



**BIOL 1404 PLANT BIOLOGY (L, N)**

Survey of the plant phyla, structure and function of plant organs, water relations, translocation, reproduction, growth and development. Emphasis on the importance of plants to humans. Lab: two hours per week. Prerequisites: [R] [Sci] MATH 0104

**BUS 2003 SMALL BUSINESS MANAGEMENT**

Focuses on the experiences and problems faced by those who go into business for themselves. Looks at problems of organizing and managing individually owned businesses including location, securing capital, records, personnel and sales promotion. Prerequisite: MGMT 2103.

**\*CIS 1113 COMPUTER CONCEPTS WITH APPLICATIONS**

Provides students with an introduction to concepts and applications of the personal computer in business. Topics include spreadsheets, databases, word processing, ethics, vocabulary, Internet skills and file system management. Theory and hands-on computer instruction is included. Prerequisite: READ 0033 or [R].

**\*CIS 1503 MICROCOMPUTER APPLICATIONS-MS OFFICE**

Familiarizes the student with fundamental terminology and concepts of microcomputers, their operating systems and disk management, as well as major production applications including word processing, spreadsheets, data base management systems, and may include graphics, data communications and desktop publishing. Familiarity with computer keyboard is recommended. Hands on computer instruction.

**HRT 1013 PRINCIPLES OF HORTICULTURE**

Horticulture fundamentals course covering the characteristics of and uses for horticultural plants, plant growth principles and plant care practices, the scope of the horticulture industry, basics in plant propagation, landscape plant maintenance, fruit and vegetable gardening and pest control. Lab: three hours per week. (Sp, Su, F)

**HRT 1163 BILINGUAL HORTICULTURE COMMUNICATIONS**

This course is designed to assist supervisors and employees within the horticulture industry with the Spanish/English language transition and to gain better understanding of contemporary Hispanic culture. Emphasis will be placed on translating and then properly speaking horticulture terminology in Spanish while addressing cultural and communication issues. The linkages and implications of these issues will be examined as they apply to successfully managing and understanding a diversified work force.

**HRT 1413 MATH APPLICATIONS FOR HORTICULTURE**

Topics include learning measurement and quantity applications as commonly encountered in gardens, landscape design, landscape contracting, turfgrass management, greenhouse operations and interiorscape maintenance. Emphasis on calculating based on units of measure. Prerequisites: HRT 1013 and MATH 0404.

**HRT 1423 LANDSCAPE AND BIDDING CONTRACTS**

Investigation of professional principles and practices in the field of landscape contracting, focusing on costs of business and project implementation. Course work includes: estimating costs for landscape installation and maintenance, bidding on landscape installation and maintenance work, preparation and review of contracts for landscape installation and maintenance, controlling the work and costs of the work under the terms of landscape contracts and subcontracts, and administering a landscape contracting business. Prerequisites: HRT 1013, MATH 0104 and CIS 1113 or CIS 1503

**HRT 1843 IRRIGATION AND DRAINAGE DESIGN**

This course is designed to teach student basic principles of irrigation and drainage design. Students will be presented with engineering aspects of water dynamics and hydraulics. Additional topics include soil-water-plant interactions, system components, electrical systems and business practices and estimating. Students will design irrigation systems for residential, commercial and sport fields. Lecture: two hours per week. Lab: three hours per week

**HRT 2050 (2051-2056) ADVANCED PROBLEMS-HORTICULTURE**

One to six credits, six credits maximum. A study of applied problems that are of particular interest to horticulture majors. Prerequisite: consent of department head.

**HRT 2013 MAINTENANCE OF LANDSCAPE PLANTS**

Preparation of soil, pruning and training of ornamental trees, shrubs and vines, pest and disease control, fertilization and environmental factors which affect the care and maintenance of landscape plants. Lab: three hours per week. Prerequisite: HRT 1013.

**HRT 2023 HORTICULTURAL SOIL SCIENCE**

Principle physical, chemical and biological properties of the soil as related to horticultural plant growth. Soil testing and fertilizer usage: formation and classification of soils, rural and urban land use. Prerequisites: HRT 1013, . Lab: three hours per week.

**HRT 2050 (2051-2056) ADVANCED PROBLEMS-HORTICULTURE**

One to six credits, six credits maximum. A study of applied problems that are of particular interest to horticulture majors. Prerequisite: consent of department head.

**HRT 2133 NURSERY MANAGEMENT AND OPERATIONS**

The propagation, production, management and marketing of commercial nursery stock including facilities, equipment, supplies, environmental and pest control. Lab: three hours per week. Prerequisites: HRT 1013.

**HRT 2163 PLANT PROPAGATION**

Principles and practices used in the sexual and asexual propagation of horticultural plants including seeds, division, layering, cuttings, grafting, budding and tissue culture techniques. Lab: three hours per week. Prerequisite: HRT 1013.

**HRT 2213 HORTICULTURE MARKETING**

An in-depth study of marketing principles and how marketing applies to the horticulture industry. Includes location, facilities, sales methods and price determination. Services, merchandising, marketing and advertising techniques, as well as supervisory and personnel responsibilities are also offered.

**HRT 2223 GREENHOUSE OPERATIONS I**

The study of greenhouse environments necessary for flower and tropical plant production. Topics covered include commercial greenhouse facilities; heat, cooling and humidity control systems; soil media; watering and fertilizing practices; and pest control measures. Production methods for spring season greenhouse crops. Lab: three hours per week. Prerequisite: HRT 1013.

**HRT 2232 SEMINAR IN HORTICULTURE OCCUPATIONS**

To acquaint the student with the variety of job opportunities and placement in the horticulture industry. Skills used in resume writing, public speaking and project presentations will be covered. Development of skills necessary at the supervisory level including leadership, motivation of employees, communication, and recruiting and retaining good employees will be discussed. Guest speakers will address topics within the horticulture industry. Prerequisite: consent of department head.

**HRT 2244 HORTICULTURE PRACTICUM**

Occupational aspects of ornamental horticulture are covered. An internship in ornamental horticulture in areas such as park maintenance, landscape construction, landscape maintenance, wholesale or retail sales, horticultural therapy or turf management will be established either in the industry or at the Horticulture Center. The lecture will involve problem-solving techniques for the area of specialization. Refinement of skills as well as speed and accuracy will be emphasized. Lab: six hours per week. Prerequisite: Consent of department head .

**HRT 2263 HORTICULTURAL PEST MANAGEMENT**

Introduces and thoroughly covers the topic of pest management in all areas of horticulture technology. Lab: three hours per week. Prerequisite: HRT 1013. (F)

**HRT 2233 LANDSCAPE CONSTRUCTION**

Emphasis is placed on the basic information necessary for constructing various elements needed to develop the landscape site. Landscape construction elements including walkways, decking, walls, screens, steps, irrigation, garden pools and fountains, and landscape lighting will be studied. Lab: three hours per week. Lecture: two hours per week.

**HRT 2333 GREENHOUSE OPERATIONS II**

Commercial flower production practices for major floral crops. Emphasis placed upon the primary floral crops with other information on secondary crops. Instructions in crop scheduling and crop cultural requirements for the floriculture crops studied along with extensive laboratory applications. Lab: three hours per week. Prerequisite: HRT 1013 and HRT 2223.

**HRT 2843 IRRIGATION INSTALLATION AND TROUBLESHOOTING**

This hands-on course introduces basic irrigation layout, installation, maintenance and troubleshooting techniques. Topics include: gluing and repairing PVC and polyethylene pipe, installing and adjusting heads, electric valve operation, troubleshooting and repairing electric valves and field controllers. Additional topics include pump and well operations, cross connection, winterizing, drainage and micro irrigation system installations. Lecture: two yours per week. Lab: three hours per week. Prerequisite: HRT 1843.

**\*ITD 1323 INTERNET FUNDAMENTALS**

Introduction to the worldwide computer network. Course uses a hands-on approach to teach students the history and capabilities of the Internet. Students learn the resources available via the World Wide Web and searching capabilities. Prerequisites: placement test or CIS 1003.