201L Advanced Immunology Laboratory Rotations (4)
Laboratory/discussion—12 hours. Laboratory assignment to research laboratories. Individual research projects with emphasis on methodological/procedural experience and experimental design. May be repeated two times for credit. (S/U grading only)—I. (I.) Ashwood

202L Advanced Immunology Laboratory Rotations (5)
Laboratory/discussion—15 hours. Laboratory assignment to two research laboratories. One four-week and one six-week assignment in immunology research laboratories. Individual research projects with emphasis on methodological/procedural experience and experimental design. May be repeated two times for credit. (S/U grading only)—II. (II.) Ashwood

203. Cancer Immunology (2)
Lecture—1 hour, term paper. Covers concepts in cancer biology, immunology, and immune effector mechanisms. It will also cover topics such as: immune surveillance, immune effector mechanisms and current concepts in immunotherapy. Offered in alternate years. —III. (III.) Murphy

204. Topics in Innate Immunity (2)
Extensive writing or discussion—1 hour; performance instruction—1 hour. Prerequisite: course 201 or equivalent; course 293 preferred. Restricted to first-year B.S. and M.S. and M.G.S. students; others with permission of instructor. Enrollment limited to 18 students. Covers current topics in the field of innate immunity through student seminar presentations and critical evaluation of the literature. Concepts include: pathogen recognition, intercellular communication, specialized cellular function and effector/signaling mechanisms. Offered in alternate years. —IV. (IV.) Bevins

292. Immunotoxicology Seminar (2)
Seminar—2 hours. Prerequisite: graduate standing in Pharmacology/Toxicology, Immunology, Physiology, or Biochemistry. Seminar presentations dealing with principles of xenobiotic effects on immune system functions and specific examples of drugs and environmental chemicals exerting toxic effects on the immune system. Offered in alternate years. (S/U grading only.)—J. Gold

293. Current Concepts in Immunology (4)
Lecture/discussion—4 hours. Prerequisite: Pathology, Microbiology, and Immunology 126 or consent of instructor. Innate and acquired immunity as defense mechanisms against disease. Mechanisms regulating the distinct cell types driving these responses and current concepts in the literature. Offered in alternate years. —II. Baumgarth

294. Comparative Clinical Immunology (4)
Lecture/discussion—4 hours. Prerequisite: Pathology, Microbiology, and Immunology 126 or consent of instructor. Clinical immunology in animals and man. Pathogenesis of representative infectious diseases, hypersensitive reactions, and autoimmunity. Emphasis on specialized cellular function and effector mechanisms to combat infections or mediate pathogenicity. Not open for credit to students who have completed course 294A. Offered in alternate years. —III. Erickson

295. Cytokines (3)
Lecture—2 hours; discussion—1 hour. Prerequisite: course 293 or consent of instructor. Cytokines and their involvement in human and animal physiology/disease; molecular mechanisms and receptor signaling. Immune and immune non-actions. Overlapping/redundant functions (referred to as the “cytokine network”). Offered in alternate years. —III. Erickson

296. Antiviral Strategies in Immunology (2)
Seminar—2 hours. Prerequisite: graduate standing or consent of instructor. Presentation, discussion, and analysis of faculty research topics in immunology. Required for Immunology Graduate Students every year until they have passed their qualifying examination. May be repeated for credit. (S/U grading only)—I. (I.) Maverakis

297. Mucosal Immunology (2)
Lecture—1 hour; discussion—1 hour; term paper. Prerequisite: course 201 or equivalent. Basic concepts and current research topics in the field of mucosal immunology, with an emphasis on human mucosal immunity. Major emphasis includes innate and adaptive mucosal immunity, the gastrointestinal tract, the lung, lymphocyte trafficking, and mucosal vaccination. Offered in alternate years. —II. Shacklett

Independent Study Program

Information. Chairperson, Committee on Courses of Instruction, — Academic Senate Office 530-752-2231

The Independent Study Program provides an opportunity for upper division students to design and pursue a full quarter (12-15 units) of individual study in an area of special interest.

A program qualifying as Independent Study will consist of one or more courses in the 190–199 series. While the theme of such a program may be reasonably broad, a recognizable common thread should unite all the academic work you undertake during an independent study quarter. Regularly offered formal courses will only be acceptable as a part of such a program if they clearly fit its theme and contribute something essential toward the realization of its objectives. The program is not to be considered a way to take more variable-unit courses than normally permitted.

The procedure for enrolling in an Independent Study Program is as follows:

1. Develop, in general terms, a plan of study;
2. Locate a faculty sponsor or panel of sponsors and with their help and approval develop a detailed plan;
3. Complete a project proposal form (obtained from the Academic Senate office) and submit it to the Academic Senate Committee on Courses of Instruction.

The deadline for applications is the tenth day of instruction of the term before; see the Academic Calendar, on page 1, for specific dates.

You must report the completion or termination of the project to the Committee on Courses of Instruction.

Individual Major

(College of Agricultural and Biological Sciences, College of Biological Sciences, and College of Letters and Science)

The Major Program

The Individual Major, an integrated program composed of courses from two or more disciplines, is designed by the student and is subject to approval by faculty advisers and appropriate college committees. This major enables a student to pursue a specific interest that cannot be accommodated within the framework of an existing major. It must clearly and specifically meet the student’s educational goals as well as meet university and college academic standards.

College of Agricultural and Environmental Sciences

The Individual Major in this College has been suspended indefinitely.

Program Office. 150 Mork Hall 530-752-0100
http://caes.ucdavis.edu/StudentInfo/Advising/undergraduate-advising

Student Proposal. An Individual Major may be organized by a student having a specific academic interest that cannot be recognized within an established major. Each student wishing an Individual Major should submit a proposal to the Dean’s Office, prior to reaching 120 units, for review by the Student Actions and Individual Major Subcommittee. This proposal must include (1) an essay describing the special educational aims of the student, including a statement indicating why the educational objectives cannot be met by existing majors; (2) a list of planned courses; and (3) faculty adviser recommendations. It is critical that students contact a college counselor in the Dean’s Office for consultation and development of the proposal.

Preparatory Subject Matter........... (variable)
Lower division courses basic to the program or needed to satisfy prerequisites for upper division requirements.

Depth Subject Matter ..................45-54
Upper division course work must include:
(a) Interrelated courses of 45 upper division units from two or more areas of study;
(b) At least one of the two or more areas of study must be within the College of Agricultural and Environmental Sciences;
(c) At least 30 of the 45 upper division units that are required in the program must be taken from courses provided by the College of Agricultural and Environmental Sciences.

Unrestricted Electives ................. (variable)
Total Units for the Major ..................45-54

Master Adviser. Thomas Gordon, Ph.D. (Plant Pathology)

College of Biological Sciences

Program Office. Biology Academic Success Center, 1023 Sciences Laboratory Building, 530-752-0410

Student Proposal. A student who wishes to propose an individual major must submit the proposal to the Committee on Undergraduate Student Petitions prior to reaching 120 units. It is important for the student to make arrangements to speak with an adviser in the Biology Academic Success Center early in the development of his/her major as no individual major will be approved after a student has completed 120 units.

A.B. and B.S. Major Requirements:

UNITS
Preparatory Subject Matter........... (variable)
Lower division courses basic to the program or needed to satisfy prerequisites for upper division requirements as determined by the Committee on Undergraduate Student Petitions.

Depth Subject Matter ....... 45 units minimum
Upper division course work must include:
(a) at least 30 units from courses offered by departments in the College of Biological Sciences;
(b) additional requirements as determined by the Committee on Undergraduate Student Petitions. See the Biology Academic Success Center for details.
(c) for the B.A. degree, a maximum of 80 units toward the major; for the B.S. degree, a maximum of 110 units toward the major.

All University, General Education, and College of Biological Sciences Bachelor’s degree requirements........................ (variable)
Total Units for the Degree................. 180

Principal Adviser (selected by student).
A faculty member in a department or program in the College of Biological Sciences.