

IMMUNOLOGY (IMMU)

IMMU 7020 Immunobiology 6 cr

This course provides a broad perspective of the evolving concepts of the mechanisms underlying the regulation of the immune response. Students admitted to this course will be expected to have sufficient background knowledge of general biology.

PR/CR: A minimum grade of C is required unless otherwise indicated.

Prerequisites: IMMU 7070 plus cognate courses in molecular biology, or by consent of instructors.

IMMU 7030 Seminars in Immunology 3 cr

Presented by senior graduate students on advanced research topics not directly related to the student's thesis subject. The purpose of this course is to test the student's ability to evaluate critically a specialized topic both orally and in an essay form. This course is graded pass/fail.

PR/CR: A minimum grade of C is required unless otherwise indicated.

Prerequisites: IMMU 7110 or IMMU 7020 or by consent of instructors.

IMMU 7040 Immunological Methodology 3 cr

This lecture course is designed to provide an understanding of modern methods used for basic research in Immunology or other biomedical disciplines utilizing immunological techniques.

PR/CR: A minimum grade of C is required unless otherwise indicated.

Prerequisite: IMMU 7070 or by consent of instructors.

IMMU 7070 Introductory Immunology 3 cr

This course provides a broad survey of modern immunology, covering such topics as molecular concepts of antigenic specificity, chemistry of antibodies and their interactions with antigens and cells, regulation of the immune response, transplantation and tumor immunology.

PR/CR: A minimum grade of C is required unless otherwise indicated.

Prerequisites: general courses in chemistry, biochemistry and biology, or by consent of instructors.

IMMU 7090 Selected Topics in Immunology 3 cr

Assigned reading and written literature review on topics not normally covered in other IMMU courses. Course content will vary depending on the advances in the field and interests of the students.

PR/CR: A minimum grade of C is required unless otherwise indicated.

Prerequisites: IMMU 7070 or IMMU 7100 or consent of instructors.

IMMU 7100 Advanced Topics in Immunology 3 cr

Lectures and assigned reading providing an advanced level understanding of the molecular and cellular mechanisms governing the immune response. The course will build on basic knowledge learned in IMMU 7070 and emphasize recent advances and recently-developing concepts in the field of Immunology. This course is evaluated on a pass/fail basis.

PR/CR: A minimum grade of C is required unless otherwise indicated.

Prerequisites: IMMU 7070 or by consent of instructors.

IMMU 7110 Molecular Immunology 6 cr

This course covers in depth the structure, molecular biology and function of immunoglobulins, histocompatibility antigens, regulatory factors receptors and adhesion molecules on cells of the immune system; mechanisms of immunochemical reactions and the immunogenicity of antigens.

PR/CR: A minimum grade of C is required unless otherwise indicated.

Prerequisites: IMMU 7070 plus undergraduate courses in organic chemistry, physical chemistry and biochemistry, or by consent of instructors.