



Course-Level Assessment Project Final Report

To complete the Final Report, type your responses to the prompts below. Share a copy of the document with your supervisor and the Associate Provost of Assessment and Institutional Research.

Faculty Name(s): Dr. Jennifer Fain-Thornton
Division/Department: Science Division/Biology
Course Assessed: BIOL 210 Human Anatomy & Physiology I

Step 1. Define

Explain the purpose or rationale for assessing the selected course.

Identify which course objective(s) were assessed. Briefly explain why you selected these course objectives for assessment.

Identify to which program goal(s) selected course objective(s) align.

The rationale for assessing the selected course allows for the evaluation of a student's ability to meet the core standards for this general education course designed for premedical, physical education, nursing, physical therapy and other allied health disciplines. Course objectives 1 and 2 were assessed. **Course Object 1** - Develop a vocabulary of appropriate terminology to effectively communicate information related to the anatomy and physiology of the following body systems: integumentary, skeletal, nervous, endocrine, and muscular. **Course Object 2** - Identify and describe the microscopic and macroscopic anatomy of the structures involved in the above body systems. These objectives examine the student's ability to develop the appropriate anatomical and physiological terminology associated with the microscopic and macroscopic structures involved with five of the eleven human organ systems. Students use scientific inquiry and scientific literacy in accomplishing these course goals. The selected course is not part of a program so no program goals were assessed.

Step 2. Design

Describe the instrument (project/assignment) used to assess identified course objective(s).

What benchmarks and/or controls were established?

Explain how the assessment instrument was externally reviewed and validated.

To assess the course objectives a signature assignment on forensic anthropology was used. Students were required to review and select literature resources that support knowledge obtained in the course on the skeletal system. Students develop and write a scientific document on bone development and interactions between the organ systems, decomposition of the human body, and scientific disciplines that can contribute to the information about the human condition. In the process of writing this document, students communicate and use terminology associated with the human body systems and describe the microscopic and macroscopic structures. The artifacts associated with this assessment were reviewed and validated by a scoring process identified by the college. Initially the artifacts were reviewed and scored by three science faculty and one nursing faculty. During a second scoring process, three science faculty reviewed and scored the documents.

Step 3. Implement

Explain how the assessment was implemented.

Did any unexpected challenges arise in implementing the assessment?

The assessment was implemented as an assignment in the course. Each semester all BIOL 210 Anatomy and Physiology I sections complete this assignment. There were no challenges when implementing the assignment.

Step 4. Analyze

Explain the data that was collected and how the data was analyzed.

To what degree did students meet the established benchmarks?

Consider intention of learning activity and assessment as compared to results.

Initially the data showed that most of the students exceeded the expectations on the assignment. After the fall 2020 scoring the rubric was edited to create a more defined description of the performance levels. In the spring of 2021, there were 86 artifacts scored for the course level objectives. After scoring these artifacts the data showed that for course objective #1 and 2, eight students exceed expectations. They were able to demonstrate an extensive knowledge of anatomical and physiological processes that relate to the human condition. Sixty-four for course objective #1 and 62 for course objective #2 meet the expectations for the course level objectives. They demonstrated an adequate knowledge of anatomical and physiological processes that relate to the human condition. Ten artifacts indicated that students were underdeveloped for course object #1 and 12 for course objective #2. There were 4 students who did not meet the expectations for this assignment for course objective #1 and #2.

Step 5. Modify/Maintain

Based on analysis of data, describe changes made to the course and/or course materials.

Summarize the results of implementing changes, re-administering the assessment, and collecting and analyzing new data.

Initially artifacts from fall 2020 were scored. Modification were made in the spring 2021 semester based on scoring from the fall semester. The outcomes of the scoring data from the artifacts demonstrated that modifying the instructions on the assignment and the rubric could contribute to student success in obtaining course object number 1 and 2 goals. The assignment instructions were edited to include a statement for students to show how the organ systems are interrelated. In the initial assessment students did not always demonstrate or show the relationship between the organ systems. The instructions were edited and reads as, Describe the process of bone development and remodeling, including the cells involved *and* their physiological roles. Relate the skeletal system to the integumentary, muscular, nervous, and endocrine systems in your discussion as evidence of Course Objective 1. After reviewing the artifacts from spring 2021 semester students successful achieve this learning outcome. The rubric was edited in relation to course objective 2 to provide a more defined use of the terms microscopic and macroscopic anatomy and how these terms relate to physiology. The scoring rubric now includes the language extensively, adequately, attempts and does not distinguish between the terms to help define the performance levels.

Final Results and Recommendations

The results of this assessment project indicate that students are meeting the learning outcomes for the course, however, there were 4 out of 86 artifacts that were underdeveloped. Students in this category may need more guidance in learning the core concepts covered in the course and the assignment. The data shows that students can use inquiry, information literacy, and technology in their learning. This assignment will be used in future assessments. There are no major modifications that will be made to this assignment at this time

Supervisor Signature _____ Date _____

Please forward a copy of the signed report to the Associate Provost of Assessment and Institutional Research.