# Program Map: Environmental Science

**Department of Marine and Environmental Sciences, College of Sciences and Technology**

<table>
<thead>
<tr>
<th>Name:</th>
<th>SID:</th>
<th>Advisor:</th>
<th>Start Date:</th>
<th>Catalog Date:</th>
<th>Expected Graduation Date:</th>
</tr>
</thead>
</table>

## Fall Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Name</th>
<th>Hours</th>
<th>Course</th>
<th>Name</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 1101*</td>
<td>Composition I</td>
<td>3</td>
<td>ENGL 1102*</td>
<td>Core Area A</td>
<td>2</td>
</tr>
<tr>
<td>MATH 1113*</td>
<td>Pre-Calculus</td>
<td>3</td>
<td>MATH 2101*</td>
<td>Core Area A</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 1107</td>
<td>Principles of Biology I</td>
<td>3</td>
<td>POLS 1101</td>
<td>Core Area A</td>
<td>4</td>
</tr>
<tr>
<td>ENVS 2401*</td>
<td>Area F</td>
<td>1</td>
<td>CHEM 1211*</td>
<td>Area D Lab</td>
<td>2</td>
</tr>
<tr>
<td>COST 1103</td>
<td>First Year Experience</td>
<td>2</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

**Notes:**
- *A grade of "C" or better must be earned for this course.
- **this course is meant to fulfill the Area D requirement.

## Spring Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Name</th>
<th>Hours</th>
<th>Course</th>
<th>Name</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 1102*</td>
<td>Composition II</td>
<td>3</td>
<td>Pre-requisite: ENGL 1101</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MATH 2101</td>
<td>Area F</td>
<td>4</td>
<td>Pre-requisite: MATH 1113</td>
<td></td>
<td></td>
</tr>
<tr>
<td>POLS 1101</td>
<td>Core Area E</td>
<td>3</td>
<td>Political Science</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENVS 2401*</td>
<td>Area D Lab</td>
<td>1</td>
<td>Principles of Chemistry I*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>COST 1103</td>
<td>First Year Experience</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Notes:**
- *A grade of "C" or better must be earned for this course.
- **this course is meant to fulfill the Area D requirement.

## Fall Milestones

- Total: 16
- Spring Milestones: 14

- Student should know their career track. Students should know experience relevant to their career track. If not, they should work with a mentor.

## Sophomore

<table>
<thead>
<tr>
<th>Course</th>
<th>Name</th>
<th>Hours</th>
<th>Course</th>
<th>Name</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>HUMN 1201</td>
<td>Critical Thinking &amp; Communications</td>
<td>3</td>
<td>Core Area C</td>
<td>Option</td>
<td>3</td>
</tr>
<tr>
<td>HIST 2111/2112</td>
<td>U.S. History</td>
<td>3</td>
<td>BIOL 1108*</td>
<td>Area F</td>
<td>5</td>
</tr>
<tr>
<td>ENVS 1121K*</td>
<td>Physical Geology</td>
<td>4</td>
<td>BIOL 1108L*</td>
<td>Major</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 1212*</td>
<td>Principles of Chemistry II</td>
<td>3</td>
<td>Area E Social Sci. Option</td>
<td>SEE GUIDELINES</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 1212L*</td>
<td>Principles of Chemistry II</td>
<td>1</td>
<td>Area E Social Sci. Option</td>
<td>SEE GUIDELINES</td>
<td>3</td>
</tr>
<tr>
<td>Core Area C Option</td>
<td></td>
<td>3</td>
<td>PHYS 1111K*</td>
<td>Area F</td>
<td>1</td>
</tr>
</tbody>
</table>

**Notes:**
- *A grade of "C" or better must be earned for this course.
- **this course is meant to fulfill the Area D requirement.

## Spring Milestones

- Total: 16
- Spring Milestones: 14

- Student should have completed a job shadowing, work, or volunteer experience relevant to their career track.

## Junior

<table>
<thead>
<tr>
<th>Course</th>
<th>Name</th>
<th>Hours</th>
<th>Course</th>
<th>Name</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>AFRS 1301</td>
<td>Survey of the African-American Experience</td>
<td>2</td>
<td>ENVS 3203*</td>
<td>Core Area C</td>
<td>3</td>
</tr>
<tr>
<td>ENV 1212K Major</td>
<td>Environmental Ethics</td>
<td>3</td>
<td>ENVS 3203L*</td>
<td>Major</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 2501*</td>
<td>Organics Chemistry I</td>
<td>3</td>
<td>ENVS 3621*</td>
<td>Major</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 250L*</td>
<td>Organics Chemistry I Lab</td>
<td>1</td>
<td>Major ELEC*</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>OPEN ELECTIVE*</td>
<td>ELECT FROM COST</td>
<td>4</td>
<td>OPEN ELECTIVE*</td>
<td>Major</td>
<td>3</td>
</tr>
</tbody>
</table>

**Notes:**
- *A grade of "C" or better must be earned for this course.

## Spring Milestones

- Total: 14
- Spring Milestones: 14

- Students should have completed any required admissions testing for their career track (GRE, LSAT, MCAT, PCAT, DAT).

## Senior

<table>
<thead>
<tr>
<th>Course</th>
<th>Name</th>
<th>Hours</th>
<th>Course</th>
<th>Name</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENVS 4121*</td>
<td>Environmental Law</td>
<td>3</td>
<td>ENVS 3201*</td>
<td>Major</td>
<td>3</td>
</tr>
<tr>
<td>ENV 4101*</td>
<td>Contaminant Hydrology</td>
<td>3</td>
<td>ENV 3202*</td>
<td>Major</td>
<td>1</td>
</tr>
<tr>
<td>ENV 4101L*</td>
<td>Contaminant Hydrology Lab</td>
<td>1</td>
<td>ENV 4801*</td>
<td>Major</td>
<td>2</td>
</tr>
<tr>
<td>ENVS 4202*</td>
<td>Principles of Ecotoxicology</td>
<td>3</td>
<td>Major ELEC*</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Major ELEC*</td>
<td>SEE GUIDELINES</td>
<td>3</td>
<td>OPEN ELECTIVE*</td>
<td>Major</td>
<td>3</td>
</tr>
</tbody>
</table>

**Notes:**
- *A grade of "C" or better must be earned for this course.
- **Some professional educational programs may need to be completed by the summer before the senior year.
- Does this Degree Program Require a Minor? No
- Total Hours Required for this Degree Program: 120

## Spring Milestones

- Total: 14
- Spring Milestones: 14

- Application completed for further graduate/professional studies relevant to your career track.

- Total: 16
- Spring Milestones: 13

- Application completed for further graduate/professional studies relevant to your career track.

- Total: 16
- Spring Milestones: 13
**Program Map: Environmental Science**
Department of Marine and Environmental Sciences, College of Sciences and Technology

**Core Curriculum (Programmed Preferred Options in Bold)**

**Area B – Institutional Options 5 hrs**
- i. AFRS 1501 Survey of African-American Experience 2 hrs
- ii. HUMN 1201 Critical Thinking & Communication 3 hrs

**Area C – Humanities/Fine Arts, and Ethics 6 hrs,**
1. Select one of the following:
   - i. ENGL 2111 World Literature I 3 hrs
   - ii. ENGL 2112 World Literature II 3 hrs
   - iii. ENGL 2121 British Literature I 3 hrs
   - iv. ENGL 2122 British Literature II 3 hrs
   - v. ENGL 2131 American Literature I 3 hrs
   - vi. ENGL 2132 American Literature II 3 hrs
   - vii. ENGL 2222 African American Literature 3 hrs
   - viii. PHIL 2010 Introduction to Philosophy 3 hrs
   - ix. PHIL 2030 Introduction to Ethics 3 hrs
2. Select one of the following:
   - i. ARTS 1101 Introduction to Visual Art 3 hrs
   - ii. DNCE 2010 Dance Appreciation 3 hrs
   - iii. ENGL 2521 Introduction to Film 3 hrs
   - iv. HUMN 2011 Humanities 3 hrs
   - v. MUSC 1101 Introduction to Music 3 hrs
   - vi. THEA 2101 Introduction to Theatre 3 hrs

**Area D – Natural Sciences, Math & Technology 10 hrs**
1. Select one of the following:
   - i. BIOL 1107 Principles of Biology I 3 hrs
   - ii. BIOL 1108 Principles of Biology II 3 hrs
   - iii. CHEM 1211 Principles of Chemistry I 3 hrs
   - iv. CHEM 1212 Principles of Chemistry II 3 hrs
   - v. CISM 1130 Computer Applications 3 hrs
   - vi. CSCI 1130 Computer Applications 3 hrs
   - vii. CSCI 1301 Computer Science I 3 hrs
   - viii. ENVS 1140 Environmental Issues 3 hrs
2. Select two of the following lab sciences in sequence:
   - i. BIOL 1107/1107L Principles of Biology I 4 hrs
   - ii. BIOL 1108/1108L Principles of Biology II 4 hrs
   - iii. CHEM 1211/1211L Principles of Chemistry I 4 hrs
   - iv. CHEM 1212/1212L Principles of Chemistry II 4 hrs
   - v. PHYS 1111K Introductory Physics I 4 hrs
   - vi. PHYS 1112K Introductory Physics II 4 hrs
   - vii. PHYS 2211K Principles of Physics I 4 hrs
   - viii. PHYS 2212K Principles of Physics II 4 hrs

**Area E – Social Science 12 hrs**
1. Select one of the following:
   - i. HIST 2111 U.S. History to the Post-Civil War Period 3 hrs
   - ii. HIST 2112 U.S. History from the Post-Civil War to Pre 3 hrs
2. Select two of the following:
   - i. AFRS 2000 Introduction to Africana Studies 3 hrs
   - ii. ANTH 1101 Introduction to Anthropology 3 hrs
   - iii. ECON 2105 Principles of Macro-Economics 3 hrs
   - iv. GEOG 1101 Introduction to Human Geography 3 hrs
   - v. HIST 1111 World Hist to Early Modern Times 3 hrs
   - vi. HIST 1112 World History Early Modern Times to Pres 3 hrs
   - vii. POLS 2401 Global Issues 3 hrs
   - viii. PSYC 1101 Intro to General Psychology 3 hrs
   - ix. PSYC 2103 Human Growth & Development 3 hrs
   - x. SOCI 1101 Introduction to Sociology 3 hrs
   - xi. SOCI 1160 Social Problems 3 hrs

**Program Description**

The mission of the SSU Environmental Science Program is to provide students with special training and knowledge in the natural and social sciences so that they may be empowered to articulate environmental issues to citizens of the local and state communities and support the effort of government and industrial agencies to solve such problems. The program provides hands-on experiences in research, raises awareness of environmental justice, and inspires action.

**Major Guidelines**

**Major Electives (10 hours):**
Choose 10 hours from the courses below. Any extra hours earned will count in the Open Elective area.
- CHEM 3101/L Analytical Chemistry
- CHEM 3201/L Instrumental Analysis
- ENVS 3301/L Environmental Radiation
- ENVS 4401 Environmental Impact Assessment
- ENVS 4910 Special Topics
- MSCI 3702 Intro to GIS
- MSCI 4601 Marine Conservation Biology

**Open Electives (10 hours):**
Selected from COST courses primarily 3000/4000-level. Any extra hours from Major Electives count here.