

MICROBIOLOGY (MICR)

Course numbers with the # symbol included (e.g. #400) have not been taught in the last 3 years.

MICR 805 - Immunology

Credits: 3

An introduction to the fundamental mechanisms of immune function. Topics include the cells and organs of the immune system, humoral and cellular immune responses, the generation of immune cells, and how immune cells fight various infectious pathogens. One semester of cell biology recommended.

Grade Mode: Letter Grading

MICR 806 - Virology

Credits: 3

Principles of animal and selected plant and bacterial virology in relation to infection and disease. Emphasizes the molecular biology of viruses, viral replication, isolation, propagation, assay, pathogenesis, diagnosis, detection, epidemiology, and control. Completion of introductory microbiology and lab recommended prior to taking this course.

Grade Mode: Letter Grading

MICR 808 - Virology Laboratory

Credits: 2

Principles of animal and selected plant and bacterial virology in relation to infection and disease. Emphasizes the molecular biology of viruses, viral replication, isolation, propagation, assay, pathogenesis, diagnosis, detection, epidemiology, and control.

Grade Mode: Letter Grading

Special Fee: Yes

MICR 815 - Immunology Laboratory

Credits: 2

This applied immunology laboratory course highlights both historic and current methodologies important for elucidation and diagnosis of immune function. Techniques used to study phagocytosis, antibody production, immunodiffusion, and T-cell function will be introduced. Applications of the antibody technologies to other scientific disciplines (ELISA, immunofluorescence microscopy, immunoblotting, etc.) will also be covered. Introductory microbiology and microbiology lab recommended.

Co-requisite: MICR 805

Grade Mode: Letter Grading

Special Fee: Yes

MICR 835 - Molecular and Cellular Parasitology

Credits: 4

Parasites continue to present a major challenge to public health. Despite their significant impact on human health, many aspects of the molecular and cellular biology of these diverse organisms remain unknown. This course explores the latest research on these fascinating organisms through analysis and discussion of original research papers focusing on three major human parasites. Introductory microbiology and microbiology lab and one semester of genetics and one semester of parasitology recommended.

Grade Mode: Letter Grading