Seminar In Comparative Black History 880.

Fall, Spring. 3(3-0) A student may earn a maximum of 12 credits in all enrollments for this course. Methods and concepts that inform comparative history. The slave trade as a definitive link between Africa and the two Americas and the Caribbean, creating the black diaspora. Rise and fall of the slave trade and of disparate slave sys tems. Periods andtopics vary.

Independent Study 890.

Fall, Spring, Summer. 1 to 3 credits. A student may earn a maximum of 6 credits in all enrollments for this course.

R: Approval of department.

Special projects, directed reading, and research arranged by an individual graduate student and a faculty member in areas supplementing regular course offer-

Master's Research

Fall, Spring, Summer. 1 to 3 credits. A student may earn a maximum of 3 credits in all enrollments for this course.

R: Approval of department.

Directed research in support of Plan B master's degree requirements.

Master's Thesis Research 899.

Fall, Spring, Summer. 1 to 6 credits. A student may earn a maximum of 6 credits in all enrollments for this course.

R: Open only to graduate students in the Department of History.

Directed research in partial fulfillment of Plan A master's degree requirements.

Advanced Research Seminar in History

Fall, Spring. 3(3-0) A student may earn a maximum of 9 credits in all enrollments for this course. Current issues of professional importance. Innovative research topics and techniques.

Independent Study

Fall, Spring, Summer. 1 to 4 credits. A student may earn a maximum of 9 credits in all enrollments for this course.

R: Open only to doctoral students. Approval of department.

Special projects, directed reading, and research arranged by an individual doctoral student and a faculty member in areas supplementing the regular course offerings.

Doctoral Dissertation Research 999.

Fall, Spring, Summer. 1 to 6 credits. A student may earn a maximum of 24 credits in all enrollments for this course.

R: Open only to doctoral students in the Department of

HISTORY OF ART HA

Department of History College of Arts and Letters

Language of Art

Fall, Spring. 3(3-0)

Visual elements, organizing principles, materials, and techniques that allow painting, sculpture, architecture, prints, and drawings to speak to our intellect and emotions.

SA: HA 200

Perspectives on World Art: What Is Art? 120.

World art history from multicultural and interdisciplinary perspectives. Thematic and comparative approach to the study of the arts, both ancient and modern, of Europe, Asia, Africa, and the Americas in cultural context.

121. Perspectives on World Art: The Creative Process

Spring. 4(4-0)

History of artistic expression from a multicultural perspective. An artist-specific, medium-specific, and object-specific approach to the study of the arts, both ancient and modern, of Europe, Asia, Africa, and the Americas.

Medieval Art

Fall, Spring. 3(3-0)

R: Not open to freshmen.

Major work's of art in the medieval East (Byzantium, Russia, and the Islamic world) and West (Europe) in their cultural context.

Baroque Art and Architecture

Fall. $\bar{3}(3-0)$

R: Not open to freshmen

Artistic achievemants of major artists of 17th century Italy, Spain, Flanders, Holland, England and France.

260. East Asian Art

Fall. 3(3-0)

R: Not open to freshmen.

Thematic introduction to East Asian civilization through selected masterpieces of visual arts. Main trends of East Asian arts throughout a range of time periods.

292. Introduction to Ancient Studies

Fall. 2(1-2) Interdepartmental with Arts and Letters, Classical Studies, and History. Administered by Arts and Letters.

Methods and current trends in the study of the Greek and Roman world. Visits to library and museum collec-

338. Eighteenth-Century American Art

Fall, 3(3-0) Interdepartmental with American

Studies

R: Not open to freshmen.

Artistic production in North America in the Colonial and early Republican cultural contexts. SA: HA 438

Nineteenth-Century American Art

Spring. 3(3-0) Interdepartmental with American Studies.

R: Not open to freshmen.

Nineteenth-century artistic production in North America in its cultural context.

SA: HA 448

358. Twentieth-Century American Art Through Midcentury

Fall. 3(3-0) Interdepartmental with American Studies.

R: Not open to freshmen.

Twentieth-century artistic production in North America in its cultural context.

SA: HA 458

401. Greek Art and Archaeology

Fall. 3(3-0)

P: HA 201. R: Not open to freshmen and sophomores. Completion of Tier I writing requirement.

Arts of Greek antiquity. The Bronze Age to the Roman conquest. Discussion of specific archaeological sites.

Roman Art and Archaeology

Spring. 3(3-0)

P: HA 201. R: Not open to freshmen and sophomores. Completion of Tier I writing requirement.

Arts of ancient Rome from the foundation of the city to the fall of the empire. Discussion of specific archaeological sites.

Ancient Greek and Roman Painting

Spring. 3(3-0)

P: HA 201. R: Not open to freshmen and sophomores. Greek and Roman painting: pottery and wall painting from the tenth century B.C. to the fall of Rome.

407. Greek and Roman Architecture and Sculpture

Spring of even-numbered years. 4(4-0)

P: HA 201. R: Not open to freshmen and sophomores. Archaic Age through Constantine the Great. Greek religious sculpture, Greek and Roman temples, and Greek reliefs.

Early Christian and Byzantine Art Fall. 4(4-0)

P: HA 201. R: Not open to freshmen and sophomores. Completion of Tier I writing requirement.

Sculpture, architecture, painting, and minor arts of the Medieval East from the adoption of Christianity by Constantine in 315 A.D. to the fall of Constantinople in 1453. Historical, liturgical, theological, and literary influences.

415. Early Medieval Art

Fall of odd-numbered years. 4(4-0) P: HA 201. R: Not open to freshmen and sophomores. Completion of Tier I writing requirement. Sculpture, architecture, monumental painting and minor arts of the Medieval West from the migrations of the fourth century to the Romanesque period.

Late Medieval Art

Spring. 4(4-0)

P: HA 201. R: Not open to freshmen and sophomores. Sculpture, architecture, monumental painting, and minor arts from St. Denis in the twelfth century to Gothic variations in northern Europe.

420. Renaissance Architecture and Sculpture

Spring of odd-numbered years. 4(4-0) P: HA 202. R: Not open to freshmen and sophomores. Theories and practice of architecture and sculpture in Italy, from the thirteenth to the sixteenth centuries. Key figures such as Brunelleschi, Donatello, and Michelangelo.

422. Italian Renaissance Painting Fall. 4(4-0)

P: HA 202. R: Not open to freshmen and sophomores. Major masters from later thirteenth century through the mid-sixteenth century, Giotto to Michelangelo.

424. The Age of Michelangelo

Spring of even-numbered years. 3(3-0) Interdepartmental with History.

P: HA 202 or HST 333. R: Approval of department. Art, society in the Italian Renaissance. The works of Michelangelo as reflections of events and concerns of his time.

Northern Renaissance Art 427.

Fall of odd-numbered years. 3(3-0)

P: HA 202. R: Not open to freshmen and sophomores. Painting and sculpture in Germany and Flanders from Van Eyck to Bruegel.

430. Baroaue Art in Italy

Spring of odd-numbered years. 3(3-0) P: HA 202. R: Not open to freshmen and sophomores. Painting, sculpture and architecture of the seven-teenth century in Italy. The Carracci, Caravaggio, Bernini, and Borromini.

432. Northern Baroque Art

Spring of even-numbered years, 3(3-0) P: HA 202. R: Not open to freshmen and sophomores. Seventeenth-century art in Flanders, France, and Holland. Paintings of Rubens, Poussin, Hals and Rembrandt. Architecture in France.

433. Colonial Spanish Art and Architecture Spring. 3(3-0)

P: HA 202. R: Not open to freshmen and sophomores. Painting, sculpture and architecture within the cultural contexts of sixteenth, seventeenth, and eighteenth-century Spain and Latin America.

440. United States and European Architecture since 1850

Spring. 3(3-0)

P: HA 203 or approval of department. R: Not open to freshmen and sophomores.

Technological, stylistic, and intellectual developments in architectural design. European and United States architects and the changing meaning of avant garde, traditional, and vernacular approaches.

441. American Genre Painting

Fall, Spring. 3(3-0) Interdepartmental with American Studies.

P: HA 438 or HA 448 or HA 458.

Genre painting produced in the United States between 1790 and the early decades of the 20th century.

442. The Art of Winslow Homer

Fall, Spring. 3(3-0) Interdepartmental with American Studies.

P: HA 438 or HA 448 or HA 458. R: Not open to freshmen and sophomores.

Detailed consideration of Homer's career and his work in a variety of media and genres in the context of a changing nation between 1860 and 1910.

444. Modern Latin American and Latino Art Fall, Spring. 3(3-0)

P: HA 202. R: Not open to freshmen and sophomores. Nineteenth- and twentieth- century art in Latin America. Latino art in the United States.

445. Art in the Age of Revolution Fall. 4(4-0)

P: HA 203. R: Not open to freshmen and sophomores. European art from the mid 18th c. Industrial Revolution through the Revolutions of 1848. Major artists include, Goya, Ingres, Delacroix, Constable, Turner, Courbet, and Manet.

446. Monet and His Times

Spring. 4(4-0)

P: HA 202. R: Not open to freshmen and sophomores. With Monet as a focus, European Art from the midnineteenth century through World War I. Renoir, Cezanne, Degas, Van Gogh, Seurat, Rodin, Picasso, and others.

450. Twentieth Century Western Arts and Ideas

Fall of even-numbered years. 4(4-0) P: HA 202. R: Not open to freshmen and sophomores. Origins of modernism and the major Western artistic movements of the twentieth century to 1960, in their historical contexts.

452. Contemporary Art

Spring. 4(4-0)

P: HA 203. R: Not open to freshmen and sophomores. Art in various media created during the last two decades and its art historical sources. Criticism and its relationship to the artistic and cultural climate.

460. Art of India and Southeast Asia Fall. 3(3-0)

P: HA 204. R: Not open to freshmen and sophomores. Art and architecture of India and Southeast Asia, with attention to the major religions (Hinduism, Buddhism, Jainism, Islam) on which that art is predominantly based.

462. The Arts of China

Fall. 4(4-0)

 $P\!:H\!A$ 204 or approval of department. $R\!:$ Not open to freshmen and sophomores.

Chinese art from the Bronze Age to the 18th century. Ancient ritual bronzes, Han funerary art, Buddhist sculpture, and painting. Aesthetic and philosophical principles.

463. Japanese Art

Spring. 4(4-0)

P: HA 204 or approval of department. R: Not open to freshmen and sophomores.

History and principles of Japanese art from prehistory to modern times. Buddhist art, emakimono, painting, and ukiyo-e.

470. Art of West Africa

Spring. 4(4-0)

P: HA 204 or approval of department.

Major art traditions of West Africa. Multifaceted nature of visual arts in African societies.

471. Art of Central, Southern and Eastern Africa

Fall. 3(3-0)

P: HA 204 or approval of department.

Major art traditions of central, southern and eastern Africa. Multifaceted nature of visual arts in African societies.

474. Aesthetic Theory and Modernism

Fall. 4 credits. Interdepartmental with Philosophy, English, Linguistics and Languages, Music, and Romance Languages. Administered by Philosophy. R: Not open to freshmen and sophomores. Completion of Ter I writing requirement.

Problems, assumptions, and arguments of modern aesthetic theory examined in the context of debates over modernity and modernist artistic practice.

481. Women in Art

Fall of odd-numbered years. 3(3-0)

P: HA 202 or approval of department. R: Not open to freshmen and sophomores.

Selected European, North American, and Asian or African women artists, architects, and critics active since the late nineteenth century: their ocuvres and their changing relationships to mainstream artistic and critical developments.

483. Historic Preservation and Preservation Planning in the U.S.

Fall. 4(4-0) Interdepartmental with Urban Planning and Landscape Architecture. Administered by Urban Planning.

R: Not open to freshmen and sophomores. Approval of department.

History and philosophy of the preservation of buildings, structures, and objects significant to the heritage of this nation. Preservation as a planning tool for local governments.

484. History of Prints

Spring of odd-numbered years. 3(3-0)

P: HA 202, HA 203. R: Not open to freshmen and sophomores.

Printmaking to the present. Woodcuts, engraving, etching and lithography by such artists as Durer, Rembrandt, Goya and Picasso.

485. Museum Studies

Fall of even-numbered years. 3(3-0) Interdepartmental with Arts and Letters. Administered by Arts and Letters.

 $R{:}\ Not\ open\ to\ freshmen\ and\ sophomores.$

Activities, functions and organization of museums; the changing role of museums as cultural institutions.

486. History of Western Design

Spring. 4(4-0)

R: Not open to freshmen and sophomores.

History of design from the Victorian Age to the present. Relationship to materials and technology, to the influence of the fine arts and to socio-political movements.

489. Methods and Approaches in History of Art (W)

Fall. 3(3-0)

R: Completion of Tier I writing requirement. Approval of department.

Techniques and reference materials used in art-historical research. History of scholarship in the field, with emphasis on changes in approach in the 19th and 20th centuries. Extensive writing.

490. Independent Study

Fall, Spring. I to 3 credits. A student may earn a maximum of 3 credits in all enrollments for this course.

R: Not open to freshmen and sophomores. Approval of department.

Special projects arranged by an individual student and a faculty member in areas supplementing regular course offerings.

491. Special Topics in History of Art

Fall, Spring. 3(3-0) A student may earn a maximum of 6 credits in all enrollments for this course. R: Approval of department.

Special topics supplementing regular course offerings proposed by faculty on a group study basis.

493C. Museum Internship

Fall, Spring, Summer. 2 to 3 credits. A student may earn a maximum of 6 credits in all enrollments for this course. Interdepartmental with Arts and Letters. Administered by Arts and Letters.

R: Not open to freshmen and sophomores. Approval of college.

Activities, functions and organization of a university art museum.

800. Seminar in Ancient Art

Fall of even-numbered years. 3(3-0) A student may earn a maximum of 6 credits in all enrollments for this course.

R: Approval of department.

Intensive investigation of a topic in the history of ancient painting, sculpture, or architecture.

810. Seminar in Medieval Art

Spring of odd-numbered years. 3(3-0) A student may earn a maximum of 6 credits in all enrollments for this course.

R: Approval of department.

Intensive investigation of a topic in Early Christian, Byzantine, or Medieval art.

820. Seminar in Italian Renaissance Art

Spring of even-numbered years. 3(3-0) A student may earn a maximum of 6 credits in all enrollments for this course.

R: Approval of department.

Intensive investigation of a topic in Italian art of the 14th, 15th, or 16th centuries.

840. Seminar in 19th Century Art

Spring of even-numbered years. 3(3-0) A student may earn a maximum of 6 credits in all enrollments for this course.

R: Approval of department.

Intensive investigation of a topic in the history of 19th-century painting, sculpture, or architecture.

844. Seminar in Latin American Art

Fall, Spring. 3(3-0) A student may earn a maximum of 6 credits in all enrollments for this course. Intensive investigation of a topic in the history of Latin American art.

850. Seminar in 20th Century Art

Fall of odd-numbered years. 3(3-0) A student may earn a maximum of 6 credits in all enrollments for this course.

R: Approval of department.

Investigation of a topic in the history of 20th-century painting, sculpture, or architecture.

Courses

870. Seminar in African Art

Spring of odd-numbered years. 3(3-0) A student may earn a maximum of 6 credits in all enrollments for this course.

R: Approval of department.

Intensive investigation of a topic in the history of African painting, sculpture, or architecture.

Independent Study

Fall, Spring, Summer. 1 to 3 credits. A student may earn a maximum of 6 credits in all enrollments for this course.

R: Approval of department.

Special project, directed reading, and research arranged by an individual graduate student and a faculty member in areas supplementing regular course offerings.

Special Topics in History of Art 89I.

Fall, Spring, Summer. 3(3-0) A student may earn a maximum of 6 credits in all enrollments for this

R: Approval of department.

Special topics supplementing regular course offerings proposed by faculty on a group study basis for graduate students.

Master's Thesis Research 899.

Fall, Spring, Summer. 1 to 6 credits. A student may earn a maximum of 6 credits in all enrollments for this course.

R: Approval of department.

Directed research leading to a master's thesis, used in partial fulfillment of Plan A master's degree requirements.

HORTICULTURE

HRT

Department of Horticulture College of Agriculture and **Natural Resources**

Horticulture: Plants and People 100.

Spring. 3(2-2)

R: Not open to junior or senior Horticulture majors. Functional uses of plants: aesthetics, food, industry, recreation. Growing and using horticultural plants. Consumer and environmental issues related to horticulture in daily living.

Principles of Horticulture I

P: BOT 105 or BS 110 or BS 111 or concurrently. Contributions of horticulture to society. Cultivar development, crop geography, environmental factors, vegetative and reproductive development, and crop management. Field trip required.

203L. Principles of Horticulture I Laboratory Fall. 1 credit.

P: HRT 203 or concurrently.

Growing, handling, and identifying plants. Irrigation, fertilization, and media for plant production. Pruning and control of flowering and growth. Measuring environmental factors. Sources of cultural information. SA: HRT 201L

204. Principles of Horticulture II

Spring. 2(3-0)

SA: HRT 201

Asexual and sexual propagation. Plant population effects, pest management, harvesting, and postharvest handling and marketing of horticultural crops. Field trip required. SA: HRT 202

Principles of Horticulture II Laboratory Spring. 1 credit.

P: HRT 204 or concurrently.

Growing, handling, and identifying plants. Asexual propagation from cuttings. Micropropagation. Bulbs, tubers, and corms. Grafting. Seed germination on perennial and annual crops. Storage of fruit. SA: HRT 202L

211. Ornamental Trees and Narrow-Leaved Evergreens

Fall. 3(2-3)

Identification, adaptation, evaluation, management, and landscape uses of trees, deciduous shrubs, narrowleaved evergreens, and woody vines.

212. Ornamental Flowering Shrubs and Broad-Leaved Evergreens

Spring. 3(2-3)

Identification, adaptation, evaluation, management, and landscape uses of flowering trees, deciduous shrubs, broad-leaved evergreens, woody vines and ground covers.

Greenhouse Structures and Management

Fall. 3(3-0)

Planning and operation of a commercial greenhouse. Structures, coverings, heating, cooling, ventilation, irrigation, fertilization, root media, and pest control. Field trips required.

Basic Floral Design

Spring. 2(1-2)

Principles and mechanics of floral design. Line and mass designs, symmetrical and asymmetrical designs. Contemporary techniques. Flower identification. Retail pricing. Laboratory fee required. First half of semester.

225B. Advanced Floral Design

Spring. 2(1-2)

P: HRT 225A or concurrently.

Marketing, selling, and designing flowers for weddings, funerals, and other special events. Identification, handling, and design use of fresh flowers and other materials. Laboratory fee required. Second half of semester.

Nursery Management

Fall. 3(2-3)

P: HRT 204. R: Not open to freshmen and sophomores. Management practices applied to wholesale and retail nursery production and marketing. Field trip required.

311. Landscape Design and Management **Specifications**

Spring. 4(3-2) Interdepartmental with Landscape Architecture.

P: HRT 211; HRT 212 or concurrently.

Landscape design techniques, spatial organization, plant selection, plant and site interaction. Relationship between design, construction and maintenance. Preparation of planting and maintenance specifications.

322. Greenhouse Production I: Potted Plants Fall. 3(1-4)

P: HRT 204; HRT 221 or concurrently.

Commercial production of floriculture greenhouse crops with emphasis on flowering and potted foliage plants and on seed germination. Field trips required.

Greenhouse Production II: Cut Flowers and Bedding Plants

Spring. 3(1-4)

P: HRT 204, HRT 221.

Commercial production of bedding plants and cut flowers. Finishing procedures for selected potted plant crops. Field trips required.

Floral Distribution and Marketing

Spring. 3(2-2)

P: HRT 204 or concurrently.

Business operations of wholesale and retail floral outlets. Identification, care, and handling of commercial cut flowers and foliages. Field trips required.

337. Tree and Small Fruit Production and Management Fall. 3(2-3)

P: HRT 204.

Commercial aspects of tree and small fruit production. Procedures used in production of major fruit crops grown in Michigan: apples, cherries, peaches, grapes, blueberries, brambles, and strawberries. Field trips required.

SA: HRT 330

Vegetable Production and Management 341. Spring. 3(2-3)

P: HRT 204.

Field production of vegetable crops. Marketing systems, tillage practices, field establishment, cultural management, pest management, harvesting, and postharvest handling and storage. Field trip required. SA: HRT 440, HRT 442

Retail Florist Practicum

Fall, Spring, Summer. 1 to 3 credits. A student may earn a maximum of 6 credits in all enrollments for this course.

P: HRT 204. R: Open only to juniors and seniors. Approval of department and application required. Maximum of 8 credits may be earned in HRT 394A and HRT 490.

Customer relations. Floral design, flower buying, holiday planning. Advertising, display. Financial recordkeeping. Flower care and handling.

Physiology and Management of Herbaceous Plants

Spring. 3(3-0)

P: HRT 221, BOT 301. R: Not open to freshmen and sophomores

Physiological and flowering responses of herbaceous plants to light, temperature, nutrients, and gases. Management of these factors for optimum production.

403. Handling and Storage of Horticultural Crops

Fall. 3(2-3)

P: BOT 105 or BS 110. R: Not open to freshmen and sophomores.

Biological principles involved in quality maintenance of horticultural products. Control of deterioration during harvesting, handling, transport, and storage. Field trip required. SA: HRT 482

Horticultural Management (W) 404.

Spring. 3(2-2)

P: EC 201 or EC 202; HRT 204 or CSS 370 or FOR 404. R: Open only to seniors in the College of Agriculture and Natural Resources. Completion of Tier I writing reouirement.

Integration of physiological, genetic, economic, and production principles to develop a horticultural business plan. Management techniques. Environmental impacts of business and production practices. SA: HRT 488

411. Landscape Contract Management

P: HRT 311.

Management of landscape construction and maintenance operations. Working drawings, construction specifications, labor and equipment standards, and bid procedures. Case studies.