Global and International Studies

(Open of Letters and Science)
The interdisciplinary minor in Global and International Studies will enable students to learn about global and international issues at UC Davis, as well as gain firsthand academic experience abroad. The minor is also designed to give recognition for upper division course work while studying abroad. However, the minor can also be completed with approved course work taken at UC Davis.

The minor is overseen by a Program Committee. For more information, see http://studyabroad.ucdavis.edu/.

Minor Program Requirements:

Global and International Studies .......... 23-25

Arts and Humanities Emphasis:
One course from: Anthropology 4, 20, International Relations 1, Political Science 3 or Sociology 5 .................4
One upper division UC Davis general course on global international studies .... 3-4
See program adviser for a list of approved courses.
Course cluster requirement ........ 16-17
The minor requires the selection of interrelated course clusters totaling a minimum of 16-17 upper division units in area and regional studies, or thematic course clusters in global and international studies. Suggested course clusters include:
(1) Country or region-specific courses: Western Europe; Russian and East/Central Europe; Asia and the Pacific; Latin and South America; Africa and the Middle East; Jewish Studies; specific countries.

(2) Courses clustered around a thematic field in global and international studies: people and nationalities; the individual and society; arts, language, literature and culture.

Study Abroad and International Internships. The course cluster requirement may be met in one of two ways: (1) completion of a minimum of 16-17 units in the course cluster emphasis by taking approved UC Davis upper division courses in the area of global/international studies and/or approved upper division course work taken while participating in UC Davis abroad or another approved study abroad program, or (2) completion of 12 units of course work in a UC Davis accredited international internship, plus UC Davis courses sufficient to total 16-17 units. Students must meet with the GIS adviser and complete a Course Cluster Worksheet to demonstrate subject interrelatedness.

Global Disease Biology

(Open of Agricultural and Environmental Sciences)

Department of Plant Pathology

Program Office. 152 Hutchison Hall 530-754-7277

Master Adviser. Jonathan J. Leveau, Ph.D., Professor (Plant Pathology)

Committee in Charge
Patricia A. Conrado, D.V.M., Ph.D., Professor (Pathology, Microbiology and Immunology)
Satya Dandekar, Ph.D., Professor (Medical Microbiology and Immunology)
Thomas Gordon, Ph.D., Professor (Pathology)
David M. Rizzo, Ph.D., Professor (Plant Pathology)
Dari Borjeson, D.V.M., Ph.D., Professor (Pathology, Microbiology and Immunology)
Joie Watson, D.V.M., Ph.D., Professor (Medicine and Epidemiology)
Michael S. Wilkes, M.D., M.P.H., Ph.D., Professor (Internal Medicine)

Faculty Faculty includes members of the Departments of Plant Pathology, on page 513; Veterinary Medicine, School of, on page 581; Medicine, School of, on page 427

The Major Program

The Global Disease Biology (GDB) major offers students the opportunity to study disease and its relationship to the health of people, animals, plants, and the environment. The program uses an integrated approach to advance student understanding of the concept(s) of disease, the societal and personal impacts of past, present and future diseases, and the science behind disease discoveries, causes, evolution, diagnostic intervention. The program recognizes the interconnectedness of people, animals, plants, and the environment and aims to identify and address the fundamental causes of poor health around the world. Managing global disease problems requires a multifaceted, holistic approach to address the full spectrum of human, animal, and environmental health risks (also known as a One Health approach). Throughout a series of core courses, issues related to human, animal, and plant health, along with tools available to solve these problems, will be introduced to provide students with real-world scenarios in which they can apply and advance their creative and critical thinking skills. The major prepares graduates with the knowledge, leadership skills and experiences required to excel in professions associated with global health, the environment, food safety and security, biological safety and security, and health policy. For more information, see http://gdb.ucdavis.edu.

The Program. The Global Disease Biology major provides students with broad preparatory scientific course work, global disease biology core classes, flexibility in upper division electives, and a strong research experience. Global Disease Biology core classes are intended to be transdisciplinary and focus on concepts that cut across human, animal, and plant diseases offering a unifying ecological and quantitative perspective on disease. Students plan their chosen emphasis of study as part of a required discussion course and in consultation with their adviser. Students will draw from many undergraduate courses currently offered on disease and health in a way that complements the core courses required for the Global Disease Biology major. The minor includes a senior research project, which each student designs to bridge the disciplines of the major.

Internships and Career Alternatives. The program and interests of each student in solving societal problems guides students to a range of internship and career choices. On and off-campus internship opportunities are available in research laboratories, in field situations, with governmental agencies, with private industry, and in international programs. A degree in Global Disease Biology prepares students for careers in research, teaching, governmental regulation, health care industry, or agriculture (food safety/food security) as each relates to disease and health of people, animals, and plants. Students in the major gain research experience and may choose to continue their training at the graduate or professional level in a variety of biological disciplines. Careers in medicine, veterinary medicine, and plant pathology are open to Global Disease Biology majors.

B.S. Major Requirements:

Preparatory Subject Matter ............... 60-62

Global Disease Biology 90 ................. 9

Science and Society 13 .................. 3

Biological Sciences 2A-2B-2C .......... 15

Chemistry 2A-2B-2C, and 8A-8B or 118A-118B .. 21-25

General Physics 7A/7B .................... 8

Mathematics 17A-17B-17C ............. 12

Depth Subject Matter ...................... 46-49

Biological Sciences 101, 103 ............ 7

Evolution and Ecology 100 .............. 4

Microbiology 101 ......................... 5

One course from Statistics 13, 100; Plant Sciences 120 .................. 3

Pathology, Microbiology & Immunology 129Y ............ 8

VM Medicine and Epidemiology 158 .... 3

Global Disease Biology 101, 102 ........ 8

Two courses from Plant Pathology 120:

Pathology, Microbiology & Immunology 127, 128; Microbiology 162, Entomology 153, 156/156L; Global Disease Biology 103 .... 6-9

Global Disease Biology 187 .............. 3

Global Disease Biology 189 .............. 3

Restricted Electives ....................... 25

Focused specialty upper division courses as outlined in the student’s major proposal (from course 187) with approval of the major adviser.

Total Units for the Degree ............... 125-134

Recommended

Biological Sciences 101D ................. 1

Global Disease Biology 189D .......... 1

Minor Program Requirements: A minor in Global Disease Biology may complement student’s major program. Some courses have required prerequisites not included as part of the minor, and students should plan accordingly.

Global Disease Biology .................. 20-22

Science and Society 13 ................. 3

Pathology, Microbiology & Immunology 129Y ............ 3

VM Medicine and Epidemiology 158 .... 3

Global Disease Biology 101, 102 ........ 8

One course from: Plant Pathology 120:

Pathology, Microbiology & Immunology 127, 128; Microbiology 162, Entomology 153, 156/156L; Global Disease Biology 103 ........ 3-5

Minor Program Adviser: TBA

Advising Center for the minor is located in 152 Hutchison Hall 530-754-7277.