452. Warm Season Vegetables

Spring. 4(3-2) HRT 101, BOT 301, CSS

210.

210.

Warm season crops with emphasis on botany, taxonomy, morphology, growth processes, production, harvesting, handling, quality and composition. Field trip required.

456. Cool Season Vegetables

Fall. 4(3-2) HRT 101, BOT 301, CSS

Cool season crops with emphasis on botany, taxonomy, morphology, growth processes, production, harvesting, handling, quality and composition. Field trip required.

460. Tropical Vegetables

Spring of odd-numbered years. 3(3-0) HRT 101 or approval of instructor.

Culture of tropical vegetables in commercial and subsistence cropping systems. Role in human nutrition, income generation and international development.

462. Tropical Fruits and Spices

Spring of even-numbered years. 3(3-0) HRT 101 or approval of instructor.

Culture of tropical fruits and spices in commercial and subsistence cropping systems. Role in human nutrition, income generation and international development.

801. Research Procedures in Plant Science

Winter. 4(3-2) Approval of depart-

ment.

Orderly approach to problems of biological research in relation to basic principles of research.

808. Physiology of Horticultural Crops

 $Winter \, of \, even-number ed \, years. \, 4 (3-2) \\ BOT \, 415.$

Physiology of grafting, juvenility, flowering of woody plants, fruiting, senescence, bud and seed dormancy as related to horticultural crops. Emphasis on critical review of literature.

814. Plant Breeding and Genetics Seminar

Winter. 1(1-0) May reenroll for a maximum of 2 credits. Approval of department. Interdepartmental with the departments of Crop and Soil Sciences, and Forestry. Administered by the Department of Crop and Soil Sciences.

815. Selected Topics in Plant Breeding and Genetics (MTC)

Fall, Winter, Spring, Summer. 2 to 5 credits. May reenroll for a maximum of 12 credits if different topics are taken. Approval of department. Interdepartmental with the departments of Crop and Soil Sciences, and Forestry. Administered by the Department of Crop and Soil Sciences.

Selected topics in plant breeding including: hostplant resistance, nutrition and quality, computerized records and data analysis, classical literature and strategies for improving field, horticulture and forestry crops.

816. Special Problems in Plant Breeding and Genetics

Fall, Winter, Spring, Summer. 1 to 3 credits. May reenroll for a maximum of 8 credits. Approval of department. Interdepartmental with the departments of Crop and Soil Sciences, and Forestry.

Students may conduct research in a laboratory, greenhouse or field-plot on a selected subject or study selected published literature under the supervision of a faculty member.

817. Plant Breeding Methods

(HRT 823.) Fall. 3(3-0) STT 422 or concurrently. Interdepartmental with the departments of Crop and Soil Sciences, and Forestry. Administered by the Department of Crop and Soil Sciences.

Methods, strategies and practices in organization and operation of plant breeding programs. Emphasis on practical application of classical, modern and futuristic approaches to plant breeding.

819. Plant Breeding Systems

(HRT 822.) Winter. 3(3-0) CSS 821, STT 422. Interdepartmental with the departments of Crop and Soil Sciences, and Forestry. Breeding systems for improvement of self and cross pollinated and of vegetatively propagated crops. The genetic basis for parent selection.

821. Genetic Concepts in Plant Breeding

Fall. 3(3-0) CSS 350 or ZOL 441. Interdepartmental with the departments of Crop and Soil Sciences, and Forestry. Administered by the Department of Crop and Soil Sciences.

Genetic structure of plant populations, gene action, inbreeding, outbreeding, heterosis, linkage and recombination, genetic architecture of traits, genetic distance.

825. Post Harvest Physiology

Winter of odd-numbered years. 4(3-2) Biochemical and biophysical changes associated with the maturation, ripening and senescence of harvested horticultural plants.

830. Special Research Problems

Fall, Winter, Spring, Summer. 1 to 12 credits. May reenroll for a maximum of 12 credits. Approval of department.

831. Selected Topics (MTC)

Fall, Winter, Spring, Summer. 1 to 4 credits. May reenroll for a maximum of 12 credits if different topics are taken. Approval of department.

Selected topics in horticultural science of current interest and importance.

836. Evolution of Crop Plants

Fall of even-numbered years. 3(3-0) CSS 821 or approval of department. Interdepartmental with the departments of Crop and Soil Sciences, and Forestry.

Cultural and biological aspects of evolution under domestication; origin and diversity of cultivated plants.

838. Tissue Culture for Plant Breeding

(840.) Winter of even-numbered years. 3(2-2) BOT 414, CSS 821. Interdepartmental with the departments of Crop and Soil Sciences, and Forestry.

The application of plant cell, protoplast and tissue culture methodologies and principles to crop improvement.

850. Plant Interactions in Agroecosystems

Winter of odd-numbered years. 3(3-0) BOT 450, BCH 401, CSS 402.

Interactions between plants affecting mortality and plastic responses in horticultural, agronomic, and forest systems, including interference and symbiosis.

899. Master's Thesis Research

Fall, Winter, Spring, Summer. Variable credit. Approval of department.

940. Theoretical Population Genetics

Winter. 4(4-0) MTH 113, STT 422 or approval of department. Interdepartmental with the departments of Crop and Soil Sciences, and Forestry. Administered by the Department of Forestry.

Discussion of mathematical theories in population genetics and experimental works on natural and laboratory populations.

941. Quantitative Genetics in Plant Breeding

Spring of even-numbered years. 4(4-0) STT 423, CSS 823 or approval of department. Interdepartmental with the departments of Crop and Soil Sciences, and Forestry. Administered by the Department of Crop and Soil Sciences.

Calculation and implication of genetic parameters. Linkage. Coancestry and inbreeding. Covariance between relatives. Heritability and selection. Genotype by environment interaction. Emphasis on relationship of quantitative genetics to plant breeding.

944. Physiological Genetics

Winter of odd-numbered years. 3(3-0) BOT 413; CSS 821. Interdepartmental with the departments of Crop and Soil Sciences, and Forestry. Administered by the Department of Forestry.

Control of variation in higher plants including adaptive physiology, quantitative genetics, growth correlation, biochemical genetics, hybrid physiology, and genecology.

999. Doctoral Dissertation Research

Fall, Winter, Spring, Summer, Variable credit. Approval of department.

HOTEL, RESTAURANT AND INSTITUTIONAL MANAGEMENT HRI

College of Business and Graduate School of Business Administration

102. Introduction to Hospitality Management

Winter. 4(4-0) Not open to Seniors.

Survey of the sectors, segments and disciplines of the hospitality and tourism industries; of the nature of career opportunities; of the hotel and restaurant management and travel and tourism management curricula.

203. Hospitality Accounting

Fall, Winter, Spring. 4(4-0) CPS 115; HRI 102; ACC 202.

Principles of accounting, both financial and managerial, applied to hospitality industry enterprises.

235. Physical Facilities Management (HRI 335.) Winter, 4(4-0) HRI 102.

Planning and control of building systems in lodging and foodservice operations. Heat, light, power, water, ventilation, sanitation, sound, traffic; furniture, fixtures, and equipment.

237. Lodging Management Winter, 4(4-0) HRI 102.

Typical departments and logical functions in operation of transient, destination and convention lodging properties.

Courses

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. HRI 102 or HRI 261, approval of school.

A written report based on the completion of 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 recrea-tion industries. Socio-economic models and measurement of regional impact, demand and supply.

265. Food Production Standards

Spring. 4(4-0) HRI 100, FSC 256.

packaging and presentation; selection, receiving, storage, and preparation; consumer safety and sanitation. Standards of food taste, texture, appearance;

307. Organizational Behavior in Hospitality Management

Fall, Winter, Spring. 4(4-0) HRI 237, MGT302

Relationship between human and other resources, and the management of people. Staffing, defining roles, decision making, communicating, motivating.

Hospitality Information Systems 337.

Fall, Winter, Spring. 4(4-0) EC 201, HRI 203, HRI 237.

Traditional and state-of-the-art technology for gathering, storing, disseminating and communicating information within the hospitality indus-

353. Professional Experience II

Fall, Winter, Spring, Summer. 1 credit. HRI 252, approval of school. Must be completed before enrollment for final term of

A written report based on the completion of 400 hours of approved professional work experience in the hospitality industry.

375. Hospitality Marketing

Fall. 4(4-0) HRI 102.

Principles of marketing and their application to hospitality enterprises. The marketing of highly perishable, people intensive intangibles in a highly competitive environment.

392. Hospitality Industry Finance

Fall, Winter, Spring, Summer. 4(4-0) F 1391, HRI 375, HRI 337.

Strategies for financing hospitality ventures and expansion. Determining the financial viability of proposed and existing operations.

405. Foodservice Control Systems

Fall, Winter, Spring, Summer. 4(4-0) HRI 245, HRI 337.

Development and evaluation of policy and procedures for planning, organizing, staffing, directing and controlling food and beverage operations.

Food Production Systems

Fall, Winter, Spring. Summer of even-numbered years. 6(4-6) FSC 242, HRI 405.

Recognition and achievement of quality in development of systematic relationships between menu items, time, labor, equipment and costs in quantity food production. Quality procurement policies for food, beverages and related items. Field trips required.

455. Beverage Management

(HRI 455B.) Fall. 4(4-0) HRI 245.

Evaluation of beverage alcohol and non-alcohol beverage products with respect to quality, pricevalue perceptions, packaging. Purchasing, storage, preparation and merchandising.

462. Tourism Management

Winter. 4(4-0) HRI 261.

Tourism organizations, functions, and policy determination, tour wholesaling and retail travel agency management. Field trip required.

463. Tourism Distribution Management Fall. 4(4-0) HRI 261.

Component channels of the tourism distribution system. Functional interrelationships of these channels with emphasis on increasing distribution effectiveness. Field trips required.

Tourism Planning and Development

Fall, Spring. 4(4-0) HRI 261.

Tourism resource characteristics, location, and market demand considerations. Analysis of development potential, planning processes and procedures, capital and personnel requirements, and tourism destination developments.

Hospitality Industry Research

Fall, Winter, Spring. 4(4-0) HRI 392, MTA 317.

Strategies and techniques for obtaining, analyzing, evaluating and reporting relevant research

475. Advanced Hospitality Marketing

Fall, Winter, Spring. 4(4-0) HRI 473.

Gathering, analyzing and using marketing research. Developing and evaluating marketing plans and promotional strategies.

490C. Special Problems in Club Management

Spring. 4(4-0) HRI major, HRI 405.

Complex management problems cutting across the major functions. Focus on decision-making. Cases and projects.

Special Problems in Institutional Management 490I.

Fall. 4(4-0) HRI major, HRI 405.

Complex management problems cutting across the major functions. Focus on decision-making. Cases and projects.

Special Problems in Lodging Management

Spring. 4(4-0) HRI major, HRI 405.

Complex management problems cutting across the major functions. Focus on decision-making. Cases and projects.

490M. Special Problems in Multi-unit Chain Restaurant Management

Spring. 4(4-0) HRI major, HRI 405.

Complex management problems cutting across the major functions. Focus on decision-making. Cases and projects.

Special Problems in Real Estate 490R. Selection, Financing and Design

Winter, 4(4-0) HRI major, HRI 405.

Complex management problems cutting across the major functions: marketing, human resources, law. Focus on decision-making. Cases and projects.

Special Problems in Hospitality 490X. Management

Winter. 4(4-0) HRI major, HRI 405.

Complex management problems cutting across the major functions, industry sectors and entity types. Focus on decision-making. Cases and pro-

495. Current Issues

Spring of even-numbered years. 4(4-0) Seniors, approval of school.

Focus on specific topic or issue facing the hospitality and tourism industries.

499. Independent Study

Fall, Winter, Spring, Summer. 1 to 4 credits. May reenroll for a maximum of 8 credits. Majors and approval of school.

Research in any phase of hospitality and tourism management.

805. Advanced Foodservice Management

Winter. 4(4-0) HRI 435.

Administrative and technical management of foodservices. Emphasis on operation analysis and problem solving.

Workforce Management in the 807.Hospitality Industry Fall. 4(4-0) HRI 337.

Developing and maintaining a productive workforce for hospitality firms. Emphasis on supervisory skills and labor relations.

Energy Management in Hospitality Facilities 835.

Fall. 4(4-0)

Achieving energy efficiency through system analysis and design. Includes energy audits and design problems.

837. Advanced Lodging Management Winter. 4(4-0) HRI 337.

Administrative and technical management of hotels. Emphasis on operations and analysis and problem solving.

Innocation in Hospitality 875. Marketing

Spring. 4(4-0) MTA 805 or concur-

rently.

Application of marketing concepts to the hospitality sector, with special emphasis on the role of promotion in the hospitality marketing process.

Financial Management for the 888. Service Industries

Spring. 4(4-0) ACC 840.

Preparation and interpretation of financial statements, budget preparation and analysis of budgetary variances. Financial aspects of hospitality business expansion, franchising contracts, feasibility studies, and valuation considerations.

Special Problems 890.

Fall, Winter, Spring, Summer. 1 to 15 credits. Approval of school.

Opportunity for outstanding students to engage in a thorough analysis of a service industry area of their choice that will result in a positive contribution to the field.