

498H. Honors Thesis

Fall, Winter, Spring. 4 credits. Reenrollment for a total of 12 credits required. Approval of department.

Those preparing an honors thesis will enroll in this course for three consecutive terms in their senior year. They will work on a research project under the direction of a member of the history faculty and will produce an honors thesis.

Graduate courses are of two types: reading courses and seminars. The former entail wide reading on selected topics and written and oral reports. The latter emphasize original research and the writing of research papers. The content of both reading courses and seminars in a given field may change from term to term, thus making possible a rich and varied offering in history for the graduate student. Students may enroll in a course for more than one term or more than one section of a course during the same term, provided that duplication of content does not result. Sheets giving detailed information concerning all graduate courses to be offered during a particular term are available in the History office during the preceding term. Students desiring to enroll in these courses must have the permission of the department.

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.

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.

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.

831. Archives Administration

Winter. 4(4-0) Graduate students.

Review of archives administration, past and present, study of archivist's functions in the archives of business, government, educational, and private agencies.

832. Archives Operations

Spring. 4(1-6) HST 831.

Practical work in processing and analyzing collections in University Archives and Historical Collections; reporting and critiques on archives operations.

833. Archives Independent Study

Fall, Winter, Spring, Summer. 4 credits. HST 832.

An advanced archives course in which the student works under supervision on one or more projects, e.g., processing, finding aids, and oral history.

IDC. Sub-Saharan Africa Seminar

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.

855. The Industrial Revolution in Europe

Winter of even-numbered years. 3(3-0) EC 318, EC 324. Interdepartmental with and administered by the Department of Economics. 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.

898. Directed Reading

Fall, Winter, Spring, Summer. 4 credits. May reenroll for a maximum of 16 credits. Graduate students; approval of department. Supervised individual reading on special topics and fields.

899. Master's Thesis Research

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

901A. Doctoral Seminar

Fall. 3(3-0) Admission to doctoral program in history.

HST 901A, HST 901B and HST 901C constitute a three-term seminar required of students entering doctoral program. Under guidance of dissertation director and course instructors student will prepare major research paper and submit for criticism by all participants. Grades are given for the three terms at the end of HST 901C.

901B. Doctoral Seminar

Winter. 3(3-0) HST 901A.

Continuation of HST 901A.

901C. Doctoral Seminar

Spring. 3(3-0) HST 901B.

Continuation of HST 901B.

999. Doctoral Dissertation Research

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

HISTORY OF ART

See Art.

HORTICULTURE

HRT

College of Agriculture and Natural Resources

101. Principles of Horticulture

Fall, Spring. 4(3-2) Not open to students with credit in HRT 201.

Principles of horticultural science and horticultural crop production, as related to fruits, vegetables, flowers and landscape plants.

211. Ornamental Trees and Narrow-leaved Evergreens

Fall. 4(2-4)

Identification, adaptation and evaluation of trees, deciduous shrubs, narrow-leaved evergreens and woody vines. Emphasis is on the aesthetic and functional uses of trees and shrubs in the landscape.

212. Ornamental Flowering Shrubs and Broad-leaved Evergreens

Spring. 4(2-4) HRT 211 or approval of instructor.

Identification, adaptation and evaluation of trees, deciduous shrubs, broad-leaved evergreens, woody vines and ground covers. Emphasis is on the flowering characteristics and aesthetic and functional uses of plants in the landscape.

221. Commercial Plant Propagation

Winter. 4(3-2) HRT 101.

Principles of plant propagation by seed, cutting, layerage, and graftage employed by nurseries; use of growth regulators and environmental treatments in plant propagation.

320. Tree Fruit Production

Fall. 4(3-2) HRT 101, Juniors.

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

Descriptions – Horticulture

of

Courses

- 325. Ornamental Plant Management**
Spring. 4(3-2) HRT 101, HRT 211, HRT 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.

- 326. Herbaceous Ornamental Plants**
Summer. 4(3-3) HRT 101 or BOT 205 or approval of department.

Identification, evaluation, and utilization of annual, biennial, and herbaceous perennial plants for landscape. Includes bulbs, herbs, grasses, ferns, and cultivated plants.

- 330. Special Problems**
Fall, Winter, Spring, Summer. 1 to 4 credits. May reenroll for a maximum of 12 credits. Approval of department.

Individual work on a field, laboratory or library research problem of special interest to the student.

- 331. Selected Topics**
Fall, Winter, Spring, Summer. 1 to 4 credits. May reenroll for a maximum of 12 credits if different topic is taken. Approval of department.

- 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 for Horticultural Crops**
Fall. 4(3-2) CEM 132, BOT 301.

Principles underlying weed control practices for horticultural crops. Factors involved in mechanical, chemical and biological control.

- 408. Principles of Plant Breeding**
Winter. 4(3-2) CSS 250. Interdepartmental with and administered by the Department of Crop and Soil Sciences.

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

- 410. Fruit Tree Physiology I**
Winter of even-numbered years. 4(4-0) Juniors, BOT 301, HRT 101.

Physiological effects of nutrition, moisture, light, temperature and culture as related to tree fruit crops.

- 412. Fruit Tree Physiology II**
Winter of odd-numbered years. 3(3-0) Juniors, HRT 101, BOT 301.

Physiology of flowering and fruit development in woody plants with special reference to chemical and cultural methods of manipulation.

- 416. Handling and Storage of Horticultural Crops**
Spring. 4(3-2) 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) HRT 101, BOT 301 or BOT 414.

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

- 418. Controlled Plant Environment Laboratory**
Fall. 2(1-2) HRT 417 or concurrently.

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

- 419. Small Fruit Production**
Winter of odd-numbered years. 3(3-0) HRT 101, BOT 205, BOT 301.

Commercial production culture, utilization and physiology of strawberries, grapes, blueberries and raspberries.

- 433. Greenhouse Cut Flower and Foliage Plant Production**
Spring of even-numbered years. 4(3-2) HRT 418 or approval of department.

Principles of cut flower and foliage plant physiology; emphasizes production management.

- 434. Greenhouse Container-Grown Plant Production**
Winter. 4(3-2) HRT 418 or approval of department.

Principles of flower crop physiology; management of container-grown plant production.

- 435. Commercial Bedding Plant Production**
Spring of odd-numbered years. 4(3-2) HRT 417, HRT 418, HRT 434.

Production and marketing of bedding plants. Includes germination, soils, transplanting, environmental factors, production practices, major species, structures, equipment, systems, problems, economics and marketing. One field trip required.

- 440. Nursery Management**
Fall. 3(2-2) Juniors.

Management practices applied to wholesale nursery production and marketing. One all-day field trip to visit nurseries is required.

- 452. Warm Season Vegetables**
Spring. 3(3-0) HRT 101, BOT 301, CSS 210.

Warm season vegetable crops with emphasis on botany, taxonomy, morphology, growth processes, production, harvesting, handling, quality and composition.

- 453. Warm Season Vegetables Laboratory**
Spring. 1(0-2) HRT 452 or concurrently.

Identification of seeds and plants and factors affecting germination, sex expression, premature flowering, bulb and tuber formation.

- 456. Cool Season Vegetables**
Fall. 3(3-0) HRT 101, BOT 301, CSS 210.

Cool season vegetable crops with emphasis on botany, taxonomy, morphology, growth processes, production, harvesting, handling, quality and composition.

- 457. Cool Season Vegetables Laboratory**
Fall. 1(0-2) HRT 456 or concurrently.

Mineral nutrition, fertilizer placement and sources, herbicide action, weed competition, plant identification and post-harvest conditions for vegetables.

- 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. Physiology of Horticultural Crops**
Winter of even-numbered years. 4(3-2) BOT 415.

Physiology of grafting, juvenility, flowering of woody plants, fruiting, senescence, bud and seed dormancy as related to horticultural crops. Emphasis on critical review of literature.

- 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. Special Research Problems**
Fall, Winter, Spring, Summer. Variable credit. May reenroll for a maximum of 12 credits. Approval of department.

- 831. Selected Topics**
Fall, Winter, Spring, Summer. 1 to 4 credits. May reenroll for a maximum of 12 credits if different topic is taken. Approval of department.

- 840. Tissue Culture for Plant Breeding**
Winter of even-numbered years. 3(2-2) BOT 414, HRT 408.

The application of plant cell, protoplast and tissue culture methodologies and principles to crop improvement.

- 899. Master's Thesis Research**
Fall, Winter, Spring, Summer. Variable credit. Approval of department.

- 999. Doctoral Dissertation 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) Not open to Seniors.

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.