BIO 279: CONSERVATION BIOLOGY AND WILDLIFE MANAGEMENT

In Workflow

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Approval Path

1. Tue, 01 Oct 2019 00:05:30 GMT
   Jamie Kneitel (kneitel): Approved for BIO Committee Chair
2. Wed, 02 Oct 2019 22:21:30 GMT
   Jamie Kneitel (kneitel): Approved for BIO Chair
3. Wed, 02 Oct 2019 22:57:48 GMT
   Thomas Krabacher (tsk): Approved for NSM College Committee Chair
4. Wed, 02 Oct 2019 22:58:17 GMT
   Shannon Datwyler (datwyler): Approved for NSM Dean

Date Submitted:Fri, 13 Sep 2019 00:19:43 GMT

Viewing:BIO 279 : Conservation Biology and Wildlife Management

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Changes proposed by: Timothy Davidson (218658792)

Contact(s):

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Catalog Title:
Conservation Biology and Wildlife Management

Class Schedule Title:
Conservatn Bio+Wldlf Mgmt

Academic Group: (College)
NSM - Natural Sciences & Mathematics

Academic Organization: (Department)
Biological Sciences

Will this course be offered through the College of Continuing Education (CCE)?
No

Catalog Year Effective:
Spring 2020 (2020/2021 Catalog)

Subject Area: (prefix)
BIO - Biological Sciences

Catalog Number: (course number)
279

Course ID: (For administrative use only.)

106596

Units:

3

In what term(s) will this course typically be offered?

Spring term only

Does this course require a room for its final exam?

Yes, final exam requires a room

Does this course replace an existing experimental course?

No

This course complies with the credit hour policy:

Yes

Justification for course proposal:

The Biological Sciences Graduate Committee wishes to create a paired elective course based on the undergraduate class Bio 179 and graduate version, Bio 279 (Conservation Biology and Wildlife Management) to better serve both our undergraduate and graduate students. Bio 179 is an advanced upper division elective course (for majors) with both a lab and lecture, while Bio 279 is an elective seminar course for Masters of Science students. Both courses are only offered spring of every other year, which prohibits some students that wish to take the class but also graduate on time (especially students in our 2 year graduate program). However, both classes have very similar learning outcomes, assessments that can be easily modified to meet the expectations and rigor of both undergraduate and graduate level classes, and neither of these elective classes have been filled to capacity during the last 5 years.

This proposed course change would help us better serve our students by increasing the consistency of this paired offering to each Spring thus allowing students more choice and flexibility in their desired classes. In particular, this change would double our course offerings for our MS students in the Ecology, Evolution, and Conservation concentration, as we currently only offer one graduate EEC elective course per semester. In addition, we expect this change would improve the learning experiences of both student populations. We expect the graduate students would improve the quality of interactions and class discussions for undergraduates and possibly encourage them to pursue graduate school. Graduate students would benefit from the addition of a lab section, which would provide more hands on training in the field techniques commonly used in conservation careers and more opportunities to develop scientific presentation skills.

We modified the course description and notes to comply with the Paired Courses Policy.

Distinction between 179 and 279 assessments:
Bio 279 will include several additional requirements and assessments that students from Bio 179 will not have to complete (see attached syllabi for details). Graduate students will make three oral presentations (paper discussion, topic presentation, and speed talk). Also, instead of a research project poster, graduate students will complete a 8-10 page scientific research paper. Furthermore, graduate students will be expected to provide higher quality and more detailed answers on all other assignments and exams.

Justification for a modified course description:
We expect this change in course description will 1) better reflect the shifting and broader focus of the field of conservation as we provide more up-to-date content and training (additional explanation below), 2) help match the description of paired course, Bio 179 (modified previously), and 3) comply with the Paired Courses Policy.

Additional explanation: Modern conservation issues are varied and complex and threaten more than just wildlife populations. Thus, modern students of conservation need a broad understanding of human effects on ecosystems, management strategies to conserve biodiversity, and the diverse tools that address present and future conservation issues. This broad skill set will prepare students for many conservation careers. This proposed course change will broaden the scope of BIO 279 beyond its current description (vertebrates and plants) to consider how humans impact and manage biodiversity across a broad array of taxa and introduce analytical tools used by modern conservationists to assess, measure, and manage biodiversity in all its forms.

Course Description: (Not to exceed 80 words and language should conform to catalog copy.)

Advanced study of human effects and management of ecological systems, including populations, communities, and ecosystems. Topics include population and biodiversity responses to human activities, endangered species management, reserve design, and restoration. Emphasis on the critical evaluation, review, and presentation of conservation literature and issues. Paired course with Bio 179.

Are one or more field trips required with this course?

Yes

Fee Course?

No

Is this course designated as Service Learning?
No

Does this course require safety training?
No

Does this course require personal protective equipment (PPE)?
No

Course Note: (Note must be a single sentence; do not include field trip or fee course notations.)
Lecture two hours; laboratory and fieldwork three hours; meets in the same location with the same instructor as Bio 179; course cannot be taken concurrently with or after taking BIO 179; Bio 279 cannot be taken in the graduate program after completing Bio 179.

Does this course have prerequisites?
Yes

Prerequisite:
BIO 160; or instructor permission.

Prerequisites Enforced at Registration?
No

Does this course have corequisites?
No

Graded:
Letter

Approval required for enrollment?
No Approval Required

Course Component(s) and Classification(s):
Laboratory
Lecture

Laboratory Classification
CS#16 - Science Laboratory (K-factor=2 WTU per unit)
Laboratory Units
1

Lecture Classification
CS#04 - Lecture /Recitation (K-factor=1 WTU per unit)
Lecture Units
2

Is this a paired course?
Yes

Please confirm that it complies with the Paired Courses Policy and enter the course with which it is paired:
Bio 179

Is this course crosslisted?
No

Can this course be repeated for credit?
No

Can the course be taken for credit more than once during the same term?
No

Description of the Expected Learning Outcomes: Describe outcomes using the following format: "Students will be able to: 1), 2), etc."
Students will be able to:
1. Explain what biodiversity is and why it is important.

2. Describe the major threats to biodiversity and drivers of biodiversity loss.
3. Evaluate different solutions and challenges to assessing and managing biodiversity.
4. Propose and evaluate evidence-based solutions to management and conservation issues.
5. Use oral and written communication to summarize and critique conservation issues.
6. Critique, synthesize, and present conservation literature.
7. Further develop analytical skills through field and lab exercises

Attach a list of the required/recommended course readings and activities:

Davidson - Bio 279 Syllabus & assessment list.pdf

Assessment Strategies: A description of the assessment strategies (e.g., portfolios, examinations, performances, pre-and post-tests, conferences with students, student papers) which will be used by the instructor to determine the extent to which students have achieved the learning outcomes noted above.

Exams: Learning outcomes (LO) 1-3
Laboratory and field activities: LOs 1-4 and 7
Class exercises: LOs 1-4 and 7
Paper discussion: LOs 1-4 and especially 5 and 6
Topic presentation: LOs 1-4 and especially 5 and 6
Scientific semester project (paper and presentation): LOs 1-4 and especially 5 and 6

Additional details are included in the sheet appended to the attached syllabus.

Is this course required in a degree program (major, minor, graduate degree, certificate?)

No

Does the proposed change or addition cause a significant increase in the use of College or University resources (lab room, computer)?

No

Will there be any departments affected by this proposed course?

No

I/we as the author(s) of this course proposal agree to provide a new or updated accessibility checklist to the Dean's office prior to the semester when this course is taught utilizing the changes proposed here.

I/we agree

University Learning Goals

Graduate (Masters) Learning Goals:

Critical thinking/analysis
Communication
Information literacy
Disciplinary knowledge

Is this course required as part of a teaching credential program, a single subject, or multiple subject waiver program (e.g., Liberal Studies, Biology) or other school personnel preparation program (e.g., School of Nursing)?

No

Is this a Graduate Writing Intensive (GWI) course?

No

Key: 513