


April 27, 2022

TO: Members of the Board of Trustees

FROM: Carl W. Lejuez, Ph.D. 
Provost and Executive Vice President for Academic Affairs

RE: Undergraduate Major in Environmental and Natural Resource Economics

RECOMMENDATION:

That the Board of Trustees approve a new undergraduate major in Environmental and Natural Resource Economics in the College of Agriculture, Health and Natural Resources.

BACKGROUND:

The Department of Agricultural and Resource Economics (ARE) within the College of Agriculture, Health and Natural Resources currently offers an undergraduate major in Applied Resource Economics with three areas of concentration (Business Management and Marketing, Environmental Economics and Policy, and Development Economics and Policy). ARE is proposing to split the current major into two majors, Environmental and Natural Resource Economics, and Economics of Sustainable Development and Management.

The proposed new major name will align the name of the major with the curriculum and with professional fields. This will allow prospective students to more easily understand the content of the major and will also enhance employer's ability to the student's field of expertise. The name for this new major found in the American Economic Association classification codes which are used by the profession to categorize fields and literature in the discipline. The proposed new name and breakdown of areas of concentration in this major will be the same as the ARE major. Existing students may choose to keep the ARE name for their major, or they may choose to enter into this new major if it corresponds with their area of concentration. Once all existing ARE major students have matriculated out of the program, the Department will seek to close the current ARE major.

Environmental and Natural Resource Economics

Major in the Department of Agricultural and Resource Economics (ARE)

We propose to split our current major (Applied and Resource Economics) and three areas of concentration (Business Management and Marketing, Environmental Economics and Policy, and Development Economics and Policy) into two majors, **Environmental and Natural Resource Economics**, and **Economics of Sustainable Development and Management**. We have prepared a separate formal proposal for each. This proposal describes **Environmental and Natural Resource Economics** – which is designed to be similar to the current ARE major plus the Environmental Economics and Policy concentration.

Rationale: The current major name, “Applied and Resource Economics”, was chosen at one time to encompass three separate areas of concentration; however, the name is so overly general that it does not describe any of these areas very well. The existing name provides too little information to prospective students or employers. The areas of concentration differ in their focus, yet all share a common core of applied economic theory and quantitative methods. Because these areas of concentration have been in high demand nationally and internationally, ARE had over time created new courses for structured study of these areas. These areas became so well ingrained into the ARE curriculum that by 2016 the Department changed the name of its major from “Agricultural and Resource Economics” to “Applied and Resource Economics.” However, words to describe the specific areas of concentration were not included with the new name. The goal at that time was to keep the name short with the acronym ARE to match the acronym for the name of the Department (ARE). Thus, the term “Applied” was chosen. We now know that this poses two problems for our students. The first is that the name does not adequately align with major fields as they are commonly understood in applied economics. The second is that the name of the major is an inadequate signal to employers of our students’ fields of expertise.

We propose to split our one major into two with names that are recognized nationally and internationally. The names for the new majors are found in the American Economic Association [classification codes](#) which are used by the profession to categorize fields and literature in the discipline. Additionally, the [classification of instructional programs](#) (CIP) codes distinguish fields within economics using words similar to those we propose for our two majors. Because the new names will better align with content and with professional fields, prospective students will more easily find these majors through the UConn admissions materials, and the new names will enhance students’ employment prospects, as they are more descriptive of their fields.

The CIP code for this major is: Environmental/Natural Resource Economics 03.0204.

“A program that focuses on the application of economic concepts and methods to the analysis of issues such as air and water pollution, land use planning, waste disposal, invasive species and pest control, conservation policies, and related environmental problems. Includes instruction in cost-benefit analysis, environmental impact assessment, evaluation and assessment of alternative resource management strategies, policy evaluation and monitoring, and descriptive and analytic tools for studying how environmental developments affect the economic system.”

Implementation: The proposed new names and breakdown of areas of concentration in each major will not be different from what students now have available in the existing ARE major. Thus, existing students may choose to keep the ARE name for their major, or they may choose whichever of the two

new majors corresponds with their areas of concentration. We have structured the two majors such that there will be no difference in their graduation requirements. We will retain the name of the current major and its areas of concentration until the last current student with this major has graduated or changed to one of the new majors. The old ARE major will no longer be available for new students once the change is approved.

Proposed Catalogue Copy

Description of the Major: Environmental and Natural Resource Economics

The B.S degree in Environmental and Natural Resource Economics prepares students to use economic analysis and quantitative methods to understand and evaluate complex interactions between economic markets, societal values, human needs and wants, and government policies. After graduation, students will be able to apply their acquired analytical and quantitative skills in a variety of jobs and for graduate school preparation. Environmental and Natural Resource Economists work for firms and consulting companies in the private sector, and for public agencies. The curriculum incorporates economics into the study of: pollution (air, water and land), waste disposal and recycling, business and consumer behavior, sustainable development, climate change and adaptation, pollution control, energy, renewable resources, environmental justice, poverty, economic valuation of environmental protection, benefit cost analysis, and policy evaluation. Students are encouraged to enroll in independent study to work individually with a faculty member on a chosen topic related to environmental and natural resource economics. Students can also receive academic credit through internships and participation in study abroad programs. For detailed information, please refer to are.uconn.edu.

Competency Requirements

All Environmental and Natural Resource Economics majors must pass [ARE 1150](#) or [ECON 1200](#) or [ECON 1201](#); [ARE 2150](#); and a minimum of 15 additional credits of ARE courses at the 2000 level or above. Students must also pass either [ARE 2261W](#) or [ARE 2435W](#) to fulfill their writing in the major requirement. The advanced information literacy requirement is fulfilled with either [ARE 2261W](#) or [ARE 2435W](#). The courses used to satisfy the 15 additional credit ARE minimum can also be used to fulfill the CAHNR 36-credit requirement.

Students choosing this major must take a total of at least 18 credits from the courses listed below. At least 12 credits must be taken from the Core Courses and up to six credits must be taken from the Elective Courses.

Core Courses: [ARE 2434E](#), [2464](#), [3333](#), [4438E](#), [4444](#), [4462E](#).

Elective Courses: [ARE 2235](#), [3436](#), [4217](#), [4305](#); [GEOG 2320](#), [2400](#), [2500](#), [3340](#); [NRE 3245E](#); with approval of advisor up to three credits of any 3000-level or above course.

With approval of advisor, additional courses in ARE or in related fields can be used to fulfill the CAHNR 36-credit requirement for the major.

Note: Students can add one or more minors offered by the ARE Department except for the Environmental Economics and Policy minor.

Minors in [Business Management and Marketing](#), [Development Economics and Policy](#), and [Equine Business Management](#) are described in the [Minors](#) section.

Appendix 1

Current ARE Major Plan of Study (AY 2022-2023)

Competency Requirements

All Applied and Resource Economics majors must pass [ARE 1150](#) or [ECON 1200](#) or [ECON 1201](#); [ARE 2150](#); and a minimum of 15 additional credits of ARE courses at the 2000 level or above. Students must also pass either [ARE 2261W](#) or [ARE 2435W](#) to fulfill their writing in the major requirement. The advanced information literacy requirement is fulfilled with either [ARE 2261W](#) or [ARE 2435W](#). The courses used to satisfy the 15 additional credit ARE minimum can also be used to fulfill the 36-credit requirement and the concentrations.

Concentrations

Applied and Resource Economics majors can choose a concentration in one or more of the following areas: Business Management and Marketing, Environmental Economics and Policy, and Development Economics and Policy.

1) Business Management and Marketing Concentration

Majors choosing a concentration in Business Management and Marketing must take a total of at least 18 credits from the courses listed below. At least 12 credits must be taken from the Core Courses and up to six credits must be taken from the Elective Courses.

Core Courses: [ARE 2210](#), [2215](#), [3221](#), [3222](#), [3223](#), [3333](#).

Elective Courses: [ARE 2260](#), [2464](#), [3225](#), [4205](#), [4217](#), [4279](#); [4476](#); [ECON 2411](#); with approval of advisor up to three credits of any 3000-level or above course.

With approval of advisor, additional courses in ARE or in related fields can be used to fulfill the 36-credit requirement for the major with this area of concentration.

2) Environmental Economics and Policy Concentration

Majors choosing a concentration in Environmental Economics and Policy must take a total of at least 18 credits from the courses listed below. At least 12 credits must be taken from the Core Courses and up to six credits must be taken from the Elective Courses.

Core Courses: [ARE 2434E](#), [2464](#), [3333](#), [4438E](#), [4444](#), [4462E](#).

Elective Courses: [ARE 2235](#), [3436](#), [4217](#), [4305](#); [GEOG 2320](#), [2400](#), [2500](#), [3340](#); [NRE 3245E](#); with approval of advisor up to three credits of any 3000-level or above course.

With approval of advisor, additional courses in ARE or in related fields can be used to fulfill the 36-credit requirement for the major.

3) Development Economics and Policy Concentration

Majors choosing a concentration in Development Economics and Policy must take a total of at least 18 credits from the courses listed below. At least 12 credits must be taken from the Core Courses and up to six credits must be taken from the Elective Courses.

Core Courses: [ARE 2260](#), [2464](#), [3333](#), [4279](#), [4305](#), [4444](#).

Elective Courses: [ARE 2434E](#), [4205](#); [ANTH 3325](#); [ECON 2440](#), [2456](#), [2474](#), [3421W](#), [3473](#), [3479](#); [GEOG 3100](#); [POLS 3406](#), [3410](#); [SOCL 3701](#); [WGSS 2267](#), [3216](#); with approval of advisor up to three credits of any 3000-level or above course.

With approval of advisor, additional courses in ARE or in related fields can be used to fulfill the 36-credit requirement for the major with this area of concentration.

Minors in [Business Management and Marketing](#), [Environmental Economics and Policy](#), and [Equine Business Management](#) are described in the [Minors](#) section.