

# Microbiology and Immunology (MIM)

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## Courses

### **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.