

History—HST

811 Seminar in 19th Century U.S. History

Fall, Spring. 3(3-0) A student may earn a maximum of 15 credits in all enrollments for this course.

Political, social, and economic history of nineteenth century United States. Major interpretations and research methods. Topics vary.

812 Seminar in 20th Century U.S. History

Fall, Spring. 3(3-0) A student may earn a maximum of 15 credits in all enrollments for this course.

Political, social, and economic history of twentieth century United States. Major interpretations and research methods. Topics vary.

813 Race and Poverty in Cities: A Historical Perspective

Fall, Spring. 3(3-0)

Poverty, racism, and racial conflict. Promotion of racial justice and unity, in American cities. Attitudes, policies and programs during the 20th century.

815 Historiography of Europe to 1870

Fall, Spring. 3(3-0)

The development of historical thinking, historical studies, and historical scholarship of Europe through the Franco-Prussian War.

816 Historiography of Europe since 1870

Fall, Spring. 3(3-0)

Readings organized around themes and genres of historical inquiry into late nineteenth and twentieth century European history.

820 Seminar in Ancient History

Fall, Spring. 3(3-0) A student may earn a maximum of 15 credits in all enrollments for this course.

Political, social, and economic history of the ancient world. Major interpretations and research methods. Topics vary.

821 Seminar in Medieval History

Fall, Spring. 3(3-0) A student may earn a maximum of 15 credits in all enrollments for this course.

Political, social, and economic history of medieval Europe. Major interpretations and research methods. Topics vary.

822 Seminar in Early Modern European History

Fall, Spring. 3(3-0) A student may earn a maximum of 15 credits in all enrollments for this course.

Political, social, and economic history of Europe from 1500-1800. Major interpretations and research methods. Topics vary.

823 Seminar in Modern European History

Fall, Spring. 3(3-0) A student may earn a maximum of 15 credits in all enrollments for this course.

Political, social, and economic history of Europe after 1800. Major interpretations and research methods. Topics vary.

824 Seminar in Russian History

Fall, Spring. 3(3-0) A student may earn a maximum of 15 credits in all enrollments for this course.

Political, social, and economic history of Russia. Major interpretations and research methods. Periods and topics vary.

830 Seminar in African History

Fall, Spring. 3(3-0) A student may earn a maximum of 15 credits in all enrollments for this course.

Political, social, and economic history of Africa. Major interpretations and research methods. Periods and topics vary.

831 Seminar in Latin American History

Fall, Spring. 3(3-0) A student may earn a maximum of 15 credits in all enrollments for this course.

Political, social, and economic history of Latin America. Major interpretations and research methods. Periods and topics vary.

832 Seminar in Japanese History

Spring. 3(3-0) A student may earn a maximum of 15 credits in all enrollments for this course.

Political, social, and economic history of Japan. Major interpretations and research methods. Periods and topics vary.

833 Seminar in Chinese History

Fall, Spring. 3(3-0) A student may earn a maximum of 15 credits in all enrollments for this course.

Political, social, and economic history of China. Major interpretations and research methods. Periods and topics vary.

848 Seminar in British History

Fall, Spring. 3(3-0) A student may earn a maximum of 15 credits in all enrollments for this course.

Political, social, and economic history of Britain. Major interpretations and research methods. Topics vary.

850 Seminar in Comparative History

Fall, Spring. 3(3-0) A student may earn a maximum of 12 credits in all enrollments for this course.

Comparative themes or problems from different cultures and countries. Major interpretations and research methods.

860 Seminar in Women's History

Fall, Spring. 3(3-0) A student may earn a maximum of 15 credits in all enrollments for this course.

Political, social, and economic history of women. Major interpretations and research findings. Topics vary.

870 Seminar in African-American History

Fall, Spring. 3(3-0) A student may earn a maximum of 15 credits in all enrollments for this course.

Social, political, economic, and cultural topics emphasizing the intersection of race, class, and gender. Periods and topics vary.

880 Seminar In Comparative Black History

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 systems. Periods and topics vary.

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

898 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.

899 Master's Thesis Research

Fall, Spring, Summer. 1 to 6 credits. A student may earn a maximum of 9 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.

990 Independent Study

Fall, Spring, Summer. 1 to 4 credits. A student may earn a maximum of 12 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.

999 Doctoral Dissertation Research

Fall, Spring, Summer. 1 to 6 credits. A student may earn a maximum of 99 credits in all enrollments for this course. R: Open only to doctoral students in the Department of History.

Doctoral dissertation research.

HISTORY OF ART HA

Department of Art and Art History College of Arts and Letters

100 Language of Art

Fall, Spring. 3(3-0) SA: HA 200

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

120 Perspectives on World Art: What Is Art?

Fall. 4(4-0)

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.

- 209 Ancient Art**
Fall. 3(3-0)
The arts of antiquity: painting, sculpture, and architecture in Egypt, Mesopotamia, Greece, and Rome until Constantine the Great.
- 210 Medieval Art**
Spring. 3(3-0)
Major works of art in the medieval East (Byzantium, Russia, and the Islamic world) and West (Europe) in their cultural context.
- 230 Renaissance and Baroque Art**
Fall. 3(3-0)
Arts of the Renaissance and Baroque periods (14th-17th centuries) in Europe: Early and High Renaissance in Italy, Northern Renaissance, Mannerism, and Baroque.
- 240 Modern Art**
Spring. 3(3-0)
The rise of modernism and its domination over tradition in 19th and 20th century art. Romanticism, Realism, Impressionism, Cubism, Expressionism, Surrealism and Abstraction, and Post-Modern art.
- 250 American Art**
Spring. 3(3-0) Interdepartmental with History of Art; American Studies. Administered by Department of Art and Art History.
Major developments and themes in non-indigenous American art (painting, sculpture, architecture, material culture) from its colonial origins through the 20th century.
- 260 East Asian Art**
Fall. 3(3-0)
Thematic introduction to East Asian civilization through selected masterpieces of visual arts. Main trends of East Asian arts throughout a range of time periods.
- 270 Art of Africa, Oceania, and the Americas**
Spring. 3(3-0)
Art traditions of the peoples of Africa, Oceania (Polynesia, Micronesia, Melanesia, and native Australia), and the indigenous peoples of the Western Hemisphere. The roles that art plays in these societies and cultures.
- 292 Introduction to Ancient Studies**
Fall. 2(1-2) Interdepartmental with Arts and Letters; Classical Studies; History. Administered by Arts and Letters.
Methods and current trends in the study of the Greek and Roman world. Visits to library and museum collections.
- 401 Greek Art and Archaeology**
Fall of odd years. 3(3-0) P:M: (HA 120 or HA 121 or HA 209) and completion of Tier I writing requirement.
Arts of Greek antiquity. The Bronze Age to the Roman conquest. Discussion of specific archaeological sites.
- 402 Roman Art and Archaeology**
Spring of odd years. 3(3-0) P:M: (HA 120 or HA 121 or HA 209) and 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.
- 406 Ancient Greek and Roman Painting**
Spring. 3(3-0) P:M: (HA 120 or HA 121 or HA 209) and completion of Tier I writing requirement. R: Not open to freshmen or sophomores.
Greek and Roman painting: pottery and wall painting from the tenth century B.C. to the fall of Rome.
- 410 Early Christian and Byzantine Art**
Fall of even years. 4(4-0) P:M: (HA 120 or HA 121 or HA 210) and completion of Tier I writing requirement.
Sculpture, architecture, painting, and minor arts of the medieval East from the adoption of Christianity by Constantine in 312 A.D. to the fall of Constantinople in 1453. Historical, liturgical, theological, and literary influences.
- 415 Early Medieval Art**
Fall of odd years. 4(4-0) P:M: (HA 120 or HA 121 or HA 210) and 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.
- 416 Late Medieval Art**
Spring of even years. 4(4-0) P:M: (HA 120 or HA 121 or HA 210) and completion of Tier I writing requirement.
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 years. 4(4-0) P:M: (HA 120 or HA 121 or HA 230) and completion of Tier I writing requirement.
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:M: (HA 120 or HA 121 or HA 230) and completion of Tier I writing requirement.
Major masters from later thirteenth century through the mid-sixteenth century, Giotto to Michelangelo.
- 427 Northern Renaissance Art**
Fall of odd years. 3(3-0) P:M: (HA 120 or HA 121 or HA 230) and completion of Tier I writing requirement.
Painting and sculpture in Germany and Flanders from Van Eyck to Bruegel.
- 430 Baroque Art in Italy**
Spring of odd years. 3(3-0) P:M: (HA 120 or HA 121 or HA 230) and completion of Tier I writing requirement.
Painting, sculpture and architecture of the seventeenth century in Italy. The Carracci, Caravaggio, Bernini, and Borromini.
- 432 Northern Baroque Art**
Spring of even years. 3(3-0) P:M: (HA 120 or HA 121 or HA 230) and completion of Tier I writing requirement.
Seventeenth-century art in Flanders, France, and Holland. Paintings of Rubens, Poussin, Hals, and Rembrandt. Architecture in France.
- 433 Colonial Spanish Art and Architecture**
Fall. 3(3-0) P:M: (HA 120 or HA 121) and completion of Tier I writing requirement. R: Not open to freshmen or 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:M: (HA 120 or HA 121 or HA 240) and completion of Tier I writing requirement.
Technological, stylistic, and intellectual developments in architectural design. European and United States architects and the changing meaning of *avant garde*, traditional, and vernacular approaches.
- 444 Latin American and Latino Art**
Spring. 3(3-0) P:M: (HA 120 or HA 121) and completion of Tier I writing requirement. R: Not open to freshmen or sophomores.
Latin American art. Latino art in the United States.
- 445 Art in the Age of Revolution**
Spring of even years. 4(4-0) P:M: (HA 120 or HA 121 or HA 240) and completion of Tier I writing requirement.
European art from the mid-18th-century Industrial Revolution through the Revolutions of 1848. Major artists include: Goya, Ingres, Delacroix, Constable, Turner, Courbet, and Manet.
- 446 Monet and His Times**
Fall. 4(4-0) P:M: (HA 120 or HA 121 or HA 240) and completion of Tier I writing requirement.
With Monet as a focus, European art from the mid-nineteenth century through World War I. Renoir, Cezanne, Degas, Van Gogh, Seurat, Rodin, and others.
- 450 Twentieth-Century Arts and Ideas**
Fall of even years. 4(4-0) P:M: (HA 120 or HA 121 or HA 240) and completion of Tier I writing requirement.
Origins of modernism and the major Western artistic movements of the twentieth century in their historical contexts.
- 451 American Art through 1875**
Spring of even years. 3(3-0) Interdepartmental with American Studies. P:M: (HA 120 or HA 121 or HA 250) and completion of Tier I writing requirement. SA: HA 438
Artistic production in North America from colonial times to 1875, in its cultural context.
- 452 Contemporary Art**
Spring. 4(4-0) P:M: (HA 120 or HA 121 or HA 240) and completion of Tier I writing requirement.
Art in various media created during the last three decades and its art historical sources. Criticism and its relationship to the artistic and cultural climate.
- 453 American Art, 1875-1940**
Fall of even years. 3(3-0) Interdepartmental with American Studies. P:M: (HA 120 or HA 121 or HA 250) and completion of Tier I writing requirement. SA: HA 458, HA 358
Artistic production in North America from 1875 to 1940, in its cultural context.
- 462 The Arts of China**
Spring of even years. 4(4-0) P:M: (HA 120 or HA 121 or HA 260) and completion of Tier I writing requirement.
Chinese art from the Bronze Age to the 18th century. Ancient ritual bronzes, Han funerary art, Buddhist sculpture, and painting. Aesthetic and philosophical principles.

History of Art—HA

- 463 Japanese Art**
Fall of odd years. 4(4-0) P:M: (HA 120 or HA 121 or HA 260) and completion of Tier I writing requirement.
History and principles of Japanese art from prehistory to modern times. Buddhist art, emakimono, painting, and ukiyo-e.
- 470 Art of West Africa**
Spring of even years. 4(4-0) P:M: (HA 120 or HA 121 or HA 270) and completion of Tier I writing requirement.
Major art traditions of West Africa. Multifaceted nature of visual arts in African societies.
- 471 Art of Central, Southern and Eastern Africa**
Fall of odd years. 3(3-0) P:M: (HA 120 or HA 121 or HA 270) and completion of Tier I writing requirement.
Major art traditions of central, southern and eastern Africa. Multifaceted nature of visual arts in African societies.
- 474 Aesthetic Theory and Modernism**
Fall. 4(4-0) Interdepartmental with Philosophy; English; Linguistics and Languages; Music; Romance Languages. Administered by Department of Philosophy. R: Not open to freshmen or sophomores.
Problems, assumptions, and arguments of modern aesthetic theory examined in the context of debates over modernity and modernist artistic practice.
- 485 Museum Studies**
Fall. 3(3-0) Interdepartmental with Arts and Letters. R: Not open to freshmen or sophomores.
Activities, functions and organization of museums; the changing role of museums as cultural institutions.
- 486 History of Western Design**
Fall. 4(4-0) P:M: (HA 240 or HA 250) or (HA 120 and HA 121) and completion of Tier I writing requirement.
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.
- 487 Approaches to Museum Education**
Spring, Summer. 3(3-0) Interdepartmental with History of Art; Arts and Letters. Administered by Department of Art and Art History. R: Open only to juniors or seniors or graduate students.
Theoretical and practical approaches to the design and development of interpretive materials and programs within museums. Design and development of research and projects.
- 488 Museum Curatorial Practices**
Fall, Summer. 3(3-0) Interdepartmental with Arts and Letters. RB: (HA 485) R: Open only to juniors or seniors or graduate students.
Methods and practices for the development, care, and use of museum collections in research, education, and exhibition activities.
- 489 Methods and Approaches in History of Art (W)**
Fall. 3(3-0) P:M: Completion of Tier I writing requirement. R: Open only to seniors or graduate students in the History of Art major.
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. 1 to 3 credits. A student may earn a maximum of 3 credits in all enrollments for this course. R: Not open to freshmen or 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. 1 to 3 credits. 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.
- 492 Special Topics in Museum Studies**
Fall, Spring, Summer. 1 to 3 credits. A student may earn a maximum of 6 credits in all enrollments for this course. Interdepartmental with Arts and Letters. R: Open only to juniors or seniors or graduate students.
Special topics supplementing regular course offerings.
- 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. R: Not open to freshmen or sophomores. Approval of college.
Activities, functions and organization of a museum.
- 494 Museum Exhibitions: Theory and Development**
Spring. 3(2-2) Interdepartmental with Arts and Letters. R: Open only to juniors or seniors or graduate students. SA: AL 486
Theoretical and practical approaches to the planning, design, development, installations, and evaluation of museum exhibitions. Field trip required.
- 495 Workshop in History of Art**
Fall, Spring, Summer. 1 to 3 credits. A student may earn a maximum of 4 credits in all enrollments for this course. RB: Upper level history of art major. R: Open only to juniors or seniors or graduate students in the History of Art major or approval of department. Written contract required.
In-depth study and experience with a specific technique, or theoretical art historical practice, often in conjunction with visiting scholars or special exhibitions.
- 800 Seminar in Ancient Art**
Fall of even 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 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 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 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.
- 850 Seminar in 20th Century Art**
Fall of odd 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.
- 855 Seminar in American Art**
Spring of odd years. 3(3-0) A student may earn a maximum of 6 credits in all enrollments for this course. Interdepartmental with American Studies. R: Approval of department.
Intensive investigation of a topic in the history of American art.
- 860 Seminar in Asian Art**
Fall of even 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 Asian art.
- 870 Seminar in African Art**
Spring of odd 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.
- 890 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.
- 891 Special Topics in History of Art**
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 topics supplementing regular course offerings proposed by faculty on a group study basis for graduate students.
- 893 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. R: Open only to juniors or seniors or graduate students.
Activities, functions and organization of a museum.

899 Master's Thesis Research
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

100 Horticulture: Plants and People
Spring. 3(2-2) R: Not open to juniors or seniors in the Department of Horticulture.
Functional uses of plants: aesthetics, food, industry, recreation. Growing and using horticultural plants. Consumer and environmental issues related to horticulture in daily living.

104 Plant Propagation
Spring. 2(2-3) R: Open only to students in the Institute of Agricultural Technology.
Principles and practices used in commercial propagation of plants with emphasis ornamental nursery stock. Seed germination, grafting, budding, cuttage, layering and other techniques. Offered first ten weeks of semester.

109 Introduction to Applied Plant Science
Fall. 2(2-0) R: Open only to students in the Institute of Agricultural Technology.
Plant growth and development. Interrelationship between cultural practice and plant performance. Plant classification, plant physiology and metabolism.

111 Landscape Design
Spring. 3(3-3) Not open to students with credit in HRT 072 or HRT 311.
Functional uses of the landscape, landscape design process, drafting and graphic representation, plant selection and use, planting design principles, construction materials and specifications. Offered first ten weeks of semester.

203 Principles of Horticulture I
Fall. 2(2-0) SA: HRT 201
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(0-3) P:M: (HRT 203 or concurrently) SA: HRT 201L
Growing, handling, and identifying plants. Irrigation, fertilization, and media for plant production. Pruning and control of flowering and growth. Measuring environmental factors.

204 Principles of Horticulture II
Spring. 2(2-0) SA: HRT 202
Asexual and sexual propagation. Plant population effects, pest management, harvesting, and postharvest handling and marketing of horticultural crops. Field trip required.

204L Principles of Horticulture II Laboratory
Spring. 1(0-3) P:M: (HRT 204 or concurrently) SA: HRT 202L
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.

207 Horticulture Career Development
Fall. 1(1-0)
Internship preparation and identification of employment opportunities. Career goal establishment, resume construction, correspondence development, personal budgeting, interview skills and strategies.

208 Pruning and Training Systems in Horticulture
Spring of odd years. 3(2-2) R: Open only to students in the MSU-NMC IAT Applied Plant Science Program.
Principles and practices of plant growth management. Plant biology. Crown and canopy development. Crop specific training systems. Pruning techniques.

210 Nursery Management
Fall. 3(2-3) RB: (HRT 203 and HRT 203L and HRT 204 and HRT 204L) R: Not open to freshmen or sophomores. SA: HRT 071, HRT 310
Management of field and container grown nursery operations. Site selection and development, financing, legal restrictions, production practices, nutrition, irrigation, weed and pest control, modification of plant growth, storage, shipping, and marketing. Field trip required.

211 Landscape Plants I
Fall. 3(2-3)
Identification, adaptation, and evaluation of shade trees, narrow-leaved evergreens, shrubs, woody vines, herbs, ornamental grasses, and herbaceous perennials.

212 Landscape Plants II
Fall, Spring. 3(2-3)
Identification, adaptation, and evaluation of flowering trees and shrubs, broad-leaved evergreens, herbaceous vines, ground covers, bulbs, wildflowers, ferns, and aquatic plants.

213 Landscape Maintenance
Fall. 2(2-0) R: Open only to students in the Institute of Agricultural Technology.
Ornamental plant management. Plant growth and development related to pruning, fertilization, irrigation, weed control, transplanting; development of landscape management specifications; integrated plant management and plant health care programs.

213L Landscape Maintenance Field Laboratory
Fall. 1(0-2) P:M: (HRT 213 or concurrently) R: Open only to students in the Institute of Agricultural Technology.
Landscape maintenance. Site analysis. Pruning woody plants, transplanting by hand and mechanical tree spade, and planting techniques for ornamentals. Herbaceous perennial care, cutting back, dividing. Scouting as a component of integrated pest management and plant health care programs.

214 Landscape and Turfgrass Business Operations
Spring. 2(3-0) R: Open only to students in the Institute of Agricultural Technology. SA: AT 082 Not open to students with credit in AT 082.
Organizing, marketing, and directing a business enterprise within the turf and landscape industry. Project estimating, bidding, payroll, equipment, and accounting. Offered first ten weeks of semester.

215 Landscape Industries Seminar
Fall. 1(0-2) RB: Interest or experience in the 'green industries'. R: Open only to students in the Institute of Agricultural Technology. SA: HRT 064 Not open to students with credit in HRT 207 or HRT 064.
Landscape, nursery and related 'green industry' firms. Career opportunities. Horticulture operations, products, services and marketing practices. Personal and professional development.

216 Landscape Construction
Fall. 3(2-2) R: Open only to students in the Institute of Agricultural Technology. SA: HRT 076 Not open to students with credit in HRT 076.
Construction installation techniques encountered in landscape development. Field installation of patios, retaining walls, ponds, and plant materials. Construction estimating and bidding procedures. Field trip required.

217 Landscape Plant Diagnostics
Fall of odd years. 3(2-2) RB: Ornamental plant identification (host plant); basic plant science R: Open only to students in the Institute of Agricultural Technology. SA: HRT 063 Not open to students with credit in HRT 063.
Problem diagnosis of insect pests, diseases and non-infectious disorders of woody and herbaceous ornamental plants. Plant and site inspection, sampling and testing techniques. Cultural, mechanical and chemical control strategies. Field trips required.

218 Landscape Irrigation
Spring. 3(3-3) Not open to students with credit in HRT 078.
Design, installation and maintenance of irrigation systems for turfgrass and landscape plants. Design hydraulics, equipment selection, pump stations, water features, water quality and conservation. Offered the first 10 weeks of the semester.

219 Landscape Computer Aided Design
Spring. 2(0-4) RB: (CSE 101) or (CSS 110)
Computer Aided Design (CAD) for landscape design. Calculations, take offs, perspective drawings, AutoCAD and LandCADD software.

221 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.

225A Basic Floral Design
Fall, 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.