Environmental quality is fundamental to our quality of life. Environmental science seeks to preserve and improve our environment for ourselves and future generations.

Environmental science is an inter-departmental, interdisciplinary degree program based in the College of Science, Technology and Agriculture. It is a diverse, hybrid field of study that is based upon strong training in the natural sciences, mathematics, law, economics, and health.

The curriculum for the B.S. in environmental science consists of a core of approximately 60 credit hours and 20-30 additional credit hours in one of six degree option areas. All students participate in internships and/or research. This education and training provides multiple opportunities for graduates in the growing environmental field.

**Environmental Science students will...**
- Complete a science-intensive interdisciplinary curriculum providing a foundation to address environmental issues of today and the future.
- Study in modern classrooms and laboratories in the remodeled Magill Hall of Science.
- Gain valuable professional and personal experiences through internships and/or research.
- Be well prepared to enter career positions in the environmental field or to pursue post-baccalaureate education programs.
- Develop competencies to become professional and community leaders in efforts to develop a sustainable society.

**Career Planning**
Each student works individually with a faculty advisor in their area. The advisor assists students with curricular planning and development of career goals.

Approximately 70% of environmental science graduates directly enter the work force. All graduates seeking employment in the environmental field have obtained a relevant career position.

Approximately 30% of environmental science graduates continue their education in graduate programs in the sciences, law school, MBA programs, or medical school.

<table>
<thead>
<tr>
<th>Demonstrated Career Proficiency is a Requirement of all Southeast Students</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>CL001/CL002 First Semester</td>
<td>Complete the FOCUS2 assessment and develop a Career Action Plan.</td>
</tr>
<tr>
<td>CL003 Junior Year</td>
<td>Students gain information about career planning and job searching resources.</td>
</tr>
<tr>
<td>CL004 Senior Year</td>
<td>Students demonstrate advanced proficiency by identifying a position in their field, developing a cover letter, and tailoring a resume for the position. Materials are critiqued to ensure preparedness for a successful job search.</td>
</tr>
</tbody>
</table>

**Career Services**, located in Academic Hall 057, provides professional career advising to guide students in their career development.

**Internship, Employment, and Post-Baccalaureate Opportunities of Recent Graduates**
- U.S. Environmental Protection Agency
- Missouri Department of Conservation
- U.S. Green Building Council
- Centers for Disease Control and Prevention
- Illinois Natural History Survey
- A.T. Still University School of Osteopathic Medicine
- Science Applications International Corporation
- Missouri Department of Natural Resources
- Saint Louis University School of Law
- U.S. Fish and Wildlife Service
- Southern Illinois University - Edwardsville
- CH2M Hill Inc.
- KRCU National Public Radio
- Missouri Botanical Garden
- Emory University
- Burns & McDonnell Engineering Co. Inc.
- Illinois Environmental Protection Agency
- St. Louis County Department of Health
- U.S. Army Corps of Engineers
- Saint Louis Zoological Park
- Science Applications International Corporation
- Missouri Department of Natural Resources
- Saint Louis University School of Law
- U.S. Fish and Wildlife Service
- Southern Illinois University - Edwardsville
- CH2M Hill Inc.
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- Burns & McDonnell Engineering Co. Inc.
- Illinois Environmental Protection Agency
- St. Louis County Department of Health
- U.S. Army Corps of Engineers
- Saint Louis Zoological Park
Environmental Science: Biology Option

Bachelor of Science (BS)

This is a guide based on the 2014-2015 Undergraduate Bulletin and is subject to change. The time it takes to earn a degree will vary based on several factors such as dual enrollment, remediation, and summer enrollment. Students will meet with an academic advisor each semester and use DegreeWorks to monitor their individual progress.

**CURRICULUM CHECKLIST**

**Environmental Science: Biology Option – 92-98 Hours**

- **B153** Introduction to Organismal Biology (4)
- **B152** General Ecology (3)
- **B105** Environmental Biology (3)
- **CH185/085/005** General Chemistry (5)
- **CH186** Foundations of Inorganic Chemistry (3)
- **EC344** Environmental Economics (3)
- **EV201** Environmental Science Seminar I (1)
- **EV401** Environmental Science Seminar II (1)
- **EV454** Risk Assessment Applications (3)
- **EV481-483** Internship (3)
- **OR**
- **EV491** Research (3)
- **OR**
- **EV xxx** EV Course (300-500 level) (3)
- **GO110** Physical Geology (3)
- **GO365** Environmental Soil Science (3)
- **GO349** Environmental Hydrology (3)
- **MA139** Applied Calculus (3)
- **OR**
- **MA140** Analytical Geometry & Calculus I (5)
- **MA223** Elementary Probability & Statistics (3)
- **PH106** Physical Concepts (3)
- **OR**
- **PH120** Introductory Physics I (5)
- **UI429** Environmental Ethics (3)
- **BS105** Environmental Biology (3)
- **BS106** Environmental Biology Lab (1)
- **BS107** Environmental Biology Lab (1)
- **BS108** Environmental Biology Lab (1)
- **BS109** Environmental Biology Lab (1)
- **BI332** General Ecology (3)
- **BI153** Biological Reasoning (3)
- **BI200** Microbiology (3)
- **BO200** Plant Biology (4)
- **ZO200** Animal Biology (3)
- **EV200** Environmental Science Seminar III (1)
- **EV401** Environmental Science Seminar IV (1)
- **EV454** Risk Assessment Applications (3)
- **EV481** Internship (3)
- **OR**
- **EV491** Research (3)
- **OR**
- **EV xxx** EV Course (300-500 level) (3)
- **MA139** Applied Calculus (3)
- **MA140** Analytical Geometry & Calculus I (5)
- **MA223** Elementary Probability & Statistics (3)
- **PH106** Physical Concepts (3)
- **PH120** Introductory Physics I (5)
- **UI429** Environmental Ethics (3)

**Biology Option Courses – 18-19 Hours Required**

- **B151** Biological Reasoning (3)
- **B153** Introduction to Organismal Biology (4)
- **BI200** Microbiology (3)
- **BO200** Plant Biology (4)
- **ZO200** Animal Biology (3)
- **MA139** Analytical Geometry & Calculus I (5)
- **MA223** Elementary Probability & Statistics (3)
- **PH120** Introductory Physics I (5)

Choose 6 Hours From:

- **UI331** Foundations of Biochemistry (3)
- **UI360** Recycling & Waste Management (3)
- **UI373** Earth and Life Through Time (3)
- **UI386** Environmental Health (3)
- **UI387** Environmental Law & Public Policy (3)

Choose 9 Hours From:

- **UI100** First Year Seminar (3)
- **EN100** English Composition (3)
- **ART** Artistic Expression (3)
- **MA140** Applied Calculus (3)
- **MA141** Applied Calculus Lab (1)
- **MA151** Biological Reasoning (3)
- **MA223** Elementary Probability & Statistics (3)
- **PH106** Physical Concepts (3)
- **PH120** Introductory Physics I (5)
- **UI429** Environmental Ethics (3)

**University Studies Requirements** (not already listed above):

- **UI100** First Year Seminar, **EN100** English Composition, **ART** Artistic Expression, **LIT** Literary Expression, **WR** Written Expression, **OEP** Oral Expression, **BS** Behavioral Systems, Development of a Major Civilization, Economic Systems, Political Systems, Social Systems.

**SAMPLE FOUR-YEAR PLAN**

**Environmental Science: Biology Option Requirements for the 2014-2015 Undergraduate Bulletin**

<table>
<thead>
<tr>
<th>Course #</th>
<th>Hrs</th>
<th>Course #</th>
<th>Hrs</th>
</tr>
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<tbody>
<tr>
<td><strong>FIRST YEAR</strong></td>
<td></td>
<td><strong>Second Year</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Fall Semester</strong></td>
<td></td>
<td><strong>Spring Semester</strong></td>
<td></td>
</tr>
<tr>
<td>UI100</td>
<td>3</td>
<td>B153</td>
<td>4</td>
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<tr>
<td>EN100</td>
<td>3</td>
<td>CH185/085/005</td>
<td>5</td>
</tr>
<tr>
<td>BI151</td>
<td>3</td>
<td>GO110</td>
<td>3</td>
</tr>
<tr>
<td>BS105</td>
<td>3</td>
<td>Written Expression</td>
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</tr>
<tr>
<td><strong>Total</strong></td>
<td>15</td>
<td><strong>Total</strong></td>
<td>15</td>
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<tr>
<td><strong>SECOND YEAR</strong></td>
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<td><strong>Third Year</strong></td>
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<tr>
<td><strong>Fall Semester</strong></td>
<td></td>
<td><strong>Spring Semester</strong></td>
<td></td>
</tr>
<tr>
<td>Bi/BO/ZO200</td>
<td>3-4</td>
<td>Bi/BIO/ZO200</td>
<td>3-4</td>
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<tr>
<td>CH186</td>
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<td>CH341</td>
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<td>CH187</td>
<td>2</td>
<td>CH342</td>
<td>1</td>
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<tr>
<td>EV201</td>
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<td>PH106 or PH120</td>
<td>3-5</td>
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<tr>
<td>Behavioral Systems</td>
<td>3</td>
<td>Economic Systems</td>
<td>3</td>
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<tr>
<td>Literary Expression</td>
<td>3</td>
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<td><strong>Total</strong></td>
<td>15-16</td>
<td><strong>Total</strong></td>
<td>14-17</td>
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Summer courses are encouraged to avoid semesters exceeding 15 hours.

**FOURTH YEAR**

<table>
<thead>
<tr>
<th>Course #</th>
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<tr>
<td>Bi/BO or ZO elective</td>
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<tr>
<td>EV401</td>
<td>1</td>
</tr>
<tr>
<td>EV Intern/Research</td>
<td>3</td>
</tr>
<tr>
<td>Required UI3XX</td>
<td></td>
</tr>
<tr>
<td>Required UI3XX</td>
<td></td>
</tr>
<tr>
<td>Development of Major Civilization</td>
<td></td>
</tr>
<tr>
<td>Social Systems</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>16</td>
</tr>
</tbody>
</table>

Degree requirements for all students: a minimum of 120 credit hours, completion of University Studies program, career proficiencies (CL001-004), Writing Proficiency Exam (MP003), and completion of the Measure of Academic Proficiency and Progress (MAPP) at the freshman and senior levels.

A minimum 2.00 GPA in the major and overall are required to graduate with a BS in Environmental Science degree.

Refer to the Undergraduate Bulletin or DegreeWorks for additional graduation requirements (i.e. minimum GPA and coursework) for your program of study.

Revised 11/18/2013