INTEGRATIVE PHYSIOLOGY & MOLECULAR MEDICINE (IPMM)

IPMM 801 GRADUATE PHYSIOLOGY I 4 Credit Hours
Part 1 of a two part graduate physiology course drawn from the UNMC medical school curriculum. Lectures will cover circulatory, respiratory, renal, neurological and muscle physiology. This course can be taken alone or with Graduate Physiology II to provide a comprehensive understanding of human physiology.
Typically Offered: SPRING

IPMM 802 GRADUATE PHYSIOLOGY II 3 Credit Hours
Part 2 of a two part graduate physiology course drawn from UNMC medical school curriculum. Lectures cover gastrointestinal, endocrine, reproductive and sensory physiology. This course can be taken alone or with Graduate Physiology 1 to provide a comprehensive understanding of human physiology.
Typically Offered: FALL

IPPM 814 SCIENTIFIC WRITING 2 Credit Hours
A lecture/discussion-based course focusing on the writing skills needed to prepare each section of a manuscript for submission to scientific journals, as well as figure design, use of reference software and responding to reviewer critiques.
Prerequisite: Second or higher year of graduate study.
Typically Offered: FALL/SPR

IPPM 815 SCIENTIFIC COMMUNICATION 2 Credit Hours
A lecture/practicum-based course that will develop the communication skills needed to prepare various forms of oral scientific presentations including full-length and abbreviated seminars, elevator pitches, chalk talks, posters, and media/lay public communication. Preparation of multimedia including data presentation slides, posters, videos, and other forms of technology will also be covered. Pre-reqs: Professional or graduate student in their 2nd year or higher of their education.
Typically Offered: FALL/SPR

IPPM 817 APPLIED SCIENTIFIC WRITING 1 Credit Hour
This practicum develops the writing skills needed to prepare each section of a manuscript for submission to a scientific journal, as well as figure design, use of reference software and responding to reviewer critiques. Students must have sufficient research data to support a preliminary manuscript, which will be constructed through completion of individualized assignments throughout the course.
Prerequisite: concurrent enrollment in CIP 814, and permission of instructor.
Typically Offered: FALL/SPR

IPPM 896 RESEARCH OTHER THAN THESIS 1-9 Credit Hours
Student research that is clearly distinct from ongoing or planned thesis/dissertation work, or research/lab rotations performed prior to selecting a permanent Advisor or Supervisor.
Typically Offered: FALL/SP/SU

IPPM 916 CARDIOPULMONARY FUNCTION IN HEALTH & DISEASE 2 Credit Hours
A lecture/discussion-based course concerned with current advances in the pathophysiology of cardiovascular and pulmonary diseases such as heart failure and hypertension.
Prerequisite: CIP 806 (or equivalent; see instructor).
Typically Offered: FALL

IPPM 922 REDOX BIOLOGY IN HUMAN DISEASE 2 Credit Hours
Biochemical sources and regulation of reactive oxygen species and reactive nitrogen species, and their role in diseases such as diabetes, hypertension, cancer, and neurodegeneration.
Prerequisite: CIP 806 or equivalent; see instructor
Typically Offered: FALL

IPPM 930 PHYSIOLOGY & PATHOPHYSIOLOGY OF THE KIDNEY 2 Credit Hours
Integrative, cellular and molecular mechanisms of renal function, with emphasis on the alterations accompanying renal disease.
Prerequisite: PHYS 806 or equivalent; see instructor
Typically Offered: SPRING

IPPM 950 SPECIAL TOPICS IN PHARMACOLOGY 2 Credit Hours
To provide students with critical information needed for his/her dissertation research in situations where either no course exist or existing didactic courses are too extensive and deemed unnecessary.
Typically Offered: SPRING

IPPM 970 SEMINAR 1 Credit Hour
This course provides students with experience in presenting their own research in the form of abstract-based 10 min oral presentations, as well critical analysis of recent publications in the biomedical sciences.
Typically Offered: FALL/SPR

IPPM 999 DOCTORAL DISSERTATION 1-15 Credit Hours
Independent student research related to the PhD dissertation. This course may be utilized before or after successful completion of the comprehensive exam.
Typically Offered: FALL/SP/SU