

BT: Horticulture

Major requirements—60

AGRI118, 240, 308, 405; HORT105, 135, 226, 228, 315, 346, 378, plus 17–18 credits in a special area of emphasis, and 7–8 major elective credits chosen in consultation with advisor.

Cognate requirement—4

CHEM110

Horticulture Areas of Emphasis in BT Degree Programs

Students may choose an area of emphasis from the following or develop a personalized program in consultation with their advisor to meet specific career goals.

Landscape Design—16

HORT350, 365, 375, 429, 448. The landscape design program emphasizes the development of technical drawing skills, cad application, an understanding of the principles of design, and a knowledge of plants.

Landscape Management—17

HORT208, 211, 217. Select 9 credits from the following: HORT212, 350, 359, 360, 375. The landscape management emphasis features proper horticultural practice, identification of landscape plants, selection of appropriate equipment, and the concept of total maintenance.

AT: Agriculture

Major Requirements—25-36

ANSI114, 305, 340, plus 15-24 credits in a special area of emphasis (see below) and 1–2 major elective credits chosen in consulta 1–2 major elSpan<</ActualText<FEFF0020>>1765(major)3 K-25(1–tl-T7tle 0 C (ts)-2

AGRI240 **Alt (3)**

Design, installation, drawing, interpretation and maintenance of plastic or metal irrigation systems and control devices for proper sprinkler coverage. *Fall*

AGRI270 **Alt (3)**

An introduction to acquiring and analysis of management information for decision making; an understanding of basic economic principles that impact biological production systems and implementation of the principles for total quality management for increased productivity. *Fall*

AGRI300 **Alt (3)**

Importance, distribution, economic adaptation, and botany of leading farm crops, emphasizing rotation, seedbed preparation, and economic production. *Spring*

AGRI304 **Alt (3)**

Basic principles of forage crop production, emphasizing choice of crop, establishment, growth, maintenance, harvesting, storage, feeding, and other management decision. *Spring*

AGRI308 **\$ Alt (3)**

Control of weeds in horticultural and field crops, utilizing biological, cultural, mechanical, and chemical practices. Class study also involves preparation and testing for pesticide applicator's license. Weekly: 2 lectures and a 3-hour lab. *Fall*

AGRI345 **(1-4)**

A class based on selected topics of current interest in agriculture. Repeatable in different areas.

- Concepts of International Agriculture
- International Ag Implementation
- Horse Judging
- Livestock Judging
- Viticulture
- Solanaceous and Vine Crops
- Tree Fruit Production

AGRI395 **(1-4)**

Supervised internship of on-the-job work experience in some field of agriculture under the direction of the employer and evaluated by a departmental faculty member. Students submit report of their experience and must complete a minimum of 120 hours of work experience for each credit earned.

AGRI405 **(1)**

Research work in agriculture and related fields; reports given by students, faculty, and visiting lecturers. *Spring*

AGRI499 **(1-5)**

Individual research in some field of agriculture under the direction of the staff. Repeatable to 10 credits.

A a S c e c e

ANSI114 **(3)**

Basic farm animal anatomy, reproductive and digestive physiology, housing, health management with information on how animal products are processed and marketed. Efficient, effective management is emphasized throughout course. *Fall*

ANSI240 **\$ Alt (4)**

Topics covered and skills learned include (not limited to) animal restraint and handling, anesthesia, surgical instruments and aseptic technique, surgical assistance, post-surgical nursing, pain management, wound management and bandaging, euthanasia and client bereavement, diagnostic imaging. Laboratory included.

ANSI250 **\$ Alt (3)**

A study of various types of milking systems, housing and manure handling systems of dairy cattle of all ages and production levels. Ventilation, stall and barn dimensions, and bedding will be some of the topics covered. Weekly: 2 lectures and one 3-hour laboratory. *Summer*

ANSI278 **Alt (3)**

A study of the cause, prevention and treatment of infectious and metabolic diseases of dairy cattle. Weekly: 2 lectures and one 3-hour laboratory. *Spring*

ANSI305 **Alt (3)**

Principles of digestion, absorption, metabolism of feeds by farm species are examined for practical, profitable feeding. Common and non-traditional feedstuffs, feed-related diseases and ration formulation are included. Weekly: 3 lectures. Recommended: CHEM110 or 131. *Fall*

ANSI325 **\$ Alt (3)**

A study of the ways domestic animals communicate and interact with conspecific and other animals, and humans. Included are: physiological basis and development for each type of behavior; normal and aberrant behavior manifestations in each domestic animal species; treatments for problem situations; consideration of the effects of domestication on each species. Two lectures and one lab per week. *Fall*

ANSI340 **\$ (3)**

Production methods and management practices of domesticated livestock species including nutrition, reproduction, housing, health

HORT359 **\$ Alt (3)**

Controlling the plant environment to enhance plant growth and optimal development through temperature, humidity, light, nutrients, sanitation and carbon dioxide levels. Structures, coverings and mechanical systems used are explored to produce the most cost-effective horticultural crops. Weekly: 2 hours lecture and a 3-hour lab. *Fall*

HORT360 **\$ Alt (3)**

Care of shade and ornamental trees living under environmental stress of urbanization, their legal protection and value. Includes tree anatomy and physiology, soils, nutrition and water relationships, transplanting, disease and insect control, mechanical injury and pruning to develop a healthy tree. Weekly: 2 lectures and a 3-hour lab. *Fall*

HORT365 **\$ Alt (3)**

Designing landscapes to meet the environmental challenges and conditions of urban spaces. Circulation patterns for conducting business, aesthetic and functional aspects of design for corporate/institutional, governmental agencies and municipal areas. Weekly: 2 lectures and a 3-hour lab. Recommended: HORT135. *Spring*

HORT375 **Alt (3)**

An introduction to the estimating process for landscape design, construction and maintenance work. Various schedules and forms are used to assign costs of equipment, plants, hardscape materials, labor and overhead. The many variables from project to project are explored and then formulas are applied to arrive at making landscape installations an efficient and profitable business. *Spring*

HORT378 **Alt (4)**

Study of significant diseases and pests of agricultural and horticultural plant materials, including life cycles and influence of environmental conditions; determination of effective control methods for crop, ornamental and turfgrass production. *Spring*

HORT429 **\$ Alt (3)**

Principles and practices of computer-aided landscape design, including creating scale perimeter plot plans, using drawing tools, plant/site relationships, and graphic imaging leading to a computer-generated landscape drawing. Laboratory emphasizes skill development and proficiency in integrating software and hardware to create CAD-generated landscape designs. Prior landscape drawing course work is recommended. *Spring*

HORT448 **\$ Alt (4)**

Landscape design concepts relating to the more challenging problems of residential design. Field application of grading relating to contours, specifications, exploring deck design, planting combinations, and exercises in graphics and rendering for presentations. Weekly: 3 lectures and a 3-hour lab. Recommended: HORT135. *Spring*

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Academic Programs	Credits