

# BIO 282: EVOLUTION

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## 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;%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 (torsetj@csus.edu)
10. Registrar's Office (w lindsey@csus.edu)
11. PeopleSoft (PeopleSoft@csus.edu)

## Approval Path

1. Wed, 16 Oct 2019 22:13:37 GMT  
Jamie Kneitel (kneitel): Approved for BIO Committee Chair
2. Thu, 17 Oct 2019 15:52:52 GMT  
Jamie Kneitel (kneitel): Approved for BIO Chair
3. Thu, 07 Nov 2019 20:53:36 GMT  
Thomas Krabacher (tsk): Rollback to BIO Chair for NSM College Committee Chair
4. Fri, 02 Oct 2020 16:08:15 GMT  
Jamie Kneitel (kneitel): Approved for BIO Chair
5. Wed, 07 Oct 2020 22:23:42 GMT  
Thomas Krabacher (tsk): Rollback to Initiator
6. Tue, 13 Oct 2020 20:18:51 GMT  
Jamie Kneitel (kneitel): Approved for BIO Committee Chair
7. Tue, 13 Oct 2020 20:23:17 GMT  
Jamie Kneitel (kneitel): Approved for BIO Chair
8. Wed, 21 Oct 2020 22:13:50 GMT  
Thomas Krabacher (tsk): Approved for NSM College Committee Chair
9. Wed, 21 Oct 2020 22:14:11 GMT  
Shannon Datwyler (datwyler): Approved for NSM Dean

Date Submitted: Mon, 12 Oct 2020 00:57:23 GMT

## Viewing: BIO 282 : Evolution

Last edit: Mon, 12 Oct 2020 00:57:22 GMT

Changes proposed by: Brett Holland (102011700)

### Contact(s):

Name (First Last)	Email	Phone 999-999-9999
Holland	holland@csus.edu	916-317-9670

### Catalog Title:

Evolution

### Class Schedule Title:

Evolution

### 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:**

Fall 2020 (2020/2021 Catalog)

**Subject Area: (prefix)**

BIO - Biological Sciences

**Catalog Number: (course number)**

282

**Course ID: (For administrative use only.)**

106601

**Units:**

3

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

Fall term only

**Does this course require a room for its final exam?**

No, final exam does not require 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 current course description was designed when we did not offer an undergraduate course in evolution and most of our graduate students entered the program without having completed such a course. Our student background has changed over the last decade. It is now common for enrolled students to have had an undergraduate course in evolution. Therefore, this course would better serve our students by focusing on literature reading, writing, discussion and presentation (skills) rather than a lecture-based survey of evolution. For those that lack a background in basic evolutionary biology there will be several supporting resources: detailed PDFs of relevant topics, a recommended textbook, URLs, and mini-lectures by the instructor.

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

Introduction to evolutionary concepts and perspectives and their application to a variety of topics outside of evolutionary biology through discussion of peer-reviewed literature. Students will develop skills through group discussion, writing and presentation.

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

No

**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

**Does this course have prerequisites?**

Yes

**Prerequisite:**

Classified graduate standing in Biological Sciences

**Prerequisites Enforced at Registration?**

Yes

**Does this course have corequisites?**

No

**Graded:**

Letter

**Approval required for enrollment?**

No Approval Required

**Course Component(s) and Classification(s):**

Seminar

**Seminar Classification**

CS#05 - Seminar (K-factor=1 WTU per unit)

**Seminar Units**

3

**Is this a paired course?**

No

**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. Critically evaluate assigned primary literature from evolutionary biology.
2. Prepare professionally written answers to questions based on primary literature.
3. Articulate their opinions in group discussion.
4. Find relevant literature through various search engines.
5. Independently review a body of literature concerning topics first introduced through class readings and discussion.
6. Prepare and deliver a seminar.
7. Understand conceptual insights from evolutionary biology and explain their empirical and theoretical support.
8. Contrast evolutionary perspectives with proximate (e.g., molecular) perspectives of the same phenomena (e.g., senescence).
9. Explain the origin and resolution of specific controversies within evolutionary biology.

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

Course readings and activities and guides BIO 282 Fall 2019 - Google Docs.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.**

Written work: 19 writing assignments (1 per paper reading). Each paper has an accompanying prompt and requires 1-3 pages of student writing to complete. The total writing for the course will be approximately 40 pages per student. Because it is broken into 19 increments, each with feedback, there is substantial opportunity for students to incorporate suggestions and develop. ELOs 1, 2, 4, 7, 8, 9

Discussion: Student oral participation is evaluated for each discussion. Feedback through a student conference will occur as needed. ELOs 1, 5, 7, 8, 9

Presentations: students prepare and deliver an independent research seminar on a topic from discussion. Their slides and other prepared materials are evaluated. The instructor provides written feedback through a rubric evaluation and through a student conference. ELOs 1, 3, 4, 5, 6, 7, 8, 9

**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  
Intercultural/Global perspectives  
Professionalism  
Research (optional)

**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

**Please attach any additional files not requested above:**

SCHEDULE BIO 282-Fall '19.pdf  
Presentation Grading Rubric -BIO 282.pdf  
Syllabus, BIO 282, Evolution, Fall 2019 - Google Docs.pdf

### **Reviewer Comments:**

**Thomas Krabacher (tsk) (Thu, 07 Nov 2019 20:53:36 GMT):** Rollback: You need to link assessment strategies to course learning outcomes – identify with specific strategies will be used to assess which outcomes.

**Thomas Krabacher (tsk) (Wed, 07 Oct 2020 22:23:42 GMT):** Rollback: Learning Outcomes still need go be explicitly linked to Assessment strategies. This can be done by simply listing the number of the learning outcome next to the strategy(ies) that assesses it.

Key: 514