440. Nursery Management
Fall of even-numbered years. 3(2-2)
Management practices employed by wholesale, retail and landscape nurseries. Field trips to nurseries required.

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. Growth and Development
Winter. 4(4-0) BOT 301 or 411; 415.
Effects of environment and treatment with growth regulators on morphology and physiology of horticultural plants, and the roles of endogenous growth regulators in plant development.

809. Water and Nutritional Requirements
Fall. 4(2-2)
Factors affecting nutrition and methods and techniques for determining nutrient requirements for crop production.

810. Seminar
Fall, Winter. 1(0-1)

825. Post Harvest Physiology
Spring. 4(2-2)
Biochemical and biophysical changes associated with the maturation, ripening and senescence of harvested horticultural plants.

830. Advanced Horticultural Studies
Fall, Winter, Spring, Summer. Variable credit. Approval of department.

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

951. Cytogenetics in Plant Breeding
Winter of odd-numbered years. 3(2-0)
BOT 927, 929, or approval of department. Interdepartmental with and administered by Crop Science.
Application of cytogenetic principles to plant breeding. Significance of recombination, role of induced mutations, polyploidy, chromosome substitution, and aneuploid analysis as they apply to the field of plant breeding.

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

HOTEL, RESTAURANT AND INSTITUTIONAL MANAGEMENT

College of Business

102. Introduction to the Service Industries
Fall, Spring. 3(3-0)
Management careers and opportunities in hotel, motel, food service, health facilities, club, recreational centers, tourism and other public hospitality businesses. Includes front office practices. Local field trip required.

263. Service Industry Accounting
(263A) Fall, Winter. Summer of odd-numbered years. 4(4-0) AFA 202.

255. Survey of Food Services
(555) Winter. 4(4-0)
Organization and basic operation of various types of quantity food services. Fundamentals of meal planning, food production and service standards and techniques. Practice in evaluating food service installations. Field trips required.

261. Dimensions of Tourism
Fall, Winter. 4(4-0) EC 201.
Forces which influence the international and domestic hospitality, leisure, travel and recreation industries. Socio-economic models and measurement of regional impact, demand and supply.

305. Lodging Management
Fall, Winter. Summer of even-numbered years. 4(4-0) MGT 302.
Functions of organization, supervision and operation in organizations providing overnight accommodations. Considerations of ethics, politics, trade associations, collective bargaining, employee training and emphasis on human relationships.

323. Health FacilitiesExternship
Fall, Winter, Spring, Summer. Zero credit [2 credits]! 203; approval of health facilities management coordinator.
At least 500 hours of actual experience in junior-senior year, in a health care facility or related organization. Application of theoretical concepts to practical situations.

336. Service Industry Maintenance
Winter, Spring. Summer of even-numbered years. 4(4-0) 215.
Engineering in food and lodging industry, emphasizing maintenance, sanitation, equipment needs and cost considerations.

350. Work Analysis and Design
(350A) Fall, Winter. Summer of odd-numbered years. 4(4-0).
Work methods and layout. Includes flow analysis, time and motion study, work simplification, data processing and setting of standards.

353. Service Industry Externship
Fall, Winter, Spring, Summer. Zero credit. Approval of school.
Eight hundred hours of actual experience in a hospitality or tourism related organization. Application of theoretical concepts to practical supervisory of managerial situations.
490. Operational Analysis in the Housing and Feeding Industry
Spring, 4(4-0), 3 credits. An introduction to the use of operational analysis techniques in the housing and feeding industry. Basic mathematical concepts, including linear and non-linear programming, will be applied to develop solutions to major problems.(HED)

499. Independent Study
Fall; Winter; Spring; Summer, 1-15 credits. May re-enroll for a maximum of 15 credits. Approval of school and research committee. Research and investigation in any phase of housing, lodging, hospitality, or health services operations. (HED)

811. Policy Formulation and Organization
Spring, 4(4-0), 875, 888. MGT 806, 807, 888. Development of goals, objectives, and consistent business policies for the creation of dynamic and effective organizations for all phases of service industries. (HED)

861. Economic Implications of Tourism
Fall, 4(4-0), EC 860 or concurrently. Economic, historical, philosophical, psychological, governmental, and ethical aspects and satisfaction of travel. The promotion of tourism, the business of travel and its relationship to the hospitality industry. (HED)

875. Innovation in Hospitality Marketing
Spring, 4(4-0), MTA 805 or concurrently. Changing environment of the hospitality industry is examined and new developments in marketing are analyzed for potential innovative application in the hospitality sector. (HED)

888. Financial Management for the Service Industries
Winter, 4(4-0), 514, 640. Covers basing, franchising, tax considerations, planning to meet financial needs within constraints or capital markets, management of current and capital assets, including inventory and operational equipment. (HED)

890. Special Problems
Fall, Winter, Spring, Summer, 1 to 15 credits. Approval of school. Opportunity for the outstanding student to engage in depth analysis of a service industry area of his choice that will result in a positive contribution to the field. (HED)

896. Problems of the Service Industries
Winter, 4(4-0) or concurrently. Formulation of plans based on analysis of situations and trends applying general business principles. Discussion of actual cases with leaders in service industries. (HED)

898. Facilities Programming
Fall, 4(4-0). Application of principles and concepts drawn from many related disciplines to planning and operation of housing and food production systems. Utilization of optimum physical and human resources. (HED)

HUMAN ENVIRONMENT AND DESIGN* HED

College of Human Ecology

143. Design for Living I
Fall, Winter, Spring, 3(3-0). Perceptual development including analytical judgment through the study of design, a vital part of the matrix of living. Design concepts and principles as they relate to the function and ideas in the various phases of man's environment and daily life. (HED)

144. Design for Living II
Fall, Winter, Spring, 3(4-1). Use of design elements and application of principles in creative problem solving and media. (HED)

152. Principles of Clothing Construction
TRA 152, Fall, Winter, Spring, 3(2-2). Principles of clothing construction related to fit, fabric and garment assembling. (HED)

171. Textiles for Consumers
Fall, Winter, Spring, 4(3-0). 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. (HED)

201. Contemporary Retail Community
TRA 201, Fall, Winter, Spring, 3(3-0). Sophomores. The retail community as it responds to needs of consumer. (HED)

203. Selected Non-Textile and Apparel Merchandising
TRA 276, 276A, Fall, Winter, Spring, 3(3-0). Selected non-textile and apparel merchandising as it fulfills consumer needs and expectations. (HED)

210. Environmental Design: Space, Color and Texture
Fall, Winter, Spring, 3(3-6). Introduction to the field. (HED)

HUMAN DEVELOPMENT* HED

College of Human Ecology

*(Effective January 1, 1988.)

*Name changed July 1, 1970. Formerly Textiles, Clothing and Related Arts.
*Name changed July 1, 1970. Formerly College of Home Economics.

211. Environmental Design: Space, Color and Texture — Laboratory
Fall; Winter, 2(2-0) 210 per course. Discussion and demonstration of space, color and texture as components of human environment, their effect upon and use by man. (HED)

213. Synthesis of Environmental Design Elements
Fall, Spring, 2(2-0). 143 or approval of department. The synthesis of design elements, space, shape, color and texture, and their organization as they are related to man's near-environment. (HED)

214. Synthesis of Environmental Design Elements — Laboratory
Winter, Spring, 2(2-0). 213 concurrently. Discussion and demonstration of design elements, space, shape, color and texture, and their organization as they are related to man's near environment. (HED)

220. Interior Space Design
Fall, Winter, Spring, 3(0-6). 210. Basic designing and drawing of interior space in relationship to human needs. (HED)

221. Interior Color and Texture Design
Winter, Spring, 3(0-6). 220. Use of color and texture as components of environmental space design. (HED)

222. Basic Interior Design Synthesis
Fall, Spring, 3(0-6). 221. Experiential and representation of space, color and texture as they relate to environmental interior design. (HED)

230. History of Interior Design: Ancient to Medieval
Fall, 3(3-0). Historical development of furniture, textiles, and the other decorative arts in relation to interior design and architecture from ancient times to Medieval. (HED)

252. Experimental Clothing Construction
TRA 292, Fall, Winter, Spring, 3(2-2). Textile, 132 or approval of department. Application of principles of clothing construction with emphasis on fitting, alteration and construction techniques. Experimental execution and evaluation of techniques. (HED)

254. Contemporary Fashion Analysis
Fall, Winter, Spring, 3(2-2). 132 or approval of department. Analysis of fashion as evidence of a dynamic relationship between man and his environment, costume as an aesthetic expression, a sociological phenomenon, and a coordinating factor for the consumer market. (HED)

256. Survey of World Dress
Fall, Spring, 3(0-6). Secular and ceremonial dress of ethnic, peasant, and folk societies. Emphasis on costume considering its cultural meaning and influence on surrounding cultures. (HED)

301. Merchandising: Apparel and Home Furnishing Accessories
TRA 301, Winter, Spring, 4(4-0). 201, MKT 251. Emphasis on disposable consumer income as it influences the channel of distribution through merchandising of apparel and home furnishing accessories. (HED)