

Course Guide

(*Pilot Program: contact office before applying)

See our website for Faculty Coordinators and course costs: www.ece.uconn.edu/courses

Allied Health Sciences

AH 1001: 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

One credit. Offered Fall or Spring.

Introduction and mastery of medical terminology through presentation of word roots, prefixes and suffixes.

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.

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.

The minimum degree requirement for instructors wishing to teach UConn ECE Allied Health courses can be met by either of the following options:

Option 1: Instructor should have a Health Science BS major or minor (however, applicants with a MS in a Health Science major will be considered); or Option 2: Instructor will be certified to teach high school Chemistry or Biology. The first year of certification is provisional when the Department mentors the ECE instructor and oversees the implementation of the syllabus and instruction.

Other factors that contribute to certification include: prior teaching experience, work experiences in science/health related, and recommendations.

Certified instructors will work closely with the Allied Health Sciences Department to offer this class. Regular assessments and a final examination will come from the Allied Health Sciences Department. Additional assessments may be written by the ECE instructor and are approved by the Department.

Applicants for AH 2001 (Medical Terminology) should have documented coursework in the following areas: General Biology, General Chemistry, and Anatomy and Physiology (recommended).

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.

Instructor Certification Requirements:

The minimum requirement for certification in American Studies is graduate level training in both English and History. Applicants should have at least a Bachelor's Degree in American Studies; however, applicants with a Master's Degree in either English or History will be considered. This course may be team taught between a History and English instructor, where each have at least bachelor and some graduate level training within their respective majors. Individual instructors with significant documented experience in teaching American Studies content may, under certain circumstances, also receive provisional certification within a mentoring program.

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 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.

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.

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. Student must have completed Biology and the freshman year animal science course in high school.

Option 1: Instructor should have an Animal Science BS major or minor; or Option 2: five years of experience teaching in an Agriscience high school. The first year of certification is provisional when the Department mentors the ECE instructor and oversees the implementation of the syllabus and instruction.

Certified instructors will work closely with the Animal Science Department to offer this class. Regular class exams are written by the ECE instructor and are approved by the Department. Final exam comes from the Animal Science Department at Storrs.

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.

Instructor Certification Requirements:

The minimum degree requirement for teachers wishing to teach Early College Experience art courses is usually a Master of Fine Arts, although a candidate with a Master's in Education and appropriate background may be approved in exceptional situations. Samples of the applicant's personal and student work are a required piece of the application (15 – 20 pieces of instructor work; 15 – 20 pieces of student work).

Regarding student work, observed still life and perspective drawing examples are best for evaluation. Ideally, work is black and white and shows fundamentals of linear perspective, contour line, light and shadow, and an understanding of volume and composition. Student work may include observed figure or landscape, but the portfolio may not consist solely of these forms. Charcoal, graphite, and ink are preferable media. The use of color is not covered in ART 1030, Drawing I, and is not helpful when included in the student portfolio.

Samples will be submitted electronically. Acceptable formats include CD's, thumb drives, direct e-mail, or links provided to websites. JPG, TIFF or PDF images are best. If providing individual images on e-mail, please reduce the size and include all of the images in one e-mail. Multiple images may be compiled into one PDF portfolio. Do not use PowerPoint or Keynote to compile work due to compatibility issues. If providing a website, please be clear regarding the specific examples that are to be reviewed.

Upon reviewing the application materials, the faculty coordinator in Art may wish to schedule an interview with the candidate or visit the teaching facilities. This on-site visit is a way to be introduced to the program and discuss possibilities for the course.

Biology

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. Laboratory exercises in BIOL 1107 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 plant biology, genetics, ecology, and evolution.

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.

Instructor Certification Requirements:

The minimum degree requirement for instructors wishing to teach UConn ECE biology courses will be a Masters degree in a subject area, such as cell biology or animal physiology. Additionally, the candidate should present on transcripts a diverse and deep breathe of course work and laboratory course work as both an undergraduate and as a graduate student. Applicants will not be considered unless they provide a detailed lecture and lab syllabus for their proposed Bio 1107/1108 courses with their application. Certification also requires an interview with the ECE Biology Coordinator at the Storrs campus.

Applicants for Bio 1107/1108 should have documented coursework in the following areas:

- General Biology
- General Chemistry
- Organic Chemistry

Additionally, Biology 1107 applicants should present previous course work in the following:

- Genetics
- Microbiology
- Cell biology
- Animal Physiology, Comparative Anatomy or Human Physiology
- One semester of Biochemistry is recommended

Additionally, Biology 1108 applicants should present previous course work in the following:

- Plant Physiology or Botany
- Ecology or Environmental/ Conservation Science
- Invertebrate and Vertebrate Zoology
- Evolution Theory
- Animal behavior is recommended

Other factors that contribute to certification include: prior teaching experience, work experiences in research or applied aspects of biology, and recommendations.

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. Properties of some of the more familiar elements and their compounds. Quantitative measurements illustrating the laws of chemical combination in the first semester lab.

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.

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. Properties of some of the more familiar elements and their compounds. Equilibrium in solutions and qualitative reactions of the common cations and anions in the second semester lab.

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.

The minimum degree requirement for instructors wishing to teach UConn Early College Experience chemistry courses is a Bachelor's of Science in Chemistry. A Master's degree in Chemistry is preferred. A candidate with a Master's in Education and a sufficiently strong and well balanced chemistry background may be also considered for certification. All candidates must have successfully completed:

- 2 semesters of general chemistry
- 2 semesters of organic chemistry
- 2 semesters of Analytical chemistry (1 semester lab, 1 semester lecture would be acceptable)
- 2 semesters of Inorganic chemistry (1 semester lab, 1 semester lecture would be acceptable)
- 2 semesters of Physical chemistry (1 semester lab, 1 semester lecture would be acceptable)

Note: Chemistry cannot be taught at a high school that runs on a block schedule. The University's Chemistry Department will provide examinations, laboratory assignments, and other resources to participating Instructors.

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.

Instructor Certification Requirements:

The minimum degree requirement for instructors wishing to teach UConn Early College Experience Chinese courses is a Master's Degree in Chinese or a Master's Degree in Education with at least two years of Chinese teaching; however, a candidate with a Bachelor's Degree in Chinese who has completed Chinese coursework at the graduate level or who has taught Chinese for at least six years may be considered. Candidates will be interviewed by the Chinese faculty coordinator before certification is granted.

Classics

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 reinterpretation 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.

Instructor Certification Requirements:

The minimum degree requirement for teachers wishing to teach Early College Experience classics courses is usually a Master's of Arts in Classics or a related field. A candidate with a Master's in Education may be considered if supported by equivalent classical coursework at the undergraduate and graduate level.

Additional 1103 Requirements: The form of CAMS 1103 to be offered must conform closely to the form offered at UConn. Candidates who have not previously worked with Professor Travis may apply for temporary certification, with full certification pending completion of the online course and a follow-up certification interview. Candidates should understand that this process may take several months to a year and that full certification must be completed before instructors may apply for permission to list the course in the following year. Applications for this

course must be submitted a year in advance of the planned year the course will be taught in the high school.

Digital Media & Design

DMD 1000: Digital Foundation

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

Introductory studio experience in designing for the digital arts; concepts, media and strategies for making creative digital work.

Eligibility Guidelines: Successful completion of two years of high school art and one year of computer science are recommended.

<u>Instructor Certification Requirements:</u>

High school teachers wishing to teach Digital Foundations as part of the UConn Early College Experience are required to have at least a B.A or B.F.A with a three year background working or teaching Digital Media. The ideal candidate should be comfortable delivering content as part of a project-based learning environment and/or part of a flipped classroom model.

The facilitator of the ECE Digital Foundations course will schedule a time to meet the candidate and visit their teaching facilities. This experience provides an opportunity to introduce the program in greater detail and view samples of student work.

Teachers who meet the criteria are required to attend a 2-day professional development session during the summer.

Economics

ECON 1000: Essentials of Economics

Three credits. Offered Fall, Spring, or Full-year. Not open to students who are currently enrolled in or who have passed ECON 1201 or 1202.

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.

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.

<u>Instructor Certification Requirements:</u>

There are two faculty ranks associated with UConn ECE Economics: Preceptor and Instructor. Both faculty ranks have the potential for teaching Economics. The role of ECE Economics Instructor and Preceptor differ in the levels of independence determined by the University's Faculty Coordinator in Economics.

The minimum requirement for teachers wishing to become a UConn ECE Economics Preceptor is a Bachelor's degree in Economic and/or equivalent experience in the field. The minimum requirement for teachers wishing to become a UConn ECE Economics Instructor (which is educationally equivalent to an adjunct professor at the University) is a Master's Degree in Economics or equivalent experience (as judged by the UConn Economics Department).

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.

Instructor Certification Requirements:

The minimum degree requirement for teachers wishing to teach Early College Experience EDLR 1162: Health and Education in Urban Communities is typically a Master's degree in a related field. A Master's in an education or health related field of study would be ideal, but other degrees will be considered. The first year of certification is provisional, and the faculty course coordinator will mentor the ECE instructor and oversee implementation of the syllabus, instruction and service learning component of the course. Following the provisional period, certified instructors work closely with the faculty course coordinator to offer this course. All applications must include a completed *EDLR 1162 Service Site Info Form*.

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.

Instructor Certification Requirements:

Instructors should have been an engineer or have an Engineering/Physics background. The instructor should show a comfort with calculus.

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 1010 or 1011.

ENGL 1004 is designed to prepare students not yet qualified to take the required academic writing seminar (ENGL 1010 or 1011) but who would benefit from a preparatory course that

carries college credit. 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 1010: Seminar in Academic Writing

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

Instruction in academic writing through interdisciplinary reading. Assignments emphasize interpretation, argumentation, and reflection. Revision of formal assignments and instruction on grammar, mechanics, and style.

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

ENGL 1011: Seminar in Writing Through Literature

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

Instruction in academic writing through literary reading. Assignments emphasize interpretation, argumentation, and reflection. Revision of formal assignments and instruction on grammar, mechanics, and style.

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

Instructor Certification Requirements:

The preferred preparation for teaching Early College Experience English courses is a Master's of Arts degree in English with at least some coursework in rhetoric and composition (especially courses directly related to the teaching of writing). The minimum degree requirement for teachers wishing to teach Early College Experience English courses is usually a Master's of Arts degree in English; however, a candidate with Master's in Education and at least two graduate level English classes (one of which is in rhetoric and composition) may be considered.

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.

Eligibility 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.

Instructor Certification Requirements:

The minimum degree requirement for instructors wishing to teach UConn ECE French courses is a Master's of Arts degree in French; however, a candidate with Master's in Education with a sufficiently strong French background may be considered. A candidate with a strong French background has either taken graduate courses in French or has been educated (K through 12) in a Francophone country. Candidates will be interviewed by the French faculty coordinator before certification is granted.

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.

The minimum degree requirement for instructors wishing to teach UConn ECE German courses is a Bachelor's degree and Master's degree in German; however, a candidate with a Master's in Education with a sufficiently strong German background may be considered. A candidate with a strong German background has either taken at least two graduate courses in German or has been educated (K through 12) in a Germanic country and considered a native speaker. Candidates will be interviewed by the German faculty coordinator before certification is granted.

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.

<u>Instructor Certification Requirements for HIST 1300 and 1400:</u>

The minimum degree requirement for instructors wishing to teach ECE History courses is a B.A. in History with at least four graduate courses (12 credits, half the number required for a Master's degree) in European history.

Teachers interested in obtaining History certification are asked to submit the following materials in addition to the certification application:

1. A detailed syllabus for the course being taught: this should include a 'statement of purpose' for the course, a list of the texts being used, and a schedule of the lectures and readings for each class meeting. Be sure to indicate the 'title' of the lecture (e.g., "Heresy and Dissent in the 13th Century"). Discussion topics, films, etc. should also be noted in the schedule, as well as notice of any websites that students are required to use.

2. The syllabus must include a full listing of all primary source texts assigned for the course, along with an indication of how they will be used, e.g., as a basis for a careful inclass close reading, as a focus for class lecture and/or discussion, as material for written assignments, etc. The single most important feature that distinguishes an ECE History course from regular high school courses in an emphasis on reading, discussing, and interpreting primary sources.

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.

Eligibility 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.

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

Instructor Certification Requirements for HIST 1501 and 1502:

The minimum degree requirement for instructors wishing to teach ECE U.S. History courses is a B.A. in History with at least four graduate courses (12 credits, half the number required for a Master's degree) in U.S. history. Applicants must have completed at least one graduate level course in historical methodology or historiography with a grade of a B or better.

Teachers interested in obtaining U.S. History certification must submit a draft syllabus for each course (1501 and/or 1502) that includes:

- 1. A 'statement of purpose' for the course, a list of the texts being used, and a schedule of the lectures and readings for each class meeting. Be sure to indicate the 'title' of the lecture (e.g., " Jeffersonian America"). Discussion topics, films, etc. should also be noted in the schedule, as well as notice of any websites that students are required to use.
- 2. A full listing of all primary source texts assigned for the course, along with an indication of how they will be used, e.g., as a basis for a careful in-class close reading, as a focus for class lecture and/or discussion, as material for written assignments, etc. The single

most important feature that distinguishes an ECE U.S. History course from regular high school courses in an emphasis on reading, discussing and interpreting primary sources.

Human Development & Family Studies

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.

Instructor Certification Requirements:

The minimum degree requirement for instructors wishing to teach Early College Experience Family Studies class, HDFS 1070: Individual and Family Development, is a Master's Degree in Education. It is suggested that the undergraduate Bachelor's Degree be in the area of Family and Consumer Sciences Education (045, CT Home Economics) or Human Development and Family Studies with three to five years teaching experience at the secondary level.

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.

Instructor Certification Requirements:

The minimum requirement for certification in Human Rights is a Bachelor's degree in Human Rights, or a related field such as Global Studies, Political Science, or History. Preferred applicants will have an interdisciplinary and global academic background, a master's degree with graduate level coursework relevant to human rights, and/or engaging in global humanitarian programs, international organizations or other related work throughout their careers. Instructors must provide compelling evidence that their proposed course is equivalent in rigor and scope to its equivalent at the University of Connecticut.

Italian

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.

Instructor Certification Requirements:

The minimum degree requirement for instructors wishing to teach Early College Experience Italian courses is a Master's in Italian; however, a Master's in Education and appropriate Italian background may be considered.

Latino and Latin American Studies

LLAS 1190: Perspectives on Latin America

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

A multidisciplinary course including geography, indigenous peoples, colonization and nation formation; society, politics, economy, and culture of contemporary Latin America and its place in today's world.

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

The minimum degree requirement for instructors wishing to teach Early College Experience Latin and Latino American Studies courses is a Bachelor's degree and a Master's degree in Latin American Studies or in Anthropology, History, Political Science, or Spanish with a focus on the study of Latin America and the Caribbean.

Marine Science

MARN 1002: 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 1003: 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.

Instructor Certification Requirements:

The minimum requirements for instructors wishing to teach Early College Experience Marine Sciences courses are typically a Master's of Science in Oceanography, Marine Sciences, or a related field and 2 years high school science teaching experience. Applicants also will be considered if they have a Master's of Education, a Bachelors of Science in the natural sciences, and 4 years high school science teaching experience including marine science courses.

Maritime Science

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.

Instructor Certification Requirements:

The minimum requirements for certification in Maritime Studies is an instructor trained in both English and History. Applicants should have a minimum a Bachelor's Degree in Maritime Studies; however, applicants with a Master's Degree in either English or History will be considered. This course may be team taught between a History and an English instructor.

Mathematics

MATH 1030Q: Elementary Discrete Mathematics

Three credits. Offered Fall or Spring.

UConn ECE Math 1030Q cannot be taken concurrent with or after UConn ECE Math 1131Q or 1132Q. Problem solving strategies, solutions of simultaneous linear equations, sequences, counting and probability, graph theory, deductive reasoning, the axiomatic method and finite geometries, number systems.

Eligibility Guidelines: Successful completion of one year of pre-calculus is recommended.

MATH 1131Q: Calculus I

Four credits. Offered Fall only.

Students who matriculate to UConn cannot receive credit for MATH 1131Q and 1151Q. Limits, continuity, differentiation of algebraic and transcendental functions, antidifferentiation, definite integrals, the Fundamental Theorem of Calculus, u-substitution, with applications to the physical and engineering sciences.

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.

MATH 1132Q: Calculus II

Four credits. Offered Spring only. Prerequisite: MATH 1131Q in the immediately preceding semester.

A continuation of MATH 1131Q with techniques of integration, applications of integration, infinite sequences and series, power and Taylor series, polar coordinates and parametric equations, with applications to the physical sciences and engineering.

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.

Instructor Certification Requirements:

The minimum degree requirement for instructors wishing to teach UConn ECE mathematics courses is typically a Master's degree in Mathematics. In exceptional cases, a strong Bachelor's degree with evidence that the candidate is enrolled in a program to earn a Master's degree may be considered. A candidate with a Master's in Education may also be considered if coupled with a strong Bachelor's degree in Mathematics. Interviews will be conducted before certification is granted. The Math Department will not certify candidates that have earned a degree completely through online coursework.

The transcript must include at least one course on the theory of calculus (i. e., Real Analysis or Theoretical Advanced Calculus) with a grade of B or better.

Note: Core Questions are given to Instructors to include in final exams by the University's Mathematics Department.

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.

Instructor Certification Requirements:

The minimum degree requirement for instructors wishing to teach Early College Experience Music courses is usually a Master's of Arts degree in Music; however, a candidate with Master's in Education and sufficiently strong music background may be considered.

Natural Resources and the Environment

NRE 1000: 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.

Instructor Certification Requirements:

Instructors interested in applying should possess a Master's Degree in one of the environmental science fields (e.g. environmental biology, natural resources, chemistry, earth science, geography, economics) or an equivalent level of experience in education and study in environmental science. In addition, all applicants must have at least three years of teaching experience teaching an Environmental Science or similar course before applying.

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.

Instructor Certification Requirements:

Applicants should have a B.A. in Philosophy or a closely related field (such as Political Science with an emphasis on Political Theory, or Religious Studies with an emphasis on Ethics), and should possess as well either an M.A. in Philosophy (or closely related field) or have completed graduate coursework in Philosophy or closely related field.

Physics

PHYS 1201Q: General Physics I

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

Basic facts and principles of physics. 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.

Basic facts and principles of physics. 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.

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. Quantitative study of the basic facts and principles of physics including a lab component. The laboratory offers fundamental training in physical measurements. Recommended for students planning to apply for admission to medical, dental or veterinary schools and 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.

PHYS 1402Q: General Physics with Calculus II

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

Continuation of PHYS 1401Q. Quantitative study of the basic facts and principles of physics. The laboratory offers fundamental training in physical measurements. Recommended for students planning to apply for admission to medical, dental or veterinary schools. 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.

Instructor Certification Requirements:

The minimum degree requirement for teachers wishing to teach UConn ECE physics courses is a Bachelor's degree in physics with at least 3.0 GPA in the basic calculus level physics course, an overall 2.5 GPA for all physics courses on the transcript, plus two years teaching experience at the high school level. Faculty should have a calculus background. Candidates with a Master's degree or Ph.D. in physics will be considered without the two-year teaching experience requirement.

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.

Eligibility 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.

Eligibility 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.

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

Instructor Certification Requirements:

The minimum degree requirement for instructors wishing to teach Early College Experience political science courses is a Master's of Arts degree in political science or a law degree. All applicants must include a copy of the course syllabus with their application. Without a syllabus

instructors cannot be certified. Applicants may also be certified to teach one of the four introductory courses if they complete three political science graduate classes in the designated field. These three classes must be approved by the Department of Political Science.

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.

Instructor Certification Requirements:

A syllabus of the proposed course and either:

- M.A. in Sociology OR
- 2. B.A. in Sociology or a related social science field (such as, but not limited to, Political Science, Human Rights, or Anthropology), and three graduate courses in Sociology. Successful candidates need to have earned a Master's degree (education or other department).

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.

Instructor Certification Requirements:

The instructor must have a Bachelors Degree in Spanish and a Masters Degree in Spanish. If the instructor has a Bachelors Degree in Spanish and a Masters Degree in Education, the instructor needs to complete at least two scholarly courses in the study of Spanish and/or Spanish American Literature. The courses should be in a Graduate Spanish Department from an accredited university in the United States.

Statistics

STAT 1100Q: Elementary Concepts of Statistics

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

A standard approach to statistical analysis primarily for students of business and economics; elementary probability, sampling distributions, normal theory estimation and hypothesis testing, regression and correlation, exploratory data analysis. 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.

Instructor Certification Requirements:

The certification requirement for instructors wishing to teach UConn ECE statistics courses is a Master's of Science degree in Statistics, or a Master's in a related area with appropriate level undergraduate statistics background and/or undergraduate or graduate courses at least two levels above Statistics 1100QC. A candidate with a Master's in Education and an appropriate statistics background may be considered. Reasonable courses at the undergraduate level in applied statistics are STAT 2215Q or STAT 3115Q, or equivalent. Reasonable courses at the undergraduate level in statistical methods are STAT 3025Q or STAT 3375Q or STAT 3445, or

equivalent. A grade of B or better in these courses will be required. UConn's course catalog for statistics can be found online at <u>UConn Catalog</u> for comparison.

**Applicants must provide a detailed list and course descriptions of their completed statistics coursework for review. This list of courses should identify the equivalence to the UConn courses mentioned above.

Sustainable Plant and Soil Sciences

SPSS 1110: Fundamentals of Horticulture

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

Salsedo 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.

Eligibility 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.

Eligibility 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.

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

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

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.

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

SPSS 3240: Plant Biotechnology

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

Principles of recombinant DNA and plant gene transfer technologies. Applications of plant biotechnology in agriculture, horticulture, forestry, human/animal health care, and pharmaceutical industry. Social and environmental impacts of plant biotechnology.

Eligibility Guidelines: A student must pass SPSS 3230 with a grade of a "C" or higher to continue on to SPSS 3240.

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 and abstract, tribute, high-style, and wedding designs. Retail price structuring, wire services, and mass-production concepts.

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

The minimum requirements for instructor certification are Bachelor's and Master's degrees in plant science or a related discipline and three years teaching experience. A Master's degree in Education may be acceptable if applicants completed sufficient undergraduate and graduate courses in plant science and related disciplines. Access to a lab, and other resources are required to support applied learning opportunities. Other factors that will be considered include instructor's experience in applied aspects of plant science and participation in professional development activities. Teachers must submit a detailed lecture and lab syllabus with their application for certification.