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1998.83 Seminar in Latin American History (3) Coreq.: HNRS 1001 and 1003; or HNRS 1101 and 1103. Continuation of HNRS 1002, readings, and examination coordinated with HNRS 2202. 3000 Research Methodologies (3) Coreq.: 3001 American Civilization from 1400 to 1789: The Old Order (4) Continuation of HNRS 2002. 2004 Interdisciplinary Presentation of Western Civilization from the Renaissance through the Enlightenment; literature, history, philosophy, religion, government, and fine arts. 3003 Western Civilization from 1789: The Modern World (4) Continuation of HNRS 2003. Interdisciplinary Presentation of Development of Western Civilization from the Era of Revolution to the Present; literature, history, philosophy, religion, government, and fine arts. 3010 Leaders and Scholarship (3) Analysis of classical and modern foundations and principles of leadership. Practice in scholarship essay writing, interviewing, debate, and critical thinking. Intended for national and international scholarship applicants. 3030 Humanities Colloquium (3) May be taken for a max. of 6 hrs. of credit. Selected topics and materials in literature, philosophy, history, science, and the arts. 3031 American Studies (3) May be taken for a max. of 6 hrs. of credit when topics vary. Selected topics in American civilization. 3032 Social Science Colloquium (3) May be taken for a max. of 6 hrs. of credit when topics vary. Topics of significance for social sciences major only. 3035 Natural Science Colloquium (3) Prereq.: completion of one-year course in a physical science and one-year course in an biological science, at least one with laboratory; consent of instructor. May be taken for a max. of 6 hrs. of credit when topics vary. Selected topics illustrative of developing concepts of the natural and physical universe and of living organisms. 3100 Internships, Field Work, Off-Campus Programs (1-6) May be taken for a max. of 6 sem. hrs. of credit. For special learning opportunities. 3991 Thesis (3) Independent research and writing toward the honors thesis; the thesis itself to be completed in HNRS 3992. 3992 Thesis (3) An essay based on independent reading and research or a report on laboratory or field research. 4813 Interdisciplinary Fluid Dynamics: Physical Concepts (3) See ME 4813. 4823 Interdisciplinary Fluid Dynamics: Computational Methods (3) See ME 4823.

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2001 Organic Gardening (2) F One hr. lecture; 2 hrs. lab. For non-horticulture majors. Principles and practices of organic vegetable and flower growing. 2010 Horticulture Technology (2) F Prereq.: MATH 1021. Introduction and overview of calculations and measurements used in applied horticulture. 2011 Analysis of Environmental Issues (3) See EMS 2011. 2020 Installation and Maintenance of Ornamentals in the Landscape (1) F 1 hr. lecture; 2 hrs. lab. Introduction to soil analysis and preparation, installation and maintenance of landscape plants including trees, shrubs, perennials, and annuals; irrigation installation and repair. 2022 Installation and Maintenance of Ornamentals in the Landscape (1) (2) Prereq.: HORT 2020 or consent of instructor. 1 hr. lecture; 2 hrs. lab. Introduction to soil analysis and preparation, installation and maintenance of landscape plants including trees, shrubs, perennials, and annuals; irrigation installation and repair. 2025 Introduction to Green Industry (2) F Defining the general management structure and use of horticultural concepts specific to the “green business” sector; topics include enterprise development, specialized green industry labor; regulatory oversight; applied use of permits, waivers, and variances; cost effect of regulatory compliance; acquired use of patent and proprietary information. 2050 General Horticulture (4) F S 3 hrs. lecture; 2 hrs. lab. Science and art of modern horticultural plant production, including propagation, pest control, and marketing; major groups of horticultural crops including vegetables, fruits and nuts, ornamentals, houseplants, and florist crops; lab includes propagation and culture of garden plants in field and greenhouse. 2061 Plant Propagation (3) S-O Prereq.: HORT 2050. 2 hrs. lecture; 2 hrs. lab. Principles of sexual and asexual propagation; specific methods of plants. 2086 Introduction to Turfgrass Management (3) S-E Prereq.: BIOI 1202 or 1002; AGRO 2501 or equivalent. 2 hrs. lecture; 2 hrs. lab. Reoffered as AGRO 2086. Turfgrass identification and adaptation; establishment and maintenance of high quality turf areas; turfgrass biology and their uses. 2122 Herbaceous Plant Materials (2) S-O 1 hr. lecture; 2 hrs. lab. Identification and study of plant materials; propagation, growthEnemies, and visual characteristics of herbaceous plant materials used in ornamental horticulture and landscaping. 2124 Woody Plant Materials (2) S-O 1 hr. lecture; 2 hrs. lab. Identification and study of plant materials; ecological and visual characteristics of plants used in landscape design. 2125 Wood Plant Materials (2) S-O Prereq.: HORT 2124 or consent of instructor. 1 hr. lecture; 3 hrs. lab. Continuation of HORT 2124. Introduction to the nursery industry including production, availability, and marketing. 2130 Survey of Arboriculture (2) S 1 hr. lecture; 2 hrs. lab. Review of the biology, growth, environment, and management practices for trees in the landscape. 2860 Growth and Development of Agricultural Crops (3) F-O Prereq.: CHEM 1002 or 1202 and BIOI 1002 or 1202. 1 hr. lecture; 2 hrs. lab. This course is part of the core course sequence in the horticulture major. Includes an overview of agricultural plants, including water relations, respiration, photosynthesis, and growth and development. 3000 Horticultural Interests (2) S-O Prereq.: HORT 2050 and written consent of instructor. May be taken for a max. of 6 sem. hrs. credit. Work experience in horticultural areas and the planning of acceptable written reports and a seminar presentation. 3010 Research Problems (3) Written consent of the instructor. May be taken for a max. of 6 sem. hrs. credit. Independent research under a faculty member culminating in an oral and written research report. 3015 Urban Landscape Management (3) S-E Prereq.: HORT 2050, 2124 or equivalent. This course is part of the ACCEPs. Methods for sustainable management of the landscape through proper installation, management, and maintenance of plant care, pesticide management, employee management and cost accounting. 3020 Landscape Construction (2) S-O 1 hr. lecture; 2 hrs. lab. Survey of construction techniques and materials used in landscape contracting including drainage systems, paving, retaining walls, decking, and fencing. 3503 Sustainable Horticulture (3) S-O Prereq.: HORT 2050 or equivalent. This course is part of the ACCEPs. This course will provide knowledge of the principles and practices of sustainable, organic and alternative horticulture management systems. The class will review and evaluate horticulture topics including soil biological processes (compost, humus, and fertility), pest management, alternative farming systems, and organic agriculture. 4010 Tropical/Subtropical Horticulture (3) S-E Prereq.: HORT 2050 or equivalent. Current status of cultivation throughout the world; production practices; postharvest handling; international trade of tropical/subtropical horticultural crops. 4012 Special Topics in Horticulture (1-3) S-O Prereq.: Instructor consent. May be taken for a max. of 6 sem. hrs. of credit when topics vary. Lab/field trip may be required. Subject areas not covered in other horticulture courses. 4020 Greenhouse Management and Controlled Environment Agriculture (4) F 3 hrs. lecture; 2 hrs. lab. Prereq.: HORT 2050 or equivalent. This course is part of the ACCEPs. Operation and management of greenhouses and other controlled environments with emphasis on system design and construction, control of light intensity and photosynthetic cooling and systems, substrates, mineral nutrition, water quality and irrigation systems. 4030 Plantation, Beverage, and Tropical Nut Crops (3) S-O Prereq.: HORT 2050 or equivalent. World situations, production practices, marketing, postharvest processing, agro-processing, and integrated trade of rubber, oil palm, cocoa, coconut, olive, coffee, tea, wine grapes, vanilla, and various tropical nuts and fruits. 4100 International Horticulture (3) S Prereq.: HORT 2050 or equivalent. Current status of cultivation throughout the world; production practices; postharvest handling; international trade of tropical/subtropical horticultural crops. 5025 Processing of Fruits and Vegetables (3) S Prereq.: FDSCE 1049 or HORT 2050 or equivalent. 2 hrs. lecture; 2 hrs. lab. Methods of processing horticultural products includes canning, freezing, dehydration, and fermentation. 5034 Horticulture Processing Facilities (2) S-O Prereq.: HORT 4031 or FDSCE 1049 or HORT. Required field trips. Review of criteria for GMP design and