

## AGRICULTURE AND HOME ECONOMICS

extensive professional experience in Africa, Asia, Latin America, and the Middle East. The School conducts training programs for students sponsored by foreign governments, the U.S. Agency for International Development, and similar organizations with which the University has cooperative agreements.

### UNIVERSITY FARM LABORATORY

Eleven hundred and ninety acres adjacent to the academic campus provide a unique opportunity for students to directly apply the knowledge and skills acquired in the classroom. Vineyard, orchard, vegetable, cotton, and field crop enterprise projects supervised by faculty in the Plant Science and Mechanized Agriculture Department further develop production and management skills. Similar enterprise projects at the beef, sheep, and swine units are supervised by faculty in the Animal Science Department. The modern (1983) dairy and quarter horse units also support the instructional programs in Animal Science. All facilities are located within walking distance of the classroom. Over 5,000 acres of Sierra foothill rangeland are utilized in the comprehensive livestock and range management programs.

### RESEARCH AND DEMONSTRATION UNITS

**Center for Irrigation Technology.** The school is internationally recognized for research, development, and demonstration of efficient water management practices. The Center provides impetus to state-of-the-art irrigation research and development and offers work experience opportunities for enrolled students. The technical library, equipment testing facilities, field demonstration areas, and computer analysis and control programs enhance the irrigation coursework. Field days, workshops, and seminars are conducted for local growers, industry specialists, and international visitors.

**Viticulture Research Unit.** Surrounded by 160 acres of table, raisin, and wine grape vineyards, the Viticulture Research Unit provides students with up-to-date technical information and hands-on vineyard management skills. A comprehensive viticulture program of excellence is offered with financial support from the grape industry and the U.S. Department of Agriculture.

**Mushroom Research Unit.** Initially established to study the utilization of agricultural wastes as a resource for mushroom-growing media, this program now demonstrates specialty crop management and waste handling techniques for students and industry.

### UNIQUE INSTRUCTIONAL LABORATORIES

The University provides specially equipped instructional laboratories to promote practical application of the academic curriculum.

**Enology Laboratory.** The instructional winery provides an opportunity for students to make and evaluate varietal wines. The facility is also used to assist students in learning the distillation processes for converting farm waste products to alcohol fuel.

**Dairy Processing Plant.** Milk, butter, cheese, and ice cream are processed by students in this instructional laboratory and marketed to the various on-campus food services and the public.

**Meats Laboratory.** An abattoir with complete livestock butchering, curing, and processing facilities provides many learning opportunities for students including meat inspection and processing and the correlation of live appearance with carcass quality.

### UNDERGRADUATE PROGRAM PLANNING

#### High School and Community College Preparatory Coursework

To assure rapid and satisfactory progress through a degree program, high school and community college students should be competent in the following areas:

- Biological sciences, such as botany and zoology or physiology.
- Physical sciences, such as chemistry through organic chemistry.
- Mathematics through intermediate algebra.
- English grammar and composition skills; public speaking ability.
- Agricultural science, home economics, or industrial arts foundation courses.

#### Career Preparation and Program Advising

Each student should consult his or her assigned advisor for program planning assistance at least once a semester. An individually-tailored major *Program of Study* is designed to prepare the student for his or her specific career objective. Flexibility is an important characteristic of the school's major programs. The advisor will assist the student in evaluating the alternatives this