# MICROBIOLOGY, IMMUNOLOGY, AND TROPICAL MEDICINE (MICR)

### **Explanation of Course Numbers**

- Courses in the 1000s are primarily introductory undergraduate courses
- Those in the 2000s to 4000s are upper-level undergraduate courses that also may be taken for graduate credit with permission and additional work assigned
- Those in the 6000s and 8000s are for master's, doctoral, and professional-level students
- The 6000s are open to advanced undergraduate students with approval of the instructor and the dean or advising office

#### MICR 1099. Variable Topics. 1-36 Credits.

Variable topics.

#### MICR 5099. Variable Topics. 1-99 Credits.

## MICR 6220. Biology of Parasitism: Parasite Strategies of Infection, Survival, and Transmission. 2 Credits.

A comprehensive course examining the strategies parasites use to infect their hosts, how they survive and thrive within their host, and the developmental adaptations they use to ensure transmission of their offspring to the next host. Prerequisites: BISC 2339 or permission of the instructor.

#### MICR 6236. Fundamentals in Geonomics and Proteomics I. 2-3 Credits.

#### MICR 6237. Fundamentals in Geonomics and Proteomics II. 2 Credits.

. Credit cannot be earned for this course and BIOC 6237.

#### MICR 6292. Tropical Infectious Diseases. 2 Credits.

Lecture course. Pathogenesis, natural history, and epidemiology of the major infectious diseases that occur in developing countries.

#### MICR 8210. Infection and Immunity. 3 Credits.

An introduction to the fields of virology, bacteriology, and parasitology, as well as the main concepts of immune response.

#### MICR 8214. Microbiology and Immunology Seminar. 1 Credit.

Current and emerging topics with presentations and discussions facilitated by leading experts from GW and outside institution; student-led journal club and oral presentation opportunities. Prerequisites: BMSC 8210 and BMSC 8212.

#### MICR 8230. Molecular and Cellular Immunology. 3 Credits.

Major aspects of immunology, including T and B cell effector function, innate immune cell function, mucosal immunology, and immune regulation. Prerequisites: MICR 8210 or other similar introductory immunology course or with approval of staff.

#### MICR 8270. Advanced Topics in Immunology. 3 Credits.

Seminar series on topics chosen jointly by students and faculty; students present and critique original manuscripts. May be repeated for credit. Prerequisites: MICR 8210 and MICR 8230.

#### MICR 8271. HIV Persistence, Comorbidities, and Treatment. 3 Credits.

Concepts in HIV persistence, comorbidities, and treatment, including major unanswered questions currently in the field and state-of-the-art technologies with which to study these questions. Restricted to PhD students in the Institute for Biomedical Sciences. Recommended background: Prior completion of an introductory immunology course and/or familiarity with basic mechanisms of immune responses to HIV.

#### MICR 8998. Advanced Reading and Research. 1-12 Credits.

May be repeated for credit. Restricted to doctoral candidates preparing for the general examination.

#### MICR 8999. Dissertation Research. 3-12 Credits.

May be repeated for credit. Restricted to doctoral candidates.