

## Curricular Affairs Committee of the Faculty Senate

### MEMO

**To:** The UVM Faculty Senate

**From:** Curricular Affairs Committee of the Faculty Senate, Laura Almstead, Chair

**Date:** March 8, 2019

**Re:** Items approved by the Curricular Affairs Committee that do not require a Faculty Senate vote

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#### Uncontested Termination Request: ENSC Major Environmental Chemistry Concentration

The directors of the cross-college Environmental Sciences (ENSC) program submitted a request to remove Environmental Chemistry concentration option in the major. All ENSC majors must select a concentration. There are currently nine options: Agriculture and the Environment, Conservation Biology and Biodiversity, Ecological Design, Environmental Analysis and Assessment, Global Environmental and Climate Change, Water Resources, Environmental Biology, Environmental Geology, and Environmental Chemistry. For the past five years, an average of only ~2 students (less than 1% of ENSC majors) have opted to follow the Environmental Chemistry concentration. The directors of the ENSC program believe that this is because students choose to pursue a minor in Chemistry, and are therefore restricted from selecting the Environmental Chemistry concentration. Given this, the directors requested to remove the Environmental Chemistry concentration option. Some of the courses from the Environmental Chemistry concentration will be added to the existing Environmental Analysis and Assessment concentration. *[Note that this change in the Environmental Analysis and Assessment concentration does not require CAC or Faculty Senate approval.]* Letters of support were provided from the deans of all units that participate in the ENSC major – Dean Tom Vogelmann (College of Agriculture and Life Sciences), Dean Bill Falls (College of Arts and Sciences), and Dean Nancy Mathews Rubenstein School of Environment and Natural Resources).

#### New Computer Science Concentration in the Secondary Education Major

A request for a new Computer Science concentration in the existing Secondary Education major was submitted by the Department of Education in the College of Education and Social Services (CESS). The new concentration developed in collaboration with the Department of Computer Science in the College of Engineering and Mathematical Sciences (CEMS) and the Vermont Agency of Education (VT AOE). All students pursuing the existing major in Secondary Education, which leads to a B.S. in Education with Teaching Licensure, choose a content area concentration. The major involves three phases of training, with the first two focused on learners' needs, curriculum, instruction, and assessment. The content concentration (30 to 57) credits is part of the third phase, which also includes a special methods education course in the content area, EDSC 226 Teaching Internship, and EDSC 230 Teaching for Results. Current content concentration options include English, Foreign Language (French, German, Latin, Spanish), Mathematics, Science (Biology, Chemistry, Earth Science, Physics), and Social Studies.

The new Computer Science concentration was developed in response to a recognized disparity between computer science employment opportunities and the computer science learning opportunities available for students in Vermont. Computing represents two-thirds of projected new STEM jobs in the US, however less than 3% of college students earn a degree in computer science, and only 8% of STEM graduates major in Computer Science ([https://csedweek.org/resource\\_kit/blurbs](https://csedweek.org/resource_kit/blurbs)). Vermont's minimal adoption of computer science education standards places it in the bottom tier in the US with nine other states. The proposers indicated that only eight high schools in VT offer an Advanced Placement (AP) Computer Science Principles course and only 26 teachers (>1%) are licensed to teach computer science. Additionally, a recent statewide survey conducted by the VT AOE found that more than 600 teachers in Vermont were interested in furthering their knowledge of computer science via professional learning and coursework. The new Computer Science concentration is part of a joint initiative between CESS, CEMS, and the VT AOE to address these deficiencies and gaps. Letters of support were provided by:

- Michael Giangreco, Interim Chair of the Department of Education
- Scott Thomas, Dean of CESS
- Christian Skalka, Chair of the Department of Computer Science
- Linda Schadler, Dean of CEMS
- Peter Drescher, State Director of Education Technology, VT AOE

#### Substantial Revision of the Existing CE Certificate in Gerontology

A request to significantly revise the Continuing Education (CE) Certificate in Gerontology was submitted by the Department of Leadership and Developmental Sciences (Human Development and Family Studies Program) in the College of Education and Social Services (CESS). Jacqueline Weinstock will serve as the director of the certificate. Although the certificate has been in existence for more than 20 years, it has not been available to students for the past ten years because several of the required courses have not been regularly offered. This is largely due the departure of faculty involved in teaching the courses. The revisions represent a curricular revitalization and renewed commitment to ensuring courses in the certificate are offered on a regular basis. Letters of support were provided by:

- Lawrence Shelton, HDFS Program Coordinator
- Jane Okech, Chair of the Department of Leadership and Developmental Sciences
- Dale Jaffe, Chair of the Department of Sociology Coordinator of Gerontology Concentration (Sociology majors) and Gerontology Minor (non-Sociology majors)
- Michael LaMantia, Center on Aging Director
- Kieran Killeen, Associate Dean CESS
- Cynthia Belliveau, Dean CDE
- Abby McGowan, Associate Dean CAS
- Jeremy Sibold, Associate DEAN CNHS
- Thomas Vogelmann, Dean CALS
- John Green, Chair of the Department of Psychological Science
- Susan Roche, Chair of the Department of Social Work
- Jeanne Shea, Instructor ANTH 189
- Suzanne Murdock, Instructor HLTH 100
- Patrick Standon, Instructor NH 120

Given the population aging occurring locally and world-wide, and the fact that the demand for professionals trained in gerontology far exceeds the number of professionals qualified to work in the field, this revival is timely. Adults aged 65 and older are expected to comprise over 16.7% of the world's population by 2050. According to the US Census Bureau, in 2017, 18.7% of Vermonters were age 65 or older, making Vermont the second oldest state in the US. Assuming current trends continue, the percentage of older Vermonters is estimated to increase such that by 2032, almost one in four Vermonters will be over 65 (Vermont Agency of Human Services Department of Disabilities, Aging and Independent Living, 2014). The current demand for professionals in gerontology far exceeds the number of people who are prepared to work in this field. The Bureau of Labor Statistics projects that employment in aging-related occupations will grow faster than the projected growth for all occupations overall (EAB, 2016). The Vermont Aging Services Network has indicated that there is a shortage of trained professionals to serve the state's older adults, especially workers in the health care arena. Additionally, adults of all ages are increasingly interested in better understanding aging. Those already in late adulthood seek to better understand the challenges and possibilities of this phase of the life course, while those in earlier stages of adulthood desire to enter and move through later adulthood with appropriate knowledge, perspectives, skills and competencies.

Many aspects of the CE Certificate in Gerontology remain unchanged including the rationale, learning objectives, target audience, admission requirements, and participating units. The two major objectives for the revision were (1) to update the Certificate in terms of course offerings by matching the requirements and electives with currently available courses and creating one new course to round out the certificate offerings, and (2) to build on current knowledge of best practices in Gerontology Education to inform the certificate design and course offerings. A third objective was to increase the draw of the Certificate to community members by reducing the total number of required credits from 18 to 15, with the corresponding cost and time savings this would offer. Given past enrollments, inquiries about learning opportunities related to aging, and the reduced number of credits, the proposers anticipate an initial enrollment of approximately three to five students.

Previously, the curriculum for the certificate included three required courses and three elective courses. The revised curriculum (see table below) includes three required courses and two elective courses. Students who do not have prior relevant experience working with elders or in the related social services will be required to complete HDFS 190, a three-credit internship experience, as one of their electives. Other students interested in the internship course may be let in with instructor permission. Of the required courses, two remained the same (HDFS/SOC 020 and SOC 120). HDFS 221 is the one new course that was developed for the certificate and will be in the catalog next year. Letters of support were provided by faculty involved in teaching courses in the revised curriculum and/or chairs or deans of the relevant departments or units.

Required Courses		Credits
HDFS/SOC 020	Aging: Change and Adaptation	3
SOC 120	Aging in Modern Society	3
HLTH 100 OR HDFS 221	Biology of Aging  Psychology of Aging	3

<b>Elective Courses*</b>		<b>Credits</b>
HDFS 190	Internship	3
HLTH 100 OR HDFS 221	Biology of Aging (if not taken as a required course) Psychology of Aging (if not taken as a required course)	3
ANTH 189	Aging in Cross-Cultural Perspective	3
NH 120	Health Care Ethics	3
NFS 143	Nutrition in the Life Cycle	3
SOC 154	Dying, Death & Bereavement	3
SOC 224	Health Care and Aging	3

*\*An approved aging related course in another relevant program may fulfill one elective course requirement.*

As noted above, revival of the CE Certificate in Gerontology is timely considering the increasingly aging population, especially in Vermont, and the fact that demand for professionals trained in the field of gerontology exceeds the number of people qualified to fill those positions. The revisions to update the curriculum and the renewed commitment to ensuring that courses in the certificate are offered on a regular basis will help to bring the long dormant certificate back to life.