**Microbiology and Immunology (MIM)**

MIM 551. Advanced 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. Special Topics in Microbiology, Immunology and Virology. 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. Seminar in Microbiology and Immunology. 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. May be repeated. Presentation must be understandable to the broad Microbiology community in addition to the specialist.

MIM 598. Research in Molecular Biology and Immunology. 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. Research in Molecular Biology and Immunology. 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.