810.

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

Political, social, and economic history of early America. Major interpretations and research methods. Topics vary. QA: HST 821

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

Political, social, and economic history of nineteenth century United States. Major interpretations and research methods. Topics vary. QA: HST 822

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

Political, social, and economic history of twentieth century United States. Major interpretations and research methods. Topics vary. QA: HST 823

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. QA: HST 843

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. QA: HST 865A

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. QA: HST 865B, HST 865C

Seminar in Ancient History 820.

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

Political, social, and economic history of the ancient world. Major interpretations and research methods. Topics vary. QA: HST 852

Seminar in Medieval History 821.

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

Political, social, and economic history of medieval Europe. Major interpretations and research methods. Topics vary. QA: HST 853

822. Seminar in Early Modern European

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

Political, social, and economic history of Europe from 1500-1800. Major interpretations and research methods. Topics vary. QA: HST 863

Seminar in Modern European History

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

Political, social, and economic history of Europe after 1800. Major interpretations and research methods. Topics vary. QA: HST 864

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. QA: HST 867

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. QA: HST 894

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

Political, social, and economic history of Latin America. Major interpretations and research methods. Periods and topics vary. QA: HST 819

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. QA: HST 897

Seminar in Chinese History

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

Political, social, and economic history of China. Major interpretations and research methods. Periods and topics vary. QA: HST 897

840. Seminar in the History of International Relations Fall, Spring. 3(3-0) A student may earn a maximum of 15 credits in all enrollments for this

International relations since the French and Industrial Revolutions. Major interpretations and research methods. Topics vary. QA: HST 873

848

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

Political, social, and economic history of Britain. Major interpretations and research methods. Topics vary. QA: HST 848

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

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

Seminar in Women's History 860.

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

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.

Independent Study

Fall, Spring, Summer. I 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. QA: HST 898

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.

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. Approval of department.

Directed research in partial fulfillment of Plan A

master's degree requirements. QA: HST 899

901. Advanced Research Seminar in History

Fall, Spring. 3(3-0) A student may earn a maximum of 9 credits in all enrollments for this

Current issues of professional importance. Innovative research topics and techniques. QA: HST 901A, HST 901B, HST 901C

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 depart-

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

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. Approval of department.

QA: HST 999

HORTICULTURE

HRT

Department of Horticulture College of Agriculture and Natural Resources

100. Horticulture: Plants and People

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

Fall. 3(3-0)
P: BOT 105 or BS 110 or BS 111 or concurrently, Contributions of horticulture to society. Geography of horticulture. Effects of environment on horticultural plants. Cultivar and clone selection. Seed production, germination, transplant production and stand establishment. Field trips required.

QP: BOT 205 or BS 210 or BS 211 or BS 212 QA: HRT 201, HRT 221

201L. Principles of Horticulture I Laboratory

Fall. 1(0-3)

P: HRT 201 or concurrently.

Growing and handling plants. Measurement of environmental factors affecting plant growth. Identification of selected horticultural species. QP: BOT 205 or BS 210 or BS 211 or BS 212 QA: HRT 201, HRT 221

202. Principles of Horticulture II Spring. 3(3-0)

P: HRT 201.

Asexual propagation. Control of vegetative growth, flowering, and fruit growth. Horticultural practices used to grow, harvest, and market crops, including sustainable agriculture. Field trips required. QP: HRT 201 QA: HRT 201, HRT 221

Courses

202L.Principles of Horticulture II Laboratory

Spring. 1(0-3)

P: HRT 202 or concurrently.

Asexual propagation techniques. Pruning and training. Soils and soil media. Moisture and water relations. Fertilization practices. Use of growth regulators. Pest management. QP: HRT 201 QA: HRT 201, HRT 221

Ornamental Trees and Narrow-Leaved Evergreens

Fall. 3(2-3)

Identification, adaptation, evaluation, management, and landscape uses of trees, deciduous shrubs, narrow-leaved evergreens, and woody vines. QA: HRT 211

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. QA: HRT 212

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. QA: HRT 205

225A. 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. QA: HRT 242

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. QA: HRT 242

310. Nursery Management Fall. 3(2-3) P: HRT 202, HRT 211, HRT 212; MTH 110 or MTH 116. R: Not open to freshmen and sophomores. Management practices applied to wholesale and retail nursery production and marketing. Field trip required. QP: HRT 201, HRT 211, HRT 212 QA: HRT 440

Landscape Design and Management 311. Specifications Spring. 4(2-4) 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 specifica-

tions. Cost estimation. QP: HRT 211, HRT 212 QA: HRT 327

Floriculture Crop Production I Fall. 3(1-4)

P: HRT 202.

commercial production of floriculture greenhouse crops with emphasis on flowering and potted foliage plants and on seed germination. Field trips required. QP: HRT 205 QA: HRT 434, HRT 209, HRT 208, HRT 435

Floriculture Crop Production II 323. Spring. 3(1-4)

P. HRT 322.

Commercial production of bedding plants and cut flowers. Finishing procedures for selected potted plant crops. Field trips required. QP: HRT 205 QA: HRT 208, HRT 434, HRT 435

Floral Distribution and Marketing 325.Spring. 3(2-2)

P: HRT 322.

Business operations of wholesale and retail floral outlets. Identification, care, and handling of commercial cut flowers and foliages. Field trips required. QP: HRT 201 QA: HRT 248

Commercial Fruit Production

Fall. 4(3-2) P: BOT 301, HRT 202. R: Not open to freshmen and sophomores.

Commercial aspects of tree and small fruit production. Apples, cherries, peaches, grapes, blueberries, brambles and strawberries. Field trips required. QP: HRT 201, HRT 221, BOT 301 QA: HRT 319, HRT 320

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 202, HRT 225B. R: Open only to juniors and seniors. Approval of department and application required. Maximum of 8 credits may be earned in

requires. maximum of 8 creatts 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. QP: HRT 242 QA: HRT 332

Physiology of Plants in Controlled Environments 421.

Fall. 3(3-0)

P: BOT 301; HRT 201 or HRT 221. R: Not open to freshmen and sophomores.

Physiological responses of plants to light, temperature, and gases in controlled environments. Flowering and vegetative growth. Characteristics of natural and artificial lighting sources. QP: HRT 205, BOT 301 QA: HRT 417, HRT 434

Reproductive Physiology of Tree

Spring of odd-numbered years. 2(2-0) P: HRT 330 or concurrently. R: Not open to freshmen and sophomores.

Physiology of flowering and fruiting in tree fruits: manipulation by cultural practices and growth regula-

QP: HRT 320, BOT 301 QA: HRT 412

Warm Season Vegetables: Physiology and Production

Spring of odd-numbered years. 3(2-3) P: BOT 301 or concurrently; HRT 202. R: Not open to freshmen and sophomores.

Warm season vegetables emphasizing botany, physiology, growth, development, and commercial production. Fresh market and processing industries. Field trips required.

QP: HRT 201, BOT 301 QA: HRT 452

442. Cool Season Vegetables: Physiology and Production Fall of even-numbered years. 3(2-3)

P: BOT 301 or concurrently; HRT 202. R: Not open

to freshmen and sophomores. Cool season vegetables emphasizing botany, physiolo-

gy, growth, development and commercial production. Fresh market and processing industries. Field trips

QP: HRT 201, BOT 301 QA: HRT 456

World Vegetable Crops

Spring of even-numbered years. 3(3-0) P: BOT 105 or BS 110. R: Not open to freshmen and sophomores.

Importance of vegetables in human nutrition, income generation, and international development. Unique cultural and climatic requirements for production and marketing of vegetables grown worldwide. QP: HRT 201 or BS 110 or BOT 205 QA: HRT 460

Tropical and Subtropical Fruits

Fall of even-numbered years. 2(2-0) P: BOT 105 or BS 110. R: Not open to freshmen and

sonhomares.

Climatic requirements, botany, morphology, production practices, uses, and economic and cultural impor-

QP: HRT 201 or BOT 205 QA: HRT 462

Woody Plant Physiology 480.

Spring. 3(3-0) Interdepartmental with

Forestry.
P. BOT 301, R. Not open to freshmen and sophomores. Physiology of carbon utilization. Effects of water, temperature, nutrition, and light on apical, vegetative, and reproductive growth of woody plants. QP: BOT 301 QA: HRT 411

482. Handling and Storage of Horticultural Crops Fall of odd-numbered years. 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. QP: BOT 205 or BS 210 QA: HRT 416

Biotechnology in Agriculture: Applications and Ethical Issues 486.

Spring of odd-numbered years. 3(3-0) Interdepartmental with Philosophy, Crop and Soil

Sciences, and Forestry.
P: BS 111 or BOT 105. R: Not open to freshmen and sophomores.

Current and future roles of biotechnology in agriculture: scientific basis, applications. Environmental, social, and ethical concerns.

QP: BOT 205 or BS 211 QA: HRT 486

Horticultural Management 488.

Spring. 3(2-2) P: HRT 202; EC 201 or EC 202; one 300 or 400 level HRT course. R: Open only to seniors in Horticulture. Integration of physiological, genetic, economic and production principles to develop a horticultural business plan. Management techniques. Environmental impacts of business and production practices. QP: HRT 201, HRT 221, EC 201 or EC 202

Independent Study in Horticulture

Fall, Spring, Summer. 1 to 2 credits. A student may earn a maximum of 6 credits in all enrollments for this course.
P: HRT 202. R: Approval of department; application

required.

Independent study of horticulture on a field, laboratory or library research program of special interest to the student.

QP: HRT 201, HRT 221 QA: HRT 330

Selected Topics in Horticulture 491.

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

P: HRT 202. R: Not open to freshmen and sophomores. Selected topics in horticulture of current interest and importance. QA: HRT 331

801. Research Procedures in Plant Science Spring. 3(2-2) P: STT 422.

Applications of epistemology and logic in plant science research. Classical research methods. Hypothese Analysis of laboratory, storage, greenhouse, and field experiments. QA: HRT 801

802. Growth and Development of Horticultural Crops

Spring of odd-numbered years. 3(2-2) Physiology of grafting, juvenility, flowering, fruiting, senescence, bud and seed dormancy, apical dominance of horticultural crops. **QA: HRT 808**

Postharvest Physiology 803

Spring of even-numbered years. 3(2-2) Physiology, biochemistry and molecular biology of maturation, ripening and senescence of harvested horticultural crops. QA: HRT 825

Advanced Plant Breeding 819.

Fall. 3(3-0) Interdepartmental with Crop and Soil Sciences, and Forestry. P: CSS 450, STT 422.

Genetic expectations resulting from breeding strategies with cross-and self-pollinated crop plants. Germplasm collections, mapping populations, and modifications of reproductive biology useful for crop improve-

QA: HRT 819

836. Plant Evolution and the Origin of

Crop Species
Fall of even-numbered years. 3(3-0) Inter-departmental with Crop and Soil Sciences, and

Forestry. P: CSS 350.

Cultural and biological aspects of the evolution of domestic plants. origin and diversity of cultivated plants. QA: HRT 836

Selected Topics in Horticulture 891A.

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

R: Open only to graduate students in Horticulture.

Approval of department.
Selected topics in horticultural science of current interest and importance.

QA: HRT 831

Selected Topics in Plant Breeding and Genetics

Fall, Spring, Summer. 1 to 2 credits. A student may earn a maximum of 6 credits in all enrollments for this course. Interdepartmental with Crop and Soil Sciences, and Forestry.
R: Open only to graduate students in Plant Breeding and Genetics or Genetics. Approval of department. Selected topics in plant breeding. QA: HRT 815

892. Plant Breeding and Genetics Seminar

Fall, Spring, Summer. 1(1-0) A student may earn a maximum of 8 credits in all enrollments for this course. Interdepartmental with Crop and Soil Sciences, and Forestry. Experience in review, organization, oral presentation,

and analysis of research. QA: HRT 814

898. Master's 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. Master's degree Plan B project.

899. Master's Thesis Research

Fall, Spring, Summer. I to 10 credits. A student may earn a maximum of 99 credits in all enrollments for this course. R: Open only to graduate students in Horticulture.

QA: HRT 899

Doctoral Dissertation Research

Fall, Spring, Summer. 1 to 24 credits. A student may earn a maximum of 99 credits in all enrollments for this course. R: Open only to Ph.D. students in Horticulture.

QA: HRT 999

HOTEL, RESTAURANT AND INSTITUTIONAL MANAGEMENT HRI

Department of Hotel, Restaurant and Institutional Management The Eli Broad College of Business and The Eli Broad Graduate School of Management

200. Introduction to the Hospitality Industry Fall. 3(3-0)

R: Open only to freshmen and sophomores or approval of school. Open only to students in the College of Business or in programs for which HRI 200 is a catalog-listed requirement.

Survey of all sectors, segments and disciplines of the hospitality and tourism industries. Topics include impact of travel and tourism, hospitality trends, and overview of accounting, marketing, and sales. QA: HRI 102

Management of Lodging Facilities

Spring. 3(3-0)
P: HRI 200, one ISP course. R: Open only to freshmen, sophomores and juniors in Hotel, Restaurant and Institutional Management or students in programs for which HRI 237 is a catalog-listed requirement. Operational departments and logical functions in the operation of various types of lodging properties. Planning and control of physical, mechanical, and electri-

QP: HRI 102 QA: HRI 237, HRI 235

265. Quality Food Management

Spring. 3(3-0)
P: HRI 200, one ISB course. R: Open only to sophomores and juniors in Hotel, Restaurant and Institutional Management.

Standards of microbiology, sanitation, nutrition, and other quality issues in food management. Chemical, health, and workplace standards. Management of product quality and costs. QP: HRI 102 QA: HRI 265

302. Hospitality Managerial Accounting Fall, Spring. 3(3-0) P: ACC 201; CPS 100 or CPS 130; HRI 200; STT 315 or concurrently. R: Open only to juniors and seniors in the School of Hotel, Restaurant and Institutional Management.

Principles of managerial accounting applied to hospitality enterprises. Topics include financial statements, forecasting methods, internal control, and accounting

QP: ACC 201, STT 315, HRI 102, CPS 115 or CPS 100 QA: HRI 203

307. Organizational Behavior in the Hospitality Industry

Spring. 3(3-0)
P: ML 300, MGT 302; HRI 237. R: Open only to juniors and seniors in the School of Hotel, Restaurant and Institutional Management or students in pro-grams for which HRI 307 is a catalog-listed require-

Human resource management and interpersonal skills in the hospitality industry. Focus on managing in a culturally diverse workplace. QP: MGT 302, HRI 237, ML 300 or HRI 375 QA:

HRI 307

Hospitality Information Systems

Fall. 3(3-0)
P: HRI 237; CPS 100 or CPS 130. R: Open only to majors in Hotel and Restaurant Management. Technology for gathering, analyzing, storing and communicating information within the hospitality QP: HRI 237, HRI 203, EC 201 QA: HRI 337

345. Quantity Food Production Systems

Fall, Spring. 3(1-4)
P: HRI 265. R: Open only to juniors and seniors in
Hotel, Restaurant and Institutional Management.

Organization of food and beverage operations. Product knowledge, especially purchasing, storing, preparing and production in food service operations. Menu development and recipe management. QP: HRI 265 QA: HRI 345 353. Professional Work Experience I

Fall, Spring, Summer. 1(1-0) P: HRI 200. R: Open only to majors in the School of Hotel, Restaurant and Institutional Management. Work and training in hospitality management and supervision. Written report detailing work experience. QP: HRI 102 QA: HRI 252

Professional Work Experience II

Fall, Spring, Summer. 1(1-0)
P: HRI 353. R: Open only to juniors and seniors in the
School of Hotel, Restaurant and Institutional Management.

Professional workplace experience involving planning, controlling, staffing, and organizing. Professionally written reports detailing experiences required. QP: HRI 102, HRI 252 QA: HRI 353

473. Hospitality Industry Research

Fall, Spring. 3(3-0) P: HRI 337, STT 315. R: Open only to seniors in Hotel. Restaurant and Institutional Management. Not open to students with credit in ML 317.

Strategies and techniques for obtaining, analyzing, evaluating, and reporting relevant research data. QP: HRI 337, STT 315 QA: HRI 473

475. Innovations in Hospitality Marketing
Fall, Spring. 3(3-0)
P: ML 300, HRI 307; HRI 473 or concurrently. R:
Open only to seniors in the School of Hotel, Restaurant and Institutional Management or students in programs for which HRI 475 is a catalog-listed require-

Marketing of hospitality industry products and con-cepts, amid global competition and culturally diverse

markets and workforces, QP: HRI 307, HRI 375 or ML 300, HRI 473 or CONCURRENTLY QA: HRI 475

482. Hospitality Managerial Finance
Fall, Spring, Summer. 3(3-0)
P: FI 311. R: Open only to seniors in the School of
Hotel, Restaurant and Institutional Management. Cash flow determination and management. Strategies for financing hospitality ventures and expansion. Determining financial viability of proposed and existing operations. QP: HRI 203, FI 391 QA: HRI 392

485. Advanced Foodservice Management

Fall, Spring, Summer. 3(1-4) P: HRI 302, HRI 307, HRI 345. R: Open only to seniors in Hotel, Restaurant and Institutional Manage-

Beverage management and dining room service. Guest relations and current management topics. Emphasis on foodservice team projects. QP: HRI 203, HRI 307, HRI 345 QA: HRI 435

Policy Issues in Hospitality Manågement

P: HRI 482, HRI 454. R: Open only to seniors in Hotel, Restaurant and Institutional Management. Not open to students with credit in MGT 409. Management problems and issues in the hospitality industry. Focus on decision-making models. Case study analysis, discussion and written reports. QP: HRI 353, HRI 392 QA: HRI 490

490. Independent Study

Fall, Spring, Summer. 1 to 3 credits. R: Open only to majors in the School of Hotel, Restau-rant and Institutional Management. Approval of

Supervised research in hospitality management and operations QA: HRI 499

Current Topics in Hospitality Industry

Spring. 3(3-0)
P: HRI 307. R: Open only to seniors in Hotel, Restaurant and Institutional Management.
Emerging topics or issues confronting the hospitality

service industry. *QP: HRI 307 QA: HRI 4*95