

929. **Seminar in Afro-American History**
Fall, Winter, Spring. 5 credits.
930. **Seminar in American Urban History**
Fall, Winter, Spring. 5 credits.
952. **Seminar in Ancient History**
Fall, Winter, Spring. 5 credits.
953. **Seminar in Medieval History**
Fall, Winter, Spring. 5 credits.
954. **Seminar in the Renaissance**
Fall, Winter, Spring. 5 credits.
955. **Seminar in the French Revolution and Napoleon**
Fall, Winter, Spring. 5 credits.
957. **Seminar in Russian History Before 1800**
Fall, Winter, Spring. 5 credits.
958. **Seminar in Modern Russian History**
Fall, Winter, Spring. 5 credits.
959. **Seminar in East European History**
Fall, Winter, Spring. 5 credits.
960. **Seminar in English History to 1688**
Fall, Winter, Spring. 5 credits.
961. **Seminar in Modern British History**
Fall, Winter, Spring. 5 credits.
965. **Seminar in Early Modern European History**
Fall, Winter, Spring. 5 credits.
966. **Seminar in Modern European History**
Fall, Winter, Spring. 5 credits.
967. **Seminar in Modern European Intellectual History**
Fall, Winter, Spring. 5 credits.
968. **Seminar in Modern French History**
Fall, Winter, Spring. 5 credits.
969. **Seminar in Modern German History**
Fall, Winter, Spring. 5 credits.
973. **Seminar in European International Relations**
Fall, Winter, Spring. 5 credits.
988. **Seminar in West African History**
Fall, Winter, Spring. 5 credits.
989. **Seminar in East African History**
Fall, Winter, Spring. 5 credits.
992. **Seminar in China in the Traditional Period**
Fall, Winter, Spring. 5 credits.
993. **Seminar in Modern China**
Fall, Winter, Spring. 5 credits.
996. **Historical Interpretation**
Fall, Winter, Spring. 1 credit. May re-enroll for a maximum of 9 credits. Approval

of department. Open only to teaching assistants in history.

Supervised direction in preparation and conduct of a teaching assignment required of all doctoral candidates. Student will work under the direction of a regular faculty member. Doctoral candidates must enroll in three terms of this course while fulfilling required teaching assignment.

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

HISTORY OF ART

See Art

HORTICULTURE

HRT

College of Agriculture and Natural Resources

201. **Fruits and Vegetables for Home and Garden**
Spring. 3(2-2)

Principles and practices used in producing fruits and vegetables for the home in small gardens and containers; guidance in how to determine the edible quality of fresh fruits and vegetables.

211. **Landscape Plants I**
Fall. 4(1-6).

Adaptation, identification, and evaluation of narrow-leaved evergreens, deciduous shrubs and trees, and woody vines, as they are used in the landscape. Emphasis is placed on the seasonal interest of the plants studied.

212. **Landscape Plants II**
Spring. 4(1-6)

Continuation of 211. Additional emphasis on the flowering characteristics of both deciduous and broad-leaved evergreen shrubs, trees and vines.

320. **Commercial Fruit Production**
Fall. 4(3-2) Juniors.

Commercial production of principal tree fruit crops of Michigan with emphasis on planting, soil management, fertilization, pruning, thinning, and grafting.

323. **Indoor Plants and Flowers**
Fall, Winter, Spring. 3(1-4) Not open to horticulture Majors.

Identification, culture, propagation and use of plants for homes, schools, offices and public buildings; principles of flower arrangement, construction of dish gardens and hanging baskets, and the forcing of bulbs.

325. **Outdoor Plants and Flowers**
Spring. 4(3-2).

Identification, use and landscape maintenance of flowering annuals, perennials, roses, trees, shrubs and evergreens. The Horticulture gardens are utilized as an outdoor laboratory.

330. **Special Topics in Horticulture**
Fall, Winter, Spring, Summer. 1 to 9 credits. May re-enroll for a maximum of 18 credits. Approval of department.

Special studies in fields not covered in other horticulture courses; primarily independent study.

402. **Principles of Weed Control**
Fall. 3(2-2) Juniors. Interdepart-

mental and administered jointly with Crop Science.

Comprehensive study of principles underlying weed control practices, and factors involved in both mechanical and chemical control.

408. **Principles of Plant Breeding**
Spring. 4(3-2) CSC 250. Interdepartmental and administered jointly with Crop Science.

Application of genetics and other sciences to breeding and improvement of agronomic and horticultural crops.

411. **Fruit and Landscape Crop Physiology I**
Fall. 4(3-2) Juniors.

Physiological effects of moisture and nutritional environments related to fruit crops and woody perennial plants.

412. **Fruit and Landscape Crop Physiology II**
Winter of odd-numbered years. 4(3-2) Juniors.

Physiology of flowering and fruit development in woody plants.

416. **Handling and Storage of Horticultural Crops**
Winter. 4(4-0) Juniors.

Biological principles involving physical movement of fresh products from farm to consumer; physiological processes affecting maturity, quality and condition; selection and use of handling, storage, and transport facilities.

417. **Controlled Plant Environment**
Fall. 4(2-4) BOT 301 or 414.

Control of greenhouse environment and its effect on growth and production of horticultural crops.

419. **Small Fruits**
Winter. 3(3-0) Juniors.

Production, culture, utilization and physiology of strawberries, grapes, blueberries and raspberries.

421. **Principles of Plant Propagation**
Winter. 4(3-2) Juniors.

Principles of plant propagation by seed, cuttage, layerage, and graftage; scion and stock relationship; stocks for fruit and ornamental plants; practices employed by nurseries in propagation of plants.

424. **Pesticide and Growth Regulating Chemicals for Horticultural Crops**
Spring. 3(2-2) Juniors.

Spray and dust equipment and application; pesticide and growth regulating chemicals, their use in the growing of horticultural crops, and influence on the physiology of the plant.

432. **Vegetable Crop Physiology**
Spring. 4(3-2) May re-enroll for a maximum of 8 credits. Juniors.

Physiological principles involved in and related to the production of high quality vegetables.

433. **Greenhouse Crop Production Management**
Winter. 4(3-2) May re-enroll for a maximum of 8 credits.

Principles of floriculture crop physiology; includes control of environmental conditions, and management. Emphasis on cut flowers in even-numbered years; on container-grown plants in odd-numbered years.

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.

808. Growth and Development

Winter. 4(4-0) BOT 301 or 414; 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.

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(3-0) BOT 827, 919, 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, 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

HRI

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 practice. Local field trip required.

203. Service Industry Accounting

(203A) Fall, Winter. Summer of odd-numbered years. 4(4-0) AFA 202.

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

235. Service Industries Equipment and Utilities

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

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.

255. Survey of Food Services

(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 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 activation in organizations providing overnight accommodations. Considerations of ethics, policies, trade associations, collective bargaining, employee training and emphasis on human relationships.

323. 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-numbered years. 4(4-0) 235.

Engineering in food and lodging industry, emphasizing 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 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.

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 even-numbered 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 procurement policies for food, beverages and related items. Field trip required.

448. 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 problems, competitive and cooperative relations. Review of major proposals for change and expansion of service systems.

455. 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 service.

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 businesses providing revenue-generating recreation, accommodations, and services.

472. Design and Layout

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

Conceptualization, design, layout and specification 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 management problems, emphasizing quantitative and analytical decision models designed for specific operations in this field.

†See page A-2 item 3