## **Assessment: Course Four Column**



## Courses (SCI) - Biology

## **BIOL 415:Evolution**

Course Outcomes	Assessment Measures	Results	Actions
Fundamental principles of evolution - Students will be able to communicate the fundamental principles of evolution (phylogeny, patterns of evolution, and genetic variation).  General education correlates: Communication Skills Critical Thinking  Course Outcome Status: Active Next Assessment: 2020-2021 Start Date: 10/11/2017	Discussion, homework, papers - Exam 1 Case Study 1 Oral Presentation  Criterion: 60%	Reporting Period: 2016-2017 Criterion Met: Yes Exam 1: 72% Case Study 1: 76% Oral Presentation: 88% (10/11/2017)	Action: No action required, but students did express that this was the most terminology intensive portion of the course. More time could be spent developing terminology with examples. (10/11/2017)
Major mechanisms in evolution - Students will be able to communicate the major mechanisms in evolution (genetic drift, gene flow, and natural selection)  General education correlates: Communication Skills Critical Thinking Course Outcome Status: Active Next Assessment: 2020-2021 Start Date: 10/11/2017	Discussion, homework, papers - Exam 2 Case Study 2 Oral Presentation Criterion: 60%	Reporting Period: 2016-2017 Criterion Met: Yes Exam 2: 71% Case Study 2: 88% Oral Presentation: 88% (10/11/2017)	Action: No action is required. This case study was especially good at illustrating the concepts of this outcome and could be used again in the future. (10/11/2017)
The relationship between	Discussion, homework, papers -	Reporting Period: 2016-2017	Action: No action required.

Course Outcomes	Assessment Measures	Results	Actions
adaptation, sex, interactions, and evolution - Students will be able to communicate the relationship between adaptation, sex, interactions, and evolution (life histories and fitness, sex and reproductive success, and conflict and cooperation)  General education correlates: Communication Skills Critical Thinking	Exam 3 Case Study 3 Oral Presentation Criterion: 60%	Criterion Met: Yes Exam 3: 89% Case Study 3: 92% (10/11/2017)	Students performed exceptionally well at this and really enjoyed the case study. (10/11/2017)
Course Outcome Status: Active Next Assessment: 2020-2021 Start Date: 10/11/2017			
Major themes in human evolution and evolution in society - Students will be able to communicate major themes in human evolution and evolution in society  General education correlates: Communication Skills Critical Thinking Course Outcome Status: Active Next Assessment: 2020-2021 Start Date: 10/11/2017	Discussion, homework, papers - Exam 4 Case Study 4 Oral Presentation Criterion: 60%	Reporting Period: 2016-2017 Criterion Met: Yes Exam 4: 73% Case Study 4: 78% (10/11/2017)	Action: No action is required, but in the future, I might split this case study into smaller chunks. It is based on a short book, and students struggled with the additional reading assignments, especially at the end of the semester. (10/11/2017)  Follow-Up: Strengths: The case studies worked really well and were an excellent way to develop
			concepts form lecture and allow students to think more deeply about important concepts. This was especially true for the third case study, which students enjoyed and performed well on. They also helped students to dissect the primary literature, an important objective for an upper

division science class. The book discussion case study was also appreciated by the students and helped to re-inforce several major

course concepts.

Targeted Changes: As mentioned above, students communicated that the first part of the course was terminology-heavy. I plan to better illustrate the terminology with more examples. Another area for improvement is the final case study, which was based on a short book. Because this was at the end of the semester, students has less time to thoroughly read and digest this book. I might consider moving it earlier in the semester or giving more, shorter assignments to help space out their reading. Overall, students enjoyed reading the book and it is probably worth doing again. A final area for improvement were student presentations. Although students performed well on this, they communicated that they would appreciate more guidance in choosing a topic. In the future, I could offer more example topics or even narrow the assigned topic. (10/11/2017)