

803. Historiography
Fall. 3 credits.

Readings, discussions and written exercises designed to introduce the beginning graduate student to the problems, methods, and techniques of historical research. Examination of the major approaches to history. Discussion of and practice in the main techniques of historical method, including bibliography, documentation, and literary style. A section of the course will be arranged for the study of European history materials and a section for the study of American history materials.

804. Readings in American Civilization

Fall, Winter, Spring. 5 credits.
Approval of department and 6 credits in the field of the reading course taken in the Master's program.

Readings, discussions and written projects designed to improve the competence of the high school teacher in the major themes of American history. Effective teaching approaches. Students will read widely in major themes and prepare an essay on a significant problem or topic.

806. Readings in Non-Western Civilizations

Fall, Winter, Spring. 5 credits.
Approval of department and 6 credits in the field of the reading course taken in the Master's program.

Intensive reading and discussion on the non-Western world designed to view the field in historical perspective, to tackle technical teaching problems and to give a review of pertinent teaching materials, major interpretations and current problems.

812. Readings in Canadian History

Fall, Winter, Spring. 4 credits.

819. Readings in Latin-American History

Fall, Winter, Spring. 4 credits. Approval of department.

821. Readings in Seventeenth and Eighteenth Century American History

Fall, Winter, Spring. 4 credits. Approval of department.

822. Readings in Nineteenth Century American History

Fall, Winter, Spring. 4 credits.

823. Readings in Twentieth Century American History

Fall, Winter, Spring. 4 credits.

IDC. Interdisciplinary Seminar on Africa

For course description, see Interdisciplinary Courses.

848. Readings in English History

Fall, Winter, Spring. 4 credits.

852. Readings in Ancient History

Fall, Winter, Spring. 4 credits.

853. Readings in Medieval History

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.

857. Readings in Renaissance and Reformation

Fall, Winter, Spring. 4 credits.

863. Readings in Early Modern European History

Fall, Winter, Spring. 4 credits.

864. Readings in Recent European History

Fall, Winter, Spring. 4 credits.

867. Readings in Russian History

Fall, Winter, Spring. 4 credits.

873. Readings in the History of International Relations

Fall, Winter, Spring. 4 credits.

894. Readings in African History

Fall, Winter, Spring. 4 credits.

897. Readings in Asian History

Fall, Winter, Spring. 4 credits.

899. Research

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

920. Seminar in British and British Empire History

Fall, Winter, Spring. 5 credits.

921. Seminar in Russian and East European History

Fall, Winter, Spring. 5 credits.

928. Seminar in American History

Fall, Winter, Spring. 5 credits.

931. Seminar in African History

Fall, Winter, Spring. 5 credits.

932. Seminar in Asian History

Fall, Winter, Spring. 5 credits.

933. Seminar in the History of International Relations

Fall, Winter, Spring. 5 credits.

952. Seminar in Ancient History

Fall, Winter, Spring. 5 credits.

966. Seminar in Modern European History

Fall, Winter, Spring. 5 credits.

996. The Teaching of History in College

Fall, Winter, Spring. 1 credit. May re-enroll for a maximum of 3 credits. Approval of department. Open only to teaching assistants in history. Supervised direction in the preparation and conduct of teaching assignments.

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, Vegetables, and Ornamental Plants for Outdoor Home Plantings

Spring. 3(2-2)

Principles and practices used in producing fruits, vegetables, flowers, trees, shrubs and vines in small gardens, containers, and the home landscape. Indices for edible quality of home grown 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.

324. Mass Merchandising Ornamental Plants

Spring. 2(1-2) 211 or 212.

History of merchandising ornamental plants; types of garden centers, impact of cultural information and labeling on consumer. The manager, advertiser, and buyer decision making process. One day field trip required.

**Descriptions — Horticulture
of
Courses**

325. Ornamental Plant Management
Spring. 4(3-2) 211 or 212.

Transplanting and maintenance of landscape plants subject to stresses of urban environment. Development of annual maintenance specifications. Identification and evaluation of herbaceous annuals, biennials and perennials for landscape.

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: independent research, floral design, retail flower store and greenhouse management, and horticultural therapy.

350. Floral Design

Spring. 2(0-4) Junior majors and approval of department.

Principles of floral design and the care and handling of materials. Creation of corsages, terraria, tropical planters, and home, hospital and novelty arrangements.

402. Principles of Weed Control

Fall. 3(2-2) Juniors. Interdepartmental 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. 3(3-0) BOT 301 or 414.

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

418. Controlled Plant Environment Laboratory

Fall. 1(0-2) 417 or concurrently.

Experiments in the morphology and physiology of greenhouse crops. Crop production and the use of greenhouse equipment.

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, cutting, 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) Juniors.

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

433. Greenhouse Cut Flower Production

Winter of even-numbered years. 4(3-2)

May re-enroll for a maximum of 8 credits.

Principles of flower crop physiology; includes control of environmental conditions, and emphasizes the management of cut flower production.

434. Greenhouse Container-Grown Plant Production

Winter of odd-numbered years. 4(3-2)

417 or approval of department.

Principles of flower crop physiology; includes control of environmental conditions and emphasizes the management of container-grown plant production.

440. Nursery Management

Fall. 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.

ment.

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

807. Physiology of Horticulture Crops I

Fall. 4(3-2) BOT 415.

Physiology of plant organs and tissue development, sexual reproduction, rooting, bulb growth and development and grafting of horticultural crops.

808. Physiology of Horticultural Crops II

Winter. 4(3-2) BOT 415.

Physiology of juvenility, flowering and fruiting of herbaceous and woody plants, senescence and bud and seed dormancy as related to horticultural crops.

809. Physiology of Horticultural Crops III

Spring. 4(3-2) BOT 415.

Physiology of abscission, winter hardiness, water and nutrient relations, crop productivity and problems concerned with 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 427, 828, 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. 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.

235. Service Industries Equipment and Utilities

(335.) Fall, Winter. Summer of even-numbered years. 4(4-0) MTH 108.

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

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.

261. Dimensions of Tourism

Fall, Winter. 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.

265. Food Production Standards

Fall, Spring. 4(4-0) 245; HNF 100.

Interrelationships of the environmental, microbiological and physiological principles relevant to the food service industry.