PHYSIOLOGY (PHYSIOL)

PHYSIOL 335 — PHYSIOLOGY
5 credits.

Lectures, recitations, demonstrations, and labs. Not open to Fr
Requisites: Biol or zool gen chem before enroll.
Course Designation: Breadth - Biological Sci. Counts toward the Natural
Sci req
Level - Intermediate
L&S Credit - Counts as Liberal Arts and Science credit in L&S
Repeatable for Credit: No

PHYSIOL 435 — FUNDAMENTALS OF HUMAN PHYSIOLOGY
5 credits.

An advanced human physiology course that explores the major organ
systems. The main learning objective is an understanding of the
mechanisms through which homeostasis is integrated and maintained.
The class includes weekly: three lectures, one discussion, and one
inquiry-based laboratory period. Zoo 102, 151, 152, or Biocore 303/383
required. CHEM 103, 104, 109, or 115 required. PHYSICS 103, 104, 201,
202, 207, or 208 required.
Requisites: Junior standing or higher required.
Course Designation: Breadth - Biological Sci. Counts toward the Natural
Sci req
Level - Advanced
L&S Credit - Counts as Liberal Arts and Science credit in L&S
Repeatable for Credit: No

PHYSIOL/NTP/PHMCOL-M 610 — CELLULAR AND MOLECULAR
NEUROSCIENCE
4 credits.

Study of original papers leading to an understanding of the molecular
basis of electrical activity in neurons. Topics include voltage-sensitive
currents, molecular biology of neuronal receptors, synaptic transmission
and sensory transduction. Lectures supplemented with experimental
demonstrations and discussion sessions.
Requisites: Zoo 523 or equiv
Course Designation: Breadth - Biological Sci. Counts toward the Natural
Sci req
Level - Intermediate
L&S Credit - Counts as Liberal Arts and Science credit in L&S
Grad 50% - Counts toward 50% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2017

PHYSIOL/ANATOMY/NTP/PHMCOL-M/PSYCH 611 — SYSTEMS
NEUROSCIENCE
4 credits.

Introduction to the anatomy and physiology of the mammalian nervous
system. Lectures will cover the neuroanatomy of the major subdivisions
of the human brain, the major sensory and motor systems, and higher
order functions. Lab/discussion sections will emphasize readings from
the primary literature and hands-on dissections.
Requisites: PHYSIOL/NTP/PHMCOL-M 610
Course Designation: Level - Advanced
L&S Credit - Counts as Liberal Arts and Science credit in L&S
Grad 50% - Counts toward 50% graduate coursework requirement
Repeatable for Credit: No

PHYSIOL/NEURODPT/NTP/ZOOLOGY 616 — LAB COURSE IN
NEUROBIOLOGY AND BEHAVIOR
4 credits.

Students will do three independent experimental modules exploring
neuropysiology and behavior, each taking 4-5 weeks. Students will work
in groups of 2 or 3 and will learn techniques and then develop their own
short investigations into each of three separate areas of neurobiology.
There will be continual interaction between students and faculty.
Requisites: ZOOLOGY/NTP/PSYCH/ZOOLOGY 523 and NTP/PHYSIO/
PSYCH/ZOOLOGY 524 or NTP/PHMCOL-M/PHYSIOL/NTP/PHMCOL-
M 610 and ANATOMY/NTP/PHMCOL-M/PSYCH/ANATOMY/
NTP/PHMCOL-M/PHYSIOL 611
Course Designation: Level - Advanced
L&S Credit - Counts as Liberal Arts and Science credit in L&S
Grad 50% - Counts toward 50% graduate coursework requirement
Repeatable for Credit: No

PHYSIOL/NTP 629 — MOLECULAR AND CELLULAR MECHANISMS OF
MEMORY
3 credits.

Course will focus on the cell signaling and the resulting structural
changes that occur at neuronal synapses during memory formation.
The aim is to understand how the synaptic changes underlying memory
occur.
Requisites: Crse in cellular neurosci (Neurosci 523 or equiv);
BIOCHEM 501 or equiv
Course Designation: Breadth - Biological Sci. Counts toward the Natural
Sci req
Level - Advanced
L&S Credit - Counts as Liberal Arts and Science credit in L&S
Grad 50% - Counts toward 50% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2016
PHYSIOL 675 — SELECTED TOPICS IN PHYSIOLOGY
1-3 credits.

Each topic taught once every two years: advanced cardiovascular physiology, advanced respiratory physiology, advanced endocrinology, membrane transport physiology and neurobiology.

Requisites: None
Course Designation: Breadth - Biological Sci. Counts toward the Natural Sci req
Level - Advanced
L&S Credit - Counts as Liberal Arts and Science credit in L&S
Grad 50% - Counts toward 50% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Spring 2017

PHYSIOL 699 — INDEPENDENT WORK
1-4 credits.

Requisites: Consent of instructor
Course Designation: Level - Advanced
L&S Credit - Counts as Liberal Arts and Science credit in L&S
Repeatable for Credit: Yes, unlimited number of completions

PHYSIOL/KINES 773 — CARDIORESPIRATORY ADAPTIONS TO ENVIRONMENT AND EXERCISE
3 credits.

Examination of the effects of acute and chronic exercise and exposure to hypo- and hyperbaric environments on physiological responses; mechanisms underlying these responses.

Requisites: Physiol 720 or cons inst
Course Designation: Grad 50% - Counts toward 50% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2017

PHYSIOL 799 — INDEPENDENT READING
1-4 credits.

Requisites: Consent of instructor
Course Designation: Grad 50% - Counts toward 50% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions

PHYSIOL 901 — SEMINAR
1 credit.

Requisites: A course in animal physiology
Course Designation: Grad 50% - Counts toward 50% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions

PHYSIOL 990 — RESEARCH
1-9 credits.

Requisites: Consent of instructor
Course Designation: Grad 50% - Counts toward 50% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions