

852. **Graduate Reading Course in Ancient History**
(850.) Fall, Winter, Spring. 4 credits.
853. **Graduate Reading Course in Medieval History**
(856.) Fall, Winter, Spring. 4 credits.
854. **The Emergence of Commercial Capitalism**
Winter of odd-numbered years. 3 credits. EC 318, 324. Interdepartmental with and administered by the Economics Department. The rise of the mercantilist economies of Europe with stress on the growth of internal and international trade and finance during the 16th and 17th century.
855. **The Industrial Revolution in Europe**
Winter of even-numbered years. 3 credits. EC 318, 324. Interdepartmental with and administered by the Economics Department. The preconditions that led to the momentous changes in agriculture and industry in Europe from 1700-1914.
863. **Graduate Reading Course in Continental European History: 1500-1870**
(880.) Fall, Winter, Spring. 4 credits.
864. **Graduate Reading Course in Continental European History Since 1870**
(887.) Fall, Winter, Spring. 4 credits.
879. **Interdisciplinary Seminar: Behavioral and Historical Approaches to Problems of Selected Foreign Areas**
For course description, see Interdisciplinary Courses.
894. **Graduate Reading Course in African History**
Fall, Winter, Spring. 4 credits.
897. **Graduate Reading Course in Asian History**
(890.) Fall, Winter, Spring. 4 credits.
899. **Research**
Fall, Winter, Spring. Variable credit. Approval of department.
912. **Seminar in Canadian-American History**
Fall, Winter, Spring. 5 credits.
919. **Seminar in Latin American History**
(908.) Fall, Winter, Spring. 5 credits.
921. **Seminar in Seventeenth and Eighteenth Century American History**
(932.) Fall, Winter, Spring. 5 credits. Approval of department.
922. **Seminar in Nineteenth Century American History**
(934.) Fall, Winter, Spring. 5 credits.
923. **Seminar in Twentieth Century American History**
(936.) Fall, Winter, Spring. 5 credits.
948. **Seminar in English History**
(946.) Fall, Winter, Spring. 5 credits.

952. **Seminar in Ancient History**
Fall, Winter, Spring. 5 credits.
953. **Seminar in Medieval History**
(956.) Fall, Winter, Spring. 5 credits.
963. **Seminar in Continental European History, 1500-1870**
(980.) Fall, Winter, Spring. 5 credits.
964. **Seminar in Continental European History Since 1870**
(987.) Fall, Winter, Spring. 5 credits.
994. **Seminar in African History**
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.
997. **Seminar in Asian History**
Fall, Winter, Spring. 5 credits.
998. **Doctoral Seminar**
Fall, Winter, Spring. 3 credits. Re-enrollment for a total of 9 credits required. Approval of department. For doctoral candidates in history only.
A seminar jointly conducted by professors to provide students working in related fields of history with intensive experience in research. Students enrolled will develop research topics under the direction of their major professor, but will meet regularly to discuss common problems of research technique, bibliography, and methodology. In the course of the seminar, students will present progress reports on their individual research and complete their work by presenting a formal research paper to the students and professors involved in the seminar. Students enrolled in this course will be expected to enroll for three consecutive terms. No credit will be granted for any term unless all three are completed.
999. **Research**
Fall, Winter, Spring. Variable credit. Approval of department.

HISTORY OF ART

See Art

HOME ECONOMICS

H E

College of Home Economics

401. **Senior Seminar**
Fall, Winter, Spring. 3(2-0) Seniors.
450. **Selected Topics in Home Economics**
Spring. 3 credits. Seniors.
A study of current issues of concern to professional home economists.

HORTICULTURE

HRT

College of Agriculture and Natural Resources

201. **Basic Horticulture**
Fall. 4(3-2)
Principles of horticultural science related to fruits, flowers, vegetables and landscape plants.
211. **Landscape Plants I**
Fall. 4(1-6)
Identification, adaptability, and evaluation of deciduous and narrow-leaved evergreen shrubs, trees and vines as landscape plants, with emphasis on seasonal interest.
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)
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. **Ornamental Plant Management**
Spring. 4(3-2)
Planting, maintenance and management of ornamental plants. One field trip required.
330. **Special Topics in Horticulture**
Fall, Winter, Spring, Summer. 1 to 3 credits. May re-enroll for a maximum of 12 credits. Approval of department.
Laboratory or field work, consultation with staff, and independent study; dwarf fruit trees, controlled atmosphere storage, greenhouse production of vegetables, chemical weed control, container-grown nursery crops, garden center layout, growth regulators.
402. **Principles of Weed Control**
Fall. 3(2-2) Juniors. Interdepartmental and administered jointly with the Crop Science Department.
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 the Crop Science Department.
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.
The flowering and fruiting of 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
Fall and Spring of odd-numbered years. 4(3-2) May re-enroll for a maximum of 8 credits. Juniors.
Modern technology used in production of important fresh market and processing vegetables. Field trips to commercial vegetable areas required.

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.
Morphological and physiological changes in horticultural plants as induced by growth regulators.

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 the Crop Science Department.
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.

953. Cytogenetics in Plant Breeding Laboratory
Winter of odd-numbered years. 3(0-6) CSC 951 or concurrently. Interdepartmental with the Crop Science Department.
Laboratory course to accompany CSC 951.

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

245. Food Production Technology
Fall, Spring. 5(3-3) FN 202; MPH
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, Spring. Summer of odd-numbered years. 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(3-2) 261; 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, 320; 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.

335. Service Industries Equipment and Utilities
Fall, Winter. Summer of even-numbered years. 5(4-2) MTH 111.
Engineering in food and lodging industry, emphasizing utilities, machinery characteristics and environment.

336. Service Industry Maintenance
Winter, Spring. Summer of even-numbered years. 4(4-0) 335.
Engineering in food and lodging industry, emphasizing maintenance, rehabilitation, equipment needs and cost considerations.

350. Work Methods
(350A.) Fall, Winter. Summer of odd-numbered years. 4(3-2) Juniors, STT 121.
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. 305; approval of academic adviser.
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.

HOTEL, RESTAURANT AND INSTITUTIONAL MANAGEMENT HRI

College of Business

102. Introduction to the Service Industries
Fall, Spring. 3(2-2)
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, 388.) Fall, Winter. Summer of odd-numbered years. 4(3-2) AFA 202.
Principles of accounting applied to service industries. Financial statement analysis and cash flow concepts. Managerial accounting emphasized.

†See page A-2 item [3]