452. Warm Season Vegetables  
Spring, 4(3-2) HRT 101, BOT 301, CSS 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 210.  
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 even-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 department.  
Orderly approach to problems of biological research in relation to basic principles of research.

805. Physiology of Horticultural Crops  
Winter of even-numbered years, 4(3-2) BOT 415.  
Physiology of grafting,juvenility, flowering of woody plants, fruiting, setecence, bud and nodemariness 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.

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)  
Biological 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 sciences 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  
(S40.) Winter of even-numbered years, 3(3-0) 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 410.  
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 111, 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 883 or approval of department. Interdepartmental with the departments of Crop and Soil Sciences, and Forestry. Administered by the Department of Crop and Soil Sciences.  

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 geneology.

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; 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.
Description — Hotel, Restaurant and Institutional Management of Courses

245. Food Production Science
Fall, Winter, Spring. 4(4-0) HNF 190.
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 200 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
Spring. 4(4-0) HRI 100, FSC 256. Standards of food taste, texture, appearance; packaging and presentation; selection, receiving, storage, and preparation; consumer safety and sanitation.

307. Organizational Behavior in Hospitality Management
Fall, Winter, Spring. 4(4-0) HRI 237, MGT 302. Relationship between human and other resources, and the management of people. Staffing, defining roles, decision making, communicating, motivating.

337. Hospitality Information Systems
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 industry.

353. Professional Experience II
Fall, Winter, Spring, Summer. 1 credit. HRI 252, approval of school. Must be completed before enrollment for final term of the senior year. A written report based on the completion of 600 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.

435. Food Production Systems
Fall, Winter, Spring. Summer of even-numbered years. 4(4-0) FSC 243, 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, price, value 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 trips 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.

466. 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 development destinations.

473. Hospitality Industry Research
Fall, Winter, Spring. 4(4-0) HRI 392, MTA 317. Strategies and techniques for obtaining, analyzing, evaluating and reporting relevant research data.

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.

490R. Special Problems in Real Estate 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.

490X. Special Problems in Hospitality 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 projects.

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. 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 foodservice. Emphasis on operation analysis and problem solving.

807. Workforce Management in the Hospitality Industry
Fall. 4(4-0) HRI 337. Developing and maintaining a productive workforce for hospitality firms. Emphasis on supervisory skills and labor relations.

835. Energy Management in Hospitality Facilities
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.

875. Innovation in Hospitality Marketing
Spring. 4(4-0) MTA 805 or concurrently. Application of marketing concepts to the hospitality sector, with special emphasis on the role of promotion in the hospitality marketing process.

888. Financial Management for the 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.

890. Special Problems
Fall, Winter. 4(4-0) 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.