HON 1920 Freshman Colloquium: Social Science (Honors) 3(3) Internally intensive seminar that engages freshman honors students in dialogue about the “idea of the University.” Explores foundations and consequences of human thought and behavior at the individual and societal levels, with emphasis on concepts and tools that organize scholarly inquiry across the social and behavioral sciences. Topics vary. Preq: Membership in Calhoun Honors College.

HON 1930 Freshman Colloquium: CrossCultural Awareness (Honors) 3(3) Internally intensive seminar that engages freshman honors students in dialogue about the “idea of the University.” Explores traditions, customs, and value systems of peoples and cultures. Examines concepts and tools that organize scholarly inquiry into world cultures emphasizing non-Western societies. Topics vary. Preq: Membership in Calhoun Honors College.

HON 1940 Freshman Colloquium: Science and Technology in Society (Honors) 3(3) Internally intensive seminar that examines selected structures regarded as monuments to artistic creativity and technological genius and the ways that structures affect and are affected by the societies that produce them. Preq: Membership in Calhoun Honors College.

HON 2010 Structures and Society (Honors) 3(3) Interdisciplinary honors seminar that examines selected structures regarded as monuments to artistic creativity and technological genius and the ways that structures affect and are affected by the societies that produce them. Preq: Membership in Calhoun Honors College.

HON 2020 Science, Culture, and Human Values (Honors) 3(3) Interdisciplinary honors seminar that unifies natural scientific, social scientific, and humanistic disciplines into a holistic view of the modern world and its future. May be repeated for a maximum of six credits, but only if different topics are covered. Preq: Membership in Calhoun Honors College.

HON 2030 Society, Art, and Humanities (Honors) 3(3) Combines readings and methodologies from the social sciences, arts, and humanities to study the interrelationships among the disciplines and their societal effects. Subjects vary. May be repeated for a maximum of six credits, but only if different topics are covered. Preq: Membership in Calhoun Honors College.

HON 2040 Honors Study/Travel 1(3) Study/travel experience related to a three-credit Calhoun Honors Seminar. May be repeated for a maximum of three credits, but only if different topics are covered. Preq: Membership in Calhoun Honors College.

HON 2050 Current Issues 1-3(1-3) Examination of a current issue or set of issues from a variety of academic perspectives. May be repeated for a maximum of six credits, but only if different topics are covered. Preq: Membership in Calhoun Honors College.

HON 2060 Controversies in Science and Technology (Honors) 3(3) Interdisciplinary honors seminar that examines social issues related to science and technology, using perspectives from science, the social sciences, and humanities. May be repeated for a maximum six credits, but only if different topics are covered. Preq: Membership in Calhoun Honors College.

HON 2070 Reasoning, Critical Thinking, and Problem Solving (Honors) 3(3) Interdisciplinary honors seminar that teaches a particular set of tools for thinking and analyzing, showing how these tools can be applied to different kinds of problems in different disciplines. May be repeated for a maximum six credits, but only if different topics are covered. Preq: Membership in Calhoun Honors College.

HON 2090 Border Crossings: Experiences in World Cultures (Honors) 1-3(1-3) Readings and studies that heighten understanding of world cultures and societies. Taken in conjunction with international educational experiences approved by Calhoun Honors College. May be repeated for a maximum of six credits, with a maximum of three credit hours per study abroad experience. Preq: Membership in Calhoun Honors College.

HON 2100 Experiencing the Arts (Honors) 3(2) Interdisciplinary exploration of the arts through seminar discussions and attendance at performing and visual arts events on campus. Exploration of arts and aesthetics leading to performance previews, reviews, and experiences of Brooks Center and Lee Gallery events. May be repeated for a maximum of nine credits. Preq: Membership in Calhoun Honors College. Coreq: HON 2101.

HON 2101, Experiencing the Arts (Honors) Laboratory 0(3) Non-credit laboratory to accompany HON 2100. Coreq: HON 2100.

HON 2200 Studies in Social Science (Honors) 3(3) Discipline specific social science seminar including a disciplinary introduction (anthropology, economics, history, political science, psychology, or sociology) and a detailed examination of specific theories and methods within that discipline. May be repeated for a maximum of six credits, but only if different disciplines are covered. Preq: Membership in Calhoun Honors College.

HON 2210 Studies in Literature (Honors) 3(3) Introduction to selected authors and literary works focused around a specific topic. May be repeated for a maximum of six credits, but only if different topics are covered. Preq: Membership in Calhoun Honors College.

HON 2220 Studies in Arts and Humanities (Honors) 3(3) Exploration of music, literature, film, philosophy or another area in humanities by selected structures regarded as monuments to artistic creativity and technological genius and the ways that structures affect and are affected by the societies that produce them. Preq: Membership in Calhoun Honors College.

HON 2230 Studies in Communications (Honors) 3(3) Explores various topics in communications. May be repeated for a maximum of six credits, but only if different topics are covered. Preq: Membership in Calhoun Honors College.

HON 2240 Global Issues 3(3) Exploration of various global issues across time and space. May be repeated for a maximum of six credits, but only if different topics are covered. Preq: Membership in Calhoun Honors College.

HON 2250 Contract I(0) Advanced study and research taken in conjunction with any 3000- or 4000-level course. Contract requires prior approval by instructor and Honors Director. To be taken Pass/Fail: No Pass only. May be repeated once, but only if in conjunction with a different course. Preq: Membership in Calhoun Honors College.

HON 2260 Contract II(0) Advized study and research taken in conjunction with another undergraduate course as part of the student's approved interdisciplinary honors program. Preq: Membership in Calhoun Honors College.

HON 4990 Honors Research 1-12(1-12) Honors directed research in an academic discipline. Topics include, but are not limited to, literature review, research design and execution, and reporting of results. May be repeated for a maximum of 12 credits. Preq: Membership in Calhoun Honors College.

Horticulture


HORT 1010 Horticulture 3(3) Environmental factors and horticultural practices affecting optimum production of floral, fruit, ornamental, and vegetable crops. Includes a survey of the various areas of horticulture and their importance to society.

HORT 1020 Experience Horticulture 1(2) Students experience the art, science, business, and diversity of horticulture through visits to greenhouses, nurseries, botanical gardens, athletic fields, golf courses, orchards, farms, and research fields and laboratories. Students learn about horticulture from a cross section of professionals sharing their work experiences. Preq: Freshman or sophomore standing in horticulture or turfgrass.

HORT 2020 Selected Topics 1-3(1-3) Introduction to developing trends, concepts or technologies in horticulture and/or turfgrass. May be repeated for a maximum of three credits, but only if different topics are covered. Preq: Consent of instructor.

HORT 2080 Landscape Appreciation 3(3) Deepens students' appreciation of natural and built environments through a study of landscape elements, styles, and professions. Landscapes ranging in scale from residential to regional are critiqued, and design principles and landscape ethics are discussed.

HORT 2100 Growing Garden Plants in the Fall 3(2) Focuses on growing techniques for the production of ornamental and edible horticultural crops during the fall growing season. Lectures focus on scheduling, fertilization, irrigation, integrated pest management and marketing. Labs focus on providing hands-on opportunities to identify and grow flowering crops and vegetables in greenhouses and the field. Preq: HORT 1010. Coreq: HORT 2101.

HORT 2101 Growing Garden Plants in the Fall Laboratory 0(3) Non-credit laboratory to accompany HORT 2100. Coreq: HORT 2100.
HORT 2110 Growing Garden Plants in the Spring
(3) Focuses on growing techniques for the pro-
duction of ornamental and edible horticultural
crops during the spring growing season. Includes
scheduling, manipulation of vegetative growth
and flowering, nutritional management and
plant growth regulation. Labs focus on providing
hands-on opportunities to grow flowering crops
and vegetables in the greenhouse and field. Preq:
HORT 2100. Coreq: HORT 2111.

HORT 2111 Growing Garden Plants in the Spring
Laboratory 0(3) Non-credit laboratory to accom-
pany HORT 2110. Coreq: HORT 2111.

HORT 2120 Introduction to Turfgrass Culture
(3) Studies of the introductory topics associated
with the art and science of turfgrass culture.
Develops an understanding of the history and evo-
lution of turfgrasses and turfgrass culture. Explores
career potentials in turfgrass management. Explains
the basic scientific principles and techniques associ-
ated with the propagation and establishment of
fine turfgrasses. Preq: BIOL 1030 and BIOL 1040.

HORT 2130 Turfgrass Culture Laboratory 1(2)
Provides hands-on activities and understanding of
basic principles and techniques in turfgrass culture.
Students learn all phases of turfgrass management
including identification, turfgrass culture, common
turfgrass pest identification and control. Preq or
concurrent enrollment: HORT 2120.

HORT 2710 Internship 1-16(1-6) Preplanned, prac-
tical, supervised work experience to give beginning
students on-the-job learning opportunities that
support classroom experience. Students submit
monthly reports and present a departmental inter-
ship seminar. Undergraduates may accumulate a
maximum of six credits for participation in HORT
2710 and/or 4710. Preq: Consent of instructor.

HORT 3030 Landscape Plants 3(2) Woody, or-
mental plants and their aesthetic and functional
uses in landscape developments. Study covers habit
of growth, ultimate size, texture effect, period of
bloom, color, and cultural requirements. Coreq:
HORT 3031.

HORT 3031 Landscape Plants Laboratory 0(3)
Non-credit laboratory to accompany HORT 3030.
Coreq: HORT 3030.

HORT 3040 Annuals and Perennials 3(2) Annual
and perennial flowers' aesthetic appeal and func-
tional uses and needs. Color, texture, bloom time,
form, size, and growth requirements as they relate
to designing, planting, and maintaining colorful
landscapes. Preq: HORT 2080 and HORT 3030.
Coreq: HORT 3041.

HORT 3041 Annuals and Perennials Laboratory
0(3) Non-credit laboratory to accompany HORT
3040. Coreq: HORT 3040.

HORT 3080 Sustainable Landscape Design,
Installation and Maintenance 3(3) Landscape
planning of gardens using environmentally
sensitive design, construction, and maintenance
practices. Survey skills to obtain user perception
and preference and environmental measurement
skills are introduced. Offered fall semester only.
Preq: HORT 1010.

HORT 3090 Sustainable Landscape Garden De-
sign Laboratory 1(3) Landscape garden design using
sustainable environmentally sensitive concepts and
practices. Techniques of sustainable landscape
garden design including hard hand drawing, site assess-
ment, client interview, user perception survey,
plant selection, and professional presentation.
Plant selection encourages establishing healthy
ecosystems. Emphasis on interactions between
design, installation, and maintenance phases. Preq
or concurrent enrollment: HORT 3080.

HORT 3100 Growing Landscape Plants 3(2)
Principles, technologies, and techniques of land-
scape plant production and growth including envi-
ronmental control and manipulation, water,
nutrient and pest management, scheduling, propaga-
tion, and plant problem diagnostics. Emphasizes
herbaceous ornamentals along with significant
woody landscape plants. Preq: HORT 1010. Coreq:
HORT 3101.

HORT 3101 Growing Landscape Plants Laboratory
0(3) Non-credit laboratory to accompany HORT
3100. Coreq: HORT 3101.

HORT 4000 Selected Topics 1-6(1-6) A advanced
study of any aspect of horticulture and/or turfgrass
not addressed in other courses. May be repeated for
a maximum of six credits, but only if different
topics are covered.

HORT 4040® Plant Propagation 3(3) Practices of
plant propagation from seeds, bulbs, divisions, lay-
ers, cuttings, grafting, and plant tissue culture are
introduced. Physiological principles of pollination
and seed biology, plant growth, regulators, source
sink relations, life cycles and developmental phase
transitions explain the practices. Environmental
and economic contexts frame the preferred prac-
tices.

HORT 4050® Plant Propagation Techniques Lab-
oratory 1(3) Techniques of plant propagation,
including sexual methods: germination, scarifica-
tion, and stratification. Asexual methods, including
grafting, budding, cuttings, layering, tissue culture
divisions, and separations. Students visit local nurs-
eries. Preq or concurrent enrollment: HORT 4040.

HORT 4080 Horticulture Discovery and Inquiry
1-3(1-3) Students learn about horticulture through
research, service learning, and/or creative inquiry
projects. They explore a topic of interest with fac-
ulty, organize a quality proposal, complete the proj-
et, and report results to appropriate profes-
sional audiences. May be repeated for a maximum
of nine credits.

HORT 4090 Senior Capstone Course 3(3) Student
cognitive, affective and psychomerter learning
(skills) in the field of environmental horticulture
is assessed using real world professional situations
requiring the command, analysis and synthesis of
knowledge and skills acquired during the un-
dergraduate experience. Preq: Senior standing in
horticulture.

HORT 4120® Advanced Turfgrass Management
3(2) Advanced principles and practices associated
with turfgrass management for golf courses, sports
fields, sod production, and commercial lawn care.
Topics include turfgrass physiology, plant growth
and development, construction, turfgrass nutrition,
irrigation, drainage, pesticide use and fate, and de-
velopment of effective management systems. Preq:
HORT 2120 or PES 2020. Coreq: HORT 4121.

HORT 4121® Advanced Turfgrass Management
Laboratory 0(3) Non-credit laboratory to accom-
pany HORT 4120. Coreq: HORT 4120.

HORT 4200® Applied Turfgrass Physiology 3(3)
Advanced course in turfgrass science and manage-
ment. Provides the current status and develop-
ment of turfgrass stress physiology and research.
Main topics include drought, traffic, edaphic
stresses, new developments in the turf
industry and environmental stewardship. Preq:
HORT 2120, and HORT 2130.

HORT (FOR) 4270® Urban Tree Care 3(3)
Principles, practices, and problems of protecting
and maintaining trees in urban and recreational
areas. Examines environmental and biological fac-
tors affecting trees in high-use areas, their manage-
ment and cultural requirements, and the practices
necessary for their protection and care as valuable
assets in the landscape. May also be offered as FOR
4270. Preq: FOR 2050 or HORT 3030.

HORT (PES) 4330® Landscape and Turf Weed
Management 3(2) Weed management strategies
that include cultural, biological, and chemical
methods are studied for landscape and turfgrass
areas. Problem solving skills and herbicide charac-
teristics are emphasized. Coreq: HORT 4331. May
also be offered as PES 4330.

HORT (PES) 4331® Landscape and Turf Weed
Management Laboratory 0(2) Non-credit labora-
tory to accompany HORT 4330. Coreq: HORT
4330. May also be offered as PES 4331.

HORT 4550® Just Fruits 3(3) Students explore the
origins, biology, culture, and production of major
temperate zone fruits: apples, berries, and cher-
ries to pawpaws, peaches, and pomegranates, the
forbidden. They discover principles, practices,
and technologies employed to grow, protect, and
harvest the fruits that feed us from commercial
orchards, organic farms, and backyards.
Preq: HORT 1010.

HORT 4560® Vegetable Crops 3(3) Introduction
to vegetable production, value-added products
and nutrition using a farm-to-table approach.
Provides an overview of vegetable production
(small to large scale), the links between agriculture
and human health, and the concept of value
addition. Attention is given to the nutritious,
wholefood benefits of vegetables and how they
are used to reduce global protein-, calorie- and
micronutrient-malnutrition.
HUM 4560* Literature and Arts of the Holocaust 3(3) Addresses the Holocaust through literature, art, architecture, music, and film. Beginning with historical, political, and economic forces that contributed to the Holocaust, course then focuses on highly diverse creative responses to this event - responses that often reflect the difficulties and politics of these commemorative gestures. May also be offered as ENGL 4560. Preq: ENGL 3010.

INDUSTRIAL ENGINEERING


IE 2000 Sophomore Seminar in Industrial Engineering 1(1) Addresses the industrial engineering program, best student practices, and career paths. Invited lecturers, as needed, and faculty provide lectures and demonstrations. Preq: ENGR 1060 or ENGR 1090, each with a C or better.

IE 2100 Design and Analysis of Work Systems 3(2) Introduction to the tools and techniques used to design and analyze work systems for human use, including process improvement, workplace design and an introduction to the field of human factors and ergonomics. Preq: ENGR 1060 or ENGR 1090 with a C or better.

IE 2101 Design and Analysis of Work Systems Laboratory 1(1) Non-credit laboratory to accompany IE 2100. Coreq: IE 2100.

IE 2680 Creative Inquiry Seminar in Industrial Engineering 1(1) Students are introduced to creative inquiry methods, resources, and current activities in a seminar format. To be taken Pass/No Pass only. Includes Honors sections.

IE 2800 Deterministic Operations Research 3(3) Introduction to operations research models, including linear programming, integer linear programming, transportation and assignment problems, and network flows. Preq: MATH 1060 or MATH 1070 with a C or better.

IE 3000 Junior Honors Seminar 1(1) Acquaints students enrolled in the Departmental Honors Program with current research issues in the profession. This assists students in preparing a research proposal for the senior thesis. Preq: Junior standing and admission to Departmental Honors Program.

IE 3010 Systems Design I 4(3) Introduction to the design of industrial engineering systems. Design methodologies are introduced in the context of a design process that includes identifying user needs; developing a design specification; generating, evaluating, refining, and selecting design concepts; detail design; constructing, testing, and refining prototypes; and delivering the product to the customer. Preq: ENGR 1060 with a C or better; and ENGR 1020 or ENGR 1030 with a C or better.

IE 3011 Systems Design I Laboratory 0(3) Non-credit laboratory to accompany IE 3010. Coreq: IE 3010.