student the opportunity to express himself/herself on a wide variety of everyday topics. Short compositions will be written and brief oral reports presented to the class. A relaxed, informal atmosphere is created to stimulate conversation. Prerequisites: SPA:202 and Reading Proficiency.

SURGICAL TECHNOLOGY

ST:104 PHARMACOLOGY FOR SURGICAL TECHNOLOGISTS 2
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
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:105 so student may apply principles of theory to practical experience. Corequisites: ST:108 to be taken concurrently with ST:105. Must be enrolled in the Surgical Technology program and Reading Proficiency. 155 lab/clinical hours. 64 open lab hours.

ST:108 INTRODUCTION TO SURGICAL TECHNOLOGY 6
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
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
This course will introduce the surgical technology student to the principles of surgical intervention and patient care considerations in multiple specialty areas. Pathophysiology, diagnostics, prognostic 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
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.
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<tr>
<td>THT:102</td>
<td>STAGECRAFT</td>
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<td>THT:103</td>
<td>STAGE DESIGN AND LIGHTING</td>
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<td>THEATRE PRACTICUM</td>
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<td>THT:107</td>
<td>PLAYWRITING</td>
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<td>THT:108</td>
<td>ACTING I</td>
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<td>THT:109</td>
<td>ACTING II</td>
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<tr>
<td>THT:110</td>
<td>HISTORY OF THEATRE</td>
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<td>THT:111</td>
<td>SCENIC DESIGN</td>
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<td>THT:112</td>
<td>STAGE LIGHTING</td>
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<td>THT:115</td>
<td>ACTING FOR THE CAMERA</td>
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<td>THT:201</td>
<td>DIRECTING</td>
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<td>TUR:104</td>
<td>TRAVEL AND TOURISM FOUNDATIONS</td>
<td>6</td>
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<td>TUR:105</td>
<td>TRAVEL AND TOURISM COMPUTER SYSTEMS</td>
<td>5</td>
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<td>TUR:106</td>
<td>TRAVEL AND TOURISM DESTINATION GEOGRAPHY</td>
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<tr>
<td>WMS:100</td>
<td>INTRODUCTION TO WOMEN'S STUDIES</td>
<td>3</td>
</tr>
</tbody>
</table>

**ST:210 SURGICAL PROCEDURES II**
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**
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.

**TELECOMMUNICATIONS**

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<td>VOICE COMMUNICATIONS</td>
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<td>TEL:205</td>
<td>DIGITAL SWITCHING AND TRANSMISSION</td>
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<td>TEL:206</td>
<td>NETWORK TOPOLOGY</td>
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**THEATRE**

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**WOMEN’S STUDIES**

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<td>3</td>
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</tbody>
</table>
BOARD OF TRUSTEES

Theodis Brown Sr., term expires 2020 • Subdistrict 1
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Doris Graham, Ph.D., term expires 2018 • Subdistrict 1
Hattie R. Jackson, M.A., term expires 2017 • Subdistrict 2
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Margaret Tyler, Ph.D., Associate Professor

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Jason Meyer, M.E.E., Instructor II
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Dennis White, M.A., Assistant Professor

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LaRhonda Wilson, M.A., Instructor II

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- Cheryll Edwards, B.A., Academic Advisor
- Beverly Evans, B.A., Academic Advisor
- Eloise W. Finney, M.S.W., Academic Advisor
- E. Aurora Hill, M.A., Academic Advisor
- Bertha Moreland, M.S., Academic Advisor
- LaTonya Shepherd, B.S., Academic Advisor
- Anita Zieren, M.B.A., Academic Advisor

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- Bella Hafezi, M.Ed., Instructor II
- Reginald Johnson, M.A., L.P.C., Associate Professor
- Sandra Knight, M.Ed., Professor
- Kathleen Swyers, M.Ed., L.P.C., CRC, Professor

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- Glenda Doss, M.S., Coordinator

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- Deborah Logan, B.A., Coordinator

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- Kim Walker, M.A., Project Director, Student Support Services
- James Bratcher, Jr., MACM, Counselor/Project Associate II, Upward Bound
- Kendall Ware, B.S., Counselor, Project Associate I, Upward Bound
- Julie Howell, M.A., Academic Advisor/Transfer Specialist

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### Business, Math and Technology Division
- Elizabeth J. Wilcoxson, Ph.D., Interim Dean

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- John K. Graham Jr., M.S., Senior Instructional Designer, Center for Teaching and Learning
- Randy Malta, M.S., Senior Instructional Designer, Center for Teaching and Learning
- Jean Thomas, B.A., Coordinator, Library Services

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- Randy Malta, M.S., Senior Instructional Designer, Center for Teaching and Learning
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Louis Williams, Ph.D., Professor

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CCNA, CCAI, CCSIS, CCAN Voice, CCNP Voice, Instructor I
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Afzal Lodhi, Ph.D., Professor
Syed Chowdhury, Ph.D., Associate Professor
Dorothy Welty, M.S., Associate Professor

Teacher Education Program
David Shields, Ph.D., Professor
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# Admissions Application

**Admission Application**

**NOTE:** Applications will be accepted starting **July 1** for the next spring term; **Sept. 1** for the next fall term; and **Dec. 1** for the next summer term.

**Admission Application**

**ID #**

(Last Name) (First Name) (Other)

Social Security No.: ______________________________
Former Student Number (if known): _____________________________

Previous Legal Name(s): ___________________________________________________________________________________

Permanent Address: ______________________________________________________________________________________

(No P.O. Box) Number Apt. No. Street

County of Residence: __________________________________________

Mailing Address: _________________________________________________________________________________________

(Number Apt. No. Street)

City State Zip Code

Telephone Numbers: Home: ( )__________ Cell: ( )__________ Business: ( )__________

Gender: □ Male □ Female Date of Birth: ______/_____/______ E-mail Address: _________________________________

Emergency Contact: ________________________________________ ( )__________________ ____________________

Person’s Name Telephone Relationship to Applicant

**Ethnic Origin**

Are you Hispanic/Latino? □ Yes □ No

Please check any or all of the below which apply to you:

□ American Indian or Alaska Native

□ Asian

□ Black or African-American

□ Native Hawaiian or Other Pacific Islander

□ White

**Educational History**

Check one:

□ High School Graduate Date of Graduation: __________/_____/______

□ GED Graduate Date of Test Results: __________/_____/______

□ Still in High School Expected Graduation Date: __________/_____/______

□ Did Not Graduate Date Last Attended: __________/_____/______

Have you taken the ACT and/or SAT? □ Yes □ No Date of Test: Month __________ Year ________

Did you enroll (or are you currently enrolled) in a college credit course or program while in high school? □ Yes □ No If yes, check all that apply: □ Tech Prep □ Project Lead the Way □ Advanced Placement □ Dual Credit/Enrollment

□ Other ____________________

**Previous College(s)**

Most Recently Attended: Name of College __________________________ City________ State________ Dates Attended_______

Other College Attended: Name of College __________________________ City________ State________ Dates Attended_______

Other College Attended: Name of College __________________________ City________ State________ Dates Attended_______

Highest Degree Completed:

□ High School/GED □ Certificate □ Associate □ Bachelor’s □ Master’s □ Doctorate □ First Professional □ None of the previous

*Missouri Student Information System

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Date Rec’d By __________
Have you previously attended St. Louis Community College? ☐ Yes ☐ No If so, when: _________________________________

Application submitted for: ☐ Fall Year ____________ Please indicate which campus you plan to attend: ☐ Florissant Valley ☐ Meramec ☐ Spring Year ____________ ☐ Forest Park ☐ Wildwood ☐ Summer Year ____________

A. My primary reason for attending St. Louis Community College (select only one):
[ ] to improve existing job skills
[ ] to prepare for a new job
[ ] to transfer courses to another college/university
[ ] for self-improvement (not job-related)

B. I will accomplish this by (select only one):
[ ] taking selected courses
[ ] earning a Certificate
[ ] earning an Associate degree

What do you plan to study at St. Louis Community College? (Program of Study) ______________________________________________

Entry status (select only one):
[ ] New College Student (never attended any college)
[ ] Transfer Student (most recently attended another college)
[ ] Re-Entry Student (most recently attended St. Louis Community College)
[ ] Dual-Enrolled Student (still attending high school)

I agree to adhere to all college policies and procedures which includes the statement of student rights and responsibilities. Any violation of those policies will be reason for disciplinary action and could result in dismissal from the college.

Student’s Signature (REQUIRED) ____________________________________________   Date (Month/Day/Year): _____/______/______

Do you plan to: Yes No
[ ] Receive a degree or certificate
[ ] Apply for a selective admissions program
[ ] Apply for financial aid or veterans’ benefits
[ ] Participate in intercollegiate athletics
[ ] Enroll on a student visa

SEND APPLICATION AND TRANSCRIPTS TO: Admissions/Registration office at campus of choice:

Florissant Valley
3400 Pershall Road
St. Louis, MO 63135-1408
314-513-4244

Forest Park
5600 Oakland Avenue
St. Louis, MO 63110-1393
314-644-9127

Meramec
11333 Big Bend Road
St. Louis, MO 63122-5720
314-984-7601

Wildwood
2645 Generations Drive
Wildwood, MO 63040-1168
636-422-2000

Campus Safety: In accordance with federal law, the college publishes a security report annually covering crime reported within the St. Louis Community College district over a three-year period. Copies are available upon request.

Non-Discrimination Statement: 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.

For information or concerns relating to discrimination matters at a particular location, you may contact the appropriate person listed below or you may contact the Section 504/Title II Coordinator for matters relating to disabilities or the Title IX Coordinator for matters relating to sex discrimination.

Corporate College—Lesley English-Abram, manager, Community Services, Corporate College, 3221 McKelvey Road, Bridgeton, MO 63044, 314-539-5480
Cosand Center—Patricia Henderson, manager, Employment and Recruitment, 300 S. Broadway, St. Louis, MO 63102-2800, 314-539-5214
Florissant Valley—Joe Worth, vice president, Student Affairs, 3400 Pershall Road, St. Louis, MO 63135-1408, 314-513-4250
Forest Park—Thomas A. Walker, Jr., vice president, Student Affairs, 5600 Oakland Ave., St. Louis, MO 63110-1316, 314-644-9212
Meramec—Kim Fitzgerald, acting vice president, Student Affairs, 11333 Big Bend Road, St. Louis, MO 63122-5720, 314-984-7609
Wildwood—Marilyn Turas, director, Student Affairs, 2645 Generations Drive, Wildwood, MO 63040-1168, 636-422-2004

Section 504/Title II Coordinator—Donna Dare, vice chancellor for Academic and Student Affairs, 300 S. Broadway, St. Louis, MO 63102-2800, 314-539-5285
Title IX Coordinator—Pam McIntyre, president, Meramec, 11333 Big Bend Road, St. Louis, MO 63122-5720, 314-984-7763

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Text that is not part of the natural text: Date Rec’d: ____________  By ____________