

COURSE SLO ASSESSMENT REPORT, SCC

Department: **Biology**

Course: **Biol-229 General Microbiology**

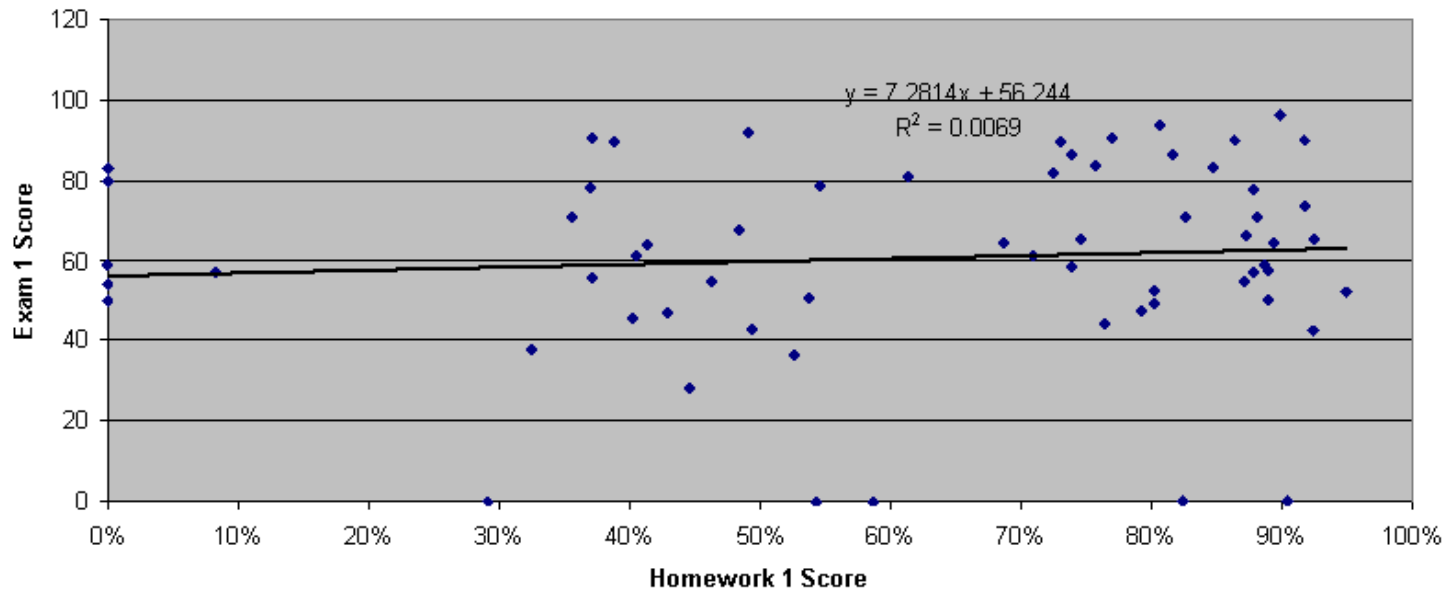
Year: 2012

Semester: Spring

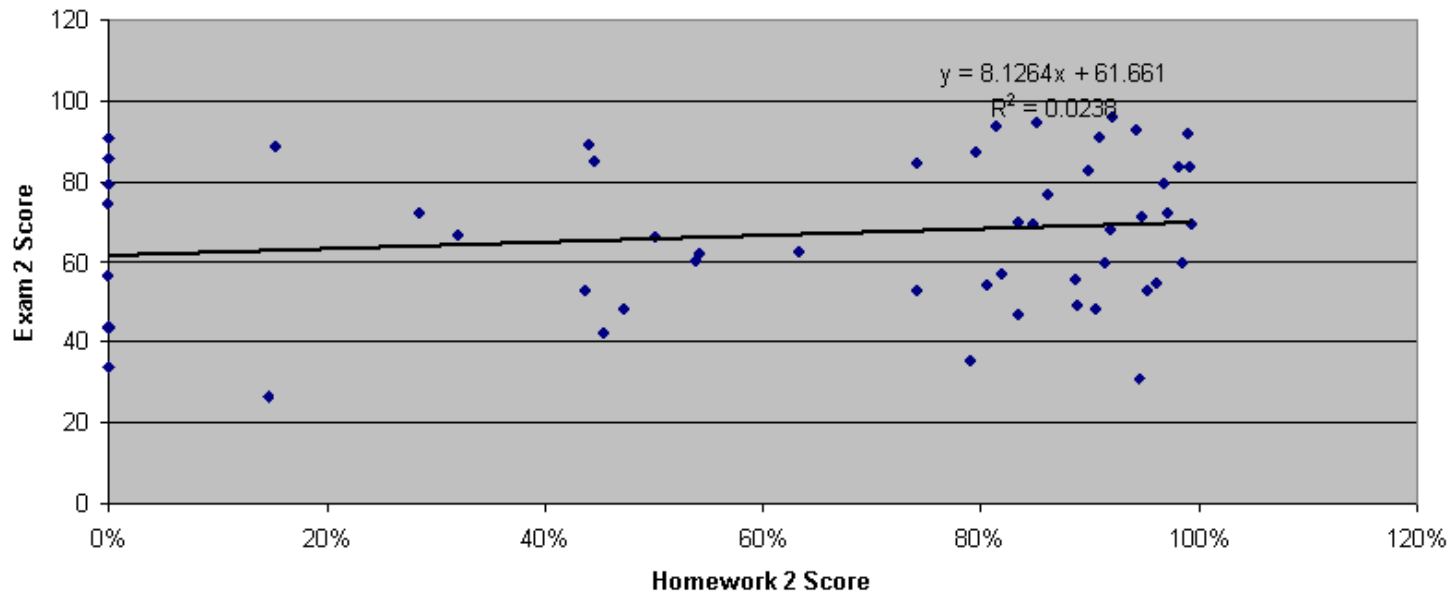
1) Outcome to be assessed	2) Means of assessment and criteria of success	3) Summary of data collected	4) Analysis of data	5) Plan of action/what to do next
<p>Demonstrate a coherent understanding of the diversity of microorganisms and their role in the biosphere.</p>	<p>Embedded questions (multiple choice, true/false) in an end- of the semester assessment. Students should be able to answer over 70% of the questions correctly</p>	<p>Of the 19 embedded questions, only 67.5% were answered correctly 73% were answered correctly by the class last semester.</p>	<p>There are 8 of the 19 questions that 70% or fewer students get correct. That is 3 more questions than last semester</p> <p>A more comprehensive analysis of homework scores and final scores and the outcome assessment quiz versus final grade follows. It interestingly but not surprisingly shows that student effort (reflected in final HW scores) strongly relates to success in the course as reflected by final exam scores and final course grades.</p>	<p>This semester I had to give the assessment before we finished the last chapter- which covers ecology and emphasizes the role of microorganisms. This accounts for the increase in the inability to answer some of the questions. I need to give this assessment on the last day of class may need to embed in final. I still need to develop a new DLA to cover microorganism diversity.</p> <p>Share some of the data with future students to help motivate them to engage fully in the course so they may succeed. Supplemental instruction will also be introduced in this course.</p>

<p>2) Outcome to be assessed</p> <p>Employ the principles of the scientific method to both laboratory and conventional investigations.</p>	<p>2) Means of assessment and criteria of success</p> <p>3 multiple choice questions in the end-of-semester assessment</p>	<p>3) Summary of data collected</p> <p>Only 56.6% answered the multiple choice questions correctly! Quite terrible. Anecdotaly, while I did not use the official rubric to score the unknown reports, they did very well on them. They can apply elements of the scientific method however, they obviously are missing some important aspects. 73.8% or greater answered these same questions correctly last semester.</p>	<p>4) Analysis of data</p> <p>Students understand elements of the scientific method but lack understanding of the entire process since they cannot answer the multiple choice questions regarding it.</p>	<p>5) Plan of action/what to do next</p> <p>The identification of an unknown microorganism is still a successful undertaking with the vast majority of students successfully employing scientific investigation. This project will continue to be utilized and I will analyze the reports using the rubric next semester to collect more data to verify. I need to integrate more explanation of the scientific method into the course since evidently some students are missing key concepts! I should also develop a lab project or DLA to address.</p>
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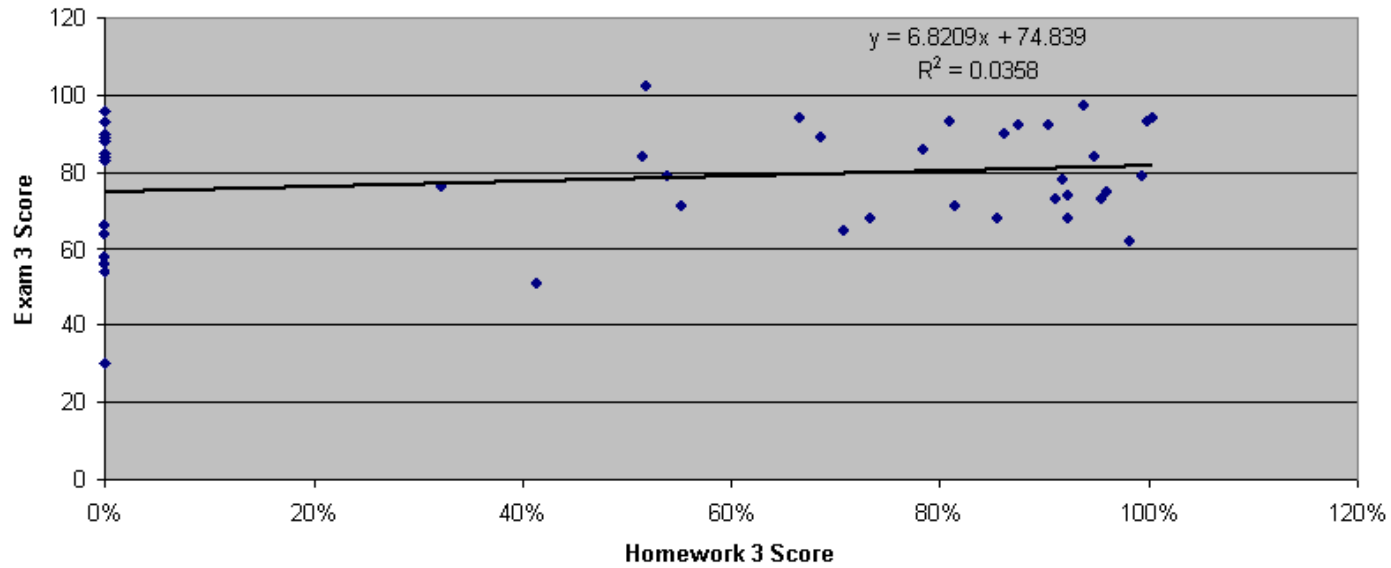
Homework 1 vs. Exam 1 Scores



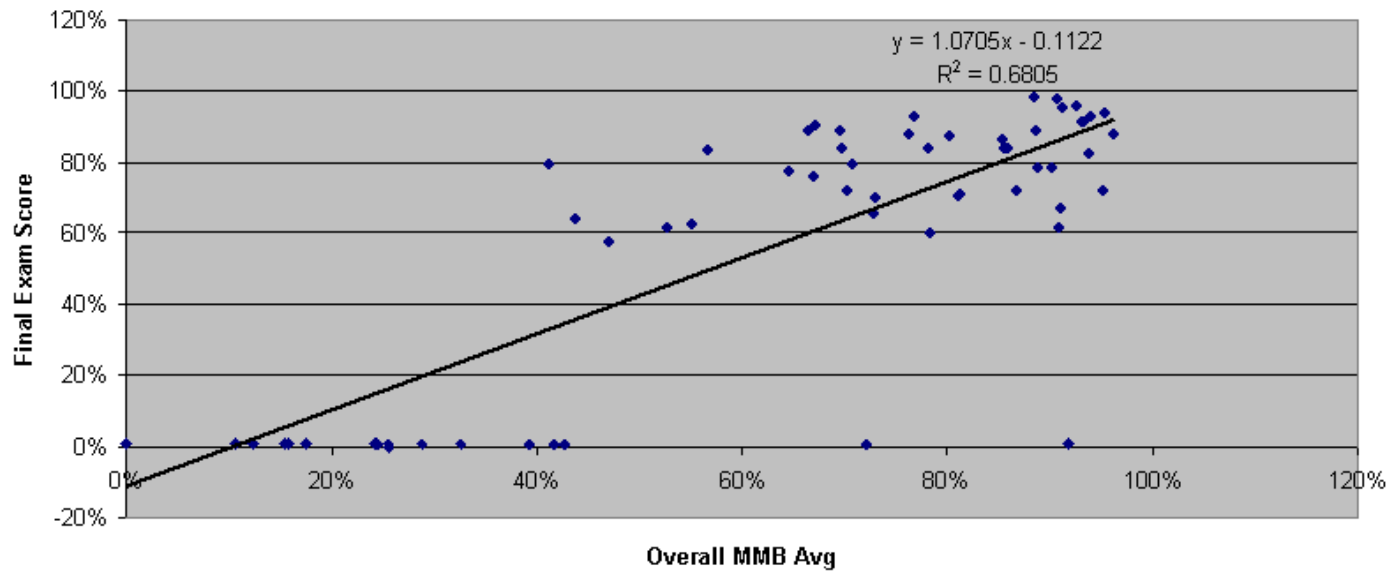
Homework 2 vs. Exam 2 Scores

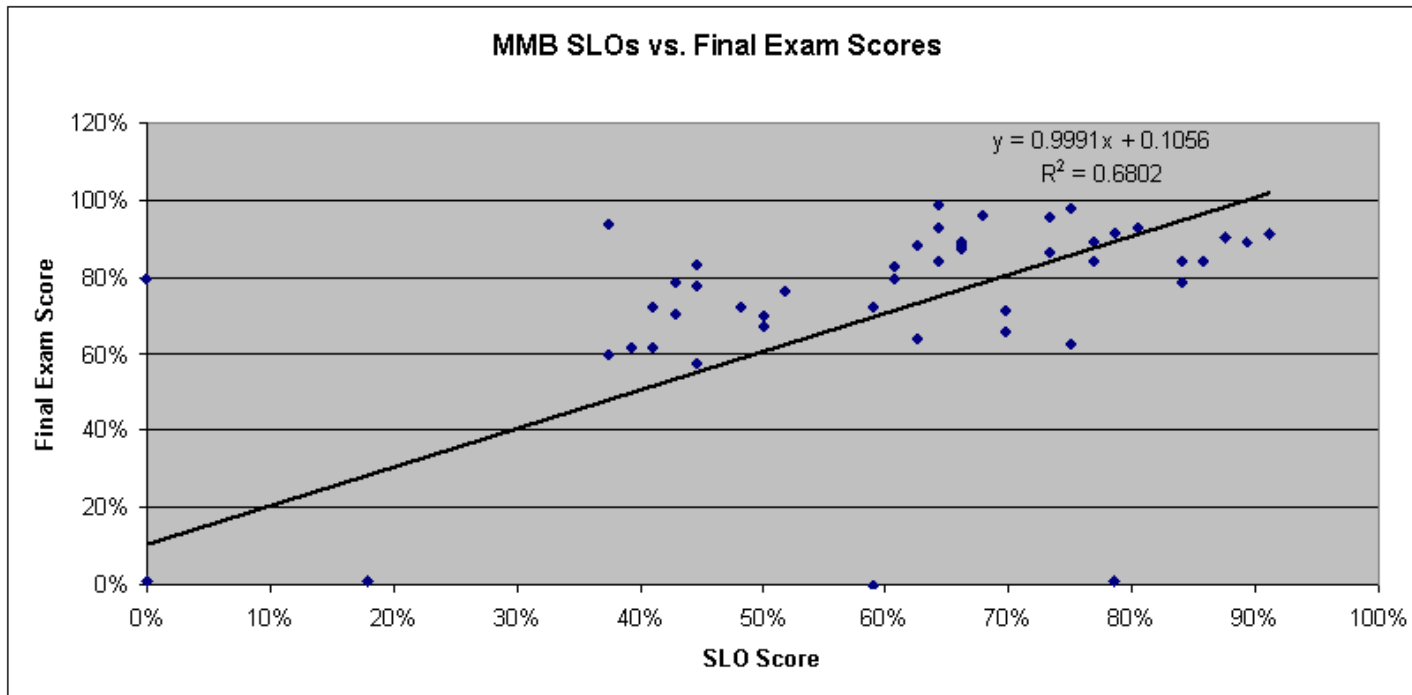


Homework 3 vs. Exam 3 Scores



MMB Homework Avg vs. Final Exam Score





- 75% of the students earning an A scored at least 80% on homework (and they averaged 86%).
- 70% of the students earning a B scored at least 80% on homework (and they averaged 80%).
- The 40 students who passed the class with an A, B, or C averaged 80% on the homework.
- The 21 students who withdrew or did not pass the class averaged 31% on their homework.

-comparing all students enrolled on day 1, the pass rate is 65%. Not passing includes all drops and grades lower than a C.

15 A
 13 B
 12 C
 2 D
 1 F

63-43=20 students withdrew from the course (32%)