MBIM - MICROBLGY & IMMUNOLOGY (MBIM)

MBIM 700 - Topics in Advanced Immunology (2 Credits)
Cutting-edge topics in immunology. Pass-Fail grading.
Prerequisites: cell biology or immunology course.

MBIM 710 - Basic and Clinical Immunobiology (3 Credits)
Immune system components, their functions and interactions. Immune system dysregulation and consequences as related to health and disease. Consideration of current topics of interest in immunology. Four lecture hours per week.
Prerequisites: cell/ molecular biology or 1 semester of Biochemistry.

MBIM 710L - Laboratory in Advanced Immunobiology (2 Credits)
Exercises and experiments on isolation, purification, and characterization of antibodies, lymphocytes, and macrophages and their involvement in immunologic reactions and interactions. Two three-hour laboratories per week.
Prerequisite or Corequisite: MBIM 710.

MBIM 711 - Advances in Biologically-based Complementary and Alternative Medicine (2 Credits)
Introduction of topics and discussion of cutting-edge research in the area of biologically-based Complementary and Alternative Medicine with special emphasis on immunological aspects of treatment and prevention of disease.

MBIM 720 - Comprehensive Microbiology (6 Credits)
Fundamental and clinical principles of microbiology and immunology as they relate to bacteria, viruses, fungi, and parasites. Major areas include immune system (organismic, cellular, and molecular levels), host-parasite interactions and infectious diseases (morphology, biology, and epidemiology). Lectures, conferences, and laboratories. Equivalent to MBIM 650 except there are no labs. Conferences devoted to literature reviews in basic microbiology and immunology.

MBIM 730 - Frontiers in Biomedical Sciences (3 Credits)
Concepts and molecular mechanisms of programmed cell death (PCD) or apoptosis, gene therapy, stem cells, and cell signaling.
Prerequisites: BS or MS degree.

MBIM 739 - Medical Bacteriology (3 Credits)
Description of bacterial structure and metabolism. How infectious agents cause disease, are identified and treated with chemotherapeutic agents. Comparison of diversity of host-pathogen interactions.

MBIM 740 - Virology (3 Credits)
Description of viral structure, chemical composition, and replication; new concepts of the role of viruses in genetics, immunity, and cancer, as well as in acute and chronic infections. Three lecture hours per week.
Prerequisites: minimum of one semester of biochemistry.

MBIM 757 - Special Topics in Microbiology and Immunology (2 Credits)
An intensive consideration of topics of current interest in microbiology and immunology. Course content varies by subject and title, but may not be repeated.

MBIM 780 - Research in Microbiology and Immunology (1-6 Credits)
A non-thesis course to provide training in laboratory techniques in specific areas of microbiology and immunology.

MBIM 790 - Independent Study (1-3 Credits)
Provides graduate students with an opportunity to develop their own course work in conjunction with the instruction. Contract approved by Instructor, Advisor and Department Chair or Graduate Director.

MBIM 801 - Seminar in Microbiology and Immunology (1-2 Credits)

MBIM 899 - Dissertation Preparation (1-12 Credits)