Course Offerings Fall 2021

Note: for simplicity the following slides list course offerings according to the new BA and BS degree options

Students should refer to the new degree details available on the dept website
Recently, a number of updates to the GEP curriculum were approved by the university...
Curriculum updates and you

For current students, you will see these changes in a few ways...

- For some courses, changes in course number, name, unit value
- Some new courses created, some courses deleted
- Change in how you’ll meet the capstone requirement starting Fall 2021
- More options available than current model
- Planning concentration: Additional courses added to list of possible electives

Changes will apply to future offerings of those courses
Updated degree program options

Current program

Bachelor of Arts in Geography and Environment

Current students are entitled to and by default will remain in the current BA with your current concentrations

New programs

Bachelor of Arts in Environmental Studies, Geography, and Planning

Mostly similar to current BA, more flexible, no concentrations, re-named

Bachelor of Science in Environmental Science, Geography, and Management

New BS option

Contingent on final program authorization from the CSU Chancellor’s Office
(New students and those who choose to re-declare)

Students should refer to the new degree details available on the dept website
Geography and Environment majors: Revised capstone requirement
The role of the capstone...

• In the capstone requirement, GEP students, near the end of your careers, work on a project with a written/presentation component

• Traditionally this was met by a two-semester 6 unit stand-alone project-based class (GEP 490 and 491)

• The two-semester version is being replaced with numerous one-semester options
  • One two-semester option will remain
Change in the capstone requirement

Starting in Fall 2021

• The separate six-unit capstone requirement will disappear
• The six-units from the capstone will be re-allocated to your concentration
• Instead you must take at least one 400-level course
  • All 400-level courses will provide the capstone project function
  • Several existing/new classes will be designated as 400-level courses
  • The one remaining two semester sequence (490/491) will continue to meet the 400-level requirement
Concentration/capstone before and after

• Another way you can think of the updates...

<table>
<thead>
<tr>
<th></th>
<th>Current Requirements*</th>
<th>Starting Fall 2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Concentration</td>
<td>ES 12 units</td>
<td>ES 18 units</td>
</tr>
<tr>
<td></td>
<td>Geospatial 13 units</td>
<td>Geospatial 19 units</td>
</tr>
<tr>
<td></td>
<td>SED 15 units</td>
<td>SED 21 units</td>
</tr>
<tr>
<td></td>
<td>SC 15 units</td>
<td>SC 21 units</td>
</tr>
<tr>
<td></td>
<td>Planning 5 courses (15 units)</td>
<td>Planning 21 units</td>
</tr>
</tbody>
</table>

One class must be at 400-level

| Capstone              | GEP 490/491 6 units | No longer a separate requirement |

*Note: Your number of required concentration units may be different from above if you are on the 2018 catalog year
### 400-level courses

#### Offered Fall 2021
- 422 Globalization and Environments (Baldwin)
- 456 Global Climate Change (Goman)
- 461 Planning Practice and Methodology (Fang, pre-req 360)
- 489 Advanced GIS (Clark, pre-req 387)
- 490 Global Issues Capstone, pt. 1 (Nardine)

#### Currently Planned Spring 2022
- 431 Restoration and Society (Watt)
- 476 Energy Services and Efficiency (Soto, pre-req 374a/b)
- 486 Environmental Data Analysis (Hernandez-Ayala)
- 491 Global Issues Capstone, pt. 2 (Nardine, pre-req 490)
Follow Up Questions?: Contact Prof Nardine nardine@sonoma.edu

GEP 490/491
GLOBAL ISSUES
CAPSTONE YEAR
2 SEMESTERS - 6 UNITS

Research a Real-World Global Issue Deeply... That You Care about Deeply.

Explore Complex Global Systems by an Interdisciplinary, Holistic Approach

Give Voice to People’s Perspectives from Their Side of the World

Not Just Another Paper: Present Thesis at Undergrad Research Symposium
400-level requirement (eligibility notes)

• Courses with same/similar title taught previously as a 300-level courses will not count toward the 400-level requirement
  • Please take a different 400-level course

• The 400-level course must be taken in your junior/senior year to meet the Capstone requirement
Benefit: December graduates

• Under the current requirements, if you had not yet taken a capstone, the earliest you could graduate was May 2022.

December 2021 is now an option if you take a 400-level course next fall and meet the updated concentration unit requirements.

• Under the current requirements, December 2022 graduates would have started capstone sequence in Fall 2021.

December 2022 graduates can now take a 400-level class as late as Fall 2022.
Course Offerings Fall 2021

Note for simplicity the following slides list course offerings according to the new BA and BS degree options.

Students should refer to the new degree details available on the Dept. website.
GEP Required Foundation courses for old and new BA and new BS

By the time you graduate you must have taken one class from each category

**Environmental Systems (required)**
- GEP 201 (B1) (3) offered Fall and Spring

**Society, Environment, and Development (Choice of 3 – select one course)**
- GEP 203 (D) (3) (not offered this fall)
- GEP 206 (E) (3)
- GEP 305 (UD D) (3)

**Environmental Inquiry and Analysis (both required)**
- GEP 211 (was 215) (Fall only)
- GEP 280 (was 202) offered Fall and Spring

Note: we are also offering a new course GEP 110: Communication of Environmental Issues (3)
This does not count towards the major but fulfills area A1
Required Upper Division Breadth in GEP

By the time you graduate you must have taken one class from each category

Society, Environment, and Development (Choice of 3 –select one course)
- GEP 324 Climate Change and Society (4) (not offered this fall)
- GEP 325 Global Food Systems (4)
- GEP 330 Environmental History (4) (not offered this fall)

Environmental Systems (Choice of 3 –select one course)
- GEP 340 Applied Ecology (3)
- GEP 351 Natural Hazards (3) (B) (not offered this fall)
- GEP 355 Weather and Climate (3) (B) (not offered this fall)

Sustainable Communities (Choice of 3 –select one course)
- GEP 360 Introduction to Urban and Reg. Planning (4) (not offered this fall)
- GEP 370 Globalization and the City (4)
- GEP 373 Energy, Technology & Society (4)

Geospatial Analysis and Technology (Required Course)
- GEP 387 Introduction to GIS (4) (offered Fall and Spring)
Professional Preparation & Experiences for GEP

Juniors and Seniors

• GEP 310 **Required** (Offered Fall & Spring (2)
• GEP 317 Internship (1-4 units)
  1) This is a contract course, students do NOT sign up for GEP 317 during registration;
  2) Ideally students should take GEP 310 before GEP 317, logistics of signing up for GEP 317 covered in GEP 310
  3) Contact Prof. Laney to get on GEP 317 canvas site
• GEP 318 (was 443) Agroecology in practice (2)
• GEP 319 (was 444) Native Plant Propagation in Practice (2)
GEP Electives

- GEP 325 Global Food Systems (4)*
- GEP 335 U.S. Environmental Policy (4)
- GEP 340 Applied Ecology (3)*
- GEP 354 Watershed Hydrology and Management (4)
- GEP 367 Transportation Policy and Technology (4)
- GEP 370 Globalization and the City (4)*
- GEP 373 Energy, Technology & Society (4)*
- GEP 374A Strategies for Carbon and Energy Reduction (3)
- GEP 374B Laboratory methods for Energy Efficiency (1)
- GEP 396 Selected Topics: Water Research Training (2)

* Do not double count for breadth but can be taken as electives if breadth area completed

Also available Capstone classes, next slide.
GEP Capstones

- GEP 422 Globalization and Environments (4)
- GEP 456 Global Climate Change Past, Present & Future (4)
- GEP 461 Planning Practice and Methodology (4)
- GEP 489 Advanced Geographic Information Systems (4)
- GEP 490 Capstone Project Methods (3) note: 2 semester sequence: must take GEP 491 (3) in spring
Geography and Environment majors: Planning concentration updates
Planning concentration updates

• Some additional adjustments were made to the planning concentration to account for Prof. Jacobson’s retirement

• These changes will make it easier to complete the planning concentration as additional courses will automatically count
# Planning concentration updates

<table>
<thead>
<tr>
<th></th>
<th>Current Requirements (5 classes total)</th>
<th>Starting Fall 2021 (21 units total)</th>
</tr>
</thead>
</table>
| **Group 1**        | 361: Planning Theory and Methodology  
                   | 362: Environmental Impact Assessment  
                   | 363: Land Use Law  
                   | 362: Environmental Impact Assessment**  
                   | 461: Planning Practice and Methodology***                                                                 |
| **Group 2**        | **Pick 2 from...**                                                                                   | 336: Environmental Law  
                   | 364: Environmental Planning  
                   | 365: Healthy Communities  
                   | 367: Transportation  
                   | 368: Urban Design  
                   | 364: Environmental Planning  
                   | 365: Healthy Communities  
                   | 367: Transportation  
                   | 368: Urban Design  
                   | 370: Globalization and the City  
                   | 371: Social Geography  
                   | 379: Special Topics – Water Resources*  
                   | 379: Special Topics – Water Resources*  
                   | 489: Advanced GIS                                                                                     |
| **Capstone**       | 490: Capstone Project Methods (planning)  
                   | 491: Capstone Project (planning)  
                   | No longer a separate requirement  
                   |  
| **Group 1 Required** | **ARR update required to count here**  
                   | **If you are planning to graduate in December 2021 but have not yet taken 362, consult with Prof. Fang**  
                   | **If you previously took 361 with Prof. Jacobson, that counts as Group 1 but not as your 400-level course**  
<p>|</p>
<table>
<thead>
<tr>
<th>Comparison of current and new BA and new BS options</th>
<th>Current BA in Geography and Environment</th>
<th>New Option** BA in Environmental Studies, Geography, and Planning</th>
<th>New Option** BS in Environmental Science, Geography, and Management</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foundation (in GEP, mostly lower division)</td>
<td>4 courses</td>
<td>4 courses (unchanged)</td>
<td>4 courses (unchanged)</td>
</tr>
<tr>
<td>Lower division outside of GEP</td>
<td>None</td>
<td>None</td>
<td>3 courses/10 units of Math, Biology, Physics, Chemistry, Computer Science</td>
</tr>
<tr>
<td>Breadth (in GEP, upper division)</td>
<td>4 courses, 10 options</td>
<td>4 courses, 10 options (1 changed option)</td>
<td>4 courses, 10 options (1 changed option)</td>
</tr>
<tr>
<td>Upper Division major courses (in GEP, in addition to breadth)</td>
<td>16-21 units of concentration courses (courses in your concentration only)*</td>
<td>21 units of electives (courses in any topic, so long as 3 classes in one “focus area”)</td>
<td>21 units of electives (courses in any topic, so long as 3 classes in one “focus area”)</td>
</tr>
<tr>
<td>Practical Experience/Professional Preparation (in GEP)</td>
<td>310 (2 units) + 0-4 more units practical experience</td>
<td>310 (2 units) + 311 (1 unit) + 2 more units (practical experience [5 minimum])</td>
<td>310 (2 units) + 311 (1 unit) + 2 more units (practical experience [5 minimum])</td>
</tr>
<tr>
<td>Related courses outside GEP</td>
<td>6-16 units*</td>
<td>3 units</td>
<td>6 units</td>
</tr>
<tr>
<td>TOTAL UNITS</td>
<td>56-59 units</td>
<td>55 units</td>
<td>68 units</td>
</tr>
</tbody>
</table>

*Varies by concentration  ** Contingent on final program authorization from the CSU Chancellor’s Office