Horticulture - Descriptions of Courses

College of Agriculture and Natural Resources

101. Principles of Horticulture
   Fall, Spring 4(3-2) Not open to students with credit in HRT 201.
   Principles of horticultural science and horticultural crop production, as related to fruits, vegetables, flowers and landscape plants.

201. Fruits, Vegetables, and Ornamental Plants for Outdoor Home Planting
   Spring 4(3-2) Not open to students with credit in HRT 101.
   Principles and practices used in producing fruits, vegetables, flowers, trees, shrubs and vines in small gardens, containers, and the home landscape. Indices for edible quality of home grown fruits and vegetables.

211. Ornamental Trees and Narrow-leaved Evergreens
   Fall 4(2-4)
   Identification, adaptation and evaluation of trees, deciduous shrubs, narrow-leaved evergreens and woody vines. Emphasis is on the aesthetic and functional uses of trees and shrubs in the landscape.

212. Ornamental Flowering Shrubs and Broad-leaved Evergreens
   Spring 4(2-4) HRT 211 or approval of instructor.
   Identification, adaptation and evaluation of trees, deciduous shrubs, broad-leaved evergreens, woody vines and ground covers. Emphasis is on the flowering characteristics and aesthetic and functional uses of plants in the landscape.

221. Commercial Plant Propagation
   (421) Fall, Winter 4(3-2) HRT 101.
   Principles of plant propagation by seed, cutting, budding, and grafting. Principles of growth regulators and environmental treatments in plant propagation.

230. Indoor Plants and Flowers
   (320) Fall, Winter, Spring 3(1-4)
   Horticulture majors will be required to learn scientific names of plants. Principles of flower arrangement, construction of dish gardens and hanging baskets, and the forcing of bulbs.

300. Tree Fruit Production
   Fall 4(3-2) HRT 101, Juniors.
   Commercial production of principle tree fruit crops of Michigan with emphasis on planting, soil management, fertilization, pruning, thinning, and grafting.

324. Mass Merchandising Ornamental Plants
   Spring 2(1-2) HRT 101, HRT 211 or HRT 212.
   History of merchandising ornamental plants; types of garden centers, impact of cultural information and labeling on consumer. The manager, advertiser, and buyer decision making process. One day field trip required.

325. Ornamental Plant Management
   Spring 4(3-2) HRT 101, HRT 211, HRT 312.
   Transplanting and maintenance of landscape plants subject to stresses of urban environments. Development of annual maintenance specifications. Identification and evaluation of herbaceousannuals, biennials and perennials for landscape.

330. Special Problems
   Fall, Winter, Spring, Summer 1 to 4 credits. May reenroll for a maximum of 12 credits. Approval of department.
   Individual work on a field, laboratory or library research problem of special interest to the student.

331. Selected Topics
   Fall, Winter, Spring, Summer 1 to 4 credits. May reenroll for a maximum of 12 credits if different topic is taken. Approval of department.

350. Floral Design
   Spring 2(0-4) Junior majors and approval of department.
   Principles of floral design and the care and handling of materials. Creation of corsages, terraria, tropical planters, and home and hospital nursery arrangements.

402. Principles of Weed Control for Horticultural Crops
   Fall of odd-numbered years 4(3-2)
   Principles underlying weed control practices for horticultural crops. Factors involved in mechanical, chemical and biological control.

403. Principles of Plant Breeding
   Winter 4(3-2) CSS 250.
   Integration and administration by the Department of Crop and Soil Sciences.

411. Fruit and Landscape Crop Physiology I
   Fall 4(4-2) Juniors.
   Physiological effects of moisture and nutritional environments related to fruit crops and woody perennial plants.

412. Fruit and Landscape Crop Physiology II
   Winter of odd-numbered years 3(3-0)
   Juniors, BOT 301, not open to students with credit in HRT 301 or HRT 308.
   Physiology of flowering and fruit development in woody plants with special reference to chemical and cultural methods of manipulation.

416. Handling and Storage of Horticultural Crops
   Winter 4(4-0) Juniors.
   Biological principles involving physical movement of fresh products from farm to consumer. Physiological processes affecting maturity, quality and condition; selection and use of handling, storage, and transport facilities.

417. Controlled Plant Environment
   Fall 3(3-0) HRT 101, BOT 301 or BOT 401.
   Control of greenhouse environment and its effect on growth and production of horticultural crops.

418. Controlled Plant Environment Laboratory
   Fall 2(1-2) HRT 417 or concurrently.
   Experiments in the morphology and physiology of greenhouse crops. Crop production and the use of greenhouse equipment.

419. Small Fruit Production
   Winter 3(3-0) HRT 101, BOT 205, BOT 301.
   Commercial production culture, utilization and physiology of strawberries, grapes, blueberries and raspberries.

433. Greenhouse Cut Flower and Foliage Plant Production
   Spring of even-numbered years 4(3-2)
   May reenroll for a maximum of 8 credits. HRT 418 or approval of department.
   Principles of cut flower and foliage plant physiology; emphasis production management.

434. Greenhouse Container-Grown Plant Production
   Winter 4(3-2) HRT 418 or approval of department.
   Principles of flower crop physiology; management of container-grown plant production.

435. Commercial Bedding Plant Production
   Spring of even-numbered years 4(3-2)
   HRT 417, HRT 418, HRT 434
   Production and marketing of bedding plants. Includes germination, soil, transplanting, environmental factors, production practices, major species, structures, equipment, systems, problems, economics and marketing. One field trip required.

440. Nursery Management
   Fall 3(2-2) Juniors.
   Management practices applied to wholesale nursery production and marketing. One all-day field trip to visit nurseries is required.

452. Warm Season Vegetables
   Spring 3(3-0) HRT 101, BOT 301, CSS 210.
   Warm season vegetable crops with emphasis on botany, taxonomy, morphology, growth processes, production, harvesting, handling, quality and composition.

453. Warm Season Vegetable Laboratory
   Spring 1(0-2) HRT 452 or concurrently.
   Identification of seeds and plants and factors affecting germination, sex expression, permanent flowering, bulb and tuber formation.

456. Cool Season Vegetables
   Fall 3(3-0) HRT 101, BOT 301, CSS 210.
   Cool season vegetable crops with emphasis on botany, taxonomy, morphology, growth processes, production, harvesting, handling, quality and composition.

457. Cool Season Vegetable Laboratory
   Fall 1(0-2) HRT 456 or concurrently.
   Mineral nutrition, fertilizer, placement and sources, herbicide action, weed competition, plant identification and post-harvest conditions for vegetables.
HOTEL, RESTAURANT AND INSTITUTIONAL MANAGEMENT

College of Business

102. Introduction to the Service Industries
Fall, 3(3-0) Not open to Seniors.
Management careers and opportunities in hotel, motel, food service, health facilities, club, recreational centers, tourism and other public hospitality businesses. Includes front office practice. Local field trip required.

203. Service Industry Accounting
Fall, Spring, 4(4-0) AFA 202; not open to Seniors.

237. Management of Lodging Facilities
Fall, Winter, Spring, 4(4-0) Sophomore majors.
An analysis of the guest cycle through examination of the functions of revenue and nonrevenue departments with emphasis on managing departmental interrelationships.

245. Food Production Science
Fall, Spring, 4(4-0) HNF 100.
Interrelationships of the physical, biological and chemical principles relevant to the food service industry.

252. Professional Experience I
Fall, Winter, Spring, Summer, 1 credit.
A written report based on prior 400 hours of approved professional work experience in the hospitality industry.

261. Dimensions of Tourism
Fall, Winter, Summer of odd-numbered years, 4(4-0) EC 201 or concurrently; not open to Seniors.
Forces which influence the international and domestic hospitality, leisure, travel and recreation industries. Socio-economic models and measurement of regional impact, demand and supply.

265. Food Production Standards
Fall, Spring, 4(4-0) HRI 245.
Interrelationships of the environmental, microbiological and physiological principles relevant to the food service industry.

307. Supervision in the Hospitality Industry
Fall, Winter, Spring of even-numbered years, 4(4-0) HRI 237, MGT 302.
The direction of people at work in the hospitality industry. Special emphasis on supervision, personnel management and systems for coordination, control, and evaluation of management skills in hotels, restaurants and other hospitality industry establishments.

335. Service Industries Equipment and Utilities
Fall, Winter, Summer of even-numbered years, 4(4-0) MTH 108 or MTH 111; HRI 237.
Engineering in food and lodging industry, emphasizing utilities, machinery characteristics and environment.