

Outcome b. Graduates will demonstrate an ability to design and conduct experiments, as well as to analyze and interpret data.

Tools used:

Course Specific Rubrics

Data Collection:

Rubrics are completed by course instructors through evaluation of specific coursework, including in-class assignments, homework assignments, exams, and projects

Frequency of Data Collection:

The data are collected every time courses are taught.

Data Analysis:

The data obtained are analyzed every year by the instructor and by the program faculty members.

Closing the Loop:

This outcome is subject to review every year based on performance criteria and metrics and specific action items are developed, if necessary, to revise the content or instruction of the courses. The analyzed data are presented separately to the following groups in meetings.

- a) Feedback to students on all assignments
- b) Feedback to and discussion with faculty on rubric results
- c) Integration of results from faculty discussion on rubric results

Performance criteria and metrics:

Rubrics for each course are given on the BMEG assessment page (<https://cbe.statler.wvu.edu/home/biomedeng/bmeg-assessment>) or can be reached by following the link on the course number in the table below.

Students should reach a level of proficiency defined as a goal metric value of 3.0 based on the rubric scale of

- (1) not proficient,
- (2) progressing to proficiency,
- (3) proficient, and
- (4) superior proficiency.

Course Assessed	Performance Criteria Number	Aspect used on rubric
BMEG 236	Performance Criterion 1	Formulate your own scientific hypothesis about human physiology from the scientific literature
	Performance Criterion 2	Design, conduct, and analyze/interpret an experiment that looks at monitoring aspects related to human physiology
BMEG 350	Performance Criterion 1	Design an experiment pertinent to the relevant modules
	Performance Criterion 2	Develop laboratory reports (pre and post lab reports) that follows the guidelines given in class and are pertinent to the individual lab module
	Performance Criterion 3	Analyze and interpret data pertinent to the relevant modules