

THE UNIVERSITY OF NORTH CAROLINA AT ASHEVILLE
FACULTY SENATE

Senate Document Number 9716S
Date of Senate Approval 05/05/16

Statement of Faculty Senate Action:

**APC Document 83 (ECS) Add Environmental and Cultural Sustainability Certificate
to the MLAS Curriculum**

Effective Date: Fall 2016

1. Add: On page 217, new entry for **Environmental and Cultural Sustainability Certificate:**

Environmental and Cultural Sustainability Certificate Program

The multidisciplinary aspects of a sustainability-based curriculum are essential to understanding many of the problems facing today's world, and for providing the basis for the development of solutions. The five-course Environmental and Cultural Sustainability Certificate program is designed for individuals employed in or seeking employment in fields such as: land use planning, environmental non-profits, government, transportation, and insurance, in which sustainability concepts play an integral role. The program is intended to be attractive to both full-time and part-time students.

The Certificate in Environmental and Cultural Sustainability is awarded to students who successfully complete 15 credit hours, including the following three core courses and two elective courses approved by the MLAS director. Students must have a cumulative 3.0 grade-point-average in the five courses.

- ECS 520, Seminar in Sustainable Cultures
- ECS 540, The Economics of Sustainability
- ECS 560, Energy Systems

The completion of the requirements for the certificate will be noted on the student's academic transcript.

2. Add: On page 221, new courses in **Environmental and Cultural Sustainability:**

Courses in Environmental and Cultural Sustainability (ECS):

520 Seminar in Sustainable Cultures

Interdisciplinary seminar on the importance of diversity among the world's cultures and the potential for homogenization resulting from the globalization of many human activities. Literature from a variety of authors concerning international environmental themes will be read and discussed throughout the course.

540 The Economics of Sustainability

Interdisciplinary seminar on the challenges and opportunities facing environmental sustainability in the modern era. This course draws on environmental and natural resource economics as well as political economy to understand contemporary

sustainability issues including climate change, ecosystem services, and the greening of global supply chains.

560 Energy Systems

Interdisciplinary seminar on the study of current energy uses and demands. Energy resources, including carbon-based, water-based, geothermal, and nuclear energy will be discussed. Renewable methods of energy generation, and potential future sources of energy will be reviewed.

599 Directed Research in Environmental and Cultural Sustainability (1-3)

Independent research under the supervision of a faculty mentor or with an interdisciplinary team of faculty. An IP grade may be awarded at the discretion of the instructor. Students may take Directed Research twice for a total of 6 hours of credit, in any combination of CCS 599, ECS 599, ENG 599 and MLAS 599. See program director.

571-3, 671-3 Special Topics in Environmental and Cultural Sustainability (1-3)

Courses not otherwise included in the catalog listing but for which there may be special needs. May be repeated for credit as subject matter changes. See program director.

Impact: SACS determined that UNC Asheville has the faculty, research and assessment resources needed to offer the Certificate in Climate Change and Society. Currently the MLAS Program is offering the four CCS courses in a cohort model, one each semester, over a two-year period. There have been a total of 103 enrollments in CCS courses since its inception that has generated 273 SCHs of graduate credit. Ten students have completed all four courses, and five are working towards it.

We are confident that SACS will arrive at a similar determination when evaluating the Certificate in Environmental and Cultural Sustainability. The three core courses in the ECS program will likewise be offered in a cohort model, one class per semester. The elective courses may be taken at any time a qualifying course is offered.

The ECS prefix carries with it a Category III designation in the UNC-system funding model, as opposed to the MLAS prefix, which is in Category II. Category III courses generate an instructional position for every 186.23 new student SCH, whereas Category II courses generate a position for every 303.93 new student SCH. ECS-prefixed courses will generate both faculty positions and state appropriations at an advantageous rate over the MLAS-prefixed courses. The Finance Department at UNC Asheville performed a study of MLAS financial performance during the past few years. Their conclusion was that the MLAS is self-supporting at current enrollment levels.

The MLAS and the Asheville Graduate Center (AGC) have funds to provide adjuncts, when needed, to departments (currently Economics, Philosophy and Physics) whose faculty teach in the ECS certificate program, as has been done with courses offered in the CCS certificate program. The MLAS program also allocates funds from its operating budgets. Additional funds, as needed and appropriate, from Admissions, AGC and the Office of the Associate Provost might supplement the marketing allocation, as the program gets underway.

Rationale: As the population of Western North Carolina grows, the demand for resources will increase, presenting larger challenges to local, state and regional communities. There has been a growing demand for knowledge of sustainability concepts, and for the skills and technological tools needed for engaging in meaningful decision-making and resultant communication. Asheville's population is expected to increase by almost 20% by 2030. The Asheville Chamber of Commerce identified science and technology (which includes climate, sustainability, green building, and broadband technology) as one of its top business

recruitment focus areas. The recent graduate education survey conducted by Stamats found that 75% of current students and 80% of alumni were in favor of graduate programming on campus. Sustainability was the second leading subject current students identified (third among alumni) when asked which academic programs they would like to see at UNC Asheville.

Many current MLAS students and alumni are employed in sustainability-related occupations. The organizations employing them include: ASAP (Appalachian Sustainable Agriculture Project), MAHEC (Mountain Area Health Education Center), Warren Wilson College, Haywood County Chamber of Commerce (Buy Haywood), USDA Forest Service, National Environmental Modeling and Analysis Center, and the National Centers for Environmental Information (formerly NCDC). Several students are pursuing entrepreneurial roles in sustainability-related fields such as agriculture, health, energy, climate change, and environmental education.

Therefore, this request is being made to allow the Master of Liberal Arts and Sciences Program to offer a graduate Certificate in Environmental and Cultural Sustainability. This certificate would be established and conducted through the enrollment of students into courses created from those already offered through the MLAS Program, or those that will be offered during future semesters. This approach would also enable those individuals who do not as yet possess a master's degree to apply the credit obtained through the successful completion of these courses toward an MLAS degree if they wish to continue their education beyond the Certificate.