

Assessment: Course Four Column



Courses (SCI) - Biology

BIOL 251:General Microbiology

<i>Course Outcomes</i>	<i>Assessment Measures</i>	<i>Results</i>	<i>Actions</i>
Functional Anatomy of Cells - Describe the cellular structure of prokaryotic cells and cell walls. Apply this information to disease processes Course Outcome Status: Active Next Assessment: 2018-2019 Start Date: 11/04/2015	Exam - Lecture Exam 1 Criterion: 70% correct	Reporting Period: 2016-2017 Criterion Met: Yes Class average: 77% (11/08/2017)	Action: None Required (11/08/2017)
	Assignment - Lab - Lab Report 1 Stains & Staining Criterion: 70% correct	Reporting Period: 2016-2017 Criterion Met: Yes Class average: 81% (11/08/2017)	
Aseptic Technique and Culture of Microorganisms - Aseptic Technique and Culture of Microorganisms Course Outcome Status: Active Next Assessment: 2018-2019 Start Date: 11/04/2015	Assignment - Lab - Laboratory Practical 1 Criterion: 70% correct	Reporting Period: 2016-2017 Criterion Met: Yes Class average: 75% (11/08/2017)	
Microbial Growth and Control Thereof. - Describe requirements for microbial growth and apply these concepts to strategies for controlling microbial growth in medically relevant situations Course Outcome Status: Active Next Assessment: 2018-2019 Start Date: 11/04/2015	Exam - Lecture Exam 2 q's 1 - 23 Criterion: 70% correct	Reporting Period: 2016-2017 Criterion Met: Yes Class average: 77% (11/08/2017)	
	Assignment - Lab - Laboratory Practical 2 Criterion: 70% correct	Reporting Period: 2016-2017 Criterion Met: Yes Class average: 77% (11/08/2017)	
	Assignment - Lab - Lab report 3 Antibiotic Evaluation Criterion: 70% correct	Reporting Period: 2016-2017 Criterion Met: Yes Class average: 80% (11/08/2017)	
	Assignment - Lab - Lab Report 4 Identification of Unknown Criterion: 70% correct	Reporting Period: 2016-2017 Criterion Met: Yes Class average: 83% (11/08/2017)	

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<p>Genetics - Compare and contrast mechanisms of prokaryotic parasexual processes and describe their relevance to the evolution of antibiotic resistance.</p> <p>Course Outcome Status: Active Next Assessment: 2018-2019 Start Date: 11/04/2015</p>	<p>Exam - Lecture Exam 2 q's 32 - 35 Criterion: 70% correct</p>	<p>Reporting Period: 2016-2017 Criterion Met: No Class average: 64% (11/08/2017)</p>	<p>Action: More time devoted to this in lecture. (11/08/2017)</p> <hr/> <p>Action: Retain transformation lab experiment. Lower my expectations? (11/08/2017)</p>
	<p>Assignment - Lab - Lab Practical 2, q's 15 & 16 Criterion: 70% correct</p>	<p>Reporting Period: 2016-2017 Criterion Met: No Class average: 56% (11/08/2017)</p>	
<p>Microbial Diversity with medically relevant examples. - Microbial Diversity with medically relevant examples.</p> <p>Course Outcome Status: Active Next Assessment: 2018-2019 Start Date: 11/04/2015</p>	<p>Exam - Lecture Exam 3 Criterion: 70% correct</p>	<p>Reporting Period: 2016-2017 Criterion Met: Yes Class average: 81% (11/08/2017)</p>	
	<p>Assignment - Lab - Lab Report 4 Identification of Unknown Criterion: 70% correct</p>	<p>Reporting Period: 2016-2017 Criterion Met: Yes Class average: 83% (11/08/2017)</p>	
	<p>Exam - Exam 4 q's 1 -23 Criterion: 70% correct</p>	<p>Reporting Period: 2016-2017 Criterion Met: Yes Class average: 81% (11/08/2017)</p>	
<p>Host Pathogen Interactions - Host Pathogen Interactions</p> <p>Course Outcome Status: Active Next Assessment: 2018-2019 Start Date: 11/04/2015</p>	<p>Exam - Lecture Exam 4, q's 24 - 55 Criterion: 70% correct</p>	<p>Reporting Period: 2016-2017 Criterion Met: Yes Class average: 72% (11/08/2017)</p>	<p>Action: This course had previously been identified as problematic, which is why I wanted to revisit it with assessment. And it still needs ongoing work. Two points, one obvious, one less so. Bacterial genetics remains problematic, even though my presentation in lab increased markedly. My assumption that they retain genetics from BIOL 190 is perhaps unfounded. More lecture time devoted to this is an obvious measure.</p> <p>The less obvious problem comes from the statistical analysis of test scores. The reliability coefficient for my exams is typically lower in Micro than my A&P exams. This</p>

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has been a pattern for many years. I have attributed it to the dramatically different subject material. Micro has a more deviously conceptual nature compared to A&P, it's a very different kettle of fish. However, the reliability coefficient was noticeably lower on the final exam. Something about these exams is not working. A confounding factor was the grade distributions. It was strongly bimodal. We have increasingly observed bimodal grade distributions in the Science department in recent years, but it was dramatic in Micro this semester. I have interpreted this bimodal pattern as poorly prepared students, but I suspect an interaction with the exams. I shall overhaul the Micro exams in the future. (11/08/2017)