

INTERDISCIPLINARY BIOMEDICAL SCIENCES (IBMS)

IBMS 600. Laboratory Safety. 1 Hour.

Semester course; 1 lecture hour. 1 credit. Describes health hazards commonly found in biomedical laboratories and their appropriate safety precautions, government regulations and emergency responses. Includes hazards of working with micro-organisms, experimental animals, and chemical, electrical and fire hazards. Graded as S/U/F.

IBMS 610. Laboratory Opportunities. 0.5 Hours.

Semester course; 0.5 credits. A concentrated presentation of the programs and research opportunities available to doctoral students in the School of Medicine. Graded as S/U/F.

IBMS 620. Laboratory/Clinical Rotations. 2 Hours.

Semester course; 2 credits. Students conduct laboratory and/or clinical rotations to gain direct exposure to individual SOM projects. Graded S/U/F.

IBMS 630. Critical Thinking. 1 Hour.

Semester course; 1 credit. Paper presentations and discussions of important topics in biomedical science.

IBMS 635. Cellular Signalling. 3 Hours.

Semester course; 3 lecture hours. 3 credits. Prerequisites: BIOC 503/504 with minimum grade of B, or permission of instructor. An interdisciplinary introduction to molecular mechanisms important in eukaryotic inter- and intracellular signaling. Topics covered: common signaling mechanisms (heterotrimeric G proteins and G-protein-coupled receptors, small G proteins, tyrosine kinases and MAP kinases, and ion channels), membranes, lipids and ions (calcium signaling, phosphoinositols and lipid signaling through GPCRs), immune and metabolic kinase cascades (AMP-activated kinase, NFκB and Jak/Stat pathways), and programmed cell death.

IBMS 680. Proposal Preparation. 1 Hour.

Semester course; 1 credit. Preparation of an NIH-style grant proposal to serve as the oral component of the Ph.D. qualifying examination. Graded S/U/F.

IBMS 690. Basic Health Sciences Research Seminar. 1 Hour.

Semester course; 1 lecture hour. 1 credit. Faculty and/or visiting lecturers present current research in basic health sciences. Students attend 12 seminars per semester in any of the basic health science or clinical departments in the School of Medicine and submit a one-paragraph (approximately 100-word) summary description of the seminar. Graded S/U/F.

IBMS 691. Special Topics in Interdisciplinary Biomedical Sciences. 0.5-4 Hours.

Semester course; variable hours. 0.5-4 credits. Lectures, seminars, tutorial sessions, Web-based courses and/or library research assignments in selected areas not available in other graduate-level courses or as a concentrated emphasis on a particular topic. Graded as S/U/F.

IBMS 692. Special Topics in Interdisciplinary Biomedical Sciences. 0.5-4 Hours.

Semester course; 0.5-4 variable hours. 0.5-4 credits. Lectures, seminars, tutorial sessions, Web-based courses and/or library assignments in selected areas not available in other graduate-level courses or as a concentrated emphasis on a particular topic.