

# PHYSIOLOGY - GRADUATE (GPSO)

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**GPSO 6010 Medical Physiology (6)**

A major physiology course taught by various faculty in the Physiology Department. This course covers most important concepts in medical physiology, along with updated information and in-depth discussion in all fields of interest related to physiological function.

**GPSO 6060 Experimental Physiol Lab (2)**

This course provides students' hands-on experiences to perform the physiological experiments with human body, animals and computer simulation modeling systems.

**GPSO 6250 Membrane Physiology (2)**

The course covers the major structure and function of ion channels, the basic physiological mechanisms of voltage gated ion channels, and transmitter gated ion channels. Also a brief consideration will also be given to certain pathophysiological mechanisms leading to disease.

**GPSO 7175 Med Terminology (3)**

This on-line course provides definition and appropriate use of common medical terminology and abbreviations. It is especially beneficial for students who are newly committed in medical sciences and who have foreign culture background.

**GPSO 7180 Selected Topics (1-5)**

Self-study under the direction of a faculty mentor in a selected topic in physiology. A final report is required.

**GPSO 7320 Renal Physiology (3)**

This course provides updated information regarding renal function and renal/hormonal control of blood pressure. The roles of kidney function in hypertension, diabetes mellitus and other human diseases are also covered.

**GPSO 7350 Translational Physiology (2)**

Seminars in physiology present cutting edge research scientists of national prominence and Tulane Faculty. A one-page report is required at the end of each seminar.

**Course Limit:** 2

**GPSO 7560 Signal Transduction/Hormone Ac (2)**

This course provided current molecular mechanisms for cellular signal transduction pathways and hormone action including membrane receptors and downstream pathways, second messenger systems, receptor-ion channels, kinase/phosphatases, extracellular matrix signaling, signaling and cell death, Wnt signaling pathways and nuclear receptor signaling.

**GPSO 7600 Integrative Cardiovascular Physiology (3)**

This advanced course covers in-depth topics in cardiovascular physiology and its association with other systems to regulate body function. The objective of the course is to provide the students with comprehensive knowledge of cardiac and vascular function and its regulation by neural, hormonal and other systems.

**GPSO 7910 Seminar Physiology (1)**

Seminars in physiology present cutting edge research scientists of national prominence and Tulane Faculty. A one-page report is required at the end of each seminar.

**Course Limit:** 2

**GPSO 7911 Independent Study (1-3)**

Students may arrange for independent study with approval of an instructor and their faculty adviser. Details of each student's program will vary, but all will involve some combination of research, readings, oral reports, and written work.

**Course Limit:** 4

**GPSO 7922 Independent Study (1-3)**

Students may arrange for independent study with approval of an instructor and their faculty adviser. Details of each student's program will vary, but all will involve some combination of research, readings, oral reports, and written work.

**Course Limit:** 4

**GPSO 7980 Research (2)**

Research thesis under the direction of faculty. Students are required to independently choose topic, conduct experiments, analyze and report data. A concise thesis based on experimental data is also required.

**GPSO 7990 Research (1-9)**

Research thesis under the direction of faculty. Students are required to independently choose topic, conduct experiments, analyze and report data. A concise thesis based on experimental data is also required.

**Prerequisite(s):** GPSO 7980.

**GPSO 9990 Dissertation Research (0)**

Research thesis under the direction of faculty. Students are required to independently choose topic, conduct experiments, analyze and report data. A concise thesis based on experimental data is also required. Course may be repeated up to unlimited credit hours.

Enrollment limited to students in the Physiology department.

**Maximum Hours:** 99