Assessment: Course Four Column



Courses (SCI) - Biology

BIOL 341:Principles of Ecology

Course Outcomes	Assessment Measures	Results	Actions
Ecological principles and terminology - Students will have an understanding of fundamental Ecological principles and terminology. Course Outcome Status: Active Next Assessment: 2021-2022 Start Date: 09/05/2017	Exam - All exam questions Criterion: 6%	Reporting Period: 2016-2017 Criterion Met: Yes Exam 1: 78% Exam 2: 79% Exam 3: 77% (02/12/2018)	Action: No action is required, but I plan to include more short answer/short essay questions for future exams. This will help me to better assess students' proper use of terminology and application of ecological principles. (02/12/2018)
Ecological topics and issues at the organismal, population, community, and ecosystem level - Students will be able to understand and describe current Ecological topics and issues at the organismal, population, community, and ecosystem level. Course Outcome Status: Active Next Assessment: 2021-2022 Start Date: 09/05/2017	Exam - Exam 3: Part 1 #24; Part 2 #8; Part 3 #6 Criterion: 60%	Reporting Period: 2016-2017 Criterion Met: No Question 24: 33% Question 8: 67% Question 6: 87% (02/13/2018)	Action: Students did really well on graph interpretation (question 6). Question 24 dealt with use of ice core data to extrapolate current trends in carbon dioxide levels. I will improve instruction on this and spend more time explaining how this technique is used. (02/13/2018)
Qualitative and quantitative methodologies used to answer Ecological questions - Students will have an understanding of the qualitative and quantitative methodologies used to answer Ecological questions. Course Outcome Status: Active Next Assessment: 2021-2022	Exam - Exam 3: Part 3, Graph Interpretation Criterion: 60%	Reporting Period: 2016-2017 Criterion Met: Yes Graph 1: 69% Graph 2: 90% Graph 3: 72% Graph 4: 87% (02/13/2018)	Action: No action required. Students performed really well at this. (02/13/2018)

Course Outcomes	Assessment Measures	Results	Actions
Start Date: 09/05/2017			
Apply knowledge of Ecological principles and methods - Students will be able to apply knowledge of Ecological principles and methods. Course Outcome Status: Active Next Assessment: 2021-2022 Start Date: 09/05/2017	Exam - All exam questions Criterion: 60%	Reporting Period: 2016-2017 Criterion Met: Yes Exam 1: 78% Exam 2: 79% Exam 3: 77% (02/13/2018)	Action: No action required, but in the future I might assess this based on their research paper. This would be a better way to assess application of ecological methods through interpreting primary literature. (02/13/2018)
Importance of primary literature to Ecological research - Students will have an understanding of the importance of primary literature to Ecological research. Course Outcome Status: Active Next Assessment: 2021-2022 Start Date: 09/05/2017	Assignment - Project - Research Paper Bibliography Criterion: 60%	Reporting Period: 2016-2017 Criterion Met: Yes 100% of students incorporated sources from the primary literature. (02/13/2018)	
Communicate scientific ideas clearly in written form on a chosen Ecological topic - Students will communicate scientific ideas clearly in written form on a chosen Ecological topic. Course Outcome Status: Active Next Assessment: 2021-2022 Start Date: 09/05/2017	Assignment - Project - Research Paper Final Score Criterion: 60%	Reporting Period: 2016-2017 Criterion Met: Yes Average score: 93% (02/13/2018)	Action: No action required. I had students submit a rough draft and this allowed for the final version to be much improved. (02/13/2018)
Communicate scientific ideas clearly in oral form on a chosen Ecological topic - Students will communicate scientific ideas clearly in oral form on a chosen Ecological topic. Course Outcome Status: Active Next Assessment: 2021-2022 Start Date: 09/05/2017	Performance/Presentation - Research Presentation Criterion: 60%	Reporting Period: 2016-2017 Criterion Met: Yes Average score: 92% (02/13/2018)	Action: Strengths: Students performed really well on graph interpretation. This is encouraging because it is an important part of Ecology and science in general. I will continue to emphasis this in lecture. It was also encouraging to see students perform well on the final papers and presentations. I will continue to include this in the course because I think it is an

excellent way for them to pursue their own interests and apply

Actions

ecological methods and principles.

Targeted Changes: A main area that needs improvement for this course is the outcomes. I plan to make these align better with assessment. As currently stated, they are difficult to align with assessment. This is particularly the case with Outcome 1 and Outcome 4. Overall, I will improve the wording of the outcomes to make them more assessable. Another area not mentioned above that I plan to improve upon is the content of my lectures. I plan to include more examples, especially local and regional ecological examples. This will help to keep students engaged and help them to see the relevance of the course. (02/13/2018)