College of Arts and Sciences, University of Oregon (Fall 2014)

Curriculum map

Human Physiology (HPHY) Undergraduate Major

Learning outcomes (LOs): Having completed a major in human physiology, a student will be able to:

- 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.

Key: I = introduces outcome; D = develops outcome; A = assesses mastery of outcome

Course(s)	Title/description	LO 1	LO 2	LO 3	LO 4	LO 5	LO 6
	200-level required courses						
HPHY 211	Medical Terminology	I		I	I	I	I
HPHY 212	Evidence, Inference, & Biostatistics	I	I	I	I	I	I
	300-level required courses						
HPHY 321	Human Anatomy I	D		I	D		D
HPHY 322	Human Physiology I	D	I/D	I/D	D	I/D	I/D
HPHY 323	Human Anatomy II	D		D	D		D
HPHY 324	Human Physiology II	D	D	D	D	D	D
HPHY 325	Human Anatomy & Physiology III	D/A	D/A	D/A	D		D
HPHY 371	Physiology of Exercise	D/A	D/A	D/A	D/A	D/A	D/A
	300-level electives	D/A	D/A	D/A	D/A	D/A	D/A
	400-level capstone	A	A	A	A	A	A

Learning outcomes explanations

Human Physiology (HPHY) Undergraduate Major

- 1. **Content & Intellectual Breadth:** Demonstrate content knowledge and understanding of terminology, concepts, and relationships in human anatomy and physiology.
 - 1.1. Identify problems, articulate questions or hypotheses, and determine the need for information.
 - 1.2. Access and collect the needed information from appropriate primary and secondary sources.
 - 1.3. Use quantitative and qualitative methods, including the ability to recognize assumptions, draw inferences, make deductions, and interpret information to analyze problems in context and draw conclusions.
- 2. **Inquiry:** Utilize a broad foundation of anatomical relationships and physiological principles in analysis, application, and synthesis related to human physiology and pathophysiology.
 - 2.1. Recognize complexity of problems and identify different perspectives from which problems and questions can be viewed.
 - 2.2. Evaluate and report on conclusions, including discussing the basis for and strength of findings, and identify areas where further inquiry is needed.
- 3. **Critical Thinking:** Critically evaluate scientific information to help make decisions with respect to personal health, clinical applications, and research in human physiology.
 - 3.1. Identify, analyze, and evaluate reasoning and construct and defend reasonable arguments and explanations.
- 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.
 - 4.1. Demonstrate in-depth knowledge and skills in Human Physiology.
 - 4.2. Identify the fundamental principles of Human Physiology.
 - 4.3. Apply the research methods and theoretical models of Human Physiology to define, solve, and evaluate problems.
 - 4.4. Transfer knowledge and skills gained from general and specialized studies to new settings and complex problems.
 - 4.5. Demonstrate life-long learning skills, including the ability to place problems in personally meaningful contexts, reflect on one's own understanding, demonstrate awareness of what needs to be learned, articulate a learning plan, and act independently on the plan.
- 5. **Communication:** Communicate effectively, to a variety of audiences, in various modes.
 - 5.1. Demonstrate general academic literacy, including how to respond to needs of audiences and to different kinds of rhetorical situations, analyze and evaluate reasons and evidence, and construct research-based arguments using Standard Written English.
 - 5.2. Effectively use the common genres and conventions for writing within Human Physiology.
 - 5.3. Prepare and deliver effective oral presentations.

- 5.4. Collaborate effectively with others to share information, solve problems, or complete tasks.
- 5.5. Produce effective visuals using different media.
- 5.6. Apply the up-to-date technologies commonly used to research and communicate within Human Physiology.
- 6. **Ethics & Professionalism:** Demonstrate knowledge of ethical and professional behavior related to academic integrity, communication with others, and during individual and cooperative work.
 - 6.1. Assembling and analyzing a set of sources that students have determined are relevant to the issue they are investigating.
 - 6.2. Acknowledging clearly when and how they are drawing on the ideas or phrasings of others.
 - 6.3. Learning the conventions for citing documents and acknowledging sources appropriate to the field they are studying.
 - 6.4. Examine various concepts and theories of ethics and how to deliberate and assess claims about ethical issues.
 - 6.5. Apply ethical concepts and theories to specific ethical dilemmas students will experience in their personal and professional lives.

General Education offerings

Human Physiology (HPHY)

The Department of Human Physiology has historically offered between three and five 100-level general education courses. Although our 101, 102 and 103 course series was originally developed 15+ years ago to recruit freshman to our major, student recruitment is no longer one of our goals. Instead, our intention is to provide non-science majors with the relevant knowledge, skills, and abilities to assist them in making informed choices related to their health. Recently, HPHY has aligned with the Science Literacy Program to begin creating new 100-level courses to replace some of the historic offerings. To date, the new course HPHY 111 *The Science of Sex* was developed and offered for the first time during summer 2014. One additional 100-level courses will be developed by a new faculty hire in collaboration with the Science Literacy Program during this academic year. Our vision is to provide one 100-level course each of fall, winter, spring, and summer term to provide non-science majors with courses that satisfy the requirement for a Science Group course, meet the goals of the Science Literacy Program, and promote human health. Specifically, the Science Literacy program's mission is to "promote student-centered teaching and communication of science where non-science majors are empowered to consider scientific approaches to societal issues and have the opportunity to learn how to process and critique scientific information" (https://scilit.uoregon.edu).

Although our course offerings are still in flux, below is a reasonable estimate of our plan for annual offerings:

Term	Course number	Course title
Fall	HPHY 1XX	Healthy Living through Science (tentative title)
Winter	HPHY 104	Understanding Human Disease
Spring	HPHY 105	Principles of Nutrition
Summer	HPHY 111	The Science of Sex
Summer	HPHY 1XX	Healthy Living through Science (tentative title)