MPIM 601/VTMI 645 Microbial Pathogenesis of Human Disease  
Credits 3.3 Lecture Hours.  
Principles of microbe-host interactions at the molecular level; selected medically important infectious diseases serve as paradigms for understanding how multiple pathogenic mechanisms contribute to disease.  
Prerequisite: Approval of instructor.  
Cross Listing: VTMI 645/MPIM 601.

MPIM 602 Immunoregulation  
Credits 3.3 Lecture Hours.  
In-depth exploration of the genetic, cellular and molecular mechanisms by which humoral and cellular immune responses are regulated; regulatory T cell circuits, molecules (interleukins, lymphokines), isotypic and idiotypic regulation, hormonal effects, immunoregulatory defects, experimental manipulation of immunoregulatory networks.  
Prerequisites: VTMI 649/POSC 649, BIOL 610 and approval of instructor.

MPIM 607 Applied Epidemiology  
Credits 4.3 Lecture Hours. 3 Lab Hours.  
Application of epidemiologic concepts to the study of disease occurrence; descriptive epidemiologic methods in the study of diseases.  
Prerequisite: Graduate classification.

MPIM 620 The Scientific Basis of Medicine  
Credit 1.1 Other Hour.  
A Journal Club in which recent research papers relevant to Medicine are presented by students and discussed by students and faculty.

MPIM 663/VTMI 663 Molecular Biology of Animal Viruses  
Credits 3.3 Lecture Hours.  
In-depth studies of the biochemistry and replication strategies of animal viruses and molecular mechanisms of pathogenesis for selected viral systems.  
Prerequisite: Graduate classification in virology, molecular biology, biochemistry or approval of the instructor.  
Cross Listing: VTMI 663/MPIM 663.

MPIM 665 Viral Vectors and Gene Therapy  
Credits 3.3 Lecture Hours.  
This course will describe various viral vector systems, their development, and their use as research tools in biotechnology and in gene therapy. The course will consist of a mixture of short lectures and discussion of papers from the literature.  
Prerequisites: MPIM 663/VTMI 663 or approval of instructor.  
Cross Listing: VTMI 665 and PLPA 665.

MPIM 685 Directed Studies  
Credits 1 to 6.1 to 6 Other Hours.  
Limited investigation in fields other than those chosen for thesis or dissertation.  
Prerequisite: Approval of instructor.

MPIM 689 Special Topics  
Credits 1 to 4.1 to 4 Lecture Hours.  
Selected topics in an identified area of medical sciences. May be repeated for credit.  
Prerequisite: Approval of instructor.