

# RATCLIFFE HICKS SCHOOL OF AGRICULTURE

Kristen Govoni Ph.D., Associate Dean, College of Agriculture, Health and Natural Resources and Director, Ratcliffe Hicks School of Agriculture

The Ratcliffe Hicks School of Agriculture confers Associate of Applied Science Degrees in Animal Science, Plant Science, and Urban Forestry and Arboriculture. This two-year program of technical and applied education is only available at the Storrs campus. The School was established in 1941 by the University of Connecticut through a bequest from Mr. Ratcliffe Hicks of Tolland, Connecticut.

Students include recent high school graduates as well as adults who are interested in continuing education or a career change. Course work offers a balance between technical and theoretical aspects of each subject with emphasis on hands-on learning.

Ratcliffe Hicks School of Agriculture graduates have the skills and knowledge to enter challenging and exciting careers. They are highly qualified for competitive positions and often manage or own businesses and production operations. Ratcliffe Hicks School of Agriculture graduates can also continue their education and pursue baccalaureate or higher degrees.

## Scholarships

The Ratcliffe Hicks School of Agriculture offers scholarships for qualified individuals entering the two-year program. Selected applicants receive up to \$1,500 toward educational expenses in their first semester. Based on academic performance, scholarships may be renewed for three additional semesters.

Incoming students are automatically reviewed for scholarships prior to entering the program. Selection is based on academic and career-related accomplishments, and potential for continued success.

Many scholarships in Agriculture, Health and Natural Resources are available to Ratcliffe Hicks students, for more information please see: [grow.uconn.edu](http://grow.uconn.edu) (<http://grow.uconn.edu>).

## Majors

- Animal Science (AAS) (<https://catalog.uconn.edu/undergraduate/ratcliffe-hicks-agriculture/animal-science-aas/>)
- Plant Science (AAS) (<https://catalog.uconn.edu/undergraduate/ratcliffe-hicks-agriculture/plant-science-aas/>)
- Urban Forestry and Arboriculture (AAS) (<https://catalog.uconn.edu/undergraduate/ratcliffe-hicks-agriculture/urban-forestry-arboriculture-aas/>)

## Admission Requirements

Admission is open to qualified graduates of approved secondary schools. For required courses and units, please refer to the Admission section of this Catalog. Foreign language study is not required for admission into the two-year program; college preparatory level courses are recommended, but not required.

Applicants follow the same process as other undergraduate programs at UConn. Applicants submit the Common Application or the UConn Admission Application, high school transcript, SAT or ACT scores, and

personal essay, which is included in the application. Applicants are encouraged to emphasize their interest, experience, and career goals when completing the essay and activities sections of the application. Applicants with prior post-secondary course work must submit official college transcripts. Applicants who are not graduates of a secondary school must present a copy of a State Equivalency Diploma and a personal statement.

Students from some New England states may be eligible to enroll in the Ratcliffe Hicks School of Agriculture at a reduced tuition rate through the New England Regional Student Program. Eligibility for Associate degree programs in Animal Science, Plant Science, and in Urban Forestry and Arboriculture are described in the Admissions section of this Catalog.

## Non-Degree Study

Individuals interested in obtaining specific skills and knowledge relating to the many diverse areas of plant, forestry, and animal science may also register for Ratcliffe Hicks courses as non-degree students. Non-degree students do not have to apply for formal admission to the University.

## Associate Degree Curricula Ratcliffe Hicks General Education Criteria

General Education Requirements for Ratcliffe Hicks students differ from University General Education Requirements for baccalaureate students.

| Course  | Title  | Credits |
|---|--|---------|
| <b>First-Year Seminar</b>   |  |         |
| SAAG 250  | First Year Student Seminar   | 1       |
| <b>Writing</b>  |  |         |
| Select one of the following:  |  | 4       |
| ENGL 1004   | Introduction to Academic Writing   |         |
| ENGL 1007   | Seminar and Studio in Writing and Multimodal Composition                                 |         |
| ENGL 1010   | Seminar in Academic Writing  |         |
| ENGL 1011   | Seminar in Writing through Literature  |         |
| <b>Mathematics</b>  |  |         |
| MATH 1011Q  | Introductory College Algebra and Mathematical Modeling (or higher - based on SAT scores) | 3       |
| <b>Civic and Community Engagement</b>   |  |         |
| Select one of the following:  |  | 3       |
| ARE 1110E   | Population, Food, and the Environment  |         |
| HIST 1501   | United States History to 1877  |         |
| HIST 1502   | U.S. History Since 1877  |         |
| NRE 1235E   | Environmental Conservation   |         |
| PP 1001   | Introduction to Public Policy  |         |
| POLS 1602   | Introduction to American Politics  |         |
| URBN 1300   | Exploring Your Community   |         |
| <b>Arts and Humanities</b>  |  |         |
| In addition to the Civic and Community Engagement course, select one course from the following: |  | 3       |
| SAAG 350  | Hispanic Culture and Communication in Agriculture  |         |
| ART 1000  | Art Appreciation   |         |
| DRAM 1101   | Introduction to the Theatre  |         |
| DRAM 1110   | Introduction to Film   |         |

|  |   |
|--|---|
| FREN 1101  | Elementary French I   |
| FREN 1102  | Elementary French II  |
| FREN 1169  | Modernity in Crisis: France and the Francophone World From 1850 to Today    |
| FREN 1171  | French Cinema   |
| FREN 1177  | Magicians, Witches, Wizards: Parallel Beliefs and Popular Culture in France |
| GEOG/URBN 1200   | Global Urbanization   |
| GERM 1169  | Contemporary Germany in Europe  |
| GERM 1171  | The German Film   |
| HIST 1201  | Modern World History  |
| HIST 1501  | United States History to 1877   |
| HIST 1502  | U.S. History Since 1877   |
| ILCS 1158  | Italian American Experience in Literature and Film                          |
| MUSI 1001  | Music Appreciation  |
| MUSI 1002  | Sing and Shout! The History of America in Song                              |
| MUSI 1003  | Popular Music and Diversity in American Society                             |
| MUSI 1004  | Non-Western Music   |
| NRE 1235E  | Environmental Conservation  |
| PHIL 1101  | Problems of Philosophy  |
| PHIL 1102  | Philosophy and Logic  |
| PHIL 1104  | Philosophy and Social Ethics  |
| POLS 1002  | Introduction to Political Theory  |
| SPAN 1001  | Elementary Spanish I  |
| SPAN 1002  | Elementary Spanish II   |
| WGSS 2204  | Feminisms and the Arts  |
| Other 1000-level course (approved by the Ratcliffe Hicks director) |   |

**Social Science:**

In addition to the Civic and Community Engagement course, select one course from the following: 3

|              |   |
|--------------|---|
| ANTH 1000    | Peoples and Cultures of the World       |
| ANTH 1006    | Introduction to Anthropology            |
| ARE 1110E    | Population, Food, and the Environment   |
| COMM 1000    | The Process of Communication            |
| ECON 1000    | Essentials of Economics                 |
| or ECON 1201 | Principles of Microeconomics            |
| or ECON 1202 | Principles of Macroeconomics            |
| EVST 1000E   | Introduction to Environmental Studies   |
| GEOG 1000    | Introduction to Geography               |
| GEOG 1700    | World Regional Geography                |
| HDFS 1060    | Close Relationships Across the Lifespan |
| HDFS 1070    | Individual and Family Development       |
| POLS 1202    | Introduction to Comparative Politics    |
| POLS 1207    | Introduction to Nonwestern Politics     |
| POLS 1402    | Introduction to International Relations |
| POLS 1602    | Introduction to American Politics       |
| PP 1001      | Introduction to Public Policy           |
| PUBH 1001    | Introduction to Public Health           |

|  |  |
|--|--|
| SARE 450   | Principles of Applied and Resource Economics |
| SLHS 1150  | Introduction to Communication Disorders      |
| SOCI 1001  | Introduction to Sociology                    |
| or SOCI 1251   | Social Problems                              |
| or SOCI 1501   | Race, Class, and Gender                      |
| WGSS 1105  | Gender and Sexuality in Everyday Life        |
| Other 1000-level course (approved by the Ratcliffe Hicks director) |  |
| <b>Total Credits</b>   | <b>17</b>                                    |

<sup>1</sup> **Other Alternatives:** Students may substitute COMM 1100 Principles of Public Speaking; NUSC 1167 Food, Culture and Society; SPSS 1125 Insects, Food and Culture for the Social Sciences requirement.

Science and computer technology requirements for the A.A.S. degree are incorporated into courses required for the major.

**Majors**

The Ratcliffe Hicks School of Agriculture students major in Plant Science, Animal Science, or Urban Forestry and Arboriculture.

Plant Science majors may concentrate in ornamental horticulture, turfgrass management, or sustainable crop production. Graduates pursue careers in golf course management, sports turf management, floriculture, landscape and grounds maintenance, greenhouse and garden center operations, nursery management, interiorscaping, park and land management, public horticulture or various positions within the entire food crop production chain from field to fork.

Animal science majors focus on equine studies or production agriculture, including both dairy and livestock. Graduates seek positions in the horse industry, production enterprises, animal health, breeding and genetics, nutrition, meat science and food handling, or related industries.

Urban Forestry and Arboriculture majors focus on the care and maintenance of individual trees and urban forest tracts near buildings, roads, and other developments. This major provides students with needed vocational skills to pursue a career in arboriculture and urban forest management, including the knowledge required to sit for the CT Arborist license exam.

**Faculty Advisors**

Faculty advisors are assigned to students upon entry into the Ratcliffe Hicks School of Agriculture according to a student's major and area of special interest. Advisors assist students in the selection of appropriate courses and help them develop an individualized program that will meet educational and career goals. The Ratcliffe Hicks Director's Office and Academic Advisory Center provide additional support to faculty advisors and students.

**Registration**

Ratcliffe Hicks students are restricted primarily to Ratcliffe Hicks courses, numbered 100-999. Ratcliffe Hicks students may register for 1000-level courses listed in the "Associate Degree Requirements" section below.

Ratcliffe Hicks students must have approval of the advisor and Director to register for 1000-level courses not listed below. Ratcliffe Hicks students may not register for 2000-level or above courses or skill code courses (W, Q, E) unless approved by the Director. Inappropriate

registration may result in administrative changes to a student's schedule or credit restrictions toward graduation requirements.

## Pass/Fail

Ratcliffe Hicks School of Agriculture students who have earned at least 24 credits and are not on academic notice may place a course, for no more than four credits, on Pass/Fail. Credits earned from a Pass/Fail course may be used toward the total credit requirement for the Associate of Applied Science degree, but cannot be used to meet any other graduation requirement.

## Supplementary Scholastic Standards

The Ratcliffe Hicks School of Agriculture follows the same academic regulations and procedures regarding scholastic standards and academic notice as all other schools and colleges of the University except:

- Ratcliffe Hicks students are on academic notice for the next semester in which they are enrolled if their academic performance is such that they have earned less than a 2.0 semester grade point average or cumulative grade point average. No warning semester is permitted.
- Students who are dismissed from the Ratcliffe Hicks School of Agriculture for the first time may, upon approval, matriculate no sooner than one semester following dismissal.

## Associate Degree Requirements

Upon recommendation of the faculty, the degree of Associate of Applied Science is awarded by vote of the Board of Trustees to students who have met the following requirements:

1. earned a total of 60 degree credits;
2. earned at least a 2.0 grade point average for the total number of calculable credits for which they have registered;
3. passed all courses required by the faculty of the Ratcliffe Hicks School of Agriculture; and
4. earned at least 40 credits at the University of Connecticut in Ratcliffe Hicks courses numbered 100-999. Transfer students may be eligible for an exception with approval of the Director.

All students must pass the following courses to earn the Associate of Applied Science Degree. *No single course can be used to satisfy more than one requirement.*

## Supplemental Information

### Transfer to Four-Year Program

Approximately 60 percent of Ratcliffe Hicks graduates continue their education to earn baccalaureate or higher degrees. Students must complete the A.A.S. program to transfer into the College of Agriculture, Health and Natural Resources or other baccalaureate programs at the University. Students should contact the Ratcliffe Hicks Director's Office to obtain an application and verify procedures. The Ratcliffe Hicks School will review applications for transfer and submit recommendations to the Transfer Admissions Office and the Registrar's Office for final decisions. Admission decisions will be based primarily on courses completed in the School and earned grade point average (minimum 2.7). Students transferring to a baccalaureate program at the University of Connecticut will receive transfer credit for courses based on the following criteria:

1. Ratcliffe Hicks courses (three-digit courses in SAAG, SAAS, SANR, SAPL, SAPB, SARE) with passing grades will be applied to the baccalaureate program except as noted below. Course equivalency is determined by departmental review.
2. If a passing grade is earned, the following courses allow for credit transfer, but grades do not: SAPB 301 Health and Disease Management of Animals, SAPL 991 Internship.
3. Baccalaureate courses (four-digit course numbers) with passing grades will be applied to baccalaureate program.
4. Courses graded satisfactory/unsatisfactory or pass/fail with passing grades will be applied to the baccalaureate program.

### Field Trips and Transportation Costs

Many courses require off-campus field trips. Students should budget money for participation.

### University Fees and Expenses

For fees and expenses, see statement under Undergraduate Fees and Expenses.

## Agricultural and Resource Economics (SARE)

### SARE 450. Principles of Applied and Resource Economics. (3 Credits)

An introduction to microeconomic analysis with applications to food, nutrition, health, natural resources, and the environment. Topics include consumer and firm behavior, supply, demand, markets, and economic policy. Taught with ARE 1150.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=SARE%20450>)

### SARE 460. Fundamentals of Accounting and Management for the Agribusiness Firm. (3 Credits)

An analysis of basic business principles, fundamentals and concepts for business entrepreneurs.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=SARE%20460>)

### SARE 495. Special Topics. (1-3 Credits)

(Also offered as SANR 495.) Total credits allowed toward graduation requirements are restricted as outlined in Ratcliffe Hicks section.

May be repeated for credit

View Classes (<https://catalog.uconn.edu/course-search/?details&code=SARE%20495>)

### SARE 699. Independent Study. (1-6 Credits)

(Also offered as SANR 699.) An independent study project is mutually arranged between a student and an instructor. Total credits allowed toward graduation requirements are restricted as outlined in Ratcliffe Hicks section.

May be repeated for credit

View Classes (<https://catalog.uconn.edu/course-search/?details&code=SARE%20699>)

## Animal Science (SAAS)

### SAAS 101. Introduction to Animal Science. (3 Credits)

The biological, physical and social factors that influence animal production and utilization. Taught with ANSC 1001.

Not open to students in an undergraduate program.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=SAAS%20101>)

### SAAS 111. Anatomy and Physiology of Domestic Animals. (3 Credits)

A study of the anatomy and physiology of the animal body including characteristics that impact animal production systems. The physiology of reproduction and digestion will receive emphasis. Management practices and techniques used to maximize production efficiency will be included.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=SAAS%20111>)

### SAAS 112. Anatomy and Physiology of Domestic Animals. (3 Credits)

A study of the anatomy and physiology of the animal body including characteristics that impact animal production systems. The physiology of reproduction and digestion will receive emphasis. Management practices and techniques used to maximize production efficiency will be included.

SAAS 111.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=SAAS%20112>)

### SAAS 113. Principles of Animal Nutrition and Feeding. (3 Credits)

Focuses on digestive anatomy of various species and the classes of nutrients including their digestion, metabolism and sources. Nutrient requirements and feeding standards for various classes of livestock for reproduction, lactation, growth, work and maintenance are included as well as companion animals, exotics and aquatics. Classes of feedstuffs, their characteristics and proper utilization will be discussed. Attention will also be given to characteristics of common feedstuffs and to formulating rations and nutritional programs for animal enterprise. Taught with ANSC 1111.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=SAAS%20113>)

### SAAS 121. Animal Breeding and Genetics. (3 Credits)

The principles of genetics, chemistry of nucleic acids, replication, transcription, translation and regulation of genes, population and quantitative genetics, and modern molecular genetics approaches as tools for breeding, and improving livestock production.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=SAAS%20121>)

### SAAS 202. Behavior and Training of Domestic Animals. (3 Credits)

Application of behavior of cattle, horses, sheep, goats, swine, companion animals and poultry to their management, training and welfare. Basic principles of genetics and physiology of behavior, perception, training, learning, motivation, and stress with consideration of integrated behavioral management and animal welfare. Students must have access to an animal that they can train throughout the semester. Taught concurrently with ANSC 1602.

Recommended preparation: SAAS 101.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=SAAS%20202>)

### SAAS 243. Animal Products. (3 Credits)

An introduction to meat, dairy and poultry products. Issues concerning regulatory standards, nutritive value, safety and quality assessment will be emphasized. Laboratories will emphasize the production and processing of these animal food products. Taught with ANSC 3343.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=SAAS%20243>)

### SAAS 251. Horse Science. (3 Credits)

Includes horse types and breeds and their nutrition, breeding, evaluation, behavior, care and management with attention given to detailed studies of the problems and practices of horse production and use. Taught with ANSC 2251.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=SAAS%20251>)

### SAAS 252. Management of the Horse Breeding Farm. (3 Credits)

Designed to develop technical and managerial skills necessary for operating horse farms. Programs for herd health, hoof care, nutrition, breeding, foaling and record keeping will be included.

SAAS 251.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=SAAS%20252>)

### SAAS 254. Horse Selection and Evaluation. (2 Credits)

Comparative evaluation, classification and selection of horses according to conformation, breed characteristics and performance. Judging skills including justification of placing through presentation of oral reasons will be developed. Field trips required. Taught with ANSC 3454.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=SAAS%20254>)

### SAAS 255. Foundations of Training. (2 Credits)

Fundamental ground work and training techniques used when working with young horses. Prior working experience with horses is highly recommended.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=SAAS%20255>)

### SAAS 257. Methods of Equitation Instruction. (2 Credits)

The techniques and procedures of teaching equitation including the theories of riding and teaching methods. Practice teaching will be required under the supervision of the instructor. Taught with ANSC 4457.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=SAAS%20257>)

### SAAS 261. Dairy Herd Management. (3 Credits)

Management of dairy cattle including milking procedures, sanitation, selection, nutrition, reproduction, physiology and anatomy of milk secretion and record keeping. Field trip required. Taught with ANSC 3261.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=SAAS%20261>)

### SAAS 262. Applied Dairy Herd Management. (3 Credits)

The organization and management of dairy farms with emphasis upon business and economic decision making. Management programs in the areas of nutrition, disease control, waste management, selection, reproduction and milking will be evaluated. Field trips are required.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=SAAS%20262>)

**SAAS 271. Introduction to Poultry Industry. (3 Credits)**

A practical application of scientific principles in the poultry industry. It will include classification, selection methods, breeding, incubation and chick development, brooding, nutrient requirements, processing and management practices.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=SAAS%20271>)

**SAAS 272. Sustainable Animal Management. (3 Credits)**

An introduction to sustainable agriculture, as related to alternative farm animal production. Basic economics will be discussed in preparation for the creation of a farm business plan. Laboratory/discussion periods will include student presentations and hands-on activities. Field trips required.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=SAAS%20272>)

**SAAS 273. Livestock Production. (4 Credits)**

Biological and economic aspects of beef, sheep, and swine production. Field trips required. Taught with ANSC 3273.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=SAAS%20273>)

**SAAS 274. Livestock and Carcass Evaluation. (2 Credits)**

Classification, form to function relationships, grades and value differences of livestock are included. Objective and subjective methods of appraisal are used to evaluate beef cattle, sheep and swine. Taught with ANSC 3674.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=SAAS%20274>)

**SAAS 275. Advanced Animal and Product Evaluation. (1 Credit)**

Intensive training in the evaluation of selected species of farm animals or their products. Type standards and the relation of anatomical features to physiological function are emphasized. Evaluation skills including justification of decisions will be developed. Students enrolled in this course will have the option to participate on intercollegiate animal and product evaluation teams. Field trips are required, some of which may occur prior to the start of the semester. Taught with ANSC 3675.

May be repeated for a total of 2 credits

View Classes (<https://catalog.uconn.edu/course-search/?details&code=SAAS%20275>)

**SAAS 276. Introduction to Companion Animals. (3 Credits)**

Basic concepts of the nutrition, physiology, health and management of companion animals. Taught with ANSC 1676.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=SAAS%20276>)

**SAAS 290. Animal Science Field Excursions. (1 Credit)**

A multiple day field trip format. Students in this course will travel with the instructor to visit and tour agri-businesses that represent commercial aspects of different animal science activities. Students will interview agri-business personnel and gain an understanding of how agricultural principles are applied in the field. Each student must submit a formal written report for evaluation and meet all other course requirements as specified by the instructor. Field trip is required. Students taking this course will be assigned a final grade of S (satisfactory) or U (unsatisfactory).

May be repeated for a total of 1 credits

View Classes (<https://catalog.uconn.edu/course-search/?details&code=SAAS%20290>)

**SAAS 291. Professional Internship. (1-6 Credits)**

Total credits allowed toward graduation requirements are restricted as outlined in Ratcliffe Hicks section.

Open to sophomores or higher; open only with consent of instructor.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=SAAS%20291>)

**SAAS 294. Career Paths in the Animal Sciences. (1 Credit)**

A discussion of current employment opportunities in animal agriculture. In addition, students will prepare resumes and give oral presentations.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=SAAS%20294>)

**SAAS 295. Special Topics. (1-6 Credits)**

Total credits allowed toward graduation requirements are restricted as outlined in Ratcliffe Hicks section. Contact Department Main Office for list of current topics and instructors.

May be repeated for credit

View Classes (<https://catalog.uconn.edu/course-search/?details&code=SAAS%20295>)

**SAAS 298. Variable Topics. (1-6 Credits)**

Contact Department Main Office for list of current topics and instructors. Instructor consent.

May be repeated for credit

View Classes (<https://catalog.uconn.edu/course-search/?details&code=SAAS%20298>)

**SAAS 299. Independent Study. (1-6 Credits)**

An independent study project is mutually arranged between a student and an instructor. Students are advised to read the Ratcliffe Hicks regulation limiting the number of credits which may be applied to the minimum graduation requirements. Students taking this course will be assigned a final grade of S (satisfactory) or U (unsatisfactory).

May be repeated for credit

View Classes (<https://catalog.uconn.edu/course-search/?details&code=SAAS%20299>)

**SAAS 358. Management Skills and Practices - Horses. (1 Credit)**

Practical experience in common management practices is offered by working in the University facilities under supervision. Students taking this course will be assigned a final grade of S (satisfactory) or U (unsatisfactory).

May be repeated for a total of 2 credits

View Classes (<https://catalog.uconn.edu/course-search/?details&code=SAAS%20358>)

**SAAS 363. Management Skills and Practices - Dairy Cattle I. (1 Credit)**

Practical experience in common management practices is offered by working in the University facilities under supervision. Students taking this course will be assigned a final grade of S (satisfactory) or U (unsatisfactory).

May not be taken out of sequence after passing SAAS 364.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=SAAS%20363>)

**SAAS 364. Management Skills and Practices - Dairy Cattle II. (1 Credit)**

Continued practical experience in common management practices is offered by working in the University facilities under supervision. Students taking this course will be assigned a final grade of S (satisfactory) or U (unsatisfactory).

SAAS 363.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=SAAS%20364>)

**SAAS 373. Management Skills and Practices - Livestock. (1 Credit)**

Practical experience in common management practices is offered by working with livestock species in the University facilities under supervisor. Students taking this course will be assigned a final grade of S (satisfactory) or U (unsatisfactory).

May be repeated for a total of 2 credits

View Classes (<https://catalog.uconn.edu/course-search/?details&code=SAAS%20373>)

**SAAS 375. Management Skills and Practices - Poultry. (1 Credit)**

Practical experience in common management practices is offered by working in the University facilities under supervision. Students taking this course will be assigned a final grade of S (satisfactory) or U (unsatisfactory).

Open only to students in the Ratcliffe Hicks School of Agriculture.

Instructor consent required.

May be repeated for credit

View Classes (<https://catalog.uconn.edu/course-search/?details&code=SAAS%20375>)

**SAAS 420. Little I Training Assistant. (1 Credit)**

Livestock animal handling, training, fitting, and showing techniques for Introduction to Animal Science students at weekly practices.

Instructor consent.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=SAAS%20420>)

## Natural Resources and the Environment

**SANR 215. Dendrology. (3 Credits)**

Identification, taxonomic classification, silvics, and distribution of trees and woody shrubs of the United States with emphasis upon Northeastern species. Focus is on field-based identification skills in natural forest, woodland and shrubland settings. Lab sessions take place primarily outdoors. Field trips are planned. Taught with NRE 2415.

Recommended preparation: SAPL 120 and SAPL 300.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=SANR%20215>)

**SANR 255. Forest Ecology. (3 Credits)**

Forest structure and functional processes and their relation to physical environment (light, temperature, water, soil); the influence of time (succession, disturbance, stand dynamics) and space (landscape ecology, ecosystem management). Laboratory will be in the field or computer lab. Taught with NRE 2455.

Recommended preparation: SANR 215.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=SANR%20255>)

**SANR 310. Introduction to Wildlife Management. (3 Credits)**

Basic wildlife techniques including habitat evaluation and identification signs. Emphasis will be placed on keeping a wildlife field journal. Field exercises and laboratory provide an opportunity to use and evaluate techniques for wildlife management.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=SANR%20310>)

**SANR 325. Fundamentals of Arboriculture. (3 Credits)**

Theory, science, and practice of evaluating, growing, managing and safe removal of trees within or in close proximity to built environments. Laboratories are field-based and will take place in outdoor conditions. Taught with NRE 3425.

SANR 215, which may be taken concurrently.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=SANR%20325>)

**SANR 425. Urban and Community Forestry. (3 Credits)**

The theory, science and practice of evaluating and managing urban trees and forest resources, recognizing urban forest resources as part of socio-ecological-economic systems.

Recommended preparation: SANR 215 and 325.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=SANR%20425>)

**SANR 495. Special Topics. (1-3 Credits)**

(Also offered as SARE 495.) Total credits allowed toward graduation requirements are restricted as outlined in Ratcliffe Hicks section.

May be repeated for credit

View Classes (<https://catalog.uconn.edu/course-search/?details&code=SANR%20495>)

**SANR 699. Independent Study. (1-6 Credits)**

(Also offered as SARE 699.) An independent study project is mutually arranged between a student and an instructor. Total credits allowed toward graduation requirements are restricted as outlined in Ratcliffe Hicks section.

May be repeated for credit

View Classes (<https://catalog.uconn.edu/course-search/?details&code=SANR%20699>)

**SANR 991. Field Study Internship. (1-6 Credits)**

Designed to acquaint students through actual work experience with their career field of interest beyond those available on campus. The student, intern supervisor, and faculty member offering the course will develop and sign a learning contract prior the start of the internship. Both the intern supervisor and student will provide evaluations at the end of the internship to the faculty member. Students taking this course will be assigned a final grade of S (satisfactory) or U (unsatisfactory).

Instructor consent.

May be repeated for a total of 6 credits

View Classes (<https://catalog.uconn.edu/course-search/?details&code=SANR%20991>)

## Pathobiology (SAPB)

**SAPB 301. Health and Disease Management of Animals. (3 Credits)**

Designed for students who plan to own and work with domestic animals. Its purpose is to develop student competence in disease management and to foster an intelligent working relationship with their veterinarian.

The course will cover a systematic relationship of infectious and noninfectious diseases of domestic animals from the standpoint of economic and public health.

SAAS 111 and 112 and a college course in biology.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=SAPB%20301>)

**SAPB 495. Special Topics. (1-2 Credits)**

Total credits allowed toward graduation requirements are restricted as outlined in Ratcliffe Hicks Section.

May be repeated for credit

View Classes (<https://catalog.uconn.edu/course-search/?details&code=SAPB%20495>)

**SAPB 699. Independent Study. (1-6 Credits)**

An independent study project is mutually arranged between a student and an instructor. Students are advised to read the Ratcliffe Hicks School regulation limiting the number of credits which may be applied toward graduation.

May be repeated for credit

View Classes (<https://catalog.uconn.edu/course-search/?details&code=SAPB%20699>)

## Plant Science (SAPL)

### **SAPL 101. Environmental Sustainability of Food Production in Developed Countries. (3 Credits)**

Foundations of modern systems that produce the majority of food calories consumed in North America and other developed countries.

Benefits and environmental risks associated with modern food production systems. Alternative food production systems and sustainability. Local food production and food security. Food production and climate change.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=SAPL%20101>)

### **SAPL 110. Turfgrass Management. (3 Credits)**

An overview of turfgrass adaptation, selection, and management. Topics include turfgrass growth, physiology, soil interactions, establishment, and maintenance. Cultural system practices for lawns, golf courses, athletic fields, and other turf areas. Turfgrass pest management practices for weeds, insects and diseases.

May not be taken out of sequence after passing SAPL 315.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=SAPL%20110>)

### **SAPL 115. Turfgrass Management Laboratory. (1 Credit)**

Grass establishment, grass identification, athletic field turfgrass playability evaluations, soil testing, turfgrass pest identification, turfgrass pest monitoring techniques and fertilizer spreader and sprayer calibration.

SAPL 110, which may be taken concurrently.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=SAPL%20115>)

### **SAPL 120. Introduction to Plant Science. (4 Credits)**

A general course designed to give students a broad view of the field of horticulture as well as a working knowledge of the fundamentals of plant growth.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=SAPL%20120>)

### **SAPL 130. Introduction to the Horticulture of Cannabis. (3 Credits)**

Fundamentals of the production cycle of Cannabis including horticultural management, identification of crop issues, elite feminized seed production, seed propagation, vegetative propagation, pruning, training, optimization of cannabinoid content and post-harvest handling. Overviews of Cannabis business operations world-wide and in Connecticut, exploring lab testing procedures, cannabidiol extraction technologies, the Connecticut medical marijuana program and government regulation of the industry. Taught with SPSS 2130.

Recommended preparation: SAPL 120.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=SAPL%20130>)

### **SAPL 160. The Great American Lawn: History, Culture and Sustainability. (3 Credits)**

The largest irrigated crop in the U.S. is located right outside your window. Examines the health, social, cultural, and environmental impacts of one of America's greatest obsessions. Taught with SPSS 1060.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=SAPL%20160>)

### **SAPL 210. Golf Course Management. (3 Credits)**

Discussion of the specialized field of golf course management. Topics: cultural techniques including soil aeration, topdressing, mowing, and thatch removal; grass or species selection, fertilization, irrigation, personnel, golf course pest management and equipment and inventory management. Field trips required.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=SAPL%20210>)

### **SAPL 230. Principles of Turfgrass Irrigation Systems. (3 Credits)**

Turfgrass irrigation systems, principles of hydraulics, irrigation components, design, installation and repair. Students will design irrigation systems for various turf areas. Field trips and fieldwork will be required. Taught with SPSS 3300.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=SAPL%20230>)

### **SAPL 240. Professional Development for Turfgrass Industries. (2 Credits)**

Topics include human resource information, communication skills, turfgrass pesticide laws and compliance, labor laws and compliance, bid specifications, resume writing, interviewing, golf course management structures, business ethics, and benefits of professional association membership. Guest lecturers include industry professionals and representatives. Taught with SPSS 3400.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=SAPL%20240>)

### **SAPL 300. Introduction to Soil Science. (3 Credits)**

Physical and chemical properties of soils; nature and use of fertilizer and lime materials; management of soils for crop production including soil testing, tillage and fertilization practices, and conservation practices.

May not be taken out of sequence after passing SAPL 315.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=SAPL%20300>)

### **SAPL 315. Advanced Turfgrass Management. (3 Credits)**

Effects of environmental stresses and turfgrass management practices on growth, development and physiology of turfgrasses. Implementation of proper management practices to promote optimal turfgrass health under stress conditions. Taught with SPSS 3150.

SAPL 110 and 300.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=SAPL%20315>)

### **SAPL 410. Woody Plants: Common Trees, Shrubs and Vines. (3 Credits)**

Taxonomy, identification, ornamental characteristics, cultural requirements and landscape use of deciduous and evergreen woody plants most often utilized in landscapes of the northeastern United States and similar environs.

SAPL 120.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=SAPL%20410>)

### **SAPL 430. Herbaceous Ornamental Plants. (3 Credits)**

Identification, nomenclature, cultural requirements and landscape uses of herbaceous perennials, ornamental grasses, ferns, annuals and bulbs. Study of live plants is required.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=SAPL%20430>)

**SAPL 440. Small Fruit Production. (3 Credits)**

The commercial production of small fruits and grapes in the Northeast and Mid-Atlantic regions including varieties, fruit-growing systems and pruning, site requirements, harvesting methods, post-harvest requirements, marketing, pest complexes and IPM strategies of the major berry crops.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=SAPL%20440>)

**SAPL 500. Principles and Concepts of Agroecology. (3 Credits)**

Application of ecological processes to modern agricultural production practices. Crops and their environment. Soil quality and maintenance of soil productivity. Sustainability of agroecosystems.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=SAPL%20500>)

**SAPL 520. Floral Art. (2 Credits)**

The study of flower arrangement as an art form with emphasis on historical background, artistic principles, color harmony, and care of perishable media. Individual expression is encouraged in the creation of floral composition.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=SAPL%20520>)

**SAPL 540. Garden Center Management. (3 Credits)**

Techniques and concepts essential in managing and operating a garden center. Topics include goal setting, retailing, finance, business planning and pricing.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=SAPL%20540>)

**SAPL 550. Urban Plant Systems: Construction and Maintenance. (3 Credits)**

Technical information on the effective construction and maintenance of planted systems. Structural and functional components of plant systems. Provision of ecosystem services. Overviews of a wide spectrum of planted systems including streetscaping, green roofs and green walls, rain gardens and bioretention, and phytoremediation systems. Techniques of soil modification. Plant selection. Establishment and maintenance of woody and herbaceous plants: planting, preservation, pruning, mulching, irrigation, and fertilization. Taught with SPSS 3550. Recommended preparation: SAPL 120,410,430. Not open for credit to students who have passed SAPL 740.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=SAPL%20550>)

**SAPL 560. Indoor Plants and Interiorscaping. (3 Credits)**

Taxonomy, identification, ornamental characteristics, cultural requirements and use of tropical plants. Principles of interiorscaping in the home, office, public buildings, and related locations.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=SAPL%20560>)

**SAPL 620. Vegetable Production. (4 Credits)**

Fundamentals of soil management and crop plant husbandry as applied to commercial vegetable production and home gardening. Horticultural principles of crop growth. Focus is on sustainable practices. Field laboratory will consist of field trips (some outside designated laboratory time) during the early part of the semester to organic and conventional farms to observe production and marketing practices. Field trips required.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=SAPL%20620>)

**SAPL 640. Plant Propagation. (3 Credits)**

Theory and practice in sexual and asexual propagation of horticultural plants, emphasizing the anatomical, physiological, and ecological principles involved. Laboratories provide practical experience with seeds, division, cuttings, budding, grafting, layering and tissue culture.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=SAPL%20640>)

**SAPL 660. Nursery Production. (3 Credits)**

Principles of field and container production of nursery stock. Emphasis on production practices for woody nursery stock from propagation to sales.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=SAPL%20660>)

**SAPL 670. Greenhouse Technology and Operations. (3 Credits)**

Introduction to greenhouse crop management with emphasis on structures, environmental control systems, and management techniques used to control crop response.

SAPL 120.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=SAPL%20670>)

**SAPL 675. Greenhouse Management Field Study. (1 Credit)**

Students will be introduced to greenhouse crop production techniques and methodologies. Course follows a travel-course format, in which students participate in regularly scheduled field trips to commercial greenhouse operations in Connecticut and neighboring states. Students will make observations on the mechanical systems, management considerations, and crop production practices employed by commercial businesses.

SAPL 670, which may be taken concurrently.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=SAPL%20675>)

**SAPL 680. Advanced Cannabis Horticulture. (3 Credits)**

Advanced concepts of Cannabis production, management, processing and product development that build upon SAPL 130. Students will choose highly focused study of either indoor controlled environment production or outdoor cultivation of Cannabis for part of the course. Taught with SPSS 3680.

SAPL 130 or SPSS 2130 or permission of instructor. Not open to students who have completed SPSS 3995 or SAPL 995 when offered as Advanced Cannabis Horticulture.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=SAPL%20680>)

**SAPL 800. Turfgrass Pests and Control. (3 Credits)**

Turfgrass weed, insect, disease and vertebrate identification and control. Emphasis on biological controls and IPM. Field trips required.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=SAPL%20800>)

**SAPL 810. Plant Pest Control. (3 Credits)**

A practical survey of practices used for insect, disease and weed pests of turf, flowers, shrubs, trees and food crops. Consideration will be given to quarantine, mechanical, biological and chemical means of control. Field trips may be required.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=SAPL%20810>)



**SAPL 840. Integrated Pest Management. (3 Credits)**

Principles of integrated pest management covering insect, disease, and weed problems with emphasis on turfgrass, ornamentals, and greenhouse production. Environmental impacts and pest control strategies will be covered.

SAPL 800 or 810.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=SAPL%20840>)

**SAPL 991. Internship. (1-6 Credits)**

Students will work with professionals in an area of their interest. Written reports, daily logs, and/or evaluations by professional supervisors may be required. Open to qualified students with consent of advisor and Department Head.

May be repeated for a total of 6 credits

View Classes (<https://catalog.uconn.edu/course-search/?details&code=SAPL%20991>)

**SAPL 995. Special Topics. (1-6 Credits)**

Total credits allowed toward graduation requirements are restricted as outlined in Ratcliffe Hicks Section.

May be repeated for credit

View Classes (<https://catalog.uconn.edu/course-search/?details&code=SAPL%20995>)

**SAPL 999. Independent Study. (1-6 Credits)**

An independent study project is mutually arranged between a student and an instructor. Total credits allowed toward graduation requirements are restricted as outlined in the Ratcliffe Hicks section of the Undergraduate Catalog.

May be repeated for credit

View Classes (<https://catalog.uconn.edu/course-search/?details&code=SAPL%20999>)