

Physiology

College of Medicine

Graduate study in physiology is designed to prepare candidates for careers as independent scientists in academics, industry, and government positions. Admission to the graduate program is competitive and is based upon academic background, professional recommendations, performance on the Graduate Record Examination (GRE), experience, and when possible, personal interviews. Applicants should complete an undergraduate degree in biological sciences, chemical sciences, physical sciences, mathematics, psychology, or engineering. It is recommended that applicants complete courses in organic chemistry, physical chemistry, calculus, physics, and the biological sciences, as well as have some research experience.

Students will have the opportunity to join faculty research programs across a spectrum of topics such as neural, endocrine, cardiovascular, renal, respiratory, sensory, and muscle physiology. Research activities employ systems, cellular, and molecular approaches. The program of study is tailored to the individual background and career goals of the student and stresses an interdepartmental approach both in the selection of courses and in the pursuit of research. Students are expected to participate in graduate seminars, journal clubs, research seminars; to interact with visiting scholars; and to present the results of their research at local and national meetings. Teaching opportunities leading to a graduate certificate in teaching is also available. Financial aid is available to the students accepted to the program.

Admission Requirements

Admission to the Ph.D. program in Physiology is through the Integrated Biomedical Sciences (IBS) Curriculum. Inquiries regarding admission should be directed to Director, Integrated Biomedical Sciences Curriculum, University of Kentucky, College of Medicine <http://graduate.med.uky.edu/integrated-biomedical-sciences>. For information about the Ph.D. program in Physiology, please contact the Director of Graduate Studies, Department of Physiology. Information may also be obtained from the department Web site: <http://physiology.med.uky.edu/>.

Graduate Courses

PGY 412g	Principles Of Human Physiology Lectures	(4)
PGY 502	Principles Of Systems, Cellular And Molecular Physiology (Same As BIO 502)	(5)
PGY 504	Independent Work In Physiology	(2-4)
PGY 535	Comparative Neurobiology And Behavior (Same As BIO 535)	(3)
PGY 560	Pathophysiology: Integrative Study In Physiology And Medicine	(1)
PGY 601	Mammalian Endocrinology (Same As ASC 601)	(3)
PGY 602	Readings In Systems, Cellular And Molecular Physiology	(3)
PGY 604	Advanced Cardiovascular Physiology	(3)
PGY 606	Advanced Neurophysiology	(3)
PGY 608	Advanced Renal Physiology	(3)
PGY 609	Advanced Respiratory Physiology	(3)
PGY 612	Biology Of Aging (Same As BIO/ANA/GRN 612)	(3)
PGY 615	Seminar In Teaching Medical Science (Med Science Teaching I) (Same As GRN 615)	(2)
PGY 616	Practicum In Teaching Medical Science (Med Science Teaching II)	(2)
PGY 617	Physiological Genomics	(2)
PGY 618	Molecular Neurobiology (Same As MI/ANA/BIO 618)	(4)
PGY 627	Proseminar In Physiological Psychology (Same As PSY 627)	(3)
PGY 630	Advanced Topics In Physiology	(1-3)

PGY 625	Muscle Forum	(1)
PGY 638	Developmental Neurobiology (Same As BIO/ANA/PSY 638)	(3)
PGY 650	Animal Physiology Laboratory (Same As BIO 650)	(2)
PGY 660	Biology Of Reproduction (Same As ASC /ANA 660)	(3)
PGY 710	Aging Of The Nervous System (Same As PHA/GRN/ANA 710)	(3)
PGY 749	Dissertation Research	(0)
PGY 766	Topical Seminar Behavioral Neuroscience (Same As PSY 766)	(3)
PGY 767	Disertation Residency Credit	(2)
PGY 768	Residence Credit For The Master's Degree	(1-6)
PGY 769	Residence Credit For The Doctor's Degree	(0-12)
PGY 774	Graduate Seminar In Physiology	(1)
PGY 791	Research In Physiology	(1-15)