GEP Major Advising Info Spring 2021

(November 4th 2020)

- 1. This document lists courses offered this Spring semester.
- 2. The schedule for GEP classes can be found at: <u>http://gep.sonoma.edu/courses/class-schedule</u>
- 3. Group Zoom Advising Sessions (page 2 of this document)
- 4. Make sure you carefully check your ARR
- 5. For Individual Concentration requirements please go to:

http://gep.sonoma.edu/degree-programs/gep-current-students

Registration

- Starting November 2nd the searchable scheduler available
- Nov 16 Jan 12 Priority Registration (week one with appts that stay open)

Group Advising Sessions

Advisor	Concentrations *	Date	Zoom link
Jeff Baldwin	SED, Legacy Geog BA	Thursday 11/5 4-5pm	https://SonomaState.zoom.us/j/86889904690
Jose J Hernández Ayala	ES and GAT	Monday 11/09 12-1pm	https://SonomaState.zoom.us/j/82639372166
Michelle Goman	ES, Legacy ENSP/ Geog BA	Tuesday 11/10 2-3pm	https://SonomaState.zoom.us/j/81663219127
Rheyna Laney	SED/Global	Tuesday 11/10 2-3pm	https://SonomaState.zoom.us/j/89700399424
Kevin Fang	SC and PSC	Thursday 11/12 3-4pm	https://SonomaState.zoom.us/j/83568777099
Matt Clark	ES and GAT, ENSP BS	Friday 11/13 10-11 am	https://SonomaState.zoom.us/j/97059403474

* If you have specifics regarding your concentration/support courses you may want to try to go to an advising session with a matching faculty advisor. All faculty advisors can aid with general questions re common breadth classes across the degree.

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GEP Required Foundation courses offered this Spring (Lower Division)

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

Environmental Systems (required)

• GEP 201 (B1) offered Fall and Spring

Applied Quantitative Analysis (required)

• GEP 202 offered Fall and Spring

Society, Environment, and Development (Choice of 3 –select one course)

- GEP 203 (D2) offered Fall and Spring
- GEP 205 (D5)
- GEP 206 (E) offered Fall and Spring

Sustainable Communities (required)

• GEP 215 (Fall only)

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 320 Geopolitics 4
- GEP 324 Climate Change and Society 4 (not offered this spring)
- GEP 330 Environmental History 4 (not offered this spring)
- Environmental Systems (Choice of 3 -select one course)
- GEP 340 Applied Ecology 3 (not offered this spring)
- GEP 351 Natural Hazards 3 (B) (not offered this spring)
- GEP 355 Weather and Climate 3 (B)
- Sustainable Communities (Choice of 3 –select one course)
- GEP 360 Introduction to Planning 4 (offered Fall and Spring)-if in PSC conc. MUST TAKE
- GEP 370 Globalization and the City 4 (not offered this spring)
- GEP 373 Energy, Technology & Society 4

Geospatial Analysis and Technology (Required Course)

• GEP 387 Introduction to GIS 4 (offered Fall and Spring)(Three sections offered)

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GEP ES concentration offerings Spring

- Remember you need to choose 3 or 4 courses to meet the 12 unit minimum over the course of your Junior/Senior year
- No more than 8 units in GEP 380-389 total
- No more than 6 units in GEP 440-444
- Classes taken as Breadth do not double-count in concentration.
 - GEP 352 Soil Science (4) Dodge
 - GEP 355 Weather and Climate 3 (B)Hernandez-Ayala
 - GEP 359 Special Topics (1) (Water topic –Guilford)
 - GEP 380 Environmental Remote Sensing (4) Clark
 - GEP 443 Agroecology (2) Hachmyer
 - GEP 447 (used to be GEP 341) Conservation Biology (St. John)

Supporting courses GEP ES students

- **Biological pathway**: BIOL 131 (Required: only offered spring) (B2)
 - Note you will need BIOL 130 as well which is only offered in the Fall (B2)
 - Biology accepts GEP 202 as a prerequisite for BIOL 130/131
 - Students in the ES bio pathway will need at minimum 1 additional biology class after BIOL 130/131 Biology (all require BIOL 130/131)
- **Physical pathway**: BIOL 131 (Required- only offered spring) (B2)
 - Need an additional two courses pick from Geology and Computer Science classes
- Support courses both pathways:
 - Check the ES concentration supporting course classes and the spring offerings in appropriate departments.
 - Consult with your advisor

GEP SED concentration offerings Spring

- Choose at least four courses to meet the 15 unit minimum.
- Classes taken as Breadth do not double-count in concentration.
- GEP 320 Geopolitics (4) Baldwin
- GEP 364 Environmental Planning (4) Wagner
- GEP 373 Energy, Technology & Society (4) Soto
- GEP 379 Special Topics: Land-Water Resource Planning (3) Nizkorodov

Supporting courses GEP SED

- Check the SED concentration supporting course classes and catalog for spring offerings
- Consult with your advisor

GEP GAT concentration offering Spring

- 13 unit minimum.
- Classes taken as Breadth do not double-count in concentration.
- GEP 380 Environmental Remote Sensing (4) Clark

Supporting courses GEP GAT

- 11 unit minimum.
- CS 115 Required Programming I (4) (offered Fall and Spring)
- Check the GAT concentration supporting course classes and catalog for spring offerings
- Consult with your advisor

GEP SC concentration offerings Fall

- 15 unit minimum.
- Classes taken as Breadth do not double-count in concentration.
- GEP 360 Introduction to Planning (4) Fang
- GEP 364 Environmental Planning (4) Wagner
- GEP 373 Energy, Technology & Society (4) Soto
- GEP 379 Special Topics: Land-Water Resource Planning (3) Nizkorodov
- GEP 476 Small-scale Energy Sources (4) Soto

Supporting courses GEP SC

- 7 unit minimum.
- Check the SC concentration supporting course classes and catalog for spring offerings
- Consult with your advisor

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GEP PSC concentration offerings Spring

- 15 unit minimum. Must take GEP 360
- Classes taken as Breadth do not double-count in concentration.

Group 1 (3 courses required by graduation)

• Please consult with Dr. Fang

Group 2 (by graduation need 2 courses)

- GEP 364 Environmental Planning (4) Wagner
- GEP 379 Special Topics: Land-Water Resource Planning (3) Nizkorodov

Supporting courses GEP PSC

- 6 unit minimum.
- Check the PSC concentration supporting course classes and catalog for spring offerings
- Consult with your advisor

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Professional Preparation for GEP

Juniors and Seniors

- GEP 310 <u>Required of all concentrations</u> (Offered Fall & Spring (2):
 - 2 sections offered
- GEP 317 Internship (1-3 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;
 - 3) The logistics of how to sign up for GEP 317 are covered in GEP 310.
- Please contact Dr. Laney, Internship coordinator to get access to the Internship canvas course.
- Pay attention to internship opportunities that the Dept. sends out or in your local area.

GEP Seniors

- You must take the Capstone Project Seminar that your Fall Methods course is partnered with.
 - 491.1: Human-Environment (Hernandez-Ayala)
 - 491.3: Global Issues (Nardine)
 - 491.5: Planning for Sustainable Communities (Fang)

NOTE: If you have not yet filed your GRADUATION APPLICATION now is the time to do so.... Starting November 2020 you will receive notification from the Registrar's Office if you are eligible to apply for graduation. You will then go through "your Student Center" in PeopleSoft to complete the process.

Energy Management and Design (BS)

- Required Classes Offered in Spring
- GEP 373 Energy, Technology & Society (4) Soto
- GEP 476 Small-scale Energy Sources (4) Soto
- GEP 317 Internship (see page 11 for details)

NOTE: If you are a SENIOR and have not yet filed your GRADUATION APPLICATION now is the time to do so.... Starting November 2020 you will receive notification from the Registrar's Office if you are eligible to apply for graduation. You will then go through "your Student Center" in PeopleSoft to complete the process.

- Check the EMD concentration supporting course classes and catalog for spring offerings (Dr. Clark while Dr Soto is on sabbatical.
- Consult with your advisor

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Legacy ENSP and Geography Students

- Please consult with your advisors regarding appropriate courses.
- Seniors in ENSP conservation and restoration (track 1 and track 2)
 - Biological pathway (Dr. Goman)
 - Social Science pathway (Dr. Goman while Dr. Watt is on sabbatical)
- NOTE: If you are a SENIOR and have not yet filed your GRADUATION APPLICATION now is the time to do so.... Starting November 2020 you will receive notification from the Registrar's Office if you are eligible to apply for graduation. You will then go through "your Student Center" in PeopleSoft to complete the process.

Dept. UD GE offerings, WEPT/WIC, CSU Fully Online

- Upper Division GE classes
 - GEP 305 World Regions in Global Context (UD D, 4) Laney (2 sections offered)
 - GEP 355 Weather and Climate (UD B, 3) Hernandez-Ayala
 - (note this is also a Breadth class)
- WEPT/WIC
 - Passing the WEPT Exam or a Passing Grade in a WIC Course is required for graduation.
 - Reached Junior status?
 - Now is the time to take the WEPT exam or take a WIC course.
 - WEPT info: https://web.sonoma.edu/writingcenter/wept/
 - WIC info: <u>https://web.sonoma.edu/writingcenter/wic/</u>
- CSU Fully Online
 - Remember all CSU students are eligible to take one FREE fully online course elsewhere in the CSU system each semester. For available options please see:
 - <u>https://www.csufullyonline.com/</u>
 - If you do use this option make sure to checkin with your GEP advisor to make sure the course is appropriate.

Course descriptions (and following 2 pages)

GEP 352: Soil Science

• Soil Science (GEP 352) will introduce students to the physical, chemical, and biological properties of soils, soil formation, classification and distribution, soil ecology, the role of soils in plant growth (crops and natural plant communities), the management and conservation of soils, and the environmental impact of their use. The course will also include an introduction to various field techniques, discussions of relevant articles and videos, and interpretation of soil data. Previous courses in geology, chemistry or biology might help inform students' understanding of the material but are not required for this bisynchronous course.

Course descriptions (and following page)

GEP 364: Environmental Planning

• This spring GEP is offering Environmental Planning (GEP 364) using the theme of climate action/adaptation/resilience in environmental planning. Students will explore some of climate change's primary impacts to the built environment and examine the social, economic, policy, and technological needs and challenges to adapt climate actions. Topics will include the planning and implementation of electrification of buildings and transportation, carbon sequestration, solid waste reduction and recovery, water conservation, habitat protection, and environmental equity and justice. There are no prerequisites for this bisynchronous course.

Course descriptions

GEP 379: Special Topics: Land-Water Resource Planning

Historically, land use planning and water management in California – and around the world - has been disconnected, posing significant challenges in ensuring equitable and sustainable development. There is growing recognition that building resilience towards climate change impacts requires collaborative solutions. This course examines the opportunities and challenges of linking land-use planning to water resource management. Students will explore legislation, novel governance and resource management approaches, and socio-technical solutions that enable actors to reliably meet water demand of diverse users, manage stormwater and dry weather runoff, and maintain safe water quality. While the emphasis is on California, this course will also explore cases and relevant topics from around the globe, including issues of water access in informal settlements and among displaced populations.

UD Supporting courses For ES and ENSP conservation track 1:

GEP ES bio pathway and ENSP track 1

- Biology
 - 323 Entomology
 - 327 Vertebrate biology
 - 330 Plant Taxonomy
 - 332 Marine biology
 - 335 Marine Ecology

GEP ES physical pathway

- Geology
 - 303 Adv. Principles Geology
 - 310 Geophysics
 - 311 Sedimentary Geology
- Computer Science
 - CS 115 Programming 1