Program Change Request

Date Submitted: 03/20/25 3:29 pm

Viewing: 5103: Earth, Society, & Environmental

Sustainability: Society and the Environment, BSLAS

Last approved: 03/30/19 5:13 pm Last edit: 08/21/25 11:21 am

Changes proposed by: Jonathan Tomkin

Earth, Society, & Environmental Sustainability: Society and the

Catalog Pages Using Environment (SAE), BSLAS

this Program

Proposal Type:

Concentration (ex. Dietetics)

This proposal is for

a:

Revision

In Workflow

- 1. U Program Review
- 2. Gen Ed Review
- 3. 1901-ESEC Head
- 4. 1265-SESE Head
- 5. KV Dean
- 6. University Librarian
- 7. COTE Programs
- 8. Provost
- 9. Senate EPC
- 10. Senate
- 11. U Senate Conf
- 12. Board of Trustees
- 13. IBHE
- 14. HLC
- 15. Catalog Editor
- 16. DMI

Approval Path

- 1. 01/27/25 2:53 pm Donna Butler (dbutler): Approved for U Program Review
- 2. 01/30/25 4:27 pm
 Melissa Steinkoenig (menewell):
 Approved for Gen Ed Review
- 3. 02/19/25 4:49 pm Jonathan Tomkin

(tomkin): Approved for 1265-SESE Head

4. 02/28/25 1:40 pm Melissa Reedy (murray): Rollback to 1265-SESE Head

for KV Dean 5. 03/14/25 12:05 pm Jonathan Tomkin (tomkin): Rollback to Initiator 6. 03/27/25 1:17 pm Donna Butler (dbutler): Approved for U Program Review 7. 03/27/25 3:59 pm Melissa Steinkoenig (menewell): Approved for Gen **Ed Review** 8. 03/27/25 4:35 pm Jonathan Tomkin (tomkin): Approved for 1901-ESEC Head 9. 03/27/25 5:14 pm Robert J. Trapp (jtrapp): Approved for 1265-SESE Head 10. 04/21/25 1:52 pm Melissa Reedy (murray): Approved for KV Dean 11. 04/21/25 2:53 pm Tom Teper (tteper): Approved for University Librarian 12. 04/21/25 4:15 pm Suzanne Lee (suzannel): Approved for COTE **Programs** 13. 04/23/25 5:37 pm

Brooke Newell

to KV Dean for

14. 05/02/25 11:21 am

Provost

(bsnewell): Rollback

Melissa Reedy (murray): Approved for KV Dean 15. 05/05/25 9:58 am Tom Teper (tteper): Rollback to KV Dean for University Librarian 16. 05/05/25 10:06 am Melissa Reedy (murray): Approved for KV Dean 17. 05/05/25 12:12 pm Tom Teper (tteper): Approved for University Librarian 18. 05/05/25 12:29 pm Suzanne Lee (suzannel): Approved for COTE **Programs** 19. 05/07/25 11:23 am **Brooke Newell** (bsnewell): Rollback to KV Dean for Provost 20. 06/04/25 12:37 pm Melissa Reedy (murray): Approved for KV Dean 21. 06/04/25 1:27 pm Tom Teper (tteper): Approved for University Librarian 22. 06/04/25 2:13 pm Suzanne Lee (suzannel): Approved for COTE **Programs** 23. 08/13/25 6:30 pm **Brooke Newell**

(bsnewell):

Approved for Provost

History

1. Mar 30, 2019 by Deb Forgacs (dforgacs)

Administration Details

Official Program Earth, Society, & Environmental Sustainability: Society and

Name the Environment, BSLAS

Diploma Title

Sponsor College Liberal Arts & Sciences

Sponsor Sch Earth, Soc, Environ Admin Earth, Society,

Department and Environment Courses

Sponsor Name <u>Jonathan Tomkin</u>

Sponsor Email <u>tomkin@illinois.edu</u>

College Contact Stephen R. Downie College Contact

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College Budget Michael Wellens

Officer

College Budget <u>wellens@illinois.edu</u>

Officer Email

If additional stakeholders other than the Sponsor and College Contacts listed above should be contacted if questions during the review process arise, please list them here.

Does this program have inter-departmental administration?

No

Effective Catalog Term

Effective Catalog Fall 2025

Term

Effective Catalog 2025-2026

Proposal Title

Proposal Title (either Establish/Revise/Eliminate the Degree Name in Program Name in the College of XXXX, i.e., Establish the Bachelor of Science in Entomology in the College of Liberal Arts and Sciences, include the Graduate College for Grad Programs)

Revise the Concentration in Society and the Environment in the Bachelor of Science in Liberal Arts and Sciences in Earth, Society, & Environmental Sustainability in the College of Liberals Art and Sciences

Does this proposal have any related proposals that will also be revised at this time and the programs depend on each other? Consider Majors, Minors, Concentrations & Joint Programs in your department. Please know that this information is used administratively to move related proposals through workflow efficiently and together as needed. Format your response like the following "This BS proposal (key 567) is related to the Concentration A proposal (key 145)"

The BS proposal (key 695) is related to the ESES Concentration proposals Science of the Earth System (key 694) and Society and the Environment (key 696).

| Program Justification | on | | |
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Provide a brief description, using a numbered item list, of the proposed changes to the program.

- 1. Sponsor department name was updated.
- 2. The formatting of the POS and additional text (including graduation requirements, university requirements, and general education requirements) and General Education table and LAS College requirements are added to adhere to the campus General Education Template.
- 3. The major (Key 695) requirements have been added to this concentration.

The following justifications (4-21) are specific to the changes made to the major (Key 695):

- 4. The program name has been shortened to "Environmental Sustainability".
- 5. The ESES Introductory Core "approved courses" list is removed. The following courses were moved to concentration (Keys 696 and 694) specific coursework, but all others (29 courses) are no longer options:

Courses removed: ESE 111, GEOL 143, IB 100, IB 103, IB 105, MCB 150, NRES 105, UP 205, ATMS 100, ATMS 201, GGIS 222, ACE 210, ACE 251, GGIS 106, HIST 202, REL 270, RST 242, SOC 160, ANTH 278, CPSC 215, GEOL 208, LA 250, NPRE 101, NPRE 201, PS 224, PS 225, SOC 270, ATMS 207, GGIS 105

Key 696: ATMS 120, ATMS 140, GEOL 100, GEOL 107, GEOL 117, GEOL 118, GGIS 103 Key 694: GEOL 107, IB 150

- 6. A Major Requirements and hours line is added.
- 7. "Coursework" is now capitalized.
- 8. ENSU 300 which was previously listed as its cross listed rubric, LA 370 under the Sustainability, Policy, and Global Change header, has been moved to the major requirements.
- 9. GGIS 379 under ESE coursework header is listed now as its cross listed rubric, ESE 379 under ESE Coursework.
- 10. The number of required Advanced Courses has increased from 5 to 6.
- 11. The listing of advanced courses has been updated, and courses are now listed individually rather than as a list.
- 12. ESE 401 and 497 are added as Advanced Course options under the header Capstone and Experiential.
- 13. ESE 389 was moved from Environmental & the Human Response header to the Advanced Course options under the header Capstone and Experiential.
- 14. IB 440 and NRES 431 were listed individually under the header Earth's Biosphere & Ecology, and we kept only IB 440 in the same list.
- 15. GEOL 401 listed under Earth's Physical Systems, Resources, & Hazards is listed now as its cross listed rubric ESE 411 under the same header.
- 16. IB 362 and IB 411 have been added as an Advanced Course option.
- 17. AGCM 430, ENG 315, GGIS 468, IB 447, IB 485, NRES 424, NRES 426, UP 405 are removed as an Advanced Course option.
- 18. CHLH 469 is changed to HK 408 as an Advanced Course option.
- 19. ESE 467. ESE 477 and ESE 498 are added as Advanced Course options under the header

Environment & the Human Response

- 20. GGIS 455 and GGIS 483, IB 405, LA 314, and UP 418 were removed as an Advanced Course option.
- 21. GGIS 407 was add as an Advanced Course option under the header Visualizing the Earth System.

The following justifications (22-29) pertain to this concentration:

- 22. The delivery method was updated to match the already approved major.
- 23. The total number of hours required in this major + concentration changed from 48-58 to
- 46-55. The overall credit hours for the program did not change, they remain at 120 hours.
- 24. The Cognate Course Work hours have changed from 16-18 to 18-21.
- 25. PS 100 or PS 101 have been added to the Cognate Course Work list for this concentration.
- 26. STAT 100 has been added to the Cognate Course Work list for this concentration.
- 27. The Introductory Social Science header has been added, and the course options added include ANTH 101, ANTH 102, GGIS 101, GGIS 104, and SOC 100.
- 28. Seven courses (ATMS 120, ATMS 140, GEOL 100, GEOL 107, GEOL 117, GEOL 118, GGIS 103) which were previously on the course list for the major (Key 695) were removed from the ESES Introductory Core course list and added to this concentration's requirements under the header Introductory Earth's Physical Systems, Resources, & Hazards. These courses have been listed in the POS as the cross listed ESE coursework where possible.

ATMS 120 listed as ESE 120

ATMS 150 listed as ESE 140

GEOL 117 listed as ESE 117

GEOL 118 listed as ESE 118

GGIS 103 listed as ESE 103

29. CHEM 101 or 102 is no longer recommended.

Did the program content change 25% or more in relation to the total credit hours, since the most recent university accreditation visit? See the italicized text below for more details.

<u>No</u>

Provide the reasoning for why each change was necessary, using a corresponding numbered item list as it relates to the brief description numbered list above.

- 1. The original Sponsor Department was incorrect due to a migration error.
- 2. Per Office of the Provost General Education initiative for transparency and accessibility.
- 3. For student transparency and clarity, the major requirements + concentration requirements are now found together.
- 4. By shortening our major name, we will more concisely describe the program, bring usual practice in line with the official name, and reduce confusion with other program names on campus. Students and faculty have long referred to the major as "Environmental Sustainability" (a shortening of the full name). This is the same name as the course rubric for courses in the program ("Environmental Sustainability" is abbreviated to ENSU in the course catalog). After consultation with students (including focus groups, surveys of majors, and surveys of nonmajors), we would like to standardize the name to be the same as this rubric. This change is supported by a large majority of current students. The change has also been partly motivated by Geology changing its name to "Earth Science and Environmental Change" (ESEC), which is very similar to the current major name (ESES). As it has turned out, students both in and outside the major, and several faculty and staff, have trouble distinguishing between these two names and rubrics.
- 5. These courses are replaced by Concentration specific Learning Outcome course choices, by ENSU 300, and by additional advanced courses. This reduces the number of introductory courses in the program, which enable an increase in advanced hours (in preparation of the incoming 40 advanced hour requirement) while holding total required hours in the program constant. We have made changes that follow the recommendations set out in "EP.24.068 Interim Guidance Regarding Implementation of the Illinois Board of Higher Education 40 Upper-Division Hour Criterion". The targeted concentration courses are specifically chosen to be those that most contribute to Learning Outcomes 1 and 2. The change also allows the addition of ENSU 300 as a required course, which is specifically designed for Learning Outcome 1. This change simplifies this degree, which is relatively complex, and so improves the program design.
- 6. This brings the POS into current practice.
- 7. This corrects a formatting error.
- 8. This increases the number of advanced courses in the program (in preparation of the incoming 40 advanced hour requirement). This addition is part of our Learning Outcomes process this new course will directly focus on deepening student understanding of Learning Outcome 1. ENSU 300 is cross listed as LA 370, formerly in the Sustainability, Policy, and Global Change list. We are listing the course as ENSU 300 because the School of Earth, Society and the Environment (SESE) has become the controlling unit of the course and is also taking over the instruction of the course, and it is consistent that readers of the catalog now see SESE's rubric.
- 9. When possible, the rubric ESE has been used throughout the POS for consistency to the program name.
- 10. References to the (now non-existent) Introductory Core has been removed, and the number of 300- and 400- level courses has been updated to six. This increase in advanced courses is in

preparation of the incoming 40 advanced hour requirement.

- 11. Advanced courses were previously listed in blocks. To conform to current POS standards, each course is listed on its own line with credit hours shown. The previous grouping of topic areas has been retained for clarity.
- 12. ESE 401 and 497 are cross-cutting courses developed by SESE and added to our curriculum. They don't focus on a single topic area and so are not in the groupings.
- 13. ESE 389 is a field expedition course and is suited for the Capstone and Experiential courses required.
- 14. The error in the course list was correct to remove the duplication.
- 15. When possible, the rubric ESE has been used throughout the POS for consistency to the program name.
- 16. IB 362 and IB 411 are new courses that was added as part of our Learning Outcome Assessment process.
- 17. AGCM 430 is no longer a course in the catalog. Deactivated FA23.

ENG 315 is no longer a course in the catalog. Deactivated FA22.

IB 447 is no longer a course in the catalog. Deactivated SP23.

IB 485 is no longer a course in the catalog. Deactivated SP23.

NRES 424 is no longer a course in the catalog. Deactivated FA23

NRES 426 is no longer a course in the catalog. Deactivated SP25.

GGIS 468 is no longer a course in the catalog. Deactivated SP25.

UP 405 is no longer a course in the catalog. Deactivated SP25.

- 18. "Environmental Health" changed its rubric from CHLH to HK when the Department of Community Health changed its name. This change reflects the course's new rubric.
- 19. ESE 467, 477 and 498 are new courses developed and offered by the School of Earth, Society and the Environment that contributes to Learning Outcome 4.
- 20. GGIS 455, GGIS 483, IB 405, LA 314, and UP 418 were removed from our course list as part of our Learning Outcome Assessment process; it was determined to insufficiently match our Learning Outcomes.
- 21. GGIS 407 is a new course developed by the Department of Geography and Geographic Information Science, a unit in the School, that contributes to Learning Outcome 5.
- 22. Due to the major being added to the concentration, the already approved delivery method being on-campus and online was updated for the concentration.
- 23. The number of hours has changed in the updated POS reflects the current credit hours of courses in the POS. For this concentration Society and Environment (SAE) the change is due to a combination of an hours change in ANTH 102 and the removal of the introductory "Approved Courses" list. ANTH 102 is a social science option in the "Society and Environment" (SAE) Concentration, and ANTH 102 used to be a 4-credit hour course, and it is now a 3-credit course. In addition, the elimination of the introductory "Approved courses" reduces the total number of courses by four, and this is replaced by three courses: ENSU 300, a 3 or 4-credit hour Advanced Course, and a 3 or 4-credit hour SAE course (GEOL 100, GEOL 107, ESE 103, ESE 117, ESE 118, ESE 120, or ESE 140), which reduces the total number of credit hours in this

CONCENTIATION BY 1-3 CIECUL HOURS.

- 24. The requirement of the Introductory Earth's Physical Systems, Resources, & Hazards list increased the total number of hours.
- 25. PS 100 or PS 101 remain as options to fulfill the Introductory Social Science and are now under the "Cognate Course Work" and the new "Introductory Social Sciences. Select 2 courses:" heading. These courses were previously on an internal document of approved courses to fulfill the [10-12 hours-Introductory Social Science (Select three courses from approved list)].
- 26. STAT 100 remains the option to fulfil the former requirement of [3 hours-Statistics (Select one course from approved list)] that was on the internal document of approved courses.

 27. ANTH 101, ANTH 102, GGIS 101, GGIS 104 and SOC 100 remain as options to fulfill the Introductory Social Science under "Cognate Course Work" and the new "Introductory Social Sciences. Select 2 courses:" heading. These courses remain unchanged from the previous Social Science options (this is not an addition), but it is now best practice to explicitly list these courses in the POS. Support letters attached.
- 28. The requirement to take one of ATMS 120, ATMS 140, GEOL 100, GEOL 107, GEOL 117, GEOL 118, GGIS 103, which most fit the Learning Outcomes and Advanced Course needs of this Concentration, are now located in the Cognate Course Work section. These courses originate from the ESES Introductory Core course list that has been removed from the major (Key 695) but retained in the concentration. The listing of the courses were changed to their ESE cross listed name if possible.
- 29. These courses are removed from our recommendation list as part of our Learning Outcome Assessment process; it was determined to insufficiently match the Learning Outcomes for the Concentration.

Instructional Resources

Will there be any reduction in other course offerings, programs or concentrations by your department as a result of this new program/proposed change?

No

Does this new program/proposed change result in the replacement of another program?

No

Does the program include other courses/subjects outside of the sponsoring department impacted by the creation/ revision of this program? If Yes is selected, indicate the appropriate courses and attach the letter of support/ acknowledgement.

Yes

Courses outside of the sponsoring department/interdisciplinary departments:

ACE 210 - Environmental Econ & Policy

ACE 251 - The World Food Economy

ANTH 101 - Introduction to Anthropology

- ANTH 102 Human Origins and Culture
- ANTH 278 Climate Change & Civilization
- ATMS 100 Introduction to Meteorology
- ATMS 120 Severe and Hazardous Weather
- ATMS 140 Climate and Global Change
- ATMS 201 General Physical Meteorology
- ATMS 207 Weather and Climate Data Sci
- CPSC 215 The Prairie and Bioenergy
- GEOL 100 Planet Earth
- GEOL 107 Physical Geology
- GEOL 117 The Oceans
- GEOL 118 Natural Disasters
- GEOL 143 History of Life
- GEOL 208 History of the Earth System
- GGIS 101 Global Development&Environment
- GGIS 103 Earth's Physical Systems
- GGIS 104 Social and Cultural Geography
- GGIS 106 Geographies of Globalization
- GGIS 222 Big Rivers of the World
- GGIS 407 CyberGIS & Geospatial Data Sci
- GGIS 455 Geog of Sub-Saharan Africa
- GGIS 483 Urban Geography
- HIST 202 American Environmental History
- IB 100 Biology in Today's World
- IB 103 Introduction to Plant Biology
- IB 105 Environmental Biology
- IB 150 Organismal & Evolutionary Biol
- IB 362 Marine Biology
- IB 405 Evol of Traits and Genomes
- IB 411 Bioinspiration
- LA 250 Environmental Site Analysis
- LA 314 History of World Landscapes
- MCB 150 Molec & Cellular Basis of Life
- NPRE 101 Introduction to Energy Sources
- NPRE 201 Energy Systems
- NRES 105 Climate Change and Ecosystems
- PS 100 Intro to Political Science
- PS 101 Intro to US Gov & Pol
- PS 224 Politics of the National Parks
- PS 225 Environmental Politics&Policy
- REL 270 Religion, Ethics, Environment
- RST 242 Nature and American Culture

SOC 100 - Introduction to Sociology

SOC 160 - Global Ineq and Social Change

SOC 270 - Global Demography

STAT 100 - Statistics

UP 205 - Ecology & Env Sustainability

UP 418 - GIS for Planners

GEOL 111 - Emergence of Life

ENGL 477 - Advanced Environmental Writing

CHEM 101 - Introductory Chemistry

CHEM 102 - General Chemistry I

Please attach any <u>ACE_Acknowledgement.pdf</u>
letters of support/ <u>ANTH_Acknowledgement.pdf</u>

acknowledgement <u>GEOL_support2.pdf</u> for any <u>ATMS_support.pdf</u>

Instructional <u>UP_Acknowledgement.pdf</u>

Resources. <u>SOC_support.pdf</u>

Consider faculty, RST_Acknowledgement.pdf
students, and/or REL_acknowledgement2.pdf
other impacted PS_Acknowledgement.pdf
units as NRES_acknowledgement2.pdf

appropriate. NPRE_Acknowledgement.pdf

MCB_Acknowledgement.pdf
LA Acknowledgement.pdf

SIB_support2.pdf

SIB_Acknowledgement.pdf
HIS_Acknowledgement.pdf
GGIS_Acknowledgement.pdf
ESEC_acknowledgement.pdf
Geol_acknowledgment2.pdf
CPSC_acknowledgement.pdf
ATMS_Acknowledgement.pdf

STAT_support.pdf
PS_support.pdf
SIB_support.pdf
GGIS_support.pdf
GGIS_support2.pdf
ENGL_support2.pdf

CHEM_acknowledgement.pdf

Program Features

Academic Level Undergraduate

Is this program part of an ISBE approved licensure program?

Nο

Will specialized accreditation be sought for this program?

No

Additional concentration notes (e.g., estimated enrollment, advising plans, etc.)

Does this program prepare graduates for entry into a career or profession that is regulated by the State of Illinois?

No

Program of Study

Provide detailed information (course rubrics, numbers, and credit hours) of how a student could obtain 40 credit hours of upper-division coursework.

The major explicitly requires 25-31 credit hours: all students in the major are required to take ENSU 300 (3 hours), ESE 379 (4 credit hours), and 18-24 credit hours chosen from an advanced course list in the Program of Study.

The remaining 9-15 credit hours can be completed with upper division free electives of which there are 33 credit hours noted in the sample sequence.

Revised programs

<u>Key696 SidebySide EnvironmentalSustainability SAE 5 1.xlsx</u> Key696 EnvironmentalSustainability SAE BSLAS 6 2.docx

Catalog Page Text - Overview Tab

Catalog Page Overview Text

The Society and the Environment concentration offers a balanced cross-disciplinary social science/humanities education, emphasizing the political, socio-cultural, economic, and historical dimensions of sustainability. Students integrate training in environmental policy, economics, ethics, and communication with tools such as GIS, survey design, and qualitative analysis. Graduates of the program prepared for professional roles or graduate study in sustainability consulting, environmental policy, resource management, and related fields.

Is the overview text above correct?

Yes

Statement for Programs of Study Catalog

Graduation Requirements

Minimum hours required for graduation: 120 hours.

Minimum required major and supporting course work: Normally equates to 46-55 hours. Twelve hours of 300- and 400-level courses in the major must be taken from this campus. Substitutions may be made with advisor approval.

University Requirements

The university and residency requirements can be found in the Student Code (§ 3-801) and in the Academic Catalog.

General Education Requirements

<u>Follows the campus General Education (Gen Ed) requirements.</u> <u>Some Gen Ed requirements may be met by courses required and/or electives in the program.</u>

| Composition I | | <u>4-6</u> |
|--------------------------|--|-------------|
| Advanced Composition | | <u>3</u> |
| Humanities & the Arts | (6 hours) | <u>6</u> |
| Natural Sciences & Tec | hnology (6 hours) | <u>6</u> |
| Social & Behavioral Sci | ences (6 hours) | <u>6</u> |
| fufilled by ECON 103 | 2 and PS 100 or PS 101 | |
| Cultural Studies: Non-V | Western Cultures (1 course) | <u>3</u> |
| Cultural Studies: US Mi | inority Cultures (1 course) | <u>3</u> |
| Cultural Studies: Weste | ern/Comparative Cultures (1 course) | <u>3</u> |
| Quantitative Reasoning | g (2 courses, at least one course must be Quantitative Reasoning I) | <u>6-10</u> |
| fulfilled by STAT 100 | and and any other course approved as Quantitative Reasoning I or II | |
| Language Requirement | t (Completion of the fourth semester or equivalent of a language other than English is | <u>0-20</u> |
| required) | | |
| Orientation and Professi | ional Development | |
| LAS 101 | Design Your First Year Experience | <u>1</u> |
| <u>OR</u> | | |
| <u>LAS 100</u> | Success in LAS for International Students | <u>3</u> |
| <u>& LAS 101</u> | and Design Your First Year Experience | |
| <u>OR</u> | | |
| <u>LAS 102</u> | Transfer Advantage | <u>1</u> |
| Major Requirements | | |
| ESE coursework | | <u>10</u> |
| ESE 200 | Earth Systems | <u>3</u> |
| ENSU 300 | Environmental Sustainability | <u>3</u> |
| | | |

| ESE 379 | Introduction to Geographic Information Systems | <u>4</u> |
|-------------------------|--|---------------|
| Advanced Courses | | <u>18-24</u> |
| | 300- and 400-level courses (from the lists below), totaling at least 18 credit hours, and | |
| | y coherent program approved by the advisor, are required. At least three of these six must be listed or cross-listed as an ESE or ENSU course. | |
| Capstone and Exp | | |
| ESE 389 | Environment and Sustainability Field Expedition | <u>3</u> |
| ESE 401 | ESE Capstone | <u>3</u> |
| ESE 497 | Special Topics in ESE | <u>1 to 4</u> |
| Earth's Biosphere | e & Ecology | |
| ESE 439 | Biogeography | <u>3</u> |
| HORT 430 | <u>Children and Nature</u> | <u>2</u> |
| <u>IB 362</u> | Marine Biology | <u>3</u> |
| <u>IB 411</u> | Bioinspiration | <u>3</u> |
| <u>IB 440</u> | Plants and Global Change | <u>3</u> |
| <u>IB 444</u> | Insect Ecology | <u>3</u> |
| <u>IB 451</u> | Conservation Biology | <u>4</u> |
| <u>IB 452</u> | Ecosystem Ecology | <u>3</u> |
| <u>IB 453</u> | Community Ecology | <u>3</u> |
| <u>IB 461</u> | <u>Ornithology</u> | <u>4</u> |
| NRES 348 | Fish and Wildlife Ecology | <u>3</u> |
| NRES 419 | Env and Plant Ecosystems | <u>3</u> |
| NRES 420 | Restoration Ecology | <u>4</u> |
| Earth's Physical S | ystems, Resources, & Hazards | |
| <u>ABE 436</u> | Renewable Energy Systems | <u>3</u> |
| <u>ATMS 420</u> | <u>Atmospheric Chemistry</u> | <u>4</u> |
| CEE 330 | Environmental Engineering | <u>3</u> |
| <u>CHEM 360</u> | <u>Chemistry of the Environment</u> | <u>3</u> |
| ENSU 302 | Air Pollution to Global Change | <u>3</u> |
| ESE 320 | Water Planet, Water Crisis | <u>3</u> |

| FCF 222 | Foods Mark Colors and the F | _ |
|-----------------|---|-------------|
| <u>ESE 333</u> | Earth Materials and the Env | 4 |
| ESE 411 | Geomorphology | <u>4</u> |
| ESE 445 | Earth Resources Sustainability | <u>3</u> |
| ESE 470 | Introduction to Hydrogeology | 4 € |
| ESE 486 | Environmental Consulting | <u>3</u> |
| GEOL 380 | Environmental Geology | <u>4</u> |
| <u>GEOL 450</u> | Investigating the Earth's Interior | <u>3</u> |
| <u>GEOL 451</u> | Environmental Geophysics | <u>4</u> |
| <u>GEOL 460</u> | Geochemistry | <u>3</u> |
| GGIS 401 | Watershed Hydrology | 3 |
| <u>GGIS 406</u> | Fluvial Geomorphology | <u>4</u> |
| GGIS 408 | Humans and River Systems | <u>4</u> |
| MSE 489 | Matl Select for Sustainability | 3 |
| NRES 351 | Introduction to Environmental Chemistry | 3 |
| Environment & | k the Human Response | |
| AGCM 330 | Environmental Communications | <u>3</u> |
| <u>HK 408</u> | Environmental Health | <u>3</u> |
| ENGL 476 | <u>Topics in Literature and the Environment</u> | 3 |
| ENSU 301 | Soc Impacts Weather & Climate | 3 |
| ESE 311 | Environmental Issues Today | 3 |
| ESE 360 | Environmental Writing | 3 |
| ESE 467 | Multimedia Environmental Communications | <u>3</u> |
| ESE 477 | Advanced Environmental Writing | 3 |
| ESE 498 | Environmental Writing for Publication | 3 |
| GGIS 350 | Sustainability and the City | <u>3</u> |
| GGIS 384 | Population Geography | 3 |
| GGIS 495 | Advanced Topics in Geography | <u>3 or</u> |
| | | <u>4</u> |
| <u>GGIS 496</u> | Climate & Social Vulnerability | <u>3</u> |
| <u>LA 430</u> | <u>Children and Nature</u> | <u>2</u> |
| | | |

| NRES 34Q Environ Social Sci Res Meth 3 NRES 472 Environmental Psychology 4 SOC 447 Environmental Sociology 3 Sustainability, Policy, and Global Change ACE 310 Natural Resource Economics 3 ACE 406 Environmental Law 3 ACE 411 Environmental Development 3 ATMS 307 Climate Processes 3 ATMS 447 Climate Change Assessment 3 ATMS 449 Biogeochemical Cycles 4 CPSC 336 Tomorrow's Environment 3 CPSC 415 Bioenergy Crops 3 CPSC 431 Plants and Global Change 3 ENSU 303 Sustainable Business I 4 ENSU 310 Renewable & Alternative Energy 4 ENSU 410 Sustainable Organizations 4 ESE 415 Transportation & Sustainability 3 ESE 426 Environmental Policy 3 ESE 482 Challenges of Sustainability 3 ETMA 311 Huma | <u>LA 450</u> | Ecology for Land Restoration | <u>4</u> |
|--|--------------------|--|----------|
| SOC 447 Environmental Sociology 3 Sustainability, Policy, and Global Change ACE 310 Natural Resource Economics 3 ACE 406 Environmental Law 3 ACE 411 Environment and Development 3 ATMS 307 Climate Processes 3 ATMS 4447 Climate Change Assessment 3 ATMS 449 Biogeochemical Cycles 4 CPSC 336 Tomorrow's Environment 3 CPSC 415 Bioenergy Crops 3 CPSC 431 Plants and Global Change 3 ENSU 303 Sustainable Business I 4 ENSU 310 Renewable & Alternative Energy 4 ENSU 310 Renewable & Alternative Energy 4 ESE 410 Green Development 4 ESE 465 Transportation & Sustainability 3 ESE 466 Environmental Policy 3 ESE 482 Challenges of Sustainability 3 ETMA 311 Humanity in the Food Web 3 NRES 439 Env and Sustainable | NRES 340 | Environ Social Sci Res Meth | <u>3</u> |
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| ACE 406 Environmental Law 3 ACE 411 Environment and Development 3 ATMS 307 Climate Processes 3 ATMS 447 Climate Change Assessment 3 ATMS 449 Biogeochemical Cycles 4 CPSC 336 Tomorrow's Environment 3 CPSC 415 Bioenergy Crops 3 CPSC 431 Plants and Global Change 3 ENSU 303 Sustainable Business I 4 ENSU 310 Renewable & Alternative Energy 4 ENSU 410 Sustainable Organizations 4 ESE 410 Green Development 4 ESE 465 Transportation &Sustainability 3 ESE 466 Environmental Policy 3 ESE 482 Challenges of Sustainability 3 ETMA 311 Humanity in the Food Web 3 NPRE 480 Energy and Security 3 NRES 325 Natural Resource Policy Mgmt 3 NRES 439 Env and Sustainable Dev 3 UP 446 Sustainable P | Sustainability, Po | licy, and Global Change | |
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| CPSC 336 Tomorrow's Environment 3 CPSC 415 Bioenergy Crops 3 CPSC 431 Plants and Global Change 3 ENSU 303 Sustainable Business I 4 ENSU 310 Renewable & Alternative Energy 4 ENSU 410 Sustainable Organizations 4 ESE 410 Green Development 4 ESE 465 Transportation & Sustainability 3 ESE 466 Environmental Policy 3 ESE 482 Challenges of Sustainability 3 ETMA 311 Humanity in the Food Web 3 NRES 480 Energy and Security 3 NRES 325 Natural Resource Policy Mgmt 3 NRES 439 Env and Sustainable Dev 3 UP 446 Sustainable Planning Seminar 4 UP 456 Sustainable Planning Workshop 4 | <u>ATMS 447</u> | Climate Change Assessment | <u>3</u> |
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| ETMA 311Humanity in the Food Web3NPRE 480Energy and Security3NRES 325Natural Resource Policy Mgmt3NRES 439Env and Sustainable Dev3UP 446Sustainable Planning Seminar4UP 456Sustainable Planning Workshop4 | ESE 466 | Environmental Policy | <u>3</u> |
| NPRE 480Energy and Security3NRES 325Natural Resource Policy Mgmt3NRES 439Env and Sustainable Dev3UP 446Sustainable Planning Seminar4UP 456Sustainable Planning Workshop4 | ESE 482 | <u>Challenges of Sustainability</u> | <u>3</u> |
| NRES 325Natural Resource Policy Mgmt3NRES 439Env and Sustainable Dev3UP 446Sustainable Planning Seminar4UP 456Sustainable Planning Workshop4 | ETMA 311 | Humanity in the Food Web | <u>3</u> |
| NRES 439Env and Sustainable Dev3UP 446Sustainable Planning Seminar4UP 456Sustainable Planning Workshop4 | NPRE 480 | Energy and Security | <u>3</u> |
| UP 446 Sustainable Planning Seminar 4 UP 456 Sustainable Planning Workshop 4 | NRES 325 | Natural Resource Policy Mgmt | <u>3</u> |
| UP 456 Sustainable Planning Workshop 4 | NRES 439 | Env and Sustainable Dev | <u>3</u> |
| <u> </u> | <u>UP 446</u> | Sustainable Planning Seminar | <u>4</u> |
| <u>UP 480</u> <u>Sustainable Design Principles</u> <u>2</u> | <u>UP 456</u> | Sustainable Planning Workshop | <u>4</u> |
| | <u>UP 480</u> | Sustainable Design Principles | <u>2</u> |

| <u>ATMS 305</u> | Computing and Data Analysis | <u>3</u> |
|-------------------------|---|------------|
| ESE 380 | Geographic Information Systems II | <u>4</u> |
| ESE 421 | Earth Systems Modeling | <u>4</u> |
| <u>GGIS 371</u> | Spatial Analysis | <u>4</u> |
| GGIS 407 | Foundations of CyberGIS & Geospatial Data Science | <u>4</u> |
| GGIS 412 | Geospatial Technologies & Society | <u>3</u> |
| GGIS 460 | Aerial Photo Analysis | <u>3</u> |
| <u>GGIS 476</u> | Environmental Remote Sensing | <u>3</u> |
| <u>GGIS 477</u> | Introduction to Remote Sensing | <u>3</u> |
| GGIS 479 | Advanced Topics in GIS | <u>4</u> |
| NRES 427 | Modeling Natural Resources | <u>4</u> |
| NRES 454 | GIS in Natural Resource Mgmt | <u>4</u> |
| Society and the Environ | nment Concentration Requirements | |
| Cognate Course Work | | <u>9</u> |
| <u>PS 100</u> | Intro to Political Science | <u>3</u> |
| or PS 101 | Intro to US Gov & Pol | |
| <u>STAT 100</u> | <u>Statistics</u> | <u>3</u> |
| ECON 102 | Microeconomic Principles | <u>3</u> |
| Introductory Social Sci | ences: Select 2 courses: | <u>6-8</u> |
| ANTH 101 | Introduction to Anthropology | <u>3</u> |
| ANTH 102 | Human Origins and Culture | <u>3</u> |
| GGIS 101 | Global Development & Environment | <u>3</u> |
| GGIS 104 | Social and Cultural Geography | <u>4</u> |
| <u>SOC 100</u> | Introduction to Sociology | <u>4</u> |
| Introductory Earth's Ph | nysical Systems, Resources, & Hazards. Select 1 course: | <u>3-4</u> |
| <u>GEOL 100</u> | <u>Planet Earth</u> | <u>3</u> |
| <u>GEOL 107</u> | Physical Geology | <u>4</u> |
| ESE 103 | Earth's Physical Systems | <u>4</u> |
| <u>ESE 117</u> | <u>The Oceans</u> | <u>3</u> |

| ESE 118 | Natural Disasters | <u>3</u> |
|-------------------|--|------------------|
| ESE 120 | Severe and Hazardous Weather | <u>3</u> |
| ESE 140 | Climate and Global Change | 3_ |
| Cognate Course | | 16-18 |
| | roductory Social Science (Select three courses from approved list) | |
| 3 hours-Statistic | cs (Select one course from approved list) | |
| 3 hours-Econom | nics: ECON 102 | |
| Highly recomme | ended: CHEM 101 or CHEM 102 | |
| Program | Relationships | |
| Corresponding | | |
| Program(s): | | |
| | Corresponding Program(s) | |
| Environmenta | al Sustainability, BSLAS | |
| | | |

Program Regulation and Assessment

Plan to Assess and Improve Student Learning

Illinois Administrative Code: 1050.30(b)(1)(D) Provision is made for guidance and counseling of students, evaluations of student performance, continuous monitoring of progress of students toward their degree objectives and appropriate academic record keeping.

Are the learning outcomes for the program listed in the Academic Catalog?

<u>No</u>

Student Learning Outcomes

- 1. Be able to recognize, critique and implement commonly accepted Sustainability models and ideas in a wide variety of settings, using systems thinking to link social and natural science concepts.
- 2. Have a fundamental understanding of social science concepts; being able to recognize and apply appropriate social science methods.
- 3. <u>Use quantitative methods to describe, understand and evaluate theoretical and applied issues in environmental and sustainability study; this includes direct calculation, working with data, and using quantitative models.</u>
- <u>4.</u> Be able to critically evaluate and then communicate environmental and sustainability concepts to both specialized and wide audiences.
- 5. Students will demonstrate professional competence in environmental and sustainability practice by executing appropriate laboratory and field techniques, applying Geographic Information Science tools and software, and selecting and employing suitable quantitative and qualitative analytical methods. migration

Describe how, when, and where these learning outcomes will be assessed.

Describe here:

Assessment Approach in the Environmental Sustainability Program

The Environmental Sustainability program employs a structured approach to assess student learning outcomes (LOs) through evaluations at foundational, mid-program, and capstone stages. Assessments are both direct and indirect.

Start of Program (Foundational Stage)

In the foundational stage, direct assessments occur within core courses. In ESE 200 (Earth Systems), students are introduced to sustainability models and systems thinking, with course based assessment. This serves as a baseline assessment of LO1, focusing on students' ability to recognize and apply basic sustainability concepts.

For Science of the Earth System Concentration students, cognate courses such as MATH 220/221, PHYS 101/211, CHEM 102, and STAT 100 provide students with natural science and quantitative foundations (LO2 and LO3). For Society and the Environment Concentration students, required social science courses and STAT 100 provide students with social science and quantitative foundations (LO2 and LO3).

These foundational assessments establish baselines across Learning Outcomes.

Mid-Program (Advanced Coursework and Integration)

Mid-program assessments focus on deeper disciplinary understanding and practical applications. Advanced ENSU and ESE courses, chosen based on each student's concentration. ENSU 300 (Environmental Sustainability) has learning objectives built around reaching proficiency in LO1. Students complete written assignments and introductory presentations, providing a direct assessment of their early ability to communicate sustainability concepts (LO4).

ESE 379 (Introduction to GIS) is focused on developing quantitative methods to describe geographic information using industry standard software, furthering LO3 and LO5.

Program specific communication courses (ESE 360 and ESE 467) have students evaluating and then communicating environmental and sustainability concepts (LO4).

Students choose focused upper level (300 and 400 level) courses as part of their concentration. These are chosen with an advisor to directly deepen their concentration understanding (LO2), with all courses related to one or more of LO1-5.

End of Program (Summative Assessment)

In the capstone paper and field expedition courses (typically ESE 389 and ESE 401), students demonstrate their ability to apply sustainability models (LO1), exhibit disciplinary knowledge in natural or social sciences (LO2), and use quantitative methods for data analysis (LO3). There is usually a presentation, (LO4), and an opportunity to draw on technical competencies, highlighting professional readiness (LO5).

<u>Indirect Assessment Measures</u>

In addition to these direct assessments, the program employs several indirect measures to assess student learning outcomes and program effectiveness. Each graduating senior completes

an exit survey upon graduation, providing feedback on their educational experience and self-assessment of their preparedness in relation to each learning outcome. Alumni and employer feedback are also collected to evaluate graduates' readiness and effectiveness in the professional sphere. Post-graduation metrics, including job placement rates, graduate school placement and acceptance, and feedback from employers, further assess program impact and identify areas for continuous improvement.

Identify faculty expectations for students' achievement of each of the stated student learning outcomes. What score, rating, or level of expertise will signify that students have met each outcome? Provide rating rubrics as necessary.

Faculty expect students to achieve Level 3 (Proficient) or higher across all learning outcomes by program completion, with some students reaching Level 4 (Exemplary) in specific areas.

Proficiency is demonstrated through direct assessments (such as capstone projects, experiential courses, and advanced coursework), and indirect assessments (such as exit surveys and alumni responses). This rubric provides clear standards for evaluating student achievement of program goals and supports faculty in giving targeted feedback for growth.

The "program LOA rubric" and an example course rubric are attached.

Explain the process that will be implemented to ensure that assessment results are used to improve student learning.

To ensure that assessment results are effectively used to improve student learning in the Environmental Sustainability program, a continuous improvement process is employed. This process includes structured data collection, analysis, and feedback.

- 1. Annual Data Collection and Review:
- o Each year, the Associate Director and faculty advisors collect data from both direct and indirect assessment measures. Direct assessment data include progress and feedback from foundational, advanced, and capstone courses, while indirect data come from exit and graduate surveys.
- o Specific attention will be paid to capstone projects and advanced coursework, as these provide summative assessments of students' achievement in each learning outcome.
- 2. Analysis by the Courses & Curriculum Committee:
- o The Courses & Curriculum Committee reviews the data for action items. This analysis focus's on identifying trends and areas where students may be struggling to meet learning outcomes, as well as areas where students excel.
- o For each learning outcome, the committee will evaluate whether students are achieving the expected proficiency levels. This step evaluates the effectiveness of current teaching strategies, course content, and assessment methods.
- 3. Faculty Feedback and Discussion:
- o Assessment results are shared with the entire faculty each year in a faculty meeting. Faculty members who teach foundational, advanced, and capstone courses will discuss specific challenges and successes they observed in student performance.
- 4. Action Plan Development:
- o Based on the assessment data and faculty input, the Courses & Curriculum Committee develop an action plan, as needed. This plan may include modifications to course content, assessment methods, and instructional practices.
- o The action plan will specify targeted improvements for each learning outcome as needed, along with timelines for implementation and designated faculty responsible for overseeing changes.
- 5. Implementation and Monitoring:
- o Faculty members responsible for implementing changes will integrate the improvements into their courses in the following academic year. This may include revising syllabi, introducing new learning activities, or updating assessment rubrics to better measure specific outcomes.

 o The Associate Director will monitor the implementation process, ensuring that changes are made as planned and providing support to faculty as needed.
- 6. Ongoing Feedback Loop:
- o After implementation, the Associate Director and Courses & Curriculum Committee will continue to collect and review assessment data annually to monitor the impact of changes on student learning. Adjustments will be made as needed, based on whether improvements are yielding the desired outcomes.
- o Additionally, feedback from exit surveys, alumni, and employer surveys will be incorporated into this process to gain insights on how well the program prepares students for professional success, providing an external perspective on curriculum effectiveness.

Program

Capstone Rubric for ESES.docx program LOA rubric (1).docx

Description and

Requirements

Attach Documents

Delivery Method

This program is

available:

On Campus - Students are required to be on campus, they may take some online courses.

On Campus and Online - 2 program types. Students can receive the entire program either on campus or online. Students can choose to take courses in either modality.

Describe the use of this delivery method:

Admin update to add online program to CIM record.

Enrollment

Describe how this revision or phase down/elimination will impact enrollment and degrees awarded. If this is an elimination/phase down proposal include the plans for the students left in the program.

N/A

Budget

Are there

No

budgetary

implications for this

revision?

Will the program or revision require staffing (faculty, advisors, etc.) beyond what is currently available?

Nο

Additional Budget

Information

Attach File(s)

Financial Resources

How does the unit intend to financially support this proposal?

migration

Will the unit need to seek campus or other external resources?

No

Attach letters of support

Faculty Resources

Please address the impact on faculty resources including any changes in numbers of faculty, class size, teaching loads, student-faculty ratios, etc.

The total number of courses required remains the same, so we do not anticipate that this will alter faculty numbers, class sizes, teaching loads or student faculty ratios.

Library Resources

Describe your proposal's impact on the University Library's resources, collections, and services. If necessary please consult with the appropriate disciplinary specialist within the University Library.

According to Jessica Hagman, the subject specialist assigned to ESES, "The Library's existing resources, collections in the relevant subject areas, and services are sufficient to meet the needs of the proposed program as of Fall 2024."

EP Documentation

EP Control Number EP.26.010

Attach Rollback/

Approval Notices

Non-EP Documentation

U Program Review

Comments

Rollback

Documentation and

Attachment

DMI Documentation

Attach Final

Approval Notices

Banner/Codebook

Name

Society and the Environment

Program Code:

5103

Minor

Conc

5103

Degree

BSLAS

Code

Code

Code

Major

Code

5313

Senate Approval

Date

Senate Conference

Approval Date

BOT Approval Date

IBHE Approval Date

HLC Approval Date

DOE Approval Date

Effective Date:

Program Reviewer Comments **Donna Butler (dbutler) (05/14/24 8:12 am):** BV- Office of the Registrar- Correction made to Department to Sch Earth, Soc, Environ Admin as this department was missing from department list in CIM before, and has now been added.

Brooke Newell (bsnewell) (05/15/24 8:53 am): Rollback: Email sent to Jonathan and Stephen D.

Melissa Steinkoenig (menewell) (01/30/25 4:27 pm): Made adjustments to the Gen Ed table to align with major per approval and review by Jonathan Tomkin

Melissa Steinkoenig (menewell) (01/30/25 4:27 pm): Gen Ed Table Check: Good

Melissa Reedy (murray) (02/28/25 1:40 pm): Rollback: Email sent to Jonathan, SESE Head, and Stephen

Jonathan Tomkin (tomkin) (03/14/25 12:05 pm): Rollback: so melissa can access it

Brooke Newell (bsnewell) (04/23/25 5:37 pm): Rollback: Discussion via email with College and Dept Sponsor included. Rolled back to KV Dean per request of Melissa R.

Tom Teper (tteper) (05/05/25 9:58 am): Rollback: Per request of Melissa Reedy

Brooke Newell (bsnewell) (05/07/25 11:23 am): Rollback: Per request from College.