

Undergraduate Curriculum Change Memo

Date: Nov. 4, 2020
From: Vanessa Lougheed, Environmental Science Program
Through: Jim Kubicki, Chair, Dept of Geological Sciences
Through: Robert Kirken, Dean, College of Science
To: Chair, Undergraduate Curriculum Committee
Subject: Course changes in Environmental Science

Please find attached

- Signature page
- Course Change Forms

The attached documents serve to update of ESCI 2201, 2204 and 2105 so that they become junior level. As such, we ask to delete ESCI 2201, 2204 and 2105 and create 3 new courses (ESCI 3201, 3204, 3105), with the exact same descriptions and goals as their predecessors. Several other courses (ESCI 3192, 4301, 4398) also will require changes to their pre-requisites and co-requisites as a result.

These changes are required to reflect the level at which they are taught.

The only changes to the ESCI degree plans will be replacing ESCI 2201, 2204 and 2105 in the core to the 3 new courses (ESCI 3201, 3204, 3105)

The University of Texas at El Paso

Degree Proposal

Approval Page

Proposal Title: Course Change Form – ESCI 2201, 2204, 2105

Department Chair

I have read the enclosed proposal and approve this proposal on behalf of the department.

Signature James Kubicki

12/16/2020
Date

College Curriculum Committee Chairperson

I have read the enclosed documents and approve the proposal on behalf of the college curriculum committee.

Signature Nancy Marcus

1-14-2021
Date

College Dean

I have read the enclosed documents and approve the proposal on behalf of the college. I certify that the necessary funds will be allocated by the college in support of this proposal.

Signature Polita Kula

1-14-21
Date

Graduate Council/Undergraduate Curriculum Committee

Council Action: Approved Returned to the College

Date of Action Report: _____

Signature, Chairman _____

_____ Date

Course Deletion Form

Courses to be deleted: (You may list several on the same sheet)

Subject Prefix	Course Number	Title
ESCI	2201	Environmental Policy & Law

Rationale for Deleting the Course(s)

Briefly describe the rationale for this change.

This form will address one part of this overall goal:

We request changing ESCI 2201 (sophomore) to ESCI 3201 (junior level), so it better reflects the level at which the course is taught.

This is a multi-part request:

- 1) Delete ESCI 2201
- 2) Create ESCI 3201 (with identical description as 2201)

Course Add Form

Course Information

Subject Prefix and # ESCI 3201 TCCN (If applicable) _____

Title (29 characters or fewer): Environmental Policy & Law____

Dept. Administrative Code _____ CIP Code _____

Course Level (UG, GR, DR, or SP): _____

Will this course be taught during a part of term in addition to a full 16-week term? (Y/N): N
 If so, what term length will this course be taught in? (e.g., 8 weeks) _____

How many times may the course be taken for credit? (Please indicate 1-9 times): 1

Should the course be exempt from the "Three Repeat Rule?" (Y/N): N

Grading Mode: X Standard _____ Pass/Fail _____ Audit

Description (600 characters maximum):

A survey of the practical knowledge required to begin a career in the environmental arena. Topics include an overview of environmental agencies, laws, and regulations; quality control/quality assurance (QA/QC) procedures; environmental sampling, including field work; sample custody, analysis and record-keeping; ethics; the roles of the public and private sector in environmental management.

Contact Hours (per week): 2 Lecture Hours 2 Lab Hours _____ Other

Types of Instruction (Schedule Type): (Underline all types of instruction which reflect how the course should be scheduled in Banner.):

- | | |
|---------------------|---------------------------------------|
| <u>A</u> Lecture | H Thesis |
| B Laboratory | I Dissertation |
| C Practicum | K Lecture/Lab Combined |
| D Seminar | O Discussion or Review (Study Skills) |
| E Independent Study | P Specialized Instruction |
| F Private Lesson | Q Student Teaching |

Equivalent Courses

<u>Course Number</u>

Prerequisite Course(s)

<u>Course Number</u>	<u>Concurrent Enrollment Permitted? (Y/N)</u>	<u>Minimum Grade Required</u>
ESCI 1301	N	C
ESCI 1101	N	C

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Corequisite Course(s):

<u>Course Number</u>
ESCI 3105

Restrictions

Indicate which of the following registration restrictions should be implemented:

<u>Restriction</u>	<u>Yes/No</u>
Departmental Approval	No

<u>Restriction</u>	<u>Yes/No</u>	<u>Test Name</u>	<u>Minimum Score</u>
Placement Test	No		

<u>Restriction</u>	<u>Yes/No</u>	<u>Majors Permitted</u>
Major	Yes	ESCI

<u>Restriction</u>	<u>Yes/No</u>	<u>Classes Permitted</u>
Classification	No	

Rationale for Adding the Course

This form will address one part of this overall goal:

We request changing ESCI 2204 (sophomore) to ESCI 3204 (junior level), so it better reflects the level at which the course is taught.

This is a multi-part request:

- 1) Delete ESCI 2201
- 2) Create ESCI 3201 (with identical description as 2201)



ENVIRONMENTAL POLICY & LAW ESCI 3201

Lecture: TTh 10:30-11:50 AM, Miners Hall 300

Instructor: *Dr. Brenda Barnes* - 915-276-6103 (call or text)
email: bebarnes@utep.edu
Office Hours: by appointment

No Text Required at this Time

Class materials (e.g., copies of power points, knowledge surveys, group assignments, handouts, supplemental readings, links to useful websites) will be available at the class Blackboard site.

Class Description:

A survey of the practical knowledge required to begin a career in the environmental arena. Topics include an overview of environmental agencies, laws, and regulations; quality control/quality assurance (QA/QC) procedures; environmental sampling, including field work; sample custody, analysis and record-keeping; ethics; the roles of the public and private sector in environmental management.

Goals:

To increase your knowledge of the environment and the laws that protect it.
To develop skills to prepare you for applying and obtaining internships and permanent employment in the environmental field.

Tentative Class Schedule (subject to change):

Week of	Topics
Jan. 20	Introduction and Regulatory Overview; Federal, State & Local Government – Class Activity
Jan. 27	Environmental Policy
Feb. 3	National Env. Policy Act/Clean Air Act
Feb. 10	Clean Water Act/Safe Drinking Water Act
Feb. 17	Nuclear Waste/Radiation Safety
Feb. 24	Comprehensive Environmental Response, Compensation and Liability Act (CERCLA/Superfund) – Class Activity
Mar. 2	Resource Conservation & Recovery Act (RCRA)
Mar. 9	Pollution Prevention/Toxic Substances Control Act/EPCRA & others
Mar. 16	SPRING BREAK
Mar. 23	Endangered Species Act/FIFRA and Regulatory Wrap-up
Mar. 30	International Policy and Regulations
Apr. 6	Environmental Risk Management and Remediation
Apr. 13	Data Quality Objectives and Data Management Activity
Apr. 20	QA/QC and Sampling Techniques Activity
Apr. 27	Environmental Practice and Ethics
May 4	Guest Speaker/Student Presentations
May 11	Student Presentations

Environmental Policy & Law



Grading:

*Class Assignments and Final Project:	300 points
+Class Participation:	30 points
&Group Participation	20 points

*In-class or out of class activities that may involve writing, class discussion, quizzes, oral presentations, numerical calculations, etc. A final project will also be required. Each class assignment will total to 15 to 20 points; the final project will be worth 75 points (for a final total of 300 points).

+Each week you will receive 2 additional points for class participation. The participation grade may be based on attendance, promptness to class, actively engaging in class discussion, asking questions, etc.

You will be assigned some activities to work on as a group. At the end of the semester your participation will be assessed by your group members (as well as having the opportunity for a self-assessment).

Some assignments/activities will be turned in in Blackboard.

Students with Disabilities: If you think you may have a disability or if you are experiencing learning difficulties, please contact the [Disabled Student Services Office \(DSSO\)](#) at (915) 747-5148 (voice or TTY), in Union East Room 106, or by e-mail at dss@utep.edu. They will provide any necessary accommodations. You should also meet with your instructor in order to facilitate your needs. You are expected to provide documentation of your disability in order to make special arrangements in this class.

Academic Honesty and other issues: The Environmental Science program has gone to great lengths in order to make learning the material easier than engaging in scholastic dishonesty, which is defined in the UTEP Student Handbook and also at <http://www.utep.edu/dos>. Proven violations of these detailed regulations may result in any of the consequences outlined in the Student Handbook.

NO NEED TO CHEAT IN THIS CLASS!!!

Course Deletion Form

Courses to be deleted: (You may list several on the same sheet)

Subject Prefix	Course Number	Title
ESCI	2105	Research Exp in Envi Science 2

Rationale for Deleting the Course(s)

Briefly describe the rationale for this change.

This form will address one part of this overall goal:

We request changing ESCI 2105 (sophomore) to ESCI 3105 (junior level), so it better reflects the level at which the course is taught.

This is a multi-part request:

- 3) Delete ESCI 2105
- 4) Create ESCI 3105 (with identical description as 2105)

Course Add Form

Course Information

Subject Prefix and # ESCI 3105 TCCN (If applicable) _____

Title (29 characters or fewer): Research Exp in Envi Science 2 _____

Dept. Administrative Code _____ CIP Code _____

Course Level (UG, GR, DR, or SP): _____

Will this course be taught during a part of term in addition to a full 16-week term? (Y/N): N
 If so, what term length will this course be taught in? (e.g., 8 weeks) _____

How many times may the course be taken for credit? (Please indicate 1-9 times): 1

Should the course be exempt from the "Three Repeat Rule?" (Y/N): N

Grading Mode: X Standard _____ Pass/Fail _____ Audit

Description (600 characters maximum):

Student will continue a mentored research project with the goal of preparing and presenting a scientific poster at a local, regional or national meeting.

Contact Hours (per week): 1 Lecture Hours 3 Lab Hours _____ Other

Types of Instruction (Schedule Type): (Underline all types of instruction which reflect how the course should be scheduled in Banner.):

- | | |
|----------------------------|---------------------------------------|
| <u>A</u> <u>Lecture</u> | H Thesis |
| <u>B</u> <u>Laboratory</u> | I Dissertation |
| C Practicum | K Lecture/Lab Combined |
| D Seminar | O Discussion or Review (Study Skills) |
| E Independent Study | P Specialized Instruction |
| F Private Lesson | Q Student Teaching |

Equivalent Courses

<u>Course Number</u>

Prerequisite Course(s)

<u>Course Number</u>	<u>Concurrent Enrollment Permitted? (Y/N)</u>	<u>Minimum Grade Required</u>
ESCI 3204	N	C

Corequisite Course(s):

<u>Course Number</u>

Restrictions

Indicate which of the following registration restrictions should be implemented:

<u>Restriction</u>	<u>Yes/No</u>
Departmental Approval	No

<u>Restriction</u>	<u>Yes/No</u>	<u>Test Name</u>	<u>Minimum Score</u>
Placement Test	No		

<u>Restriction</u>	<u>Yes/No</u>	<u>Majors Permitted</u>
Major	Yes	ESCI

<u>Restriction</u>	<u>Yes/No</u>	<u>Classes Permitted</u>
Classification	No	

Rationale for Adding the Course

This form will address one part of this overall goal:

We request changing ESCI 2204 (sophomore) to ESCI 3204 (junior level), so it better reflects the level at which the course is taught.

This is a multi-part request:

- 3) Delete ESCI 2105
- 4) Create ESCI 3105 (with identical description as 2105)

Environmental Science Research 2
ESCI 3105, CRN XXXX (1 credit hour)
Room TBD/Time TBD
Spring xxx

Instructors:

To be determined

Time:

1 hour in class, 1 day/week

NOTE: You are expected to work outside of class on research with your advisor/mentor each week

Prerequisite: ESCI 3204

Required Textbook: NONE

Course Description:

This course focuses on completing the research that you proposed to accomplish in ESCI 3204.

Learning Outcomes:

By the end of this semester you will have completed research that leads to a poster presentation at a scientific meeting or symposium. You will learn to keep a research notebook, design, print and present a research poster, and write a final report on your research topic.

Enrolled students will:

1. Attend and actively participate in class sessions.
2. Spend time each week working on their research project. You are expected to report *significant* research progress as indicated in the syllabus.
3. Keep a research notebook and bring it to every class. Occasional checks of your notebook will be made.
4. Make a poster presentation of your research results at the COURI spring research symposium (or other selected research meeting).
5. Write a final report on your research in journal format.

Tentative Course Schedule:

WEEK	TOPIC
1	Introduction to course, keeping a laboratory notebook
2	Making the most of your time with your advisor Assignment: oral report on research progress [1]
3	Keeping your data collection organized Assignment: oral report on research progress [2]

4	Oral research presentations, the good and the bad Assignment: attend a seminar and write a report on it, oral report on research progress [3]
5	I've been collecting data – now what? Assignment: oral report on research progress [4]
6	Posters – Part 1 – basic ins and outs Assignment: critique 2 posters, oral report on research progress [5]
7	Posters – Part 2 – mapping out your poster, common pitfalls Assignment: draft of poster for group critique
8	Final report – Part 1 – format, evaluation of journal styles, outlining the report Assignment: oral report on research progress [6]
9	Posters part 3 – how to present? Assignment: final draft of poster, oral report on research progress [7]
10	Final report – Part 2– how to overcome writer's block, common writing problems Assignment: draft/outline of final report, oral report on research progress [8]
11	Posters part 4 – last minute considerations Assignment: go over your poster with your advisor, oral report on research progress [9]
12	No class – attend research symposium! Assignment: hand in your final version of poster after symposium
13	Final Report- Part 3 - What important feedback did you get from symposium? How will that alter your report? Assignment: complete draft of introduction/background, methods, and results sections of final report, oral report on research progress [10]
14	Final Report – Part 4 – Tying up loose ends Assignment: draft of conclusions and abstract of final report
15	Reflecting on research, thinking ahead to graduate school or a profession Assignment: final report due on **

Notes: Nearly every week you will be expected to report on your research progress. This should be significant progress (not that you washed lab dishes or waited all day for an automated procedure to run). If you were waiting for a result what else did you do? If you experiment hit a roadblock, what did you decide to do? To allow for illness, travel, etc., you will be allowed to “pass” on reporting at 3 out of the 10 times reports are expected (see syllabus above for times when reports will be expected). You are expected to keep a research notebook and bring it to every class meeting. This will help guide you in preparing your progress reports. Notebooks may be checked for completeness during any class period.

Grades:

Progress presentations (7): 70 points
Unannounced lab notebook checks: 5 points
Class participation: 10 points
Poster: 25 points
Final report: 40 points
Total: 150 points
Instructions and rubrics for assignments will be posted on Blackboard.

Course policies:

Class participation: You are expected to come to class prepared to discuss your research progress and other course materials.

E-mail and Blackboard:

You are required to provide the teaching team with a UTEP e-mail address and check your UTEP e-mail and Blackboard daily. We will use your UTEP e-mail to contact you and you will use your UTEP e-mail to contact us as well. Do not use Blackboard for e-mail.

Dropping the course:

Students may drop the class and receive a W (withdrawal) on their transcript prior to **. You must consult the Instructor prior to dropping. Due to the University's six-drop rule, dropping the course may not be in your best interest. After **a drop will result in an F on your transcript. Receiving either a W or an F in any course may prevent you from meeting the satisfactory Academic Progress requirements necessary to receive financial aid.

Student Conduct:

Each student is responsible for notice of and compliance with the provisions of the Regents' [Rules and Regulations](http://www.utsystem.edu/bor/rules/homepage.htm), available at <http://www.utsystem.edu/bor/rules/homepage.htm>. All students are expected to behave as courteous, responsible adults. We will have frequent discussions and students are expected to tolerate and respect the opinions of others.

Cellular and electronic devices:

Cell phones and other electronic and recording devices must be turned off during class time to minimize classroom disruptions. This means you cannot make calls, send text messages, or use social media during class. You may use your laptop or tablet to take notes in class, but this privilege will be revoked if the devices are used inappropriately.

Students who fail to follow this rule may incur disciplinary action up to and including dismissal from the class and upon repeated offenses, the course.

Academic Integrity:

All graded assignments must be entirely the work of the *individual* student. "Plagiarism" means the appropriation, buying, receiving as a gift, or obtaining by any means another's work and the unacknowledged submission or incorporation of it in one's own academic work offered for credit, or using work in a paper or assignment for which the student had received credit in another course without direct permission of all involved instructors. (from the Regents' [Rules and](#)

[Regulations](#)) Plagiarism is a serious violation of university policy and will not be tolerated. All cases of suspected plagiarism will be reported to the Dean of Students for further review.

Disability accommodations:

If you have or suspect you might have a disability and need an accommodation you should contact the Center for Accommodations and Support Services (CASS) at 747-5148 or at cass@utep.edu or go to Room 106 Union East Building. Students are responsible for providing any CASS accommodation letters and instructions.

Course Deletion Form

Courses to be deleted: (You may list several on the same sheet)

Subject Prefix	Course Number	Title
ESCI	2204	Research Exp in Envi Science 1

Rationale for Deleting the Course(s)

Briefly describe the rationale for this change.

This form will address one part of this overall goal:

We request changing ESCI 2204 (sophomore) to ESCI 3204 (junior level), so it better reflects the level at which the course is taught.

This is a multi-part request:

- 5) Delete ESCI 2204
- 6) Create ESCI 3204 (with identical description as 2204)

Course Add Form

Course Information

Subject Prefix and # ESCI 3204 TCCN (If applicable) _____

Title (29 characters or fewer): Research Exp in Envi Science 1_____

Dept. Administrative Code _____ CIP Code _____

Course Level (UG, GR, DR, or SP): _____

Will this course be taught during a part of term in addition to a full 16-week term? (Y/N): N
 If so, what term length will this course be taught in? (e.g., 8 weeks) _____

How many times may the course be taken for credit? (Please indicate 1-9 times): 1

Should the course be exempt from the "Three Repeat Rule?" (Y/N): N

Grading Mode: X Standard _____ Pass/Fail _____ Audit

Description (600 characters maximum):

Students will work under the supervision of a faculty mentor on a selected research project in the environmental sciences. Seminars associated with this course will emphasize professional developmental activities including experimental design, ethics, applying for internships, and science communication.

Contact Hours (per week): 1 Lecture Hours 3 Lab Hours _____ Other

Types of Instruction (Schedule Type): (Underline all types of instruction which reflect how the course should be scheduled in Banner.):

- | | |
|----------------------------|---------------------------------------|
| <u>A</u> <u>Lecture</u> | H Thesis |
| <u>B</u> <u>Laboratory</u> | I Dissertation |
| C Practicum | K Lecture/Lab Combined |
| D Seminar | O Discussion or Review (Study Skills) |
| E Independent Study | P Specialized Instruction |
| F Private Lesson | Q Student Teaching |

Equivalent Courses

<u>Course Number</u>

Prerequisite Course(s)

<u>Course Number</u>	<u>Concurrent Enrollment Permitted? (Y/N)</u>	<u>Minimum Grade Required</u>
ESCI 1310	N	C

Corequisite Course(s):

<u>Course Number</u>

Restrictions

Indicate which of the following registration restrictions should be implemented:

<u>Restriction</u>	<u>Yes/No</u>
Departmental Approval	No

<u>Restriction</u>	<u>Yes/No</u>	<u>Test Name</u>	<u>Minimum Score</u>
Placement Test	No		

<u>Restriction</u>	<u>Yes/No</u>	<u>Majors Permitted</u>
Major	Yes	ESCI

<u>Restriction</u>	<u>Yes/No</u>	<u>Classes Permitted</u>
Classification	No	

Rationale for Adding the Course

This form will address one part of this overall goal:

We request changing ESCI 2204 (sophomore) to ESCI 3204 (junior level), so it better reflects the level at which the course is taught.

This is a multi-part request:

- 5) Delete ESCI 2204
- 6) Create ESCI 3204 (with identical description as 2204)

Introduction to Environmental Science Research
ESCI 3204, CRN XXXX (2 credit hours)
Classroom TBD/Time TBD
Fall XXXX

Instructors:

To be determined

Time:

2 hours, 1 day/week

Required Textbook: NONE

Prerequisite: ESCI 1310 (Methods in Environmental Science)

Course Description:

This course provides an introduction to research proposal writing, research methodologies, research theories and protocols, and laboratory/field safety.

Learning Outcomes:

By the end of this course students will complete a research proposal that contains an introduction, problem statement (significance), literature review, methods section, references and a timeline. This proposal will be used as the basis of a full research project that will be completed and presented in ESCI 2105.

Enrolled students will:

1. Attend and actively participate in class sessions and related activities.
2. Learn about the research process.
3. Develop a mentor-mentee relationship with a faculty advisor/mentor who will help you to identify a research question and guide you through a research project.
4. Complete all assignments and a required research proposal that will facilitate completion of a research project in ESCI 2105.

Tentative Course Schedule:

WEEK	TOPIC
1	Introduction to course and faculty, safety training Assignment: complete safety training course(s)
2	Overview of the research process Assignment: begin to develop research topic and questions
3	Research topics, questions and proposal sections Assignment: faculty advisor/mentor list
4	Literature review and research design, communicating science to the public

	Assignment: summarize sample research proposal for peers and for general public
5	Library research and resources, citations Assignment: write research proposal introduction and problem statement (1-3 pages)
6	Ethics and protocol (human and animal subjects, IRB) Assignment: write research proposal literature review section and references list (3 to 5 pages)
7	Research methods part 1 – implementation and data management Assignment: update on interaction with faculty mentor/advisor
8	Research methods part 2 – data collection Assignment: review sample data sets
9	Research methods part 3 – data analysis and statistics Assignment: write research proposal methodology section (3 to 5 pages)
10	Research methods part 4 – graphical presentation of data and results Assignment: critique figures from research paper
11	Working to cultivate a mentor-mentee relationship, developing realistic research timelines, writing an abstract Assignment: completed faculty advisor/mentor-scholar agreement, critique of an abstract
12	Presenting the research proposal (tips for oral presentations and design of PowerPoint slides) Assignment: draft of complete research proposal (8 to 16 pages)
13	Research proposal presentations (Group A) and questions Assignment: PowerPoint presentation (3 to 6 slides)
14	Research proposal presentations (Group B) and questions Assignment: PowerPoint presentation (3 to 6 slides)
15	Applying for an internship, looking ahead to ESCI 2105 Assignment: final research proposal (8 to 16 pages)

Grades:

Attendance and participation: 15%

Weekly assignments (excluding draft and final research proposal): 40%

Draft of research proposal: 15%

Final research proposal: 30%

Instructions and rubrics for assignments will be posted on Blackboard.

Course policies:

Class participation: You are expected to come to class prepared to answer questions about any assigned readings and participate in class discussions.

E-mail and Blackboard:

You are required to provide the teaching team with a UTEP e-mail address and check your UTEP e-mail and Blackboard daily. We will use your UTEP e-mail to contact you and you will use your UTEP e-mail to contact us as well. Do not use Blackboard for e-mail.

Dropping the course:

Students may drop the class and receive a W (withdrawal) on their transcript prior to **. You must consult the Instructor prior to dropping. Due to the University's six-drop rule, dropping the course may not be in your best interest. After **a drop will result in an F on your transcript. Receiving either a W or an F in any course may prevent you from meeting the satisfactory Academic Progress requirements necessary to receive financial aid.

Student Conduct:

Each student is responsible for notice of and compliance with the provisions of the Regents' [Rules and Regulations](#), available at <http://www.utsystem.edu/bor/rules/homepage.htm>. All students are expected to behave as courteous, responsible adults. We will have frequent discussions and students are expected to tolerate and respect the opinions of others.

Cellular and electronic devices:

Cell phones and other electronic and recording devices must be turned off during class time to minimize classroom disruptions. This means you cannot make calls, send text messages, or use social media during class. You may use your laptop or tablet to take notes in class, but this privilege will be revoked if the devices are used inappropriately.

Students who fail to follow this rule may incur disciplinary action up to and including dismissal from the class and upon repeated offenses, the course.

Academic Integrity:

All graded assignments must be entirely the work of the *individual* student. *"Plagiarism"* means the appropriation, buying, receiving as a gift, or obtaining by any means another's work and the unacknowledged submission or incorporation of it in one's own academic work offered for credit, or using work in a paper or assignment for which the student had received credit in another course without direct permission of all involved instructors. (from the Regents' [Rules and Regulations](#)) Plagiarism is a serious violation of university policy and will not be tolerated. All cases of suspected plagiarism will be reported to the Dean of Students for further review.

Disability accommodations:

If you have or suspect you might have a disability and need an accommodation you should contact the Center for Accommodations and Support Services (CASS) at 747-5148 or at cass@utep.edu or go to Room 106 Union East Building. Students are responsible for providing any CASS accommodation letters and instructions.

Degree Plan

BS in Environmental Science Core for all concentrations

Required Credits: 120

Code	Title	Hours
Designated Core (All courses require a grade of C or better)		
Required Courses: ¹		
CHEM 1105	Laboratory for CHEM 1305	1
CHEM 1106	Laboratory for CHEM 1306	1
CHEM 1305	General Chemistry	3
CHEM 1306	General Chemistry	3
ESCI 1101	Environmental Sci. Lab	1
ESCI 1301	Intro to Environmental Sci	3
ESCI 1310	Field Methods in Env Science	3
ESCI 2105 ESCI 3105	Research Exp in Env Science 2	1
ESCI 2204 ESCI 3201	Environmental Policy & Law	2
ESCI 2204 ESCI 3204	Research Exp in Envi Science 1	2
ESCI 3192	Prof. Development in ESCI	1
ESCI 4301	Senior Project	3
ESCI 4320	Monitoring Regional Sust	3
ESCI 4398	Environmental Sci. Internship (Note: Not required for ESCI Secondary Education Minor)	3
MATH 1411	Calculus I	4
STAT 2480	Elementary Statistical Methods	4
University Core Curriculum		

Code	Title	Hours
	<u>Complete the University Core Curriculum requirements.</u>	42
Concentration		
	Select one of the concentrations below:	40
Upper Division Requirement		
	Select a total of thirty-seven hours of upper division course work ¹	
Total Hours		120

Course List

¹ A total of thirty-seven hours of upper division coursework is required for all Bachelor of Science degrees.