Partnership Agreement Missouri
Southern State University St.
Charles Community College

Missouri Southern State University (MSSU) and St. Charles Community College (SCC) agree to join in a partnership for providing access to baccalaureate and master’s degree programs in the St. Charles region of Missouri using a process of inter-institutional articulation through collaboration and cooperation. The partners agree to work together to develop 2 + 2 educational programs within the region, using locally available classrooms for instruction and exploring opportunities for telecommunication and on-line based educational delivery systems.

The partnership educational activities will be governed by joint application of each institution’s policies and procedures and by appropriate regulations of the Department of Elementary and Secondary Education and the Coordinating Board of Higher Education. The academic officers of each institution (VPAA or delegate) shall serve as liaison officers for the partnership.

The partners will continue to develop the ways and means by which cooperation and collaboration may be facilitated and through which the needs of students can be best served.

This partnership shall be in effect from the start of the Fall of 2014 semester until the end of the Summer of 2016 semester and shall automatically renew itself for an indefinite term unless terminated by either party upon one academic year’s written notice of termination. The partners agree that any course or courses in progress at the termination date will be completed. In the event of termination, they also agree that they will work together to assist students in degree programs in finding appropriate ways and means for completing their degree programs. If discontinued, SCC will immediately cease enrolling new students to the program. The timeline for completion will be specified by the end of the semester following the announcement of discontinuance.

President
Missouri Southern State University
Date 4/9/14

President
St. Charles Community College
Date 4/8/14
Missouri Southern State University/St. Charles Community College
Articulation Agreement

I. Purpose of Agreement

The purpose of this agreement between St. Charles Community College and Missouri Southern State University is to provide for a smooth transfer of credit between two institutions with the ultimate goal of program completion for students who attend both institutions. This agreement complies with CBHE’s "Credit Transfer: Guidelines for Student Transfer and Articulation among Missouri Colleges and Universities" adopted in April 1998 and "Principles of Good Practice for Transfer and Articulation" adopted in June 1988.

II. Term of Agreement and Modification

This agreement shall be binding on both parties from the time it is signed by both parties for a period of two years and shall be automatically renewed for each subsequent year unless written notice is given by either party one academic year in advance of their intent not to renew. Modifications and revisions in the agreement may be made from time to time as seems appropriate to both parties by written and signed amendments or by the new versions of the agreement as a whole.

III. Bachelor's Degree Program to be offered by MSSU in partnership with SCC.

The Bachelor of Science degree in Environmental Health and Safety is to be offered by MSSU in partnership with SCC. The mission of the degree program is to provide students with the knowledge and skills necessary to work as an environmental health and safety professional. Environmental health is the science of preventing physical, chemical or biological hazards from adversely impacting human health or the ecological balances that sustain our environment. Career opportunities include professional positions with public health departments, environmental protection agencies, environmental consultants and occupational health and safety divisions of industry. The transfer program through Missouri Southern State University is fully accredited by the National Environmental Health Science and Protection accreditation Council (EHAC).
General Education Requirements (fulfills requirements in Area A – I at MSSU)

<table>
<thead>
<tr>
<th>Area</th>
<th>MSU Credit Hours</th>
<th>MSSU Credit Hours</th>
<th>SCC Credit Hours</th>
<th>SCC Credit Hours</th>
<th>Total Credit Hours Required</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Area A - Written Communication</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENG 101 College Composition I (WI)</td>
<td>3</td>
<td>ENG 101 English Composition 1</td>
<td>3</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>ENG 102 College Composition II (WI)</td>
<td>3</td>
<td>ENG 102 English Composition 2</td>
<td>3</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td><strong>Area B - Oral Communication</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>COMM 100 Oral Communication</td>
<td>3</td>
<td>SPE 101 Communications</td>
<td>3</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><strong>Area C – Mathematics</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MATH 130 College Algebra</td>
<td>3</td>
<td>MAT 160 College Algebra</td>
<td>4</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>The above course meets the minimum requirement of College Algebra by EHAC</td>
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<tr>
<td><strong>Area D - Life and Physical Sciences</strong></td>
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</tr>
<tr>
<td>At least 3 hours of biological science with lab required by EHAC, such as BIO 101, 105, 110 or 121 at MSSU</td>
<td>3</td>
<td>BIO 110/113 Human Biology</td>
<td>4 - 5</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>At least 3 hours of microbiology with lab required by EHAC, such as BIO 231</td>
<td>3</td>
<td>BIO 245/247 Microbiology</td>
<td>4</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>At least a total of 6 hours of general chemistry with labs required by EHAC, such as CHEM 151 and 152</td>
<td>6</td>
<td>CHM 115 General Chemistry I (5 credits)</td>
<td>10</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>At least 3 hours of organic chemistry with lab required by EHAC, such as CHEM 301</td>
<td>3</td>
<td>CHM 240/243 Organic Chemistry I</td>
<td>5</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>At least 3 semester hours of physics required by EHAC, such as PHYS 150 or 151</td>
<td>3</td>
<td>PHY 150/153 General Physics</td>
<td>4</td>
<td>4</td>
<td></td>
</tr>
</tbody>
</table>

The above courses meet the minimum (3 - 6) hours for the basic science courses and include at least 6 hours of additional basic science as required by EHAC. Any change in EHAC requirements may require a change in the science or math requirement.
### Minimum Total Hours of Basic Science Required:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th>27-28</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Area E - Social and Behavioral Science</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Required Courses:</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>HIST 110 U.S. History 1492-1877 or HIST 120 U.S. History 1877-Present</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>HIS 101 U.S. History to 1877 or HIS 102 U.S. History since 1877</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>PSC 120 Govt: U.S., State &amp; Local** **Missouri Constitution Test Required</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>POL 101 American Govt</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>2. Select two courses w/ different prefixes</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>ANTH 101 General Anthropology</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ECON 180, 201 or 202 Economics</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GEOG 101 Intro to Geography SOC 110 Intro to Sociology</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSY 100 General Psychology</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ANT 105 Introduction to Biological Anthropology</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ECON 100, 110 or 120 Economics</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SOC 101 Intro to Sociology PSY 101 Intro to Psychology</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Area F - Humanities and Fine Arts</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Select One</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ART 110 Art Appreciation</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>MUS 110 Music Appreciation</td>
<td></td>
<td></td>
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<tr>
<td>MUS 106 World Music</td>
<td></td>
<td></td>
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<tr>
<td>TH 110 Theatre Appreciation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ART 101 Art Appreciation</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>MUS 111 Music Appreciation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>THE 122 Intro to Theater</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Select One</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENG 150 Intro to Literature</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ENG 305 Short Story</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENG 261 or 262 World Literature ENG 271 or 272 British Literature ENG 281 or 282 American Literature PHIL 201 Intro to Philosophy PHIL 212 Ethics</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>LIT 272 World Literature LIT 273 World Literature</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>LIT 250 English Literature before 1800 or LIT 260 English Literature after 1800</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LIT 210 American Literature 1620-1865 or LIT 220 American Literature 1865-present PHIL 101 Intro to Philosophy PHIL 160 Ethics</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Area G - Health and Wellness</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>KINE 103 Lifetime Wellness</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>PHE Personal Wellness</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td><strong>Area H - International Requirements</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
MSSU Bachelor of Science Degree  
Environmental Health & Safety – Distance Learning Track

**Environmental Health Semester Blocks (43 hours)** – The EH-DLT requires successful completion of four Environmental Health Semester Blocks. Students may enroll into any Semester Block that is currently available. These courses are taken via the Internet from MSSU. Semester Block grades are given for each individual course. Students must enroll for the entire block of courses to graduate in a timely manner.

<table>
<thead>
<tr>
<th>Fall Semester, Even Years</th>
<th>Course</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EH 370</td>
<td>Environmental Health &amp; Safety</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>EH 377</td>
<td>Food Safety</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>EH 378</td>
<td>Occupational Health and Safety</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>EH 380</td>
<td>Epidemiology</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

**Total Hours: 12**

<table>
<thead>
<tr>
<th>Spring Semester, Even Years</th>
<th>Course</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EH 371</td>
<td>Environmental Toxicology (W1)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>EH 373</td>
<td>Solid &amp; Hazardous Waste Management</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

**Total Required credit hours of General Education:** 62-63
<table>
<thead>
<tr>
<th>Course</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EH 375</td>
<td>Disease Vector Control</td>
<td>1</td>
</tr>
<tr>
<td>EH 376</td>
<td>Water Quality Management</td>
<td>3</td>
</tr>
<tr>
<td>EH 382</td>
<td>Epidemiological Statistics</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td><strong>Total Hours: 11</strong></td>
<td></td>
</tr>
<tr>
<td>EH 312</td>
<td>Environmental Biology (WI)</td>
<td>4</td>
</tr>
<tr>
<td>EH 372</td>
<td>Environmental Regulations</td>
<td>3</td>
</tr>
<tr>
<td>EH 374</td>
<td>Industrial Hygiene Sampling &amp; Management</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Total Hours: 10</strong></td>
<td></td>
</tr>
<tr>
<td>EH 311</td>
<td>Soil Morphology &amp; Sewage Systems</td>
<td>3</td>
</tr>
<tr>
<td>EH 481</td>
<td>Environmental Risk and Safety Management (WI)</td>
<td>3</td>
</tr>
<tr>
<td>EH 411</td>
<td>Hazardous Material Safety</td>
<td>2</td>
</tr>
<tr>
<td>EH 410</td>
<td>Hazardous Incident Management</td>
<td>1</td>
</tr>
<tr>
<td>EH 379</td>
<td>Career Planning in EH&amp;S</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td><strong>Total Hours: 10</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Additional Requirement:** Must be taken in addition to the Environmental Health Semester Block courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EH 491</td>
<td>Internship in Environmental Health</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Note: This course may be taken during any semester at MSSU, but requires pre-planning with EH Faculty prior to enrollment.</td>
<td></td>
</tr>
</tbody>
</table>

**Total Credits Required from MSSU by Internet**

<table>
<thead>
<tr>
<th></th>
<th>45</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electives (see additional courses in SCC course descriptions; additional credit hours received when taking SCC General Education Courses will count towards the elective credit hours)</td>
<td>16-17</td>
</tr>
</tbody>
</table>

**TOTAL CREDITS REQUIRED TO RECEIVE A BACHELOR OF SCIENCE DEGREE**

<table>
<thead>
<tr>
<th></th>
<th>124</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Elective credits or course prerequisite may be required to reach the 124 total required hours.</strong></td>
<td></td>
</tr>
</tbody>
</table>
The EH courses may be modified or changed by MSSU to provide updated or more relevant information to the environmental health professional or to meet EHAC accreditation requirements. The above plan is based on internet delivery of the EH courses by MSSU. Students may take MSSU on campus courses toward the MSSU EHS degree plan, however the sequence of EH on campus courses is different.

IV. Transfer Policy to Missouri Southern State University

The University subscribes to the guidelines of the Coordinating Board for Higher Education of the State of Missouri. The University welcomes students with course work or associate's degrees from other accredited colleges and pledges to seek harmonious solutions to any problems that transfer students may encounter. Transfer credit from an accredited institution may be used to satisfy any equivalent course requirements.

Courses that meet graduation requirements from the transferring accredited institution not counting toward specific major or general education requirements at MSSU will be accepted as general elective courses. The University computes cumulative grade point averages on the basis of all hours attempted at all colleges attended. Courses that cannot transfer are not used in GPA calculation.

V. MSSU Academic Policies

MSSU shall regularly publish a catalog containing all applicable academic policies for students transferring from SCC to MSSU. These policies will apply equally to all students enrolled in Missouri Southern State University. MSSU will be bound by its published policies.

VI. Articulation Agreements

MSSU will work with SCC to develop and maintain future and existing articulation agreements between each institution in mutually agreed upon completion areas. These articulation agreements will be publicized on the websites of both MSSU and SCC, with links to the other institution’s webpage. In addition, the college and university will work to make seamless the transition for students between the two institutions.

Environmental Health and Science Degree Requirements:

1. A minimum of 124 semester hours of college credit applicable to a Baccalaureate Degree are required for graduation.
2. A 2.0 GPA is required for all credit hours attempted at SCC.
3. A 2.0 GPA is required for all credit hours required for the major, both inside and outside the major department.
4. A 2.0 GPA is required for all courses, required and elective, taken in the major department.
5. The BS degree requires a minimum of 40 hours at the 300/400 level. Courses taken at SCC which are equivalent to 300/400-level courses at MSSU will not be considered upper-level and will not count towards the 40 minimum required upper-level hours.
6. The EH&S major must take the Senior Assessment exam from MSSU prior to graduation.
7. The student is required to have a proctor approved by MSSU Distance Testing for all EH&S exams. Exams will be proctored at SCC’s Assessment Center by the Assessment Center staff.
8. Students actively participating in the degree program who do not meet the MSSU
institutional residency last 30 of 36 credit hour requirement must complete an academic petition. As part of this agreement, MSSU has agreed that these petitions will be approved.

10. The MSSU EHS Program Director will notify the SCC Science Dean and faculty liaison of any change in Environmental Health Accreditation Council course/hour requirements and will work with SCC to help maintain a pathway for SCC students to an EHAC accredited degree plan.

VII. Marketing and Recruitment

1. The SCC Director of Marketing and Communications will collaborate with the MSSU Director of University Relations and Marketing to annually develop a joint marketing communications plan to promote MSSU’s programs in partnership with SCC. The plan will include objectives and strategies aimed at targeted audiences and tactics that include SCC’s printed class schedule, the college’s portal, signage, and in other venues and media as appropriate. SCC agrees to promote and market the degree plan to their students.

2. SCC agrees to put the degree plan in the community college catalog.

3. SCC agrees to promote the degree plan in at least one course to recruit students into the degree plan. List the course(s) in which the degree plan will be promoted at the community college:
   a. BIO 122 – Environmental Science
   b. BIO 105 – Essentials of Biology
   c. BIO 110 – Human Biology
   d. BIO 150 – General Biology I
   e. BIO 240 – Anatomy and Physiology I
   f. CHM 115 – General Chemistry I

4. SCC agrees to provide a faculty liaison on campus for the Environmental Health & Safety degree for the students that are active in the degree plan at the community college. The faculty liaison will work in conjunction with the faculty at MSSU to help students in the major to attain completion of the degree plan.

5. MSSU will provide advisement to SCC students in the degree plan by distance communication methods.

VIII. Curricular Programming

Missouri Southern State University and St. Charles Community College both provide curricular options and programs for their students.

Missouri Southern State University will apply 79 credit hours of coursework from St. Charles Community College toward a MSSU degree. Missouri Southern State University accepts all courses in transfer except those recognized by the sending institution as remedial in nature. Students will need to complete 124 credit hours, including 45 credit hours of upper divisional coursework, for a Bachelor's degree in Environmental Health & Safety.

Missouri Southern State University is a signatory institution within the State of Missouri to the Associate in Arts (A.A), the Associate of Arts in Teaching (A.A.T) and the 42-hour block of coursework. In addition, MSSU recognizes the value of the Associate in Applied Science (A.A.S) degrees and evaluates courses individually for transfer. Additional articulation agreements may be developed at the request of St. Charles Community College or Missouri Southern State University.
It is anticipated that as each institution grows its respective programs, the opportunities for students will extend beyond existing programs. It is the desire of both institutions to provide the best possible education for students unable to attend traditional campus programs.

IX. Dual Admissions

St. Charles Community College and Missouri Southern State University have a dual admissions program—when a student is admitted to St. Charles Community College and indicates an interest in continuing at Missouri Southern State University—immediate advising is provided to ensure the student's experience is as seamless as possible. Upon graduation, the student is already admitted to Missouri Southern State University and does not need to re-apply.

X. Regular Meetings

The MSSU Environmental Health Program Director and the SCC Science Dean, shall meet at least once each term to review and discuss this agreement.
MSSU Course Descriptions

The following course descriptions are to aid Saint Charles Community College in suggesting equivalent credits for the courses students will complete through Saint Charles Community College. Suggested equivalents may then be provided to MSSU to finalize the Articulation Agreement.

**Area A**

**ENG 0101 (F,S,Su) 3 hrs. cr.**  
*College Composition I (Writing Intensive)*  
An introduction to the principles of college-level writing and critical thinking. Students will write a number of essays for a variety of purposes and audiences. Successful completion of the course permits the student to enroll in English 102. Students demonstrating exceptional ability as indicated by Writing Placement scores may take English 111.

**ENG 0102 (F,S,Su) 3 hrs. cr.**  
*College Composition II (Writing Intensive)*  
Continued development of writing skills. Emphasizes writing from sources. Initiation, development and completion of a research paper. Prerequisite: English 101.

**Area B**

**COMM 0100 (F,S,Su) 3 hrs. cr.**  
*Oral Communication*  
Principles of oral communication, including speaking and listening competencies and skills. Primary emphasis is on presenting various types of speeches and improving listening ability. Research organization, reasoning, language and evaluation skill development are included. Three contact hrs. per week. (Required of all degree candidates.)

**Area C**

**MATH 0130 (F,S,Su) 3 hrs. cr.**  
*College Algebra*  
Functions and their graphs; polynomial, rational, exponential and logarithmic functions; systems of equations; the binomial theorem. Prerequisites: Two units of high school algebra, one unit of high school geometry and a score of 22 or above on the ACT Mathematics Section or MATH 030 with grade of 'C' or better.

**MATH 0131 (F,S,Su) 3 hrs. cr.**  
*Finite Mathematics*  
Finite mathematics with algebra that is designed for business, social science and computer science students. Set theory, functions, matrices, linear programming, probability and statistics, with applications. Prerequisites: Two units of high school algebra and a score of 22 or above on the ACT Mathematics Section or MATH 030 with a grade of 'C' or better.

**MATH 0135 (F,S,Su) 3 hrs. cr.**  
*Trigonometry*  
Trigonometric functions, inverses and their graphs; trigonometric identities and equations; solution of the general triangle; complex numbers. Prerequisites: Two units of high school algebra, one unit high school geometry and a score of 22 or above on the ACT Mathematics Section or MATH 030 with grade of 'C' or better.

**MATH 0140 (F,S) 5 hrs. cr.**  
*Algebra and Trigonometry*
Equivalent of MATH 130 and MATH 135. Prerequisites: Two units of high school algebra, one unit of high school geometry and a score of 22 or above on the ACT Mathematics Section or MATH 030 with a grade of 'C' or better. Only two hours credit for students with MATH 135 or MATH 130 credit. No credit for students with credit for MATH 130 and MATH 135.

**MATH 0150 (F,S) 5 hrs. cr.**

**Calculus with Analytic Geometry I**

Limits. Differentiation of algebraic and transcendental functions and integration of algebraic functions. Plane analytic geometry. Applications to physical problems. Prerequisites: MATH 140 with a grade of 'C' or better or four units of high school mathematics and a satisfactory score on the Mathematics Placement Test.

**Area D**

**BIO 0101 (F,S,Su) 4 hrs. cr.**

**General Biology**

General treatment of unifying principles of living organisms at the chemical, cellular, organismic and population levels of organization including cell structure and function, metabolism, genetics, evolution and ecology. Emphasis will be placed on biological principles as they relate to humans, stressing how humans interact with their environment and possible outcomes of these interactions. Three lectures, one two-hour lab per week. Not for biology majors.

**BIO 0105 (F,S) 4 hrs. cr.**

**General Biology: Environmental Health Emphasis**

A general biology course that emphasizes environmental health. The organization, complexity and interdependency of life is revealed through the study of life chemistry, cells organisms, respiration, photosynthesis, genetics, populations, evolution and ecology. Emphasis is placed on protection of the human environment with discussion of environmental issues and environmentally related public health concerns. Three lectures, one two hr. lab per week. Credit is not granted for both BIO 101 and BIO 105. Not for biology majors.

**BIO 0110 (F,S) 4 hrs. cr.**

**Principles of Biology I**

First in a two-course introductory sequence for biology majors. The unifying principles of living organisms including scientific method, biological molecules, cell structure, function and metabolism, genetics, evolution and a survey of Prokaryotes, Protists and Fungi. Three lectures, one two-hour lab per week. Prerequisites: BIO 101 or BIO 105 or an ACT composite score of 22 or higher. High school chemistry strongly recommended.

**BIO 0121 (F,S,Su) 4 hrs. cr.**

**Human Anatomy and Physiology I**

The first in a two-course sequence in which human anatomy and physiology are studied using a body system approach. Includes the concept of scientific inquiry and the fundamental concepts of cell biology, cell metabolism and genetics. Three lectures and one, two-hour lab per week. Fulfills the General Education Requirements in Area 3, Section A for certain Allied Health, Environmental Health, Kinesiology and Nursing majors. Prerequisite: ACT composite score of 19 or higher or a satisfactory score on the departmental assessment or BIO 070 with a grade of C or better.

**BIO 0231 (F,S,Su) 5 hrs. cr.**

**General & Medical Microbiology**

Structure and function of microorganisms. Topics include general principles of microbiology, immunology and identification of microorganisms. Three lectures and two, two-hour labs per week. Prerequisites: BIO 111 (or BIO 121) and CHEM 120 or 151.
CHEM 0151 (F,S,Su) 5 hrs. cr.
General Chemistry I
Introductions to theories of chemistry with emphasis on the relationship of structure to properties of matter, the changes that occur during chemical reactions and the quantitative aspects of these changes. Four lectures, one three-hour laboratory per week. Prerequisite or co-requisite: MATH 140 or higher level math course.

CHEM 0152 (F,S,Su) 5 hrs. cr.
General Chemistry II
Continuation of Chemistry 151. Emphasis on the dynamics and thermodynamics of chemical processes and on the properties and reactions of analogous groups of cations and anions. Four lectures, one three-hour laboratory per week. Prerequisites: CHEM 151 with a minimum grade of 'C' or permission of instructor and MATH 140 or higher level math course.

CHEM 0301 (F,S) 5 hrs. cr.
Organic Chemistry I
Principles of organic chemistry including nomenclature, structure, stereochemistry and reactions will be studied by the functional group approach. A brief introduction to organic reaction mechanisms and spectroscopy will be presented. Four lectures and one three-hour laboratory per week. Prerequisite: CHEM 152 with a grade of ‘C’ or better.

PHYS 0150 (Demand) 5 hrs. cr.
Environmental Physics
Emphasis on physics-based problems and laws related to the environment and to human health. Topics include forces in nature, energy, laws of thermodynamics, heat transfer and radiation, properties of fluids and fluid flow, mechanical properties of solids, sound, electromagnetic waves and spectra, basic electricity, radioactivity and nuclear physics. Designed for students in environmental health and students in biology needing only one course in physics. Students may not receive credit for both Physics 150 and 151 or Physics 150 and 152. Four hours lecture, one three-hour laboratory per week. Prerequisite: MATH 140.

PHYS 0151 (F,S,Su) 5 hrs. cr.
Elementary College Physics I
Mechanics, rotational dynamics, properties of matter, heat, wave motion and sound. Four hours lecture, one three-hour laboratory per week. Prerequisite: MATH 140.

PHYS 0250 (F,S) 2 hrs. cr.
General Physics I
Introductory study of physics covering vectors, geometric and trigonometric applications in physics, , kinematics and dynamics of particles in one and two dimensions and Newton's laws of motion. Course meets for the first five weeks of the semester. Four hours lecture and one three-hour laboratory per week. Prerequisite or co-requisite: MATH 150.

PHYS 0260 (F,S) 3 hrs. cr.
General Physics II
Introductory study of energy, momentum, kinematics and dynamics of rigid bodies, equilibrium, fluids, heat and thermodynamics. The course is sequential to PHYS 250 and begins the sixth week of the semester. Four hours lecture, one three-hour laboratory/recitation session per week. Prerequisite: PHYS 250 or 251 with a grade of 'C' or better. Prerequisite or co-requisite: MATH 150.

Area E
HIST 0110 (F,S) 3 hrs. cr.
United States History 1492-1877
Survey of the United States from the era of discovery through reconstruction. Prerequisite: UE 150 or a score of 17 or higher on the ACT Reading Section.
HIST 0120 (F,S) 3 hrs. cr.

United States History 1877 to Present
Survey of the economic, social and political development of the United States from 1877 to the present. Prerequisite: UE 150 or a score of 17 or higher on the ACT Reading Section.
PSC 0120 (F,S) 3 hrs. cr.

Government: US State & Local
Designed to give students an understanding of their governments, enabling them to keep up with political developments with the goal of becoming informed citizens needed to sustain democracy. Successful completion of this course fulfills the requirements for the state-mandated Missouri Constitution Test.

ANTH 0101 (F) 3 hrs. cr.

General Anthropology
An introduction to the field of anthropology, including its historical origins and the four sub-fields central to the discipline today: sociocultural, linguistic, archeological and physical/biological branches. Applied aspects of each of the four sub-fields will also be addressed. An emphasis is placed on the holistic nature of the discipline, centering around an evolutionary and comparative approach to our species. The role of culture as the primary human adaptation for survival is emphasized, as well as the origins of the biological traits necessary for the development of culture. This course documents the interrelationship of ecology and subsistence patterns with social structures and institutions across different historic periods and cultures.

ECON 0180 (F,S,Su) 3 hrs. cr.

The American Economic System
A core course on the goals, organization, and operation of the U.S. economy. Topics include: scarcity and choice; the role of profits, saving, investment and competition; the economic functions of government; limitations of the market system; other types of economic systems; and international trade. Personal finance topics include setting goals, budgeting, savings and investing, credit management and retirement planning. Not for business majors or for those who have taken ECON 201 or 202. Prerequisite: ACT MATH Score of 19 or higher or MATH 030 or above.

ECON 0201 (F,S,Su) 3 hrs. cr.

Principles of Economics (Macro)
A basic course that explains the organization, operation and goals of the U.S. economic system with emphasis on basic principles and concepts; measurement, determination and stabilization of national income; unemployment and inflation; the role of money and monetary policy; fiscal policy; economic growth; international finance; and current economic problems. Prerequisite: MATH 030 or above.

ECON 0202 (F,S,Su) 3 hrs. cr.

Principles of Economics (Micro)
A continuation of economic principles with emphasis on the theory of price determination and income distribution, with particular attention to the nature and application of those bearing on decision making within a household, firm or industry; cost and revenue implications of various product and factor market structures; and international trade and finance. Prerequisite: MATH 030 or above.

GEOG 0101 (S-Odd) 3 hrs. cr.

Introduction to Geography
An introduction to geography, with the goal of increasing geographic literacy and recognizing the importance of geography in everyday life. This course introduces students to the discipline, its basic principles and major concepts, tools, techniques and methodological approaches. It traces the development of modern geography and surveys its physical and human sub-disciplines.

**PSY 0100 (F,S) 3 hrs. cr.**

**General Psychology**
Introductory course stressing the importance of the psychological mechanisms underlying all human behavior.

**SOC 0110 (F,S) 3 hrs. cr.**

**Introduction to Sociology**
An introductory course focused on the systematic study of society. Emphasis on major concepts of sociology and the scientific point of view in understanding and explaining human behavior and social phenomena.

**Area F**

**ART 0110 (F,S) 3 hrs. cr.**

**Art Appreciation**
A survey designed to increase appreciation of the visual arts through readings, slide lectures, library research and visits to the George A. Spiva Center for the Arts. Development of the cognitive and critical processes as they relate to the visual arts are emphasized.

**MUS 0106 (F,S) 3 hrs. cr.**

**World Music**
An ethnomusicological survey of select indigenous musics and their cultures. The musical cultures selected for study are not those found in Eurocentric (Western art) musics. There are no prerequisites.

**MUS 0110 (F,S,Su) 3 hrs. cr.**

**Music Appreciation**
A survey of masterpieces of Western musical literature; intended for non-music major.

**TH 0110 (F,S,Su) 3 hrs. cr.**

**Theatre Appreciation**
Introduction to theatre as a communicative and fine art emphasizing collaborative efforts of playwright, artistic director, designer, actor and crew. Activities include the interpretation and evaluation of plays through scripts, live and taped performances.

**ENG 0150 (F,S) 3 hrs. cr.**

**Introduction to Literature**
An introduction to the major literary genres, including the examination of literary themes and techniques common in fiction, poetry and drama. Option for satisfying Area F General Education requirement. Prerequisite: ENG 101 or ENG 111.

**ENG 0261 (F,S) 3 hrs. cr.**

**World Literature I**
Selected literature from the ancient world through the Renaissance, excluding British and American literature. Option for satisfying Area F General Education requirement. Prerequisite: ENG 101 or ENG 111.

**ENG 0262 (F,S) 3 hrs. cr.**

**World Literature II**
Selected literature from the Renaissance to the present, excluding British and American literature. Option for satisfying Area F General Education requirement. Prerequisite: ENG 101 or ENG 111.

**ENG 0271 (F,S) 3 hrs. cr.**
British Literature I
Survey of British literature from its beginnings through the eighteenth century. Option for satisfying Area F General Education requirement. Prerequisite: ENG 101 or ENG 111.
ENG 0272 (F,S) 3 hrs. cr.

British Literature II
Survey of British literature from the Romantic Movement to the present. Option for satisfying Area F General Education requirement. Prerequisite: ENG 101 or ENG 111.
ENG 0281 (F,S) 3 hrs. cr.

American Literature I
A survey of American literature from its beginning to the Civil War. Option for satisfying Area F General Education requirement. Prerequisite: ENG 101 or ENG 111.
ENG 0282 (F,S) 3 hrs. cr.

American Literature II
A survey of American literature from the Civil War to the present. Option for satisfying Area F General Education requirement. Prerequisite: ENG 101 or ENG 111.
ENG 0305 (F,S) 3 hrs. cr.

The Short Story
An in-depth study of the short story with representative writers from throughout the world. Option for satisfying Area F General Education requirement. Prerequisite: ENG 101 and 102 or ENG 111.
PHIL 0201 (F,S-Honors,Su-Even) 3 hrs. cr.

Introduction to Philosophy
Comparative survey of major types of philosophy and of representative problems in philosophy. Option for satisfying Area F General Education requirement.
PHIL 0212 (F-Even) 3 hrs. cr.

Ethics
Exploration of the problems of value and personal moral standards, comparative survey of major ethical systems and evaluation of the chief ethical struggles in contemporary society. Option for satisfying Area F General Education requirement.

Area G
KINE 0103 (F,S,Su) 2 hrs. cr.

Lifetime Wellness
Designed to provide students with the knowledge and self-management skills that will assist them in adopting healthy lifestyles. The course will encompass all areas of wellness: physical, emotional, spiritual, social and intellectual.
SCC Course Descriptions

The following course descriptions are suggested equivalent credits for the courses completed at SCC

Area A

ENG 101 English Composition I ... 3
Prerequisites: Placement or ENG 096 with passing grade or a grade of C or higher in ESL 102
College-level writing course required for all other college-level writing classes. Emphasizes essay structure, ways of organizing information, and use of sources. Basic research skills and critical thinking skills as integral part of course.

ENG 102 English Composition II ... 3
Prerequisites: C grade in ENG 101
Advanced college-level writing course emphasizing analysis and in-depth research. Critical reading and thinking skills as well as library skills are integral part of course.

Area B

SPE 101 Oral Communication ... 3
Focus on importance of communication competence in a variety of situations. Topics include verbal and nonverbal communication, listening, perception, self-concept, small group communication, and public speaking. Students required to prepare and present three to four graded oral presentations.

Area C

MAT 160 College Algebra ... 4
Prerequisites: Grade of C or better in MAT 121 or ASMNT MAT 160.
Designed for students in transfer programs. Topics include linear and quadratic equations and inequalities; complex numbers and solution of higher degree polynomial equations; systems of linear equations; matrices; graphing functions including exponential, logarithmic, and rational polynomial functions; conic sections; sequences, and series. Students may not receive credit for both MAT 160 and MAT 171.

MAT 171 Pre-Calculus Mathematics ... 6
Prerequisites: Grade of B or better in MAT 121 or ASMNT MAT 171.
Unified study of College Algebra and Trigonometry provides necessary background for Calculus. Includes linear, quadratic, rational, and higher degree polynomial equations and inequalities; systems of equations; relations and functions along with graphs and equations; exponential and logarithmic; inverse; degree and radian measure; trigonometric functions; identities; triangles; vectors; polar coordinates; complex numbers; matrices and determinants; sequences and series; binomial theorem; mathematical induction; and applications. Students may not receive credit for MAT 171 and either MAT 150 and MAT 160. Students not planning to take Calculus may satisfy mathematics requirement for A.A. degree with MAT 160 or MAT 165 in lieu of MAT 171.

MAT 180 Calculus and Analytic Geometry I ... 5
Prerequisites: Grade of C or better in MAT 171 or both MAT 150 and MAT 160 or ASMNT MAT 180.
First in a sequence of three courses including analytic geometry, differential calculus, and integral calculus. Recommended for majors in mathematics, computer science, physical sciences, or engineering. Includes analytic geometry, functions, limits, continuity, the derivative and differentials, applications of the derivative and differentials, antidifferentiation, indefinite and definite integrals, and applications of definite integral.
Area D

BIO 105  Essentials of Biology  3
Examines fundamental principles of biology. Includes organization of living things, scientific method, cell and molecular biology, genetics, ecology, evolution, and relationship between biology and society. Suitable for non-science majors.
Corequisites: Recommended (not required) BIO 106

BIO 106  Essentials of Biology Laboratory  1
Emphasis on use of methodologies typical of biological studies. Compliments topics covered in BIO 105. Suitable for non-science majors.
Corequisites: BIO 105

BIO 110  Human Biology  3
Survey of human body structure and function for non-science major. Study of all organ systems of the body along with current topics in human biology.

BIO 113  Human Biology Laboratory  1
Use of models, specimens, and investigative activities intended to enhance study of human organism.
Corequisites: BIO 110

BIO 150  General Biology I  5
Prerequisites: MAT 121, One year of high school biology or equivalent with a C or better; One year of high school chemistry or equivalent with a grade of C or better. Basic principles of plant and animal biology, including cell biology, biochemistry, energetics, genetics, evolution, and ecology. Appreciation of scientific method in general and biological methodology. Lab component will emphasize the use of methodologies typical of biological studies. For science majors.

BIO 246  Microbiology  4
Previously BIO 245 and BIO 247
Prerequisites: High-school biology or equivalent and high-school chemistry or equivalent with a grade of a "C" or better within the last five years.
Basic concepts of microbiology including metabolism, genetics, and inhibition of bacteria, fungi and viruses. Emphasis on human pathogens, infection, resistance, and immunity. Laboratory exercises reinforce lecture concepts and teach fundamental skills in microscopy, aseptic technique, isolation, and identification of microorganisms.

BIO 240  Anatomy and Physiology I  3
Prerequisites: High school biology or its equivalent within the last five years with a grade of C or better.
Structure and function of human body, with particular attention to cell biology, skeletal system, muscular system, nervous system, and endocrine system.
Corequisites: BIO 243

BIO 243  Anatomy and Physiology Laboratory I  1
Activities to enhance study of topics covered in the lecture section (BIO 240). Use of models, charts, and both microscopic and gross specimens to illustrate various systems.
Corequisites: BIO 240

CHM 115  General Chemistry I  5
Prerequisites: MAT 098 and 1 year of High School Chemistry or CHM 101 or equivalent with a grade of C or better.
Study of how compounds are formed and named, chemical equations, calculations and problem-solving involving elements, compounds and chemical equations including stoichiometry, thermochemistry; properties of gases, solids, solutions, and acids and bases. Experiments introduce basic lab skills and aspects of qualitative and quantitative analysis.
CHM 116  General Chemistry II ...  5
Prerequisites: Completion of CHM 115 with a grade of C or better.
Continuation of Chemistry I. Includes study of chemical equilibria, acid-base chemistry,
complex ions, thermodynamics, oxidation-reduction reactions, nuclear chemistry, and
introduction to organic chemistry. Experiments continue to introduce and improve
laboratory skills and problem solving.

CHM 240  Organic Chemistry I ...  3
Prerequisites: CHM 116, with a grade of C or better.
Introduction to structure, nomenclature, properties, synthesis and reactions of aliphatic
and aromatic carbon compounds.

CHM 243  Organic Chemistry I Laboratory ...  2
Prerequisites: CHM 240, with a grade of C or better or equivalent.
Hands-on introduction to laboratory techniques and procedures of organic synthesis and
identification.
Corequisites: CHM 241

PHY 150  General Physics I ...  3
Prerequisites: MAT 150, or MAT 160
Survey of kinematics, dynamics, energy, momentum, rotational motion, fluids, and
thermodynamics. Non-calculus in approach. Three hours of lecture-recitation and two
hours of laboratory per week.
Corequisites: PHY 153

PHY 153  General Physics I Laboratory ...  1
Experimental component of PHY 150.
Corequisites: PHY 150

Area E

HIS 101  U.S. History to 1877 ...  3
Survey of historical, cultural, political, economic, and institutional forces and events that
shaped United States history through period of Reconstruction. HIS 101 complies with
provisions of Section 170.011 RsMo.

HIS 102  U.S. History Since 1877 ...  3
Survey of the historical, cultural, political, economic, and institutional forces and events
that shaped United States history from 1877 to present. HIS 102 complies with
provisions of Section 170.011 RsMo.

POL 101  American Government ...  3
Basic concepts of political science with major emphasis on origin, principles,
organization, and nature of American federal system and its politics. POL 101 complies
with provisions of Section 170.011 RsMo.

ANT 105  Introduction to Biological Anthropology ...  3
Survey of common topics, including human evolutionary fossil record, modern physical
variations such as race, forensics, and primate behavior and evolution.

ECO 100  Survey Economics ...  3
Prerequisites: One of the following must be completed: MAT 096, ASMNT A120.
Introduction to basic economic decision-making at both micro and macro levels.
Overview of topics relating to aggregate economic activity and to individual economic
activity of households and firms.

ECO 110  Principles of Macroeconomics ...  3
Prerequisites: One of the following must be completed: MAT 098, ASMNT A121
Introduction to determination of aggregate measures of economic activity, price level,
employment and national output. Topics include inflation, unemployment and economic
growth; money and banking system; and formulation of fiscal and monetary policies in
pursuit of economic stabilization.
ECO 120 Principles of Microeconomics ... 3
Prerequisites: One of the following must be completed: MAT 098, ASMNT A121
Introduction to determination of prices in product and factor markets. Topics include
individual decision-making behavior of households and firms; interactions in markets of
varying degrees of competition; and effects of such markets on allocation of scarce
resources and distribution of income.
SOC 101 Introduction to Sociology ... 3
Examines relationship between individual and society in social structure of modern
society. Introduction to way in which sociologists interpret and research human behavior.
Covers patterns of social interaction and social influences on individual conduct.
PSY 101 Introduction to Psychology ... 3
Examination of behavioral, cognitive, psychoanalytic, humanistic, and biological
viewpoints in psychology. Includes learning principles and applications, perception,
motivation, emotions, stress, psychobiology, personality, abnormal behavior, and
approaches to therapy.

Area F
ART 101 Art Appreciation ... 3
Lectures to stimulate visual, emotional and intellectual awareness of humankind's artistic
heritage. Covers historically significant art forms from prehistoric through
postmodernism.
MUS 111 Music Appreciation ... 3
Introductory course for non-music majors. Presents main elements of music, how they
develop and change throughout history, and the role of music in society. Emphasis on
understanding musical elements and aural applications. Attendance required at live
performances.
The 122 Introduction to Theater ... 3
Emphasizes appreciation of theater as one of living arts. Surveys theater history and
dramatic theory from Greeks to present Broadway. Includes lectures, films and
discussions on the practitioners and work. Requires attendance at live theater
productions.
LIT 210 American Literature From 1620-1865 ... 3
Prerequisites: ENG 101
Study of development of U.S. literary tradition beginning with early colonists through Civil
War. Reading and discussion of major authors of poetry, fiction, drama and historical
documents.
LIT 220 American Literature From 1865-present ... 3
Prerequisites: ENG 101
Survey of American literature beginning with the period after the Civil War to the present.
Major American writers in poetry, fiction, and drama will be read and discussed in
relation to the development of intellectual thought and literary theory. Includes writers
who reflect diverse voices? Native American, African American, Asian American, Latin
American, etc. who make America unique.
LIT 250 English Literature Before 1800 ... 3
Prerequisites: ENG 101
Overview of earliest works written in English. Traces development of various forms of
literature from beginnings in early Anglo-Saxon poetry through Shakespeare's plays
and Romantic Poets.
LIT 260 English Literature After 1800 ... 3
Prerequisites: ENG 101
Overview of English literature beginning with Romantics and continuing through Modern
Age. Includes poetry, drama, fiction, and essays.
LIT 272 World Literature - Ancient World Through the Renaissance ... 3
Prerequisites: ENG 101
Explores foundations of Western literary traditions from pre-Classical and Classical
World through Middle Ages and Renaissance.
LIT 273  World Literature - Enlightenment to 20th Century ... 3
Prerequisites: ENG 101
Explores foundations of Western literary traditions from the Enlightenment to early 20th Century.

PHL 101  Introduction to Philosophy ... 3
Introduction to philosophical inquiry and historically important philosophical ideas by exploring issues discussed by classical and/or modern philosophers.

PHL 160  Ethics ... 3
Introductory survey of classical and contemporary theories in field of ethics. Questions considered regarding ideal moral life, nature of good and evil, principles for distinguishing right from wrong, and ethical relativism versus objectivism. Discusses selected moral dilemmas of modern living.

Area G
PHE 106  Personal Wellness ... 2
Focuses on development of positive lifestyle by using combination of classroom/activity. Experiences include concepts of fitness, lifetime sports, stress management techniques, leisure well being, contemporary threats, and nutrition. Completion allows current SCC students to continue use of the SCC Fitness Center.

Area I
ANT 101  Physical Anthropology and Archaeology ... 3
Study of human evolutionary development. Principles, theories, data, and methods employed by physical anthropologists and archaeologists used to cover subjects such as evolution, human prehistory, the fossil evidence of homo sapiens and ancestral forms.

BUS 255  International Business ... 3
Prerequisites: BUS 101
Survey course to develop understanding and appreciation of environments and operations of international business. The nature of international business, international environment, organizations and monetary systems, foreign environment, and management tools that deal with environmental forces.

GEO 100  Principles of Geography ... 3
Covers the major areas of geographic study, both physical and cultural, and how each is distributed globally. Promotes understanding of a multicultural world and the differing values held by people throughout that world.

GLC 215  Intercultural Communication ... 3
Explores issues related to intercultural communication process. Considers important role of context (social, cultural, and historical) in intercultural interactions. Topics include stereotyping, prejudice, ethnocentrism, social class and religious identities, folk culture, power, and intercultural conflict.

HIS 145  Western Civilization: Ancient and Medieval Heritage ... 3
Introduction to ancient civilizations of Eastern Mediterranean, classical civilizations of Greece, Rome, and Western European society up to the Renaissance.

HIS 146  Western Civilizations, Modern European Heritage ... 3
Beginning with Renaissance, survey of history of Western civilization through post-WWII period.

ARB 101  Arabic Language and Culture I ... 4
Basic Arabic language skills includes speaking, listening comprehension, reading and writing, with emphasis on effective linguistic functioning in real situations. Explores cultures of Arabic-speaking countries.

FRN 101  French Language and Culture I ... 4
Beginning French course that presents basic language skills of speaking, listening comprehension, reading and writing, with emphasis on effective linguistic functioning in real situations. Includes culture unit on Paris. Opportunity provided for audio-lingual practice outside of class.
GRM 101  German Language and Culture I  ...  4
Beginning German course that presents basic language skills of speaking, listening comprehension, reading and writing, with emphasis on effective linguistic functioning in real situations. Opportunity provided for audio-lingual practice outside of class.

SPN 101  Spanish Language and Culture I  ...  4
Beginning Spanish course that presents basic language skills of speaking, listening comprehension, reading and writing, with emphasis on effective linguistic functioning in real situations. Opportunity provided for audio-lingual practice outside of class.
Possible Electives taken at SCC (16-17 credits)

BIO 122 Environmental Sciences ... 3
Study of biological and physical characteristics and principles of nature. Deals with
diverse topics such as ecology, endangered species, pollution, meteorology, earth
studies, populations, etc. Occasional guest speakers or field trips included. (For non-
science majors)

BIO 151 General Biology II ... 5
Prerequisites: BIO 150 with a grade of C or better
Continuation of General Biology I. Emphasis on botany, zoology, animal systems,
behavior, taxonomy. Lab component will feature laboratory and field activities that
complement studies in lecture. For science majors.

BIO 241 Anatomy and Physiology II ... 3
Prerequisites: BIO 240 with a grade of C or better, BIO 243.
Continuation of study of structure and function of human body. Topics include
cardiovascular system, lymphatic system, respiratory system, digestive system, urinary
system, and reproduction.
Corequisites: BIO 244

BIO 244 Anatomy and Physiology Laboratory II ... 1
Prerequisites: BIO 243, BIO 240
Continuation of BIO 243. Use of laboratory activities to enhance study of human body
structure and function.
Corequisites: BIO 241

BIO 242 Anatomy and Physiology Supplement ... 1
Prerequisites: High school biology or its equivalent within the last five years.
Supplement and reinforcement of concepts presented in BIO 240 and 243. Strongly
recommended for students who have failed or received a "W" in BIO 240 or its
equivalent; recommended for all students in BIO 240.
Corequisites: BIO 240 and 243

BIO 265 Pathophysiology ... 3
Prerequisites: BIO 240, BIO 241, BIO 243, BIO 244
Study of mechanisms of disease conditions. Working from foundation of normal function,
exploration of what can go wrong and how. Emphasis on conditions most commonly
encountered by today's health professionals. Combination of lecture, discussion, and
seminar.

BIO 280 (formerly 140) Nutrition Pathways ... 3
Prerequisites: BIO 240 with a grade of C or better, BIO 241 can be taken as a
prerequisite or corequisite
Scientific study of the essential nutrients and their function in the body. Recommended
nutrient intakes, diet assessments and planning, relationships between diet and health
will also be covered.

BUS 101 Introduction to Business ... 3
Survey course covering many facets of business; a general knowledge of the modern
business environment. Review of economic, social, legal, and ethical systems affecting
U.S. firms. General concepts of business organization, management, people aspects of
business, together with functions of production, marketing (including international),
accounting, finance, computers, and information systems.

BUS 115 Introduction to Public Relations ... 3
Basic functions of public relations in the public and private sector. Emphasis on history,
case studies and writing, including press releases, media plans and speeches. Media's
role in public relations, and role in shaping and swaying public opinion. Specific jobs and
emphasis areas also covered.

CHM 222 Quantitative Analysis ... 3
Prerequisites: CHM 116, with a grade of C or better.
Introduction to volumetric, spectrophotometric, and gravimetric chemistry. Focus on
instrumental analysis and advanced chemical laboratory skills. Additional laboratory time may be required.

CHM 241 Organic Chemistry II ... 3
Prerequisites: CHM 240, with a grade of C or better.
Continuation of study of structure, nomenclature, properties, synthesis and reactions of aliphatic and aromatic carbon compounds with emphasis on chemistry of carbonyl compounds.
Corequisites: CHM 243

GEO 120 Introduction to GIS (Geographic Information Systems) ... 3
Introduction to the concepts and experiences in Geographic Information Systems (GIS). Examines how to manipulate and analyze spatial data with exploration of practical uses of GIS. Includes using GIS technology and software through hands-on exercises and projects to solve real-world problems. Focus on developing skills in the use of visual maps and written communication in GIS.

GEO 225 Advanced GIS ... 3
Prerequisites: GEO 120 or permission of instructor.
Exploration of increasingly complex geographic concepts using computer and analytical methods to solve spatial problems. Sophisticated GIS technology used to find and explain spatial patterns. ESRI products and GPS technology used to create data and maps.

PHY 105 Environmental Geology ... 3
Examination of geologic processes and hazards that influence human activities and the geologic aspects of pollution and waste-disposal.

PHY 107 Environmental Geology Laboratory ... 1
Exercises focus on environmental and social issues relevant to environmental problems and the effects of human interaction in geologic processes.
Corequisites: PHY 105-Environmental Geology.

MAT 175 Introductory Statistics ... 3
Prerequisites: Grade of C or better in MAT 160, ASMNT MAT 180, or ASMNT MAT 210.
Topics include descriptive statistics, sampling techniques, counting techniques, probability, probability distributions, confidence interval estimates, hypothesis testing, simple linear regression, and one-way ANOVA.

PHY 151 General Physics II ... 3
Prerequisites: PHY 150, PHY 153
 Begins with wave motion, but emphasis on electricity and magnetism. Treats geometric and wave optics. Non-calculus in approach. Three hours of lecture-recitation and two hours of laboratory per week.
Corequisites: PHY 154

PHY 154 General Physics II Laboratory ... 1
Prerequisites: PHY 150, PHY 153
Experimental component for PHY 151.
Corequisites: PHY 151

SPE 225 Professional Communication ... 3
Prerequisites: SPE 101
Role of and development of professional communication skills intrinsic to the workplace. Focus is on the development of theoretical and performance competencies in interpersonal communication, small group communication, organizational communication and public communication. Includes understanding organizational diversity and ethics; improving listening skills; enhancing interviewing skills; managing group meetings and teamwork; and presentation of informational and persuasive proposals via enhancement of verbal, vocal and visual strategies.
Additional foreign language courses:

ARB 101  Arabic Language and Culture I ...  4
Basic Arabic language skills includes speaking, listening comprehension, reading and writing, with emphasis on effective linguistic functioning in real situations. Explores cultures of Arabic-speaking countries.

ARB 102  Arabic Language and Culture II ...  4
Prerequisites: ARB 101
Continuation of ARB 101. Explores cultures of Arabic-speaking countries.

ARB 201  Arabic Language and Culture III ...  4
Prerequisites: ARB 102 or equivalent
Follow-up to ARB 102. Expanded opportunities for listening to, speaking, reading, and writing Modern Standard Arabic. Continued exploration of culture, with an emphasis on Arab intellectuals, poets and writers. Emphasis remains on linguistic functioning in real situations.

ARB 202  Arabic Language and Culture IV ...  4
Prerequisites: ARB 201 or equivalent.
Follow-up to ARB 201. Precise and coherent use of Modern Standard Arabic language through development of the speaking, reading, writing and listening skills; more focus on syntax, morphology, and grammar. Students will take part in meaningful, functional communication that might be encountered in real life complex situations. Varied reading and writing activities representing cultural topics will be included. Media Arabic will be introduced.

FRN 101  French Language and Culture I ...  4
Beginning French course that presents basic language skills of speaking, listening comprehension, reading and writing, with emphasis on effective linguistic functioning in real situations. Includes culture unit on Paris. Opportunity provided for audio-lingual practice outside of class.

FRN 102  French Language and Culture II ...  4
Prerequisites: FRN 101 or 1 to 1 1/2 years minimum high school language study
Continuation of French 101, including culture unit on France.

FRN 195  French Language and Civilization ...  1-9 hrs
Involves travel and/or study in Francophone or French culture area. May have prerequisites and may be repeated for credit. Will not satisfy General Education requirements.

FRN 201  French Language and Culture III ...  4
Prerequisites: FRN 102 or 1 1/2 to 2 years minimum high school language study. A grade of C or better in the prerequisite course is recommended
Follow up to French 102. Provides expanded opportunities for listening to, speaking, reading, and writing French. Continues exploration of culture, with emphasis on Francophone world. Emphasis remains on linguistic functioning in real situations.

FRN 202  French Conversation and Composition ...  4
Prerequisites: FRN 201 or 2 years minimum high school language study. A grade of C or better in the prerequisite course is recommended.
Intensive one-semester course focusing on conversational skills, grammar review, and composition. Exploration of role of French in North America.

GRM 101  German Language and Culture I ...  4
Beginning German course that presents basic language skills of speaking, listening comprehension, reading and writing, with emphasis on effective linguistic functioning in real situations. Opportunity provided for audio-lingual practice outside of class.

GRM 102  German Language and Culture II ...  4
Prerequisites: GRM 101 or 1 to 1 1/2 years minimum high school language study. A grade of C or better in the prerequisite course is recommended.
Continuation of German 101.
GRM 195 German Language and Civilization Experience ... 1-9 hrs
Involves travel and/or study in German speaking or German culture area. May have prerequisites and may be repeated for credit. Will not satisfy general education requirements.

GRM 201 German Language and Culture III ... 4
Prerequisites: GRM 102 or 1 1/2 to 2 years minimum high school language study. A grade of C or better in the prerequisite course is recommended.
Intensive course with emphasis on conversational proficiency. Grammar review and expansion. Variety of literary and cultural readings used for vocabulary building and as basis for classroom discussion. Opportunity provided for audio-lingual practice outside of class.

GRM 202 German Conversation and Composition ... 4
Prerequisites: GRM 201 or two years minimum high school language study. A grade of C or better in the prerequisite course is recommended.
Continuation and completion of materials presented in German 201.

SPN 101 Spanish Language and Culture I ... 4
Beginning Spanish course that presents basic language skills of speaking, listening comprehension, reading and writing, with emphasis on effective linguistic functioning in real situations. Opportunity provided for audio-lingual practice outside of class.

SPN 102 Spanish Language and Culture II ... 4
Prerequisites: SPN 101 or 1 to 1 1/2 years minimum high school language study. A grade of C or better in the prerequisite course is recommended.
Continuation of Spanish 101.

SPN 195 Spanish Language and Civilization Experiences ... 1-9 hrs
Involves travel and/or study within Hispanic or Latin American culture area. May have prerequisites and may be repeated for credit.

SPN 201 Spanish Language and Culture III ... 4
Prerequisites: SPN 102 or 1 1/2 to 2 years minimum high school language study. A grade of C or better in the prerequisite course is recommended.
Follow up to SPN 102. Provides expanded opportunities for listening, speaking, reading, and writing. Opportunity provided for audio-lingual practice outside of class.

SPN 202 Spanish Conversation and Composition ... 4
Prerequisites: SPN 201 or two years minimum high school language study. A grade of C or better in the prerequisite course is recommended.
Intensive one-semester course focusing on conversational skills, grammar review and composition. Exploration of role of Hispanic world.