

# 2016-2017 Human Physiology Assessment Report

**Target:** HPHY 212: Evidence, Inference, and Biostatistics course learning outcomes

**Purpose:** Revise the HPHY 212 course learning outcomes and align them with the six department level learning outcomes for students completing a major in human physiology.

**Assessors:** Philip Matern and Austin Hocker

HPHY 212 was selected as the target for assessment, because it was being adapted into an online course. The process of reviewing and building the course into a new format provided the opportunity to evaluate the course learning outcomes as they are applied in both the face-to-face and online classrooms. HPHY 212 is currently listed as introducing each of the department level learning outcomes, but the overall course objectives had not been reevaluated with the current curriculum map and department-level learning outcomes.

The outcomes were reevaluated in relation to the department-level learning outcomes:

1. **Content & Intellectual Breadth:** Demonstrate content knowledge and understanding of terminology, concepts, and relationships in human anatomy and physiology.
2. **Inquiry:** Utilize a broad foundation of anatomical relationships and physiological principles in analysis, application, and synthesis related to human physiology and pathophysiology.
3. **Critical Thinking:** Critically evaluate scientific information to help make decisions with respect to personal health, clinical applications, and research in human physiology.
4. **Life-long Learning:** Demonstrate life-long learning skills, which include deciding what needs to be learned, articulating a learning plan, and implementing this plan.
5. **Communication:** Communicate effectively, to a variety of audiences, in various modes.
6. **Ethics & Professionalism:** Demonstrate knowledge of ethical and professional behavior related to academic integrity, communication with others, and during individual and cooperative work.

The existing HPHY 212 course-level learning outcomes to be assessed were:

1. Describe how new physiology knowledge is created
2. Describe how new physiology knowledge is communicated to scientists and the general public
3. Perform basic statistical tests
4. Fulfill the requirements necessary to participate in human subjects research
5. Discuss the key factors necessary for navigating a Human Physiology major at the University of Oregon
6. Demonstrate the keys steps required for lab reports

HPHY 212 course and lecture level objectives were revised and/or rewritten to better match the existing learning activities and priorities of the course. The course-level outcomes were then matched to represent each of the department-level learning outcomes:

1. Describe the process of how new scientific knowledge is generated (**content**)
2. Search, collect, and evaluate relevant information from primary and secondary sources (**content**)
3. Recognize the complexity of scientific questions and identify methodological concerns in research (**inquiry**)
4. Apply research methodologies to define and evaluate questions (**life-long learning**)
5. Analyze data with appropriate statistical tests and effectively communicate findings (**critical thinking**)
6. Understand ethical concepts in conducting research and how they apply to medical practice (**ethics**)
7. Demonstrate key skills required for effective communication of scientific research and knowledge (**communication**)

**Next Steps:** These learning outcomes will be implemented in the upcoming iterations of the HPHY 212.