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 Vegetables Laboratory

Spring, I(0-2) HRT 452 or concur-

rently.

Identification of seeds and plants and factors affecting germination, sex expression, permature 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 Vegetables 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.

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-numbered years. 4(3-2)

Wint 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.

810. Seminar

Fall, Winter. 1(0-1)

825. Post Harvest Physiology Spring. 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

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

840. Tissue Culture for Plant Breeding

Winter of even-numbered years. 3(2-2) BOT 414, HRT 408.

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

899. Master's Thesis Research

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

999. Doctoral Dissertation Research

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

HOTEL, RESTAURANT AND INSTITUTIONAL HRI

College of Business and Graduate School of Business Administration

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

(303) Fall, Spring. 4(4-0) AFA 202; not open to Seniors.

Principles of accounting applied to service industries. Financial statement analysis and cash flow concepts. Managerial accounting emphasized.

237. Management of Lodging Facilities

Fall, Winter, Spring. 4(4-0) Sophomore majors.

An analysis of the guest cycle through examination of various operating departments within a hotel. 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. Approval of school.

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 oddnumbered 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. Summer of even-numbered years. 4(4-0) HRI 237, MGT 302.

The direction of people at work in the hospitality industry. Special applications of supervisory management skills in hotels, restaurants and other hospitality industry establishments.

335. Service Industries Equipment and Utilities

(235.) Fall, Winter. Summer of evennumbered years. 4(4-0) MTH 108 or MTH 111; HRI 237.

Engineering in food and lodging industry, emphasizing utilities, machinery characteristics and environment.

337. Management Systems for the Hospitality Industry

Winter, Spring. Summer of evennumbered years. 4(4-0) CPS 110, EC 200.

Evaluation and appraisal of management systems currently in use and the development of new management systems for 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 prior 400 hours of approved professional work experience in the hospitality industry.

375. Marketing of Hospitality and Travel Services

Fall, Winter, Spring, Summer. 4(4-0)

Applications of marketing concepts, methods and techniques in the hospitality and travel sector. Uses and limitations of various promotional forces such as advertising, field selling, merchandising, sales promotion, and in-house selling.

392. Managerial Finance for the Hospitality Industry

Fall, Winter, Spring. 4(4-0) AFA 391,

HRI 203.

Basic financial concepts applied to the hospitality management industry. Methods of expansion; franchises, condominiums, leases and management contracts. Financial aspects of feasibility studies. Financial ratios specific to the hospitality industry.

405. Food and Beverage Management

Winter, Spring. Summer of evennumbered years. 4(4-0) HRI 265, HRI 203.

Duties and responsibilities of the manager in restaurant and catering operations. Management methods in goal setting, forecasting, controlling quality and costs; establishing policies to create favorable acceptance and profitable operations.

435. 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.

455A. Food Evaluation

Spring. 4(4-0) Approval of school.

History of foods and related physiological and psychological theories and their application to quality consideration. Courses

455B. Beverage Evaluation

Fall. 4(4-0) Approval of school.

History of beverages and related physiological and psychological theories and their application to quality considerations.

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.

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 destination developments.

472. Design and Layout

Winter, Spring. 4(4-0) HRI 335.

Conceptualization, design, layout and specification of service industry facilities.

473. Operations Research in the Service Industries

Fall, Spring. Summer of oddnumbered years. 4(4-0) HRI 337, MTA 317.

Application of marketing and operational research techniques to service industry management problems, emphasizing quantitative and analytical decision models designed for specific operations in this field.

475. Promotion of Hospitality Services

Fall, Winter, Spring. Summer of oddnumbered years. 4(4-0) HRI 375.

Advertising, personal selling, sales promotion, merchandising, public relations, and publicity to compete effectively for individual and group sales in the hospitality industry.

490. Operational Analysis in the Hospitality Industry

Fall, Spring. 4(4-0) HRI 405, 800 hours work experience requirement. HRI majors only. Advanced management concepts, leading to an

Advanced management concepts, leading to an understanding of decision theory as applied to directed investigation into specific hospitality operations.

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 food, lodging, hospitality, tourism or health facilities operations.

805. Advanced Foodservice Management

Winter, 4(4-0) HRI 435.

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

807. Workforce Management in the Hospitality Industry

Spring. 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 Spring. 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 concur-

rently.

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

Winter. 4(4-0) AFA 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

 $Fall, Winter, Spring, Summer. \ 1\ to\ 15$ 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.

HUMAN ECOLOGY HEC (COLLEGE OF)

201. Family in Its Near Environment

(F E 110.) Fall, Winter, Spring. Summer of odd-numbered years. 3(3-0) Sophomores. Foundations of human ecology are explored using conceptual frameworks of family as ecosystem and human development. Interrelationships of ecosystems which focus on families are examined.

HUMAN ENVIRONMENT AND DESIGN HED

College of Human Ecology

143. Design for Living I

Fall, Winter, Spring. 3(3-0)

Perceptual development including analytical judgement through the study of design, a vital part of the matrix of living. Design components and principles as they relate to the function and ideas in the various phases of human environment and daily life.

144. Design for Living II

Fall, Spring. 3(1-4) HED 143.

Use of design elements and application of principles in creative problems and media.

152. Principles of Clothing Construction

Fall, Winter, Spring. 3(2-2)

Principles of clothing construction related to fit, fabric and garment assembling.

171. Textiles for Consumers

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

A programmed sequence develops decisionmaking 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.

201. Contemporary Merchandising Management

Fall, Winter, Spring. 3(3-0) Sophomores.

Merchandisers supplying goods and services for consumer needs.

203. Selected Non-Textile and Apparel Merchandise

Winter, Spring. 3(3-0) HED 143.

Selected non-textile and apparel merchandise as it fulfills consumer needs and expectations.

215. Interior Environments

Fall, Winter. 3(3-0) Spring, Summer: 3 credits; credit by examination only. HED 144, sophomores or approval of department. Students may not receive credit in both HED 215, and HED 210, HED 213.

Design fundamentals as they relate to interior design and human behavior. Characteristics of interior design, finishing materials and artifacts.

216. Interior Environments: Studio

Fall, Winter, Spring. 3(0-6) HED 215 or concurrently. Students may not receive credit in both HED 216 and HED 211, HED 214.

Application of design fundamentals.

220. Interior Space Design

Fall, Winter. 3(0-6) HED 215, HED 216 or concurrently.

Basic designing and drawing of interior space in relationship to human needs.

221. Interior Color and Texture Design

Winter, Spring. 3(0-6) HED 220.

The manipulation and development of color and texture as components of environmental space design.

223. Interior Design Synthesis I

(222.) Fall, Spring. 3(0-6) HED 221.

Experimentation and representation of space, color and texture as they relate to environmental interior design.

239. Housing Conservation

Spring. 3(3-0) Interdepartmental with and administered by Building Construction.

Skills and techniques in conserving, repairing and remodeling existing housing. Structural components of housing and evaluation of housing structure.

252. Experimental Clothing Construction

Winter, Spring. 3(2-2) HED 152 or pass departmental placement examination.

Application of principles of clothing construction with emphasis on fitting, alteration and couturier construction techniques. Experimental execution and evaluation of techniques.