Descriptions — Horticulture
of
Courses

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

525. 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.

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

531. 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.

536. 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.

538. Tissue Culture for Plant Breeding
Winter of even-numbered years. 3(2-2)
BOT 414, CSS 921. 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.

580. Plant Interactions in Agroecosystems
Winter of odd-numbered years. 3(3-0)
BOT 450, BCH 410, CSS 492. Interactions between plants affecting mortality and plastic responses in horticultural, agronomic, and forest systems, including interference and symbiosis.

583. Plant Mineral Nutrition
Winter of odd-numbered years. 4(4-0)
BOT 201, CSS 430 or approval of department. Interdepartmental with and administered by the Department of Crop and Soil Sciences. Principles of mineral transport in plant cells and tissues. Plant responses to and diagnosis of mineral stresses. Physiological roles of mineral nutrients as related to plant growth and productivity.

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 work on natural and laboratory populations.

941. Quantitative Genetics in Plant Breeding
Spring of even-numbered years. 4(4-0)

944. Physiological Genetics
Winter of odd-numbered years. 3(3-0)
BOT 413; CSS 921. 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 gendecology.

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 factors, 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
Winter. 4(4-0) HRI 102.
Principles of selecting and controlling food and beverage 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.

252. Professional Experience I
Fall, Winter, Spring, Summer. 1 credit. HRI 102 or HRI 201, 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 recreation industries. Socio-economic models and measurement of regional impact, demand and supply.

265. Food Production Standards
Winter. 4(4-0) HNF 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. Stafing, 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.

345. Food Production Systems
(HRI 245.) Fall, Winter, Spring, Summer. 4(4-0) HRI 245.
Food handling techniques and strategies. Purchasing, storage and retrieval, preparation, packaging and delivery.

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 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 337, HRI 345.
Development and evaluation of policy and procedures for planning, organizing, staffing, directing and controlling food and beverage operations.

435. Advanced Foodservice Management
Fall, Winter, Spring, Summer. 4 credits. HRI 313, HRI 405.
Foodservice team projects. Planning, organization, production and service delivery of catered foodservice events.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Prerequisites</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>HRI 455</td>
<td>Beverage Management (HR1 55B)</td>
<td>4(4-0)</td>
<td>HRI 345</td>
<td>Evaluation of beverage alcohol and non-alcohol beverage products with respect to quality, price, value perceptions, packaging, Purchasing, storage, preparation and merchandising.</td>
</tr>
<tr>
<td>HRI 462</td>
<td>Tourism Management</td>
<td>4(4-0)</td>
<td>HRI 261</td>
<td>Tourism organizations, functions, and policy determination, tour wholesaling and retail travel agency management. Field trip required.</td>
</tr>
<tr>
<td>HRI 463</td>
<td>Tourism Distribution Management</td>
<td>4(4-0)</td>
<td>HRI 261</td>
<td>Component channels of the tourism distribution system. Functional interrelationships of these channels with emphasis on increasing distribution effectiveness. Field trips required.</td>
</tr>
<tr>
<td>HRI 473</td>
<td>Hospitality Industry Research</td>
<td>4(4-0)</td>
<td>HRI 329, HRI 405</td>
<td>Gathering, analyzing and using marketing research. Developing and evaluating marketing plans and promotional strategies.</td>
</tr>
<tr>
<td>HRI 490X</td>
<td>Special Problems in Hospitality Management</td>
<td>4(4-0)</td>
<td>HRI major, HRI 405</td>
<td>Complex management problems cutting across the major functions, industry sectors and entity types. Focus on decision-making. Cases and projects.</td>
</tr>
<tr>
<td>HR1 499</td>
<td>Independent Study</td>
<td>1 to 4(0-0)</td>
<td></td>
<td>Research in any phase of hospitality and tourism management.</td>
</tr>
<tr>
<td>HR1 500</td>
<td>Workforce Management in the Hospitality Industry</td>
<td>4(4-0)</td>
<td>HRI 337</td>
<td>Developing and maintaining a productive workforce for hospitality firms. Emphasis on supervisory skills and labor relations.</td>
</tr>
<tr>
<td>HR1 505</td>
<td>Seminar in Advanced Foodservice Management</td>
<td>4(4-0)</td>
<td>HRI 435</td>
<td>Administrative and technical management of foodservices. Emphasis on operation analysis and problem solving.</td>
</tr>
<tr>
<td>HR1 507</td>
<td>Workforce Management in the Hospitality Industry</td>
<td>4(4-0)</td>
<td>HRI 337</td>
<td>Developing and maintaining a productive workforce for hospitality firms. Emphasis on supervisory skills and labor relations.</td>
</tr>
<tr>
<td>HR1 508</td>
<td>Energy Management in Hospitality Facilities</td>
<td>4(4-0)</td>
<td>HRI 405</td>
<td>Achieving energy efficiency through systems analysis and design. Includes energy audits and design problems.</td>
</tr>
<tr>
<td>HR1 535</td>
<td>Energy Management in Hospitality Hospitals</td>
<td>4(4-0)</td>
<td>HRI 405</td>
<td>Achieving energy efficiency through systems analysis and design. Includes energy audits and design problems.</td>
</tr>
<tr>
<td>HR1 537</td>
<td>Advanced Lodging Management</td>
<td>4(4-0)</td>
<td>HRI 337</td>
<td>Administrative and technical management of hotels. Emphasis on operations and analysis and problem solving.</td>
</tr>
<tr>
<td>HR1 538</td>
<td>Innovation in Hospitality Marketing</td>
<td>4(4-0)</td>
<td>MTA 805</td>
<td>Application of marketing concepts to the hospitality sector, with special emphasis on the role of promotion in the hospitality marketing process.</td>
</tr>
<tr>
<td>HR1 539</td>
<td>Financial Management for the Service Industries</td>
<td>4(4-0)</td>
<td>ACC 840</td>
<td>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.</td>
</tr>
<tr>
<td>HR1 540</td>
<td>Financial Problems</td>
<td>1 to 15(0-0)</td>
<td></td>
<td>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.</td>
</tr>
</tbody>
</table>

**HUMAN ECOLOGY (COLLEGE OF)**

<table>
<thead>
<tr>
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<th>Prerequisites</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>HED 401</td>
<td>Perspectives in Human Ecology</td>
<td>3(0-0)</td>
<td>HED 110, 3(0-0) Sophomores</td>
<td>Introduction to the study of families from a human ecological perspective. Development of the profession of human ecology. Analysis of issues affecting families. Interdepartmental emphasis.</td>
</tr>
</tbody>
</table>

**HUMAN ENVIRONMENT AND DESIGN (HED)**

<table>
<thead>
<tr>
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<th>Credits</th>
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</tr>
</thead>
<tbody>
<tr>
<td>HED 134</td>
<td>Design for Living I</td>
<td>3(1-4)</td>
<td>HED 143</td>
<td>Use of design elements and application of principles in creative problems and media.</td>
</tr>
<tr>
<td>HED 135</td>
<td>Clothing Construction Studio</td>
<td>3(1-4)</td>
<td>HED 143</td>
<td>Emphasis on fit, alterations, different techniques in assembling apparel. Basic principles of clothing construction. Completed garments required.</td>
</tr>
<tr>
<td>HED 137</td>
<td>Textiles for Consumers</td>
<td>3(0-6)</td>
<td>HED 143</td>
<td>A programmed sequence develops decision-making abilities in the selection of textile alternatives for various uses. Consumer-oriented concepts of durability, comfort, care and aesthetic appearance are used to evaluate products.</td>
</tr>
<tr>
<td>HED 138</td>
<td>Introduction to Merchandising Management</td>
<td>3(0-4)</td>
<td>HED 143</td>
<td>An overview of the merchandising function as it provides goods and services to individuals and families. Field trips required.</td>
</tr>
<tr>
<td>HED 139</td>
<td>Non-textile Merchandise Production, Properties, and Performance</td>
<td>3(0-4)</td>
<td>HED 143</td>
<td>Product information for selected nontextile merchandise as it assists consumers and professionals in decision making. Investigation of materials, construction, production, quality and care of nontextile goods.</td>
</tr>
<tr>
<td>HED 140</td>
<td>Interior Environments</td>
<td>3(0-4)</td>
<td>HED 143</td>
<td>Design fundamentals as they relate to interior design and human behavior. Characteristics of interior design, finishing materials and artifacts.</td>
</tr>
<tr>
<td>HED 141</td>
<td>Interior Environments: Studio</td>
<td>3(0-4)</td>
<td>HED 143</td>
<td>Design fundamentals as they relate to interior design and human behavior. Characteristics of interior design, finishing materials and artifacts.</td>
</tr>
</tbody>
</table>