

Course Outcomes Guide (COG)

Course Title: Bio117-21

Date: 5/11/15

Course Team: Nickerson

Expected Learning Outcomes

- Students will access, process, analyze and synthesize scientific information.
- Students will apply knowledge of specific course content to enhance understanding of personal and societal scientific issues.
- Students will be able to understand and apply the scientific method and use critical thinking skills in order to generate, graph, analyze and interpret scientific data and reports.
- Students will use verbal and writing skills to clearly communicate biological concepts in a comprehensive scientific report.
- Students will apply computer and information literacy skills in the preparation of a scientific report.

Assessment

- 3 multiple choice / short answer exams (100 pts each)
- 1 cumulative final exam (100 pts)
- 15 lecture homework assignments (P/F, 10 pts each)
- 10 online lecture quizzes (high ten, worth 10 points each)
- 6 lab quizzes/assignments (20 pts each)
- 2 independent online learning (50 each)
- 1 scientific research paper: Ecology of a Freshwater Stream

Validation

Homework assignments and quizzes are assessed automatically by online educational programs designed by the publishers of the course textbook. Each assessment item is linked to a specific learning objective and ranked by difficulty level 1-5.

The Common Final Exam has been developed in house by the instructor.

Results

SP15 Bio117-21 Nickerson						
Number of students in section	8 (8 finished/11 began)					
Number of students completing Common Final Exam (graded scantrons)	6 (6/8)					
% Withdrawn	27 (3/11)					
% Walk-away F	25 (2/8)					
% Student success	75 (6/8)					
Average % score Common Final Exam	71.7					
Average % score Critical Thinking / Gen. Ed. Skills	97					
Average Course Grade	68.9					
Course Grade Distribution (%)	A	B	C	D	F	W
	0	25	50	12.5	0	

Follow-up

The average grade in this class is a B because all students enrolled passed the pre-requisite course of Bio101 with a C or better. Many weaker Bio101 students did not continue into Bio102.

Following a state wide meeting of biology instructors and program directors it was determined that this course curriculum is in general alignment with all other MD community colleges in both scope and difficulty for a majors level introductory (100 level) biology course. The course content will be adjusted to include genetics and photosynthesis. The topics of cell communication and the molecular biology of DNA labs will be eliminated.

Budget Justification

Students will rely heavily on LSC services for:

- access to course materials, physical and online
- printing of course handouts and notes
- private tutoring
- group study

Budget Justification

Students will rely heavily on SLC services for:

- access to course materials, physical and online
- printing of course handouts and notes
- private tutoring
- group study