

# **Course Catalog**

(\*Pilot Program: contact office before applying)

See our website for Faculty Coordinators (ece.uconn.edu/about/faculty-coordinators)

and course costs (ece.uconn.edu/courses)

## **Agricultural and Resource Economics**

## ARE 2210: Essentials of Accounting and Business\*

Three credits. Offered Fall, Spring, or Full-year

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

Eligibility Guidelines: Instructor consent is required.

### **Allied Health Sciences**

### **AH 1100: Introduction to Allied Health Professions**

One credit. Offered Fall or Spring.

Overview of health professions, team approach to health care delivery.

Eligibility Guidelines: Instructor consent is required.

## **AH 2001: Medical Terminology**

Two credits. Offered Fall, Spring, or Full-year.

Introduction and mastery of medical terminology through presentation of word roots, prefixes and suffixes. Disease processes, symptoms, diagnosis, and treatments that affect various body systems. Terminology associated with disease processes, symptoms, diagnosis, clinical procedures, laboratory tests, and treatments that affect various body systems.

Eligibility Guidelines: Student must have successfully completed or be enrolled concurrently in high school biology. Instructor consent is required.

### AH 4092: EMT Training

Four credits. Offered Full-year only.

Instruction in basic life support skills, treatment of bleeding control and shock recognition, care for trauma victims, medical emergencies. Supervised practice experience and hands-on instruction of theory. Includes a 10-hour observation experience outside of classroom instruction. Meets the performance requirements of the National Registry of Emergency Medical Technicians (NREMT) certification exam. Students must first register for Hospital's EMT training program (separate Hospital program costs apply).

Eligibility Guidelines: Successful completion of high school biology and chemistry, and instructor consent, is required.

## American Sign Language

### ASLN 1002: Elementary American Sign Language\*

Four credits. Offered Full-year Only.

Continued development of basic knowledge and understanding of conversational ASL.

Eligibility Guidelines: Two or more years of high school ASL, or instructor's consent, is required.

#### **American Studies**

#### **AMST 1201: Seminar in American Studies**

Three credits. Offered Fall, Spring, or Full-year.

What is an American? A multi-disciplinary inquiry into the diversity of American societies and cultures.

Eligibility Guidelines: Successful completion of two years of high school history and two years of high school English are recommended.

### **Animal Science**

\*Contact UConn ECE before applying as these courses runs in a limited number of Agriscience high schools only.

### ANSC 1602: Behavior and Training of Domestic Animals\*

Three credits. Offered Fall, Spring, or Full-year.

Application of behavior of cattle, horses, sheep, goats, swine and poultry and companion animals 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 are required to have access to an animal that they will train throughout the semester; the Department of Animal Science will not necessarily provide animals for training.

Eligibility Guidelines: Student must be enrolled in an Agriscience program in Connecticut. Student must have completed Biology and the freshman year animal science course in high school.

## ANSC 1676: Introduction to Companion Animals\*

Three credits. Offered Fall, Spring, or Full-year.

Basic concepts of the nutrition, physiology, health, and management of companion animals.

Eligibility Guidelines: Student must be enrolled in an Agriscience program in Connecticut. Student must have completed Biology and the freshman year animal science course in high school or instructor consent is required.

### ANSC 2251: Horse Science\*

Three credits. Offered as the last course in a four-semester sequence.

Valuable to animal science majors. 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.

Eligibility Guidelines: Student must be enrolled in an Agriscience program in Connecticut. ANSC 2251 must be offered as the last course in a four-semester sequence (of animal science and horse science courses). ANSC 2251 is an advanced course and before enrollment, students must successfully complete Biology and least one year (or two semesters) of an introductory high school course specifically in horse science (not as a portion of another class).

## **Anthropology**

### ANTH 1000: Peoples and Cultures of the World

Three credits. Offered Fall, Spring, or Full-year.

An introduction to the anthropological understanding of human society through ethnographic case studies of selected peoples and cultures, exploring the richness and variety of human life. Encourages students to learn about different cultures and to apply their knowledge to make sense of their own society.

Eligibility Guidelines: Successful completion of two years of high school or equivalent through grade advancement and instructor consent is required.

### ANTH 1500: Great Discoveries in Archeology\*

Three credits. Offered Fall, Spring, or Full-year.

Surveys of important discoveries in archeology spanning the whole of human prehistory across the globe. Current issues, methods, and techniques in the field of archeology.

Eligibility Guidelines: Successful completion of two years of high school or equivalent through grade advancement and instructor consent is required.

## Art

## ART 1030: Drawing I

Three credits. Offered Fall, Spring, or Full-year.

Fundamental principles of drawing based on observation.

Eligibility Guidelines: Successful completion of one full year of high school art instruction is recommended.

#### **Asian and Asian American Studies**

## AAAS 2201: Introduction to Asian American Studies\*

Three Credits. Offered Fall, Spring, or Full-year.

A multidisciplinary and interdisciplinary introduction to major themes in Asian American Studies. Concepts of identity and community, migration and labor histories, Asians and the law, representations of Asians in visual and popular culture, gender issues, interracial and interethnic relations, and human rights.

Eligibility Guidelines: Successful completion of at least one year of a high school literature/history/social studies course recommended.

## **Biological Sciences**

## **BIOL 1107: Principles of Biology I**

Four credits. Offered Fall, Spring, or Full-year. May be taken in either order.

Designed to provide a foundation for more advanced courses in Biology and related sciences. Topics covered include molecular and cell biology, animal anatomy and physiology. Lab exercises include dissection of preserved animals.

Eligibility Guidelines: Student must have studied/been exposed to the fundamental basic principles of inorganic and organic chemistry in a course that in addition contains a laboratory component.

### **BIOL 1108: Principles of Biology II**

Four credits. Offered Fall, Spring, or Full-year. May be taken in either order.

Designed to provide a foundation for more advanced courses in Biology and related sciences. Topics covered include evolution and population genetics, plant physiology and diversity, animal diversity and behavior, and ecology.

Eligibility Guidelines: Student must have studied/been exposed to the fundamental basic principles of inorganic and organic chemistry in a course that in addition contains a laboratory component.

### Chemistry

#### CHEM 1127Q: General Chemistry I

Four credits. Offered Fall only.

Designed to provide a foundation for more advanced courses in chemistry. Atomic theory, laws and theories concerning the physical and chemical behavior of gases, liquids, solids, and solutions. Quantitative measurements illustrating the laws of chemical combination in the laboratory component.

Eligibility Guidelines: Successful completion of basic algebra is recommended. A student must pass CHEM 1127Q with a grade of a "C" or higher to continue on to CHEM 1128Q.

### CHEM 1128Q: General Chemistry II

Four credits. Offered Spring only.

Equilibrium, thermodynamics, nuclear chemistry, and kinetics. Properties of some of the more familiar elements and their compounds. Equilibrium in solutions and reactions of the common cations and anions in the laboratory component.

Eligibility Guidelines: Successful completion of basic algebra is recommended. A student must pass CHEM 1127Q with a grade of a "C" or higher to continue on to CHEM 1128Q.

#### Chinese

## CHIN 1114: Intermediate Chinese II

Four credits. Offered Full-year only.

Development of ability to communicate in Chinese, orally and in writing.

Eligibility Guidelines: Three or more years of high school Chinese, or instructor's consent, is required. Not open for credits to students who have passed CHIN 3210.

### CHIN 3210: Chinese Conversation and Composition I

Three credits. Offered Fall only.

Development of ability to communicate in Chinese, orally and in writing.

Eligibility Guidelines: Successful completion of CHIN 1114, or instructor's consent, is required.

## CHIN 3211: Chinese Conversation and Composition II

Three credits. Offered Fall only.

Development of ability to communicate in Chinese, orally and in writing.

Eliqibility Guidelines: Successful completion of CHIN 3210, or instructor's consent, is required.

## **Civil Engineering**

## CE 2110: Applied Mechanics I

Three credits. Offered Fall, Spring, or Full-year.

Fundamentals of statics using vector methods. Resolution and composition of forces; equilibrium of force systems; analysis of forces acting on structures and machines; centroids; moment of inertia.

Eligibility Guidelines: Successful completion or concurrent enrollment in MATH 1131Q or AP Calculus is required.

## **Classics and Ancient Mediterranean Studies**

### CAMS 1103: Classical Mythology

Three credits. Offered Fall, Spring, or Full-year.

Origin, nature, and function of myth in the literature and art of Greece and Rome and the re-interpretation of classical myth in modern art forms.

Eligibility Guidelines: Instructor consent is required.

### **CAMS 3101: Topics in Advanced Greek**

Three credits. Offered Fall, Spring, or Full-year.

Not open for credit to students who have had three or more years of Greek in high school, except with Departmental consent. With a change in content, may be repeated for credit. Involves reading in Greek. Reading of Ancient Greek texts in the original.

Eligibility Guidelines: Successful completion of two semesters of accelerated elementary Greek or the equivalent is required.

## **CAMS 3102: Topics in Advanced Latin**

Three credits. Offered Fall, Spring, or Full-year.

With a change in content, may be repeated for credit. Reading of Latin texts in the original.

Eligibility Guidelines: Successful completion of three or more years of high school Latin (Latin 1-3 at the high school level) or the equivalent is required.

#### Communication

### **COMM 1000: The Process of Communications\***

Three credits. Offered Fall, Spring, or Full-year.

A study of modern communication theories and principles useful in understanding how people affect and are affected by others through communication.

Eligibility Guidelines: Successful completion of at least one year of a high school social studies course, two years of English/Language or instructor consent is recommended

## COMM 1100: Principles of Public Speaking\*

Three credits. Offered Fall, Spring, or Full-year.

Theory and performance in public speaking: methods for organizing presentation and delivery skills, overcoming anxiety of speaking in public; audience analysis; maximizing message impact; professional presentation skills; evidence; listening and speech evaluation.

Eligibility Guidelines: Successful completion of at least one year of a high school social studies course, two years of English/Language or instructor consent is recommended.

### **Computer Science and Engineering**

#### **CSE 1010: Introduction to Computing for Engineers\***

Three credits. Offered Fall, Spring, or Full-year.

Introduction to computing logic, algorithmic thinking, computing processes, a programming language and computing environment. Knowledge obtained in this course enables use of the computer as an instrument to solve computing problems. Representative problems from science, mathematics, and engineering will be solved.

Eligibility Guidelines: Instructor consent is required.

### Digital Media & Design

#### **DMD 1002: Foundations in Digital Media II**

Three credits. Offered Fall, Spring, or Full-year.

Introduction to the fundamentals of storytelling using a variety of practical digital media applications.

## Eligibility Guidelines:

- Students must have the ability to access Adobe CC = computer + account, or another professional raster-based image editing suite, and professional-level video editing suite
- Students must possess digital literacy skills and can understand to set up a project and organize documents

### DMD 1101: Design Lab I

Three credits. Offered Fall, Spring, or Full-year.

Exploration of the creation, manipulation, and reception of digital images through project-based work using image-editing software. Through lecture, discussion, projects, and critique, students will develop, refine, and evaluate digital images and understand their artistic, social, and ethical ramifications.

## Eligibility Guidelines:

- Students must have the ability to access Adobe CC = computer + account, or another professional raster-based image editing suite
- Students must possess digital literacy skills and can understand to set up a project and organize documents
- Students must have basic drawing skills

### DMD 1102: Design Lab II

Three credits. Offered Fall, Spring, or Full-year.

Theory, principles, and practices of digital screen-based visual communication. Through a multidisciplinary perspective involving art, design, art history, and media studies, students will address how culture visualizes screen-based communication through both image and type.

#### **Eligibility Guidelines:**

- Students must have the ability to access Adobe CC = computer + account, or another professional raster-based image editing suite, and professional-level video editing suite
- Students must possess digital literacy skills and can understand to set up a project and organize documents

### DMD 2210: Film and Video Editing I

Three credits. Offered Fall, Spring, or Full-year.

Introduction to digital editing, project management, working with sound, and time-based storytelling.

## Eligibility Guidelines:

- Students must have the ability to access Adobe CC = computer + account, or another professional-level video editing suite
- Students must possess digital literacy skills and can understand to set up a project and organize documents

### **DMD 2500: Introduction to Game Design**

Three credits. Offered Fall, Spring, or Full-year.

Introduction to the principles of game design and development. History of the industry, story, and game mechanics.

Eligibility Guidelines:

- Students must have the ability to access a professional game development tool such as Unity, Unreal, Godot, or Construct3
- Students must possess digital literacy skills and can understand to set up a project and organize documents

#### **Economics**

#### **ECON 1000: Essentials of Economics**

Three credits. Offered Fall, Spring, or Full-year.

A general introduction to micro- and macroeconomics. Economic concepts to be taught include opportunity costs, demand and supply, incentives, comparative advantage, inflation and employment policies, balance of international payments, and economic growth.

Eligibility Guidelines: Successful completion or simultaneous enrollment in Intermediate Algebra/Algebra II and Geometry are required. Not open to students who are currently enrolled in or who have passed ECON 1201 or 1202.

## **ECON 1201: Principles of Microeconomics**

Three credits. Offered Fall, Spring, or Full-year. May be taken before or after ECON 1202.

How the invisible hand of the market functions through the economic decisions of firms and individuals. How prices, wages and profits are determined, resources are allocated and income is distributed. Topical subjects (e.g., energy policy and health care).

Eligibility Guidelines: Successful completion or simultaneous enrollment in Intermediate Algebra/Algebra II and Geometry are required.

## **ECON 1202: Principles of Macroeconomics**

Three credits. Offered Fall, Spring, or Full-year. May be taken before or after ECON 1201.

The organization and function of the economic system as a total unit. Economic decisions, institutions, and policies that determine levels and rates of growth of production, employment, and prices. Topical subjects (e.g., government budget deficits and current interest-rate policy).

Eligibility Guidelines: Successful completion or simultaneous enrollment in Intermediate Algebra/Algebra II and Geometry are required.

#### **Education**

### **Educational Curriculum and Instruction**

## EDCI 1100: If You Love It, Teach It

Three credits. Offered Fall, Spring, or Full-year.

Studies of K-12 teaching, learning, and schooling in the United States; historical, philosophical, and social foundations of education as well as self-study to reimagine educational futures.

Eliqibility Guidelines: Successful completion of three years of high school English is recommended.

### **Educational Leadership**

### **EDLR 1162: Health and Education in Urban Communities**

One credit. Offered Fall, Spring, or Full-year.

As an introductory course, EDLR 1162 explores the historical and social forces that shape health and education in urban communities, specifically in Connecticut. Topics of study will include poverty, culture, and identity and how these phenomena affect children's health, nutrition, schooling and opportunities for success. Through readings, films, discussion, reflection and service-learning opportunities, class members analyze policies, norms and beliefs in our society. Students will be challenged to consider how these trends may lead us to a more just society and how these may perpetuate injustice.

Eligibility Guidelines: Instructor consent is required.

## **EDLR 2001: Contemporary Social Issues in Sport**

Three credits. Offered Fall, Spring, or Full-year.

Socio-cultural, economic, political, and other related issues in sport. Sport as a social institution, the impact of sport in American culture, and the impact of American culture on sport. Sport at the youth, intercollegiate, professional, and international levels; how sport at these levels is experienced differently by individuals, communities, organizations, and society. Issues in sport relative to gender, race (ethnicity), differing physical and intellectual ability, sexual identity, and gender identity.

Eligibility Guidelines: Instructor consent is required.

## **Educational Psychology**

### **EPSY 1100: Introduction to Special Education**

Three credits. Offered Fall, Spring, or Full-year.

Special education services in American education, including various exceptionalities and the roles of professionals.

Eligibility Guidelines: Instructor consent is required.

## **English**

## **ENGL 1004: Introduction to Academic Writing**

Four credits. Offered Fall, Spring, or Full-year.

Development of the reading and writing skills essential to university work. Students placed in ENGL 1004 must pass the course before electing ENGL 1007.

ENGL 1004 is designed to support students who would benefit from a preparatory English course that carries college credit, but have not yet enrolled in ENGL 1007. Please contact the UConn ECE Program Office before considering offering the course as it is not open without approval from our office.

Eligibility Guidelines: Successful completion of two years of high school English is required.

### ENGL 1007: Seminar and Studio in Academic Writing and Multimodal Composition

Four credits. Offered Fall, Spring, or Full-Year

College composition through multiple forms of literacy, including rhetorical, digital, and information literacies necessary for twenty-first-century contexts. The development of creatively intellectual inquiries through sustained engagement with texts, ideas, and problems. Emphasis on transfer of writing and rhetorical skills to academic and daily life. ENGL 1007 includes a built-in one-credit studio component.

Eligibility Guidelines: Successful completion of two years of high school English is required. Students placed in ENGL 1004 must pass that class before enrolling in ENGL 1007

### **ENGL 3082: Writing Center Practicum**

One credit. Offered Fall, Spring, or Full-year.

Introduction to Writing Center pedagogy, theory and research methods. Intended primarily for students staffing UConn ECE Partner School Writing Centers. Students taking this course will be assigned a grade of S (satisfactory) or U (unsatisfactory).

Eligibility Guidelines: Successful completion of two years of high school English is required. Students should either be enrolled, planning to enroll, or have successful completed ENGL 1007.

#### French

## FREN: 3250: Global Culture I

Three credits. Offered Fall or Full-year.

Intense study of oral French. Learning of oral techniques of communication in conjunction with weekly topics of conversation associated with various francophone cultures. Rigorous and active oral practice through dialogues, interviews, round tables, and oral reports.

Eliqibility Guidelines: Successful completion of three full years of high school French, or instructor consent, is required.

### FREN 3268: Grammar and Composition

Three credits. Offered Spring or Full-year.

Advanced study of French texts and extensive written practice in a variety of forms ranging from compositions, essays, summaries, and film reviews.

Eligibility Guidelines: Successful completion of three full years of high school French, or instructor consent, is required.

## **Earth Sciences**

## ERTH 1000E: The Human Epoch: Living in the Anthropocene\*

Three credits. Offered Fall, Spring, or Full-year.

Introduction to geoscience focusing on human activities as agents of geologic change. Examines human planetary processes in our current epoch, the Anthropocene. Provides a novel frame for contemporary environmental issues such as climate change, sustainability, mass extinctions, land use, and waste disposal. Interaction between earthly processes and human affairs.

Eligibility Guidelines: Successful completion of basic earth science coursework.

### ERTH 1051: Earth's Dynamic Environment\*

Three credits. Offered Fall, Spring, or Full-year.

Origin and history of planet Earth, emphasizing how rock, air, water, and life interact at different scales to produce the earth's crust, landforms, life systems, natural resources, catastrophes, and climatic regimes. Provides a scientific context for human-induced global change.

Eligibility Guidelines: Successful completion of basic earth science coursework. Proficiency in basic algebra and geometry is required.

## ERTH 2800: Our Evolving Atmosphere\*

Three credits. Offered Fall, Spring, or Full-year.

An introduction to atmospheric science, including a history of the field, features of the atmosphere, weather forecasting, and a geologic history of climate change.

Eligibility Guidelines: Successful completion of basic earth science coursework. Proficiency in basic algebra and geometry is required.

#### German

### **GERM 3233: Building Language Skills through Culture I**

Three credits. Offered Fall, Spring, or Full-year.

Development of oral and written skills using a content-based methodology and drawing on texts that deal with issues in contemporary culture of German-speaking countries. Emphasis on acquisition of a sophisticated understanding of cultural differences while building vocabulary, improving accuracy, and increasing facility in self-expression and communication.

Eligibility Guidelines: Successful completion of three or more years of high school German, or instructor consent, is required.

#### **GERM 3255: Studies in 20th Century German Literature**

Three credits. Offered Fall, Spring, or Full-year. Prerequisite: GERM 3233.

Study of a cohesive group of texts that mark the period. Attention will be given to the relevant socio-historical context and to the visual and performing arts. Taught in German.

Eligibility Guidelines: Successful completion of GERM 3233 is required.

#### History

### **HIST 1300: Western Traditions Before 1500**

Three credits. Offered Fall, Spring, or Full-year.

An analysis of the traditions and changes which have shaped Western political institutions, economic systems, social structures, and culture in ancient and medieval times.

Eligibility Guidelines: Successful completion of at least one year of a high school history/social studies course recommended.

### **HIST 1400: Modern Western Traditions**

Three credits. Offered Fall, Spring, or Full-year.

History of political institutions, economic systems, social structures, and cultures in the modern Western world.

Eligibility Guidelines: Successful completion of at least one year of a high school history/social studies course recommended.

#### HIST 1501: United States History to 1877

Three credits. Offered Fall, Spring, or Full-year.

Surveys political, economic, social, and cultural developments in American history through the Civil War and Reconstruction.

Eliqibility Guidelines: Successful completion of at least one year of a high school history course recommended.

### HIST 1502: United States History Since 1877

Three credits. Offered Fall, Spring, or Full-year.

Surveys political, economic, social, and cultural developments in American history from 1877 to the present.

Eliqibility Guidelines: Successful completion of at least one year of a high school history course recommended.

### **Human Development & Family Sciences**

## HDFS 1070: Individual & Family Development

Three credits. Offered Fall, Spring or Full-year.

Human development throughout the life span, with emphasis upon the family as a primary context.

Eligibility Guidelines: Successful completion of two years of English/Language Arts, one year of social studies, and one year of science, or instructor consent, is required.

### **Human Rights**

#### **HRTS 1007: Introduction to Human Rights**

Three credits. Offered Fall, Spring, or Full-year.

Exploration of central human rights institutions, selected human rights themes and political controversies, and key political challenges of contemporary human rights advocacy.

Eligibility Guidelines: Successful completion of two years of high school social studies courses, or consent of the instructor, is recommended.

### HRTS 2200: Introduction to Genocide Studies\*

Three credits. Offered Fall, Spring, or Full-year.

Interdisciplinary introduction to the study of genocide as an historical, legal, social, political, and conceptual phenomenon, including response, prevention, and commemoration efforts.

Eligibility Guidelines: Successful completion of three years of high school social studies courses (to include world history and/or world geography), or consent of the instructor, is recommended.

#### **Italian Literature and Cultural Studies**

#### ILCS 3239: Composition & Conversation I

Three credits. Offered Fall, Spring, or Full-year. Prerequisite: ILCS 1148 or equivalent.

Practice in written and oral composition. Syntax study.

Eligibility Guidelines: Successful completion of the equivalent of four Italian language courses (two courses at the Elementary level & two at the Intermediate level) and instructor consent. A student must pass ILCS 3239 with a grade of a "C" or higher to continue on to ILCS 3240.

## **ILCS 3240: Composition & Conversation II**

Three credits. Offered Fall, Spring, or Full-year. Prerequisite: ILCS 3239 or equivalent.

Further practice in written and oral composition. Treatment of the finer points in syntax.

Eligibility Guidelines: Successful completion of the equivalent of four Italian language courses (two courses at the Elementary level & two at the Intermediate level) and instructor consent. A student must pass ILCS 3239 with a grade of a "C" or higher to continue on to ILCS 3240.

### Kinesiology

### KINS1100: Exercise and Wellness for Everyone\*

Three credits. Offered Fall, Spring, or Full-year.

Overview of the five pillars of health (exercise, nutrition, sleep, stress and relationships); role of exercise in health promotion and disease prevention across the lifespan; impacts of exercise in leisure time, culture, community, careers and the workplace

Eligibility Guidelines: Successful completion of 1 year of high school physical education courses (including health), or consent of the instructor, is recommended.

#### **Latino and Latin American Studies**

### LLAS 1190: Perspectives on Latin America

Three credits. Offered Fall, Spring, or Full-year.

Multidisciplinary exploration of the historical development of such aspects of Latin America and the Caribbean as colonization and nation formation; geography and the environment; immigration and migration; race, ethnicity, and gender in society, politics, economy, and culture.

Eligibility Guidelines: Successful completion of two years of high school history and one year of high school Spanish are recommended.

#### **Marine Science**

### MARN 1001E: The Sea Around Us

Three credits. Offered Fall, Spring, or Full-year.

The relationship of humans with the marine environment. Exploitation of marine resources, development and use of the coastal zone, and the impact of technology on marine ecosystems.

Eligibility Guidelines: Successful completion of at least one year of a high school science course or instructor consent is recommended.

### MARN 1002E: Introduction to Oceanography

Three credits. Offered Fall, Spring, or Full-year.

Processes governing the geology, circulation, chemistry, and biological productivity of the world's oceans. Emphasis is placed on the interactions and interrelationships between physical, chemical, biological, and geological processes that contribute to both the stability and the variability of the marine environment.

Eligibility Guidelines: Successful completion of two years of high school lab science are recommended. Students who pass MARN 1002 are not eligible for MARN 1003. Students who pass MARN 1003 are not eligible for MARN 1002.

## MARN 1003E: Introduction to Oceanography with Laboratory

Four credits. Offered Fall, Spring, or Full-year.

Processes governing the geology, circulation, chemistry, and biological productivity of the world's oceans. Emphasis on the interactions and interrelationships of physical, chemical, biological and geological processes that contribute to both the stability and the variability of the marine environment. Laboratory experiments, hands-on exercises, and field observations including required cruise on research vessel.

Eligibility Guidelines: Successful completion of two years of high school lab science are recommended. Not open to students who have passed MARN 1002.

### **Maritime Studies**

## MAST 1200: Introduction to Maritime Culture

Three credits. Offered Fall, Spring, or Full-year.

A study of history and literature to understand the international maritime culture that links peoples, nations, economies, environments, and cultural aesthetics.

Eligibility Guidelines: Successful completion of two years of high school history and two years of high school English are recommended.

### **Mathematics**

### **MATH 1030Q: Elementary Discrete Mathematics**

Three credits. Offered Fall or Spring.

Topics chosen from discrete mathematics. May include counting and probability, sequences, graph theory, deductive reasoning, the axiomatic method and finite geometries, number systems, voting methods, apportionment methods, mathematics of finance, number theory.

Eligibility Guidelines: Successful completion of one year of pre-calculus is recommended. Not open for credit to students who have passed any math course other than MATH 1011, 1020, 1030, 1040, 1060 or 1070. UConn ECE Math 1030Q cannot be taken concurrent with or after UConn ECE Math 1131Q or 1132Q.

### MATH 1070Q: Mathematics for Business and Economics

Three credits. Offered Fall or Spring.

Linear equations and inequalities, matrices, systems of linear equations, and linear programming; sets, counting, probability and statistics; mathematics of finance; applications to business and economics.

Eligibility Guidelines: Successful completion of one year of pre-calculus is recommended. Not open for credit to students who have passed Math 1132Q.

### MATH 1131Q: Calculus I

Four credits. Offered Fall only.

Limits, continuity, differentiation, antidifferentiation, definite integral, with applications to the physical sciences and engineering sciences. Suitable for students with some prior calculus experience. Substitutes for MATH 1151 as a requirement.

Eligibility Guidelines: Successful completion of one year of pre-calculus is required. A student must pass MATH 1131Q with a grade of a "C" or higher to continue on to MATH 1132Q. To receive credit for the MATH 1131Q – MATH 1132Q sequence a student must pass MATH 1131Q in the Fall with a C or higher and continue to MATH 1132Q in the following Spring. The sequence must be completed in one academic year. Students cannot receive credit for MATH 1131 and MATH 1151.

#### MATH 1132Q: Calculus II

Four credits. Offered Spring only.

Transcendental functions, formal integration, polar coordinates, infinite sequences and series, vector algebra and geometry, with applications to the physical sciences and engineering. Substitutes for MATH 1122 as a requirement.

Eligibility Guidelines: Successful completion of one year of pre-calculus is required. A student must pass MATH 1131Q with a grade of a "C" or higher to continue on to MATH 1132Q. To receive credit for the MATH 1131Q — MATH 1132Q sequence a student must pass MATH 1131Q in the Fall with a C or higher and continue to MATH 1132Q in the following Spring. The sequence must be completed in one academic year. Prerequisite: MATH 1131Q in the immediately preceding semester.

### MATH 2210Q: Multivariable Calculus

Four credits. Offered Fall only.

Two- and three-dimensional vector algebra, calculus of functions of several variables, vector differential calculus, line and surface integrals.

Eligibility Guidelines: Successful completion of MATH 1132Q with a grade of a "C" or better. MATH 2110Q can only be taken the following fall semester after completion of 1132Q.

#### Music

## **MUSI 1001: Music Appreciation**

Three credits. Offered Fall, Spring, or Full-year.

An approach toward intelligent listening, illustrated by recordings.

Eligibility Guidelines: No previous training required.

## MUSI 1003: Popular Music and Diversity in American Society

Three credits. Offered Fall, Spring, or Full-year.

An introduction to popular music and diversity in America: jazz, blues, Top-40 pop, rock, hip-hop, and other genres. Musicians and their music studied in the context of twentieth-century and contemporary American society, emphasizing issues of race, gender, class, and resistance.

Eligibility Guidelines: No previous training required.

## MUSI 1011: Fundamentals/Ear Training I

Three credits. Offered Fall, Spring, or Full-year.

Basic skills in note reading, rhythm, meter, pitch symbols, scales, key-signatures, intervals, triads, sight-singing, and dictation. No previous training is required.

Eligibility Guidelines: Completion of at least one year of preparatory work in music courses at the high school level is recommended.

## MUSI 1012: Fundamentals/Ear Training II

Three credits. Offered Fall, Spring, or Full-year.

Further development of skills in music reading, sight-singing, and dictation.

Eligibility Guidelines: A student must pass MUSI 1011 with a grade of a "C" or higher to continue on to MUSI 1012.

#### **Natural Resources and the Environment**

#### NRE 1000E: Environmental Science

Three credits. Offered Full-year only.

An introduction to basic concepts and areas of environmental concern and how these problems can be effectively addressed. Topics include human population; ecological principles; conservation of biological resources; biodiversity; croplands, rangelands, forestlands; soil and water conservation; pollution and water management; and wildlife and fisheries conservation.

Eligibility Guidelines: Successful completion of two years of high school science is recommended.

## Philosophy

### PHIL 1101: Problems of Philosophy

Three credits. Offered Fall, Spring, or Full-year.

Topics may include skepticism, proofs of God, knowledge of the external world, induction, free-will, the problem of evil, miracles, liberty and equality.

Eligibility Guidelines: Instructor consent is required.

### PHIL 1108E: Environmental Philosophy

Three credits. Offered Fall, Spring, or Full-year.

Philosophical issues raised by humanity's interaction with its environment. Topics may include ethical and policy ramifications of the use of non-human animals for food, medicine, and scientific inquiry; whether the natural world has a status calling for its protection or preservation; obligations to future generations; environmental justice; and movements such as deep ecology, ecofeminism, and social ecology.

Eligibility Guidelines: Instructor consent is required.

#### **Physics**

## PHYS 1201Q: General Physics I

Four credits. Offered Fall, Spring, or Full-year.

A non-calculus based course introducing the laws of force and motion applied to mechanical phenomena. Concepts such as work, mechanical energy, linear and angular momentum, and energy conservation are explained. The laboratory offers fundamental training in precise measurements.

Eligibility Guidelines: Successful completion of high school chemistry is recommended.

### PHYS 1202Q: General Physics II

Four credits. Offered Fall, Spring, or Full-year.

A non-calculus based course introducing the principles governing electromagnetic phenomena, including electromagnetic radiation and waves and electric circuits. The laboratory offers fundamental training in precise measurements.

Eligibility Guidelines: Successful completion of pre-calculus or introductory calculus is recommended. A student must pass PHYS 1201Q with a grade of a "C" or higher to continue on to PHYS 1202Q.

### PHYS 1401Q: General Physics with Calculus I

Four credits. Offered Fall, Spring, or Full-year.

Quantitative study of the basic facts and principles of physics with an emphasis on mechanical phenomena. Concepts such as work, mechanical energy, linear and angular momentum, and energy conservation are explained. The laboratory offers fundamental training in physical measurements. Recommended for non-engineering students who desire to have a calculus-based physics sequence. It is also recommended for science majors whom a one year introductory physics course is adequate.

Eligibility Guidelines: Successful completion of pre-calculus or introductory calculus is recommended. Students who matriculate to UConn may take PHYS 1401Q for not more than two credits, with the permission of the instructor, if students received credits for PHYS 1201Q.

### PHYS 1402Q: General Physics with Calculus II

Four credits. Offered Fall, Spring, or Full-year.

Quantitative study of the basic facts and principles of physics with an emphasis on electromagnetic phenomena, including electromagnetic radiation and waves and electric circuits. The laboratory offers fundamental training in physical measurements. Recommended for non-engineering students who desire to have a calculus-based physics sequence. It is also recommended for science majors for whom a one year introductory physics course is adequate.

Eligibility Guidelines: Successful completion of pre-calculus or introductory calculus is recommended. A student must pass PHYS1401Q with a grade of a "C" or higher to continue on to PHYS 1402Q. May be taken for not more than two credits with the permission of the instructor, by students who have passed PHYS1202Q.

### **Political Science**

### POLS 1002: Introduction to Political Theory

Three credits. Offered Fall, Spring, or Full-year.

Major themes of political theory such as justice, obligation, and equality, and their relevance to contemporary political concerns.

Eligibility Guidelines: One year of high school history or high school civics, or instructor consent, is recommended.

### **POLS 1202: Introduction to Comparative Politics**

Three credits. Offered Fall, Spring, or Full-year.

A survey of institutions, politics, and ideologies in democratic and non-democratic states.

Eliqibility Guidelines: One year of high school history or high school civics, or instructor consent, is recommended.

### **POLS 1402: Introduction to International Relations**

Three credits. Offered Fall, Spring, or Full-year.

The nature and problems of international politics.

Eliqibility Guidelines: One year of high school history or high school civics, or instructor consent, is recommended.

#### **POLS 1602: Introduction to American Politics**

Three credits. Offered Fall, Spring, or Full-year.

Analysis of the organization and operation of the American political system.

Eliqibility Guidelines: One year of high school history or high school civics, or instructor consent, is recommended.

## Sociology

## **SOCI 1001: Introduction to Sociology**

Three credits. Offered Fall, Spring, or Full-year.

Modern society and its social organization, institutions, communities, groups, and social roles: the socialization of individuals, family, gender, race and ethnicity, religion, social class, crime and deviance, population, cities, political economy, and social change.

Eligibility Guidelines: Successful completion of at least one year of a high school history or social studies course or instructor consent is recommended.

#### **Spanish**

### SPAN 3177: Composition & Reading for Spanish Speakers

Three credits. Offered Fall, Spring, or Full-year.

Grammar, written composition, and readings for speakers of Spanish with little or no formal training. Emphasis is on Puerto Rican literature.

Eligibility Guidelines: Instructor consent.

## SPAN 3178: Intermediate Spanish Composition

Three credits. Offered Fall, Spring, or Full-year.

This course provides a thorough review of grammar and methodical practice in composition leading to command of practical idioms and vocabulary.

Eligibility Guidelines: Successful completion of three or more years of high school Spanish or instructor consent is recommended.

### SPAN 3179: Spanish Conversation: Cultural Topics

Three credits. Offered Fall, Spring, or Full-year.

Recommended preparation: SPAN 3178. In-depth development of speaking skills through cultural readings, group discussions and oral presentations on selected topics concerning the Spanish-speaking world.

Eligibility Guidelines: Successful completion of three or more years of high school Spanish, successful completion of SPAN 3178, or instructor consent is recommended.

#### **Statistics**

## **STAT 1100Q: Elementary Concepts of Statistics**

Four credits. Offered Fall, Spring, or Full-year.

Standard and nonparametric approaches to statistical analysis; exploratory data analysis, elementary probability, sampling distributions, estimation and hypothesis testing, one- and two-sample procedures, regression and correlation. Learning to do statistical analysis on a personal computer is an integral part of the course.

Eligibility Guidelines: Successful completion of Intermediate Algebra/Algebra II is required.

## **Sustainable Plant and Soil Systems**

## SPSS 1100: Turfgrass Management\*

Three credits. Offered Fall, Spring, or Full-year.

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.

Eliqibility Guidelines: Successful completion of one year of high school biology recommended.

### SPSS 1110: Fundamentals of Horticulture

Three credits. Offered Fall, Spring, or Full-year.

Science and practice of horticultural plant propagation and culture. Basic concepts of plant structure, growth and function. Integrated pest management. Impact of new technology. Horticulture and the environment.

Eliqibility Guidelines: Successful completion of one year of high school biology recommended.

## SPSS 1150: Agricultural Technology and Society

Three credits. Offered Fall, Spring, or Full-year.

Development of agricultural systems and technologies and their influence on societies. Topics include plant and animal domestication, food and industrial crops and centers of production, environmental issues, and agricultural ethics.

Eliqibility Guidelines: Successful completion of one year of high school biology recommended.

### SPSS 2120: Environmental Soil Science

Three credits. Offered Fall, Spring, or Full-year.

Introduction to the physical, chemical and biological properties of soils. The relationship between soils and the growth of higher plants. Impact of soils on environmental quality.

Eligibility Guidelines: Successful completion of one year of high school chemistry recommended.

### SPSS 2520: Floral Art

Two credits. Offered Fall, Spring, or Full-Year.

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.

Eliqibility Guidelines: Successful completion of one year of high school chemistry recommended.

### SPSS 3230: Biotechnology-Science, Application, Impact, Perception

Three credits. Offered Fall, Spring, or Full-year.

Scientific, legal, and ethical aspects of Biotechnology application in agriculture, health medicine, forensics, and the environment.

Eligibility Guidelines: None.

## SPSS 3245: Plant Breeding and Biotechnology

Three credits. Offered Fall, Spring, or Full-year.

Principles and applications, economic, social and environmental impacts, advantages, potentials and limitations of major traditional and modern plant breeding technologies including crossing/hybridization, mutagenesis, genetic engineering and genome editing.

Eligibility Guidelines: A student must pass SPSS 3230 with a grade of a "C" or higher to continue on to SPSS 3245.

#### SPSS 3530: Advanced Floral Design

Two credits. Offered Fall, Spring, or Full-year. Prerequisite: SPSS 2520.

In-depth study of post-harvest requirements for specialized floral crops. Exposure to novel floral materials with an emphasis on special events and wedding designs. Mass marketing, retail price structuring and mass-production concepts are covered.

Eliqibility Guidelines: A student must pass SPSS 2520 with a grade of a "C" or higher to continue on to SPSS 3530.