IM - IMMUNOLOGY AND MICROBIOLOGY

IM 7010 Fundamentals of Immunology Cr. 2
Basic concepts and current developments in immunology, including cellular and molecular aspects, regulation, and immunopathological mechanisms. Offered Winter.
Prerequisite: BMB 7010, with a minimum grade of C

IM 7020 Fundamentals of Microbiology Cr. 2
Basic aspects of bacteriology, genetics and mycology. Offered Fall.
Prerequisite: CHM 2260, with a minimum grade of C-; BIO 2200, with a minimum grade of C-

IM 7030 Molecular Biology of Viruses Cr. 2
Basic principles of virology including virus host interactions and the molecular biology of virus multiplication and genetics. Offered Winter.

IM 7040 Fundamentals of Research Cr. 2
Lecture/discussion of practical aspects of professional scientific research. Offered Fall.

IM 7060 Laboratory Research Cr. 2
Preparation for doing Master's thesis research in a laboratory. Students complete 3-4 week rotations in three different research laboratories prior to choosing a thesis research lab. Offered Fall.
Prerequisite: IM 7040, with a minimum grade of C
Restriction(s): Enrollment is limited to students with a major in Immunology and Microbiology, enrollment is limited to Graduate or Medical level students, enrollment limited to students in a Master of Science degree, enrollment limited to students in the School of Medicine.

IM 7410 Cancer Immunology and Immunotherapy Cr. 3
Cancer immunotherapy based on the molecular mechanisms of T cell development, tolerance and activation. Topics include T cell receptor and co-stimulatory signal-mediated regulation of T cell activation, transcripional regulation of T cell differentiation, T cell effector function and regulatory mechanisms. Each week will consist of a one-hour lecture and a two-hour discussion for 11 weeks. Offered Yearly.
Prerequisite: IBS 7090,
Equivalent: CB 7410

IM 7450 Current Trends in Immunology, Microbiology and Virology Cr. 1-5
Lectures and discussions on current literature and research problems. Offered Irregularly.

IM 7520 Molecular Mechanisms of Bacterial Pathogenesis Cr. 2
The roles of bacterial virulence factors such as tissue colonization, invasion, and exotoxins in pathogenesis. The genetic regulation of bacterial virulence factors will be discussed. Offered Winter.

IM 7850 Research Conferences in Immunology and Microbiology Cr. 1-5
Seminars and discussions in selected areas. Offered Every Term.
Restriction(s): Enrollment is limited to students with a major in Immunology and Microbiology, enrollment is limited to Graduate level students, enrollment limited to students in a Doctor of Philosophy or Master of Science degrees.
Repeatable for 20 Credits

IM 7890 Seminar Cr. 1
Offered Every Term.
Restriction(s): Enrollment is limited to students with a major in Immunology and Microbiology, enrollment is limited to Graduate level students, enrollment limited to students in a Doctor of Philosophy or Master of Science degrees.

IM 7996 Research Cr. 1-8
Offered Every Term.
Restriction(s): Enrollment is limited to students with a major in Immunology and Microbiology, enrollment is limited to Graduate level students.
Repeatable for 25 Credits

IM 8999 Master's Thesis Research and Direction Cr. 1-8
Offered Every Term.
Repeatable for 8 Credits

IM 9990 Pre-Doctoral Candidacy Research Cr. 1-8
Research in preparation for doctoral dissertation. Offered Every Term.
Repeatable for 12 Credits

IM 9991 Doctoral Candidate Status I: Dissertation Research and Direction Cr. 7.5
Offered Every Term.

IM 9992 Doctoral Candidate Status II: Dissertation Research and Direction Cr. 7.5
Offered Every Term.
Prerequisite: IM 9991, with a minimum grade of S

IM 9993 Doctoral Candidate Status III: Dissertation Research and Direction Cr. 7.5
Offered Every Term.
Prerequisite: IM 9992, with a minimum grade of S

IM 9994 Doctoral Candidate Status IV: Dissertation Research and Direction Cr. 7.5
Offered Every Term.
Prerequisite: IM 9993, with a minimum grade of S

IM 9995 Candidate Maintenance Status: Doctoral Dissertation Research and Direction Cr. 0
Offered Every Term.
Repeatable for 0 Credits