# **BIO 179: CONSERVATION BIOLOGY & WILDLIFE MANAGEMENT**

## In Workflow

- 1. BIO Committee Chair (kneitel@csus.edu)
- 2. BIO Chair (kneitel@csus.edu)
- 3. NSM College Committee Chair (tsk@csus.edu)
- 4. NSM Dean (datwyler@csus.edu)
- 5. Academic Services (torsetj@csus.edu;%20212408496@csus.edu;%20cnewsome@skymail.csus.edu)
- 6. Senate Curriculum Subcommittee Chair (curriculum@csus.edu)
- 7. Dean of Undergraduate (james.german@csus.edu;%20celena.showers@csus.edu)
- 8. Dean of Graduate (cnewsome@skymail.csus.edu)
- 9. Catalog Editor (212408496@csus.edu;%20torsetj@csus.edu;%20cnewsome@skymail.csus.edu)
- 10. Registrar's Office (wwd22@csus.edu;%20wlindsey@csus.edu;%20sac19595@csus.edu;%20danielle.ambrose@csus.edu;%20h.skocilich@csus.edu;%20205109584@csus.edu)
- 11. PeopleSoft (PeopleSoft@csus.edu)

## **Approval Path**

- 1. Tue, 01 Oct 2019 00:05:27 GMT Jamie Kneitel (kneitel): Approved for BIO Committee Chair
- 2. Wed, 02 Oct 2019 22:21:27 GMT Jamie Kneitel (kneitel): Approved for BIO Chair
- 3. Wed, 02 Oct 2019 22:57:38 GMT Thomas Krabacher (tsk): Approved for NSM College Committee Chair
- 4. Wed, 02 Oct 2019 22:58:13 GMT Shannon Datwyler (datwyler): Approved for NSM Dean

Date Submitted:Fri, 13 Sep 2019 00:15:34 GMT

## Viewing:BIO 179 : Conservation Biology & Wildlife Management

## Last edit:Fri, 13 Sep 2019 00:15:33 GMT

Changes proposed by: Timothy Davidson (218658792)

## Contact(s):

Name (First Last)	Email	Phone 999-999-9999
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## **Catalog Title:**

Conservation Biology & Wildlife Management

## Class Schedule Title:

Conservatn Bio and 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) 179

Course ID: (For administrative use only.) 106231

#### 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 electives. 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.

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

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. Paired course with Bio 279.

#### Are one or more field trips required with this course?

Yes

Fee Course?

Yes

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 279; course cannot be taken concurrently with or after taking BIO 279; Bio 279 cannot be taken in the graduate program after completing Bio 179.

#### Does this course have prerequisites?

Yes

#### Prerequisite:

BIO 100. BIO 160 recommended. Or instructor permission.

#### Prerequisites Enforced at Registration? No

Does this course have corequisites?

#### 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 279

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) Use decision making and critical thinking skills to evaluate management and conservation issues.

5) Develop scientific presentation skills through poster and oral presentation.

6) Develop analytical skills through field and lab exercises (such as: collecting and analyzing field data, quantifying biodiversity, and compiling and evaluating data from biodiversity databases).

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

Davidson - Bio 179 Syllabus & assessment list.pdf

#### Assessment Strategies: A description of the assessment strategies (e.g., portfolios, examinations, performances, pre-and posttests, 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 1-3 and especially 4 and 6 Class exercises: LOs 1-3 and especially 4 and 6 Scientific semester project (poster presentation): LOs 2-5

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.

l/we agree

## **University Learning Goals**

#### **Undergraduate Learning Goals:**

Competence in the disciplines Knowledge of human cultures and the physical and natural world Personal and social responsibility Intellectual and practical skills

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

## GE Course and GE Goal(s)

Is this a General Education (GE) course or is it being considered for GE?

No

Key: 464