Nursery Management 440.

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

801. Research Procedures in Plant

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

ment.

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

Growth and Development Winter. 4(4-0) BOT 301 or 414; 808.

415

Effects of environment and treatment with growth regulating chemicals upon morphology and physiology of horticultural plants, and the roles of endogenous growth regulators in plant development.

809. Water and Nutritional Requirements

Fall. 4(3-2)

Factors affecting nutrition and methods and techniques for evaluating nutrient requirements for crop production.

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.

Advanced Horticultural Studies

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

899. Research

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

951Cytogenetics in Plant Breeding

Winter of odd-numbered years. 3(3-0) BOT 827, 919, or approval of department. Interdepartmental with and administered by Crop

Application of cytogenetic principles to plant breeding. Significance of recombination, role of induced mutations, polyploid, chromosome substitution, and aneuploid analyses 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 HR!

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 fi practice. Local field trip required. Includes front office

203. Service Industry Accounting

(203A) Fall, Winter. Summ odd-numbered years. 4(4-0) AFA 202. Summer of Principles of accounting applied to service industries. Financial statement analysis and cash flow concepts. Managerial accounting empha-

235. Service Industries Equipment and Utilities

(335.) Fall, Winter. Summer even-numbered years. 5(4-2) MTH 111. Summer of

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

245. Food Production Technology Fall, Spring. 5(4-2) HNF 102; MPH

200.

Interrelationships of the physical, biological and chemical principles relating to foods and supplies for the food service industry.

Survey of Food Services 255.

(355.) Winter. 4(4-2)

Organization and basic operation of various types of quantity food services. Fundamentals of meal planning, food production and service standards and techniques. Practice in evaluat-ing 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 activation in organizations providing overnight accommodations. Considerations of ethics, policics, trade associations, collective bargaining, employee training and emphasis on human relationships.

Health Facilities Externship

Fall, Winter, Spring, Summer. Zero credit [2 credits]†. 203, approval of health facilities management coordinator.

At least 800 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-num-bered years. 4(4-0) 235.

Engineering in food and lodging industry, entphasizing maintenance, rehabilitation, 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 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.

375. Service Industry Merchandising (375A., 375B.) Fall, Spring, Summer.

5(4-2)MTA 316.

Principles of marketing applied to service industries advertising, promotion, public relations and personal selling to achieve profitable public recognition and good will.

400H. Honors Work

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

405. Food and Beverage Management

(447.) Winter, Spring, Summer of odd-numbered years. 4(3-2) 203, 305; 435 or concurrently.

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 operation.

435. Food Production Systems

(345.) Fall, Spring. Summer of evennumbered years. 6(4-6) 245; HNF 100; FSC 242.

Recognition and achievement of quality in development of systematic relationships between items, time, labor, equipment and costs in quantity food production. Quality procure-ment policies for food, beverages and related items. Field trip required.

Passenger Transportation Systems

Spring 4(4-0) Interdepartmental with and administered by the Marketing and Transportation Administration Department.

Composition and objectives of principal passenger travel markets: Analysis of carrier service, pricing and promotional practices and prob-lems, competitive and cooperative relations. Review of major proposals for change and expansion of service systems.

Food and Beverage Evaluation

(445.) Fall, 4(3-2) 435; approval of school.

History of foods and beverages and related physiological and psychological theories and their application to quantity food production and

461. Tourism Principles and Practices Winter. 4(4-0) EC 200 or 201.

Evolution of tourism as an industry, correlation theory of tourism, tourism organizations, planning and development. Field trip required-

465.Recreation Industry Management Fall. 4(4-0) 305.

Applies management principles in the recreation center, club, tourist entertainment and sales, and similar related husinesses providing revenuegenerating recreation, accommodations, and serv-

472. Design and Layout

Winter, Spring. Summer of odd-numbered years. 4(4-0).

Conceptualization, design, layout and specifica-tion of service industry facilities.

473. Operations Research in the Service Industries

Fall, Spring. 4(3-0) 305; MTA 316; CPS 110: Seniors.

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

†See page A-2 item 3

Operational Analysis in the 490. Housing and Feeding Industry

Spring. 4(4-0) 305; Seniors.

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

Independent Study

Fall, Winter, Spring, Summer. 1(1-0) to 15(1-0) May re-enroll for a maximum of 15 credits. Approval of school.

Research in any phase of food, lodging, hospitality, tourism or health facilities operations.

Policy Formulation and 811. Organization

Spring. 4(4-0) 875, 888; MGT 806.

Development of goals, objectives and consistent business policies for the creation of dynamic and effective organizations for all phases of service industries.

Economic Implications of 861.Tourism

Fall. 4(4-0) EC 860 or concurrently.

Economic, historical, philosophical, psychological, governmental and educational aspects and satisfactions of travel. The promotion of tourism; the business of travel and its relationships to the hospitality industry.

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.

Financial Management for the Service Industries

Winter, 4(4-0) AFA 840.

Covers leasing, franchising, tax considerations, planning to meet financial needs from internal sources or from capital markets, management of current and capital assets, including inventories and operational equipment.

890. Special Problems

Fall, Winter, Spring, Summer. I 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.

896. Problems of the Service Industries

Winter, 4(4-0) 888 or concurrently,

Formulation of plans based on analysis of situations and trends applying general business prin-ciples. Discussion of actual cases with leaders in service industries.

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, utilizing optimum physical and human resources.

HUMAN DEVELOPMENT* H D

College of Human Medicine

590. Special Problems in Human Development

Fall, Winter, Spring, Summer. 1 to 6 May re-enroll for a maximum of 12 Human medicine students. ctedits. credits.

Each student will work under direction of a staff member on an experimental, theoretical or applied problem.

608.Pediatric Specialty Clerkship

Fall, Winter, Spring, Summer. 17 credits. HM 503; primary clerkship.

Clinical experience with pediatric patients under the direction of members of the faculty of the Department of Human Development and community pediatricians. Fall, Saginaw. Winter, Lansing. Spring, Grand Rapids. Summer, Flint.

HUMAN ENVIRONMENT AND DESIGN* HED

College of Human Ecology †

143. Design for Living I

(140, TRA 140.) Fall, Winter, Spring.

Perceptual development including analytical judgment 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 man's environment and daily life,

144. Design for Living II

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

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

152. Principles of Clothing Construction

(TRA 152.) Fall, Winter, Spring.

3(2-2)

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

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 prod-

201. Contemporary Retail Community

(TRA 201.) Fall, Winter, Spring.

Sophomores.

The retail community as it responds with a supply of goods and services to the needs of the consumer.

203. Selected Non-Textile and Apparel Merchandise

(276, TRA 276.) Winter, Spring. 3(3-0) 143.

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

Environmental Design: Space, Color and Texture

Fall, Winter. 3(3-0) 144 or approval

of devartment.

Space, color and texture as components of human environment, their effect upon and use by man.

*Name changed July 1, 1970. Formerly Textiles, Clothing and Related Arts.

†Name changed July 1, 1970. Formerly College of Home Economics.

Environmental Design: Space, 211. Color and Texture — Laboratory Fall, Winter. 2(2-0) 210 concurrently.

Discussion and demonstration of space, color

and texture as components of human environment, their effect upon and use by man.

213. Synthesis of Environmental Design Elements

Winter, 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.

Synthesis of Environmental Design Elements - Laboratoru

Winter, Spring. 2(2-0) 213 concurrentlu.

Discussion and demonstration of design elements, space, shape, color and texture, and their organization as they are related to man's

220. Interior Space Design

near environment.

Fall, Winter. 3(0-6) 210.

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

221. Interior Color and Texture Design

Winter, Spring. 3(0-6) 220 or concurrently.

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

222. Basic Interior Design Synthesis Fall, Spring. 3(0-6) 221.

Experimentation and representation of space,

color and texture as they relate to environmental interior design.

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.

252, Experimental Clothing Construction

(TRA 252.) Fall, Winter. 3(2-2) 152 or pass departmental placement examination.

Application of principles of clothing construc-tion with emphasis on fitting, alteration and conturier construction techniques. Experimental execution and evaluation of techniques,

Contemporary Fashion Analysis Fall, Winter, Spring. 3(2-2) 143 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.

Survey of World Dress 256.

Fall. 3(3-0).

Secular and ceremonial dress of ethnic, peasant, and folk societies. Emphasis on costume considering its contextual meaning and influence on surrounding cultures.

301. Mechandising: Apparel and Home Furnishing Accessories I (TRA 301.) Winter, Spring. 4(4-0)

201. MKT 351.

Emphasis on disposable consumer income as it influences the channel of distribution through merchandising of apparel and home furnishing accessories.

^{*}Effective January 1, 1968.