**Microbiology and Immunology (MIM)**

**Courses**

**MIM 425. Intro Immunology & Microbiology. 3 hours.**
Mechanisms of host defense; antigens, immunoglobulins and their reactions; antibody synthesis, regulation and the cellular immune response; bacterial and viral structure and function; mechanisms of pathogenesis. Course Information: Prerequisite(s): Consent of the instructor or registration in the College of Medicine.

**MIM 426. Medical Microbiology. 3 hours.**
Fundamental aspects of bacterial, fungal and viral pathogenesis, therapy, control and prevention of infectious diseases. Course Information: Prerequisite(s): Consent of the instructor.

**MIM 455. Microbiology Lab Rotation. 3 hours.**
Course in basic and applied methods essential for the study of nucleic acids, immunoglobulins, gene transfer, cell fusion, virological and immunological methods. Course Information: Satisfactory/Unsatisfactory grading only. May be repeated to a maximum of 6 hours. Students may register in more than one section per term. Prerequisite(s): Graduate standing.

**MIM 551. Immunology. 2 hours.**
Concepts in immunochemistry, immunogenetics, molecular immunology, cellular immunology and immunopathology at the intermediate level. Course Information: Prerequisite(s): GCLS 501, GCLS 502, GCLS 503 and GCLS 510 or consent of the instructor.

**MIM 553. Molecular Biology of Viruses. 2 hours.**
Animal viruses including basic structure and viral nucleic acids; emphasizes molecular organization of viral genomes; cellular and molecular events during virus replication and viral transformation. Course Information: Prerequisite(s): GCLS 501, GCLS 502, GCLS 503, and GCLS 511 or consent of the instructor.

**MIM 554. Molecular Aspects of Microbiology. 3 hours.**
Basic concepts of prokaryotic and eukaryotic genetics; gene structure and function; gene expression; molecular aspects of mutation and recombination; chromosome structure and function. Course Information: Prerequisite(s): BCHE 460.

**MIM 560. Microbial Pathogenesis. 2 hours.**
Genetics, molecular biology and physiology of pathogenic bacteria, and host-pathogen interactions. Course Information: Credit is not given for MIM 560 if the student has credit for MIM 552. Prerequisite(s): GCLS 501, GCLS 502, GCLS 503, and GCLS 511 or consent of the instructor.

**MIM 585. Cell Biology. 4 hours.**
Functional and structural organization of the cell with emphasis on the cellular basis of physiological activity. Course Information: Same as ANAT 585 and PHYB 585.

**MIM 594. Topics in Microbiology. 1-2 hours.**
Advanced topics are covered in depth. Topics vary yearly. Course Information: Prerequisite(s): BCHE 460 and MIM 451 and MIM 455 and MIM 552 and MIM 553 and consent of the instructor.

**MIM 595. Microbiology Seminars. 1 hour.**
Topics of current research interest are presented by guest lecturers from outside institutions in areas of molecular biology, bacteriology, virology and immunology. Course Information: Satisfactory/Unsatisfactory grading only.

**MIM 598. MS Thesis Research. 0-16 hours.**
M.S. thesis research on problems in microbiology, immunology, virology and molecular biology. Course Information: Satisfactory/Unsatisfactory grading only. Prerequisite(s): Graduate standing in microbiology and immunology.

**MIM 599. PhD Thesis Research. 0-16 hours.**
Ph.D. thesis research on problems in microbiology, immunology, virology and molecular biology. Course Information: Satisfactory/Unsatisfactory grading only. Prerequisite(s): Graduate standing in microbiology and immunology.