



## **Curricular Affairs Committee of the Faculty Senate Minutes**

Thursday, January 9, 2019, 4:15 – 6:15 pm

- Present:** Professors Almstead, Budington, Dale, Emery, Everse, Garrison, Gewissler, Goodwin, Hazelrigg, Hibbeler, Kervick, Monsen, Nichols, Rosebush, Seidl, Strickler, Tomas
- Absent:** Professor Chittenden, Ivakhiv, Sisk, Teneback, Ultsch, and Student Government Association Representative Meagan Cummings, Graduate Student Senate Representative Lindsay Worley
- Guests:** Alison Maynard, Cindy Forehand, Rory Waterman, J. Dickinson
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Chair Almstead called the meeting to order at 4:18 pm in 427A Waterman.

- I. **Approval of the Minutes.** The December 5, 2019 minutes were approved as written.
- II. **Chair's Remarks** – Laura Almstead reported that all items approved by the CAC at the December meeting were approved by the Faculty Senate, and will be presented to the Board of Trustees at their meeting on January 31, 2020.
- III. **Reports**
  - A. **New Post-Professional Doctorate in Occupational Therapy (OTD), CNHS (vote).**

Rosi Rosebush and Jennifer Strickler served as the review subcommittee for this proposal, and their report is attached to these minutes. The proposal, from the College of Nursing and Health Sciences, Department of Rehabilitation and Movement Sciences in conjunction with the Graduate College, is for a new post-professional Doctorate in Occupational Therapy (OTD). The OTD will be offered to licensed occupational therapists wishing to expand knowledge in leadership, instructional delivery, and evidence-based and occupation-based practice, and if approved would be the first OT degree program in Vermont. The program proposal is well designed and supported by the chairs and deans. All courses have been designed in collaboration with Continuing and Distance Education support to ensure best practices in online education.

**Motion:** Laura Almstead called a vote to approve the proposal for a new Post-Professional Doctorate in Occupational Therapy (OTD) in the College of Nursing and Health Sciences (CNHS).

**Vote:** 16 Approve, 1 Oppose, 0 Abstain

#### IV. APR Reports

A. **HDFS and IDS Programs, CESS (vote).** Stephen Everse and Susan Kasser served as the APR subcommittee for this review and their report is attached to these minutes. The external reviewers chose to split the academic program review and produce independent reports for the Human Development & Family Studies (HDFS) and Interdisciplinary Studies (IDS) programs in the College of Education and Social Services (CESS). The APR subcommittee reviewed the self-study reports, the external reviewers reports and the program's responses to the reports. The APR subcommittee attests that, to date, the APR process has been followed.

The HDFS review was highly favorable in the summary of the program's strengths, noting 1) its contribution to the College and University as a whole, 2) the high quality of faculty teaching and advising, 3) the commitment of the program to high impact practices, and 4) the high level of student satisfaction and professional preparedness. In addition, the HDFS program has already taken steps to address most of the recommendations and has given thought and attention to many of its own visionary goals.

The IDS is held in extremely high regard in higher education circles, and in human services throughout the state of Vermont and nationwide. This allows the program to attract students of all ages and stages whose professional and academic qualifications are very high. The IDS is also highly valued by the Department, College, and Graduate College. Although one strength of the program is the Program Coordinator, Dr. Robert Nash, it is also noted that the IDS lacks a succession plan. The program is well-established, which provides a solid foundation upon which to advance Dr. Nash's legacy. UVM is positioned to be a leader in graduate education related to preparing educators to be stewards of interdisciplinary and interprofessional knowledge. The Department and Dr. Nash had no corrections to the Reviewer's report and have read and approved this APR Subcommittee report.

**Motion:** Laura Almstead called a vote to accept the APR Subcommittee report for the review of the Human Development & Family Studies (HDFS) and Interdisciplinary Studies (IDS) programs in the College of Education and Social Services (CESS).

**Vote:** 17 Approve, 0 Oppose, 0 Abstain

#### V. Other Business:

A. **Late Add Course Pilot Program** –Rory Waterman, Associate Dean CAS, presented an update on a pilot program about “late-add” courses. His report, including an overview of the goals of this pilot program is attached to these minutes. The pilot was intended to address students' needs, and the impact on retention. The pilot program is currently on hold. Discussions will resume at a future time once mechanisms and policies are put into place that will facilitate delivery of late-add courses.

B. **No Contest Termination: Bachelor of Music Degree, CAS (vote).** Laura Almstead reported that the Department of Music in the College of Arts and Sciences (CAS) requested an uncontested termination of the Bachelor of Music Degree. There are no

students enrolled in this degree program, and the termination does not affect any other departments or program. There are no implications for loss of faculty or staff as a result of this termination. The termination would only eliminate the specialized Bachelor of Music degree, and does not affect the existing Music major.

**Motion:** Meaghan Emery moved to approve the no contest termination of the Bachelor of Music Degree in the College of Arts and Sciences.

**Vote:** 16 Approve, 0 Oppose, 0 Abstain

- C. **Name/Substantial Change: ANFS PhD, CALS (vote)**— Laura Almstead reported that the Department of Animal and Veterinary Sciences (ASCI) in conjunction with the Graduate College, proposed to rename and revitalize its current doctoral program in Animal, Nutrition and Food Sciences to Animal Biosciences. This name change is accompanied by a substantial change proposal to remove the Nutrition and Food Sciences tracks from the existing ANFS PhD, and establish the existing Animal Sciences track requirements as the curriculum for the Animal Biosciences PhD. The proposals have support from the CALS curriculum committee and the Graduate Executive Council as well as the interim Dean of CALS and former Chair of the Department of Nutrition and Food Sciences and the Graduate College Dean.

**Motion:** Colby Kervick moved to approve the substantial change to the Animal, Nutrition and Food Sciences PhD in the College of Agriculture and Life Sciences, and to change the name to the PhD in Animal Biosciences.

**Vote:** 16 Approve, 0 Oppose, 0 Abstain

- D. **Name Change: MS in Animal Sciences, CALS (discussion)\*** – Laura Almstead reported that the Department of Animal and Veterinary Sciences would like to change the name of the current Animal Science MS to an MS in Animal Biosciences. The change is to be consistent with the recently requested name change of the PhD in Animal Nutrition and Food Sciences to Animal Biosciences. The 30-day comment period for the proposal has not ended, so the CAC will vote in February.

- E. **New Concentration: ENSC Major, CAS/CALS/RSENr (discussion)\*** – Laura Almstead reported that a proposal for the addition of a new concentration in the cross-college Environmental Sciences (ENSC) major was received from CALS, CAS and RSENr. The proposal is attached to these minutes. The request for a new concentration in environmental health is in response to increasing student interest and growing demand for scientists with skills to identify, abate, or eliminate sources of environmental hazards that affect the health of the population. Because students select a minimum of 14 credits from courses regularly offered across campus, no additional resources will be required for this concentration. The proposed concentration in Environmental Health was approved by the curriculum committees, faculty and deans of the three colleges involved. Conversation with the director of the Health Sciences program received a positive response to potential collaborations going forward. Laura Almstead has also reached out to the directors of the Environmental Studies program regarding a question related to communication with the ENVs program. The 30-day comment period for the proposal has not ended, so the CAC will vote in February. Laura will report any potential concerns to the CAC prior to calling a vote.

**F. Prefix request: Learning Communities (vote)** – J. Dickinson reported that the Office of the Provost has requested that a new General Instruction prefix of “LC” be created for the purposes of establishing unified course numbers for one-credit Residential Learning Community courses. The Registrar’s office has confirmed that this prefix is available. Syllabi for these courses will be reviewed and approved by a Learning Community Curriculum Committee, and approval of courses in CourseLeaf will be conducted by the Associate Provost for Academic Affairs.

**Motion:** Steve Everse moved to approve the new General Instruction prefix of “LC” for one-credit Residential Learning Community courses.

**Vote:** **15 Approve**, 0 Oppose, 1 Abstain

**VI. New Business:** none at this time.

\*Items V.D, and V.E. are still in the comment period. Discussion was held at this meeting and Laura Almstead will notify the CAC of any additional comments received prior to distributing the items to the CAC for an electronic vote in February. Because these two items are the only anticipated business, the **February 6th CAC meeting will be cancelled.**

Meeting adjourned at 5:15 p.m.

## **MEMO**

**To:** Curricular Affairs Committee of the Faculty Senate

**From:** Joan Rosebush and Jennifer Strickler

**Date:** 12-30-2019

**Re:** Approval of a proposal for a new Doctor of Occupational Therapy (OTD) submitted by the College of Nursing and Health Sciences and the Department of Rehabilitation and Movement Science

### **Program Description and Rationale**

#### **Program Description:**

A post-professional on-line Doctor of Occupational Therapy (OTD) program has been proposed by the College of Nursing and Health Sciences and the Department of Rehabilitation and Movement Sciences. It will be offered to licensed occupational therapists wishing to expand knowledge in leadership, instructional delivery, and evidence-based and occupation-based practice. The field of occupational therapy (OT) has begun a recent evolutionary transition. Under the guidance of its national leadership, many OT programs are moving to an entry-level doctorate degree. This is a proposal for an accelerated program for licensed OTs, allowing a flexible and tailored progression toward the terminal degree in the field utilizing their current occupational therapy degree and years of practice as a starting point. The State of Vermont is currently the only state that does not offer any occupational therapy degree program.

### **Justification and Evidence for Demand**

The OT profession's educational requirements may be changing. As a result of these proposed changes, faculty shortages are anticipated. It is also anticipated that currently practicing OT's will choose to advance their education as more entry-level degree programs move from a master to doctorate level. Additionally, according to market analysis, there is strong employer regional demands for doctoral-level trained occupational therapists. Finally, the State of Vermont is the only state that does not offer OT education, and there is strong support in the community to start offering this level of education to state residents. There are currently six other all-online OTD programs in the country.

### **Relationship to Existing Programs**

There is a Doctor of Nursing Practice post-professional degree that may be begun post-licensure. However, licensure is not a pre-requisite for entry. There are no other post-professional clinical doctorate programs at UVM.

### **Curriculum**

This program is designed for OTs practicing in the field of occupational therapy, and is focused around Boyer's four areas of scholarship: Discovery, Integration, Application, and Teaching. Graduates will achieve the following curricular outcomes:

- Understand research methods and design a research study

- Demonstrate knowledge translation skill by applying evidence to practice
- Articulate their leadership strengths and challenges, and devise a leadership plan that can be sustained throughout one's professional career
- Apply one leadership method to a clinical or educational setting and reflect on the process
- Apply an innovative, creative thinking concept to a real-world scenario, either in the clinical or educational setting, and report on the success, challenges, and lessons learned
- Implement one teaching strategy in a classroom or professional venue and report outcomes of the teaching experience
- Link common practice techniques and occupation-based practice to the occupational therapy practice framework in one practice area
- Work with a scholar in their area of practice to complete an individual capstone project that has practice, research, and/or education implications for our field. At least one of Boyer's four areas of scholarship must be woven through the Capstone.

The curriculum is designed with five threads: evidence-based practice, leadership, innovation, teaching excellence, and occupation-based practice. Courses for the program are listed below. Students entering the program with an MS in Occupational Therapy are required to take all courses, for a total of 33 credits. Students entering the program with a BS in Occupational Therapy must take two additional courses no later than the first semester of study: a statistics course (at any level) and a 3-credit course, OT 488: Exploring Current Occupational Therapy Theory and Practice, offered online at UVM.

| Course thread             | Course number | Course name                           | Credit       |
|---------------------------|---------------|---------------------------------------|--------------|
| Evidence-based practice   | OT 480        | Evidence-based practice I             | 3 cr         |
|                           | OT 481        | Evidence-based practice II            | 3 cr         |
| Leadership                | OT 482        | Leadership Exploration                | 3 cr         |
|                           | OT 483        | Maximizing your Leadership Potential  | 3 cr         |
| Professional scholarship  | OT 465        | Capstone I: Professional Scholarship  | 2 cr         |
|                           | OT 466        | Capstone II: Supporting Evidence      | 2 cr         |
|                           | OT 467        | Capstone III: Implementation          | 2 cr         |
|                           | OT 468        | Capstone IV: Dissemination            | 2 cr         |
|                           | OT 489        | Designing your Portfolio              | 2 cr         |
| Occupation-based practice | OT 487        | Examining occupation-based Practice   | 3 cr         |
| Professional innovation   | OT 484        | Innovation and Creative Thinking      | 3 cr         |
| Teaching excellence       | OT 485        | Implementing Adult Learning Theory I  | 3 cr         |
|                           | OT 486        | Implementing Adult Learning Theory II | 2 cr         |
| <b>Total credits</b>      |               |                                       | <b>33 cr</b> |

The curriculum is designed to be completed in four semesters, with rolling admissions after the first year. Based on their preferences, students may take more than 4 semesters to complete the program, but they may not complete it in less time.

### **Admission Requirements and Process**

#### **Source of Candidates:**

Candidates for the proposed post-professional OTD program will be licensed occupational therapists from around the nation and the world. It is estimated there are over 130,000 OTs in the United States, (bls.gov), and the majority of those have either a bachelor or master degree.

#### **Requirement for admission and retention of students:**

- Bachelor or master degree in occupational therapy from the US or abroad
- Minimum cumulative GPA 3.2/4.0
- Two years of clinical practice as a licensed OT
- English proficiency exam as required by UVM Graduate College
- Personal statement + three letters of recommendation
- Transcripts + CV
- Phone/virtual/face-to-face interview

#### **Selection Process:**

In the first year, an admissions committee consisting of two faculty members will review all admission applications. Scoring will be based on GPA, letters of recommendation, personal essay, and interview. As the Occupational Therapy program grows and develops, three faculty members will be on the admissions committee.

### **Anticipated Enrollment and Impact on Current Programs**

Initially, it is estimated that five students will enroll per semester, for a total of 15 students per academic year. Eventually, it is estimated that 7-10 students will enroll per semester and summer, for a total of 21-30 students per academic year.

### **Advising**

The Program Director will provide academic advising to all students as they progress through the program. With growth of the program, additional occupational therapy faculty will assume advising roles.

### **Assessment Plan**

The post-professional OT program will be evaluated internally every year. Individual courses will be evaluated through student evaluations, attendance, grades, peer evaluations, and OT program curricular decisions. Typically, Department and CNHS evaluation tools include but are not limited to:

- Course and instructor evaluations

- Survey of graduates
- Research papers, publications.

As part of the continual program assessment, program directors will examine the following parameters:

1. Faculty effectiveness in their assigned teaching responsibilities
2. Students' progression through the program.
3. Student retention rates
4. Student satisfaction with the program
5. Graduates' job advancement
6. Graduates' continued contribution to scholarship

In addition to internal evaluation, the normal University Academic Program Review process will include this program in the review of the Department of Rehabilitation and Movement.

### **Staffing Plans, Resource Requirement and Budget**

#### **Faculty:**

In addition to the current Program Director, one 9-month faculty member and one part-time faculty member will be hired. Additional money is needed for part-time faculty on an as-needed basis. When the program is operating at full capacity with three start points, it is estimated that 3 FTE faculty effort will be required. The demand for the post-professional OTD is expected to decrease with time as those currently licensed and practicing occupational therapists who wish to add the doctoral credential will have done so. However, these positions are not temporary as they will also support development of an entry-level OTD program (proposal to be submitted later this year) that will meet the need for new occupational therapists.

#### **Library Support:**

This program will be 100% on-line and all students will need access to the UVM database. At this point, the library has most of the needed journals and it is estimated that only one additional journal is needed to support the program, the Journal of Occupational Science. Discussions with Gary Atwood, Interim Director of the Dana Medical Library, indicate a cost of \$532.00 for this journal, and he is exploring if there is money in his budget to purchase this journal for 2020-2021.

#### **Equipment Needs:**

No equipment is needed other than computers for the new faculty teaching online. In addition, instructional design support is needed, given that the program is 100% on-line. CNHS has secured seminal funding to support the development of the OTD portfolio in partnership with UVM Continuing and Distance Education, including online course development team support for the online programming.

#### **Physical Space:**

Physical space is needed for faculty offices per the collective bargaining agreement. Classroom space with distance learning capabilities is needed 1x/year during the optional on-site portion of



the program and there is adequate classroom space available in Rowell per the Dean's Office for the on-sites.

### **Cost Estimates:**

Funds will be needed for the following:

- Faculty salaries
- Travel, food, and accommodations for all faculty to participate in the live session held at the AOTA conference
- Conference room rental at the AOTA conference
- Food and beverages for the bi-annual sessions (residential session and session at conference)
- Journal of Occupational Science (funding may be available through Dana Medical Library).

A summary of the budget analysis indicates the program will be viable if students can be attracted at the expected levels and with a 50/50 mix of in state vs out of state students. However, it is recognized that UVM's high out of state tuition may make it hard to attract this many out of state students. Therefore, if the program is approved, the CNHS will initiate a process to request a variable tuition to reduce the cost to out of state students while still ensuring positive net revenue.

### **Evidence of Support**

Letters of support were collected from the following:

- Theodore J. Angelopoulos, Ph.D.  
Chair, Department of Rehabilitation & Movement Sciences
- Scott Thomas, Ph.D.  
Interim Dean, College of Nursing & Health Sciences
- Cynthia Belliveau, Ph.D.  
Dean Continuing and Distance Education
- Elizabeth Adams, Au.D.  
Chair, College of Nursing & Health Sciences Curriculum Planning Committee
- Cynthia Forehand, Ph.D.  
Dean, Graduate College.

### **Summary**

This appears as a well-defined proposal for an area of study that has a growing need, especially in Vermont. This program represents the first educational opportunity in OT in the state of Vermont - the only state that does not currently offer any OT degree. The workforce demand for occupational therapists is increasing and expected to be robust for many years. The faculty affiliated with this program are also in the planning stage of developing an entry level OTD that

will meet the needs of future students who are not already practicing occupational therapists. Thus, Vermont will soon be able to meet its future workforce needs in OT without students needing to leave the state to be trained.

The support of chairs and deans is evident. This online post-professional OTD aligns with UVM's Academic Excellence Goals to (1) expand programmatic offerings to include distance and hybrid modes of instructional delivery and (2) increase enrollments in graduate and professional programs. It addresses a clear need for currently practicing and licensed occupational therapists who desire to move up to the doctoral level terminal degree in their field. Indeed, all courses have been designed in collaboration with Continuing and Distance Education support to ensure best practices in online education. While the absence of a permanent Dean in the CNHS makes this an awkward time to initiate a program requiring significant resources, the proposed program seems sound.

Submitted 12.30.19

Joan Rosebush

Jennifer Strickler

CAS Review Committee

**Faculty Senate Curricular Affairs Committee**  
**Academic Program Review Subcommittee Report**  
**Interdisciplinary Studies**  
**April 29 – 30, 2019**

**Academic Program Review Subcommittee:** Susan Kasser, Ph.D. and Stephen Everse, Ph.D.

**External Reviewers:**

Raeann R. Hamon, Ph.D., CFLE, Distinguished Professor of Family Science and Gerontology Chair (Messiah College)  
Jeni Hart, Ph.D., Dean of the Graduate School and Vice Provost for Graduate Studies and Professor of Higher Education in the Department of Educational Leadership and Policy Analysis (University of Missouri)

The external review team visited the University of Vermont's Interdisciplinary Studies program for 2-day review on April 29 – 30, 2019 as part of the Human Development & Family Studies (HDFS) and Interdisciplinary Studies Academic Program Review (APR). This report summarizes the strengths and weakness of the program identified through the review process, provides a synopsis of the external reviewer's report, and offers the APR internal review subcommittee's conclusions. The External Reviewers chose to split the review with each producing an independent report with Dr. Hamon reviewing the HDFS program and Dr. Hart reviewing the Interdisciplinary Studies program.

**Overview of the Human Development and Family Studies Program**

The Human Development and Family Studies (HDFS) Program, housed within the Department of Leadership and Developmental Sciences in the College of Education and Social Services, leads to the Bachelor of Science degree. The HDFS Program aims to teach students about human development and family issues across the lifespan and how to apply this knowledge in a range of diverse settings. Currently, it is the only such program in the state of Vermont. Graduates are employed in a variety of social services, non-profit organizations, and advocacy roles. They earn graduate degrees in a variety of programs, including counseling, social work, nursing and health sciences, education, and public health.

**Identified Strengths and Needs:**

**Administrative Support.** The HDFS program exists within a supportive administrative climate, particularly within the last several years. Recently, it has seen significant support by the Dean and Chair, with two new full-time faculty hires and a plan for four graduate assistantships to support the teaching of large introductory and writing intensive courses.

**Faculty.** HDFS is comprised of four full-time, highly committed faculty members (3 tenure track and 1 non-tenure track) who care about students, value excellent teaching, and are forward thinking and deliberate about next steps for the program. Faculty productivity has been good, but hampered by understaffing for several years. With the infusion of new resources, faculty members should now be better positioned to collaborate, develop, and pursue their research agendas.

As the program Coordinator approaches retirement, HDFS has the opportunity to pursue a faculty hire supporting gender and racial/ethnic diversity while also keeping in mind the teaching needs of the program.

The program already has a succession plan developed and implemented, with Professor Weinstock assuming the Coordinator role during the transition period.

Students. The program has witnessed a steady increase in the number of undergraduate and graduate students over the past ten years. There are currently 83 majors and 70 minors with the capacity to grow moving forward. The program is designed to be completed in three years, so as to accommodate a large number of students desiring to transfer into HDFS. Students confirmed that they experience a very positive climate within the program.

Curriculum. The forty-credit curriculum was deemed appropriate, with sufficient elective credits available to allow students to pursue minors, study abroad or take additional service-learning courses. Most notably, the HDFS program incorporates several high impact educational practices such as writing in the discipline, Service-Learning, and a professional internship capstone experience. The program also provides large introductory courses to students from a variety of majors both within and external to CESS. The reviewer shared that the HDFS curriculum is very heavy on the human development content area and needs more emphasis in family science. In addition, much of the family science content is being offered at the 200 level in a much more fluid manner, thus creating a challenge for assessing program goals when students are likely taking different options.

#### **External Reviewer's Recommendations:**

1. As HDFS plays an important role in retaining students at the university, the College could better promote the visibility and availability of the HDFS program. The reviewer also suggested to modify the name of the program from Human Development and Family Studies to Human Development and Family Science.

Program Response: The faculty have considered the name change suggested and are undecided about its significance in recruiting. CESS is currently engaged in developing a robust web and social media presence.

2. Develop and clearly articulate HDFS program objectives. It was recommended that all four faculty members receive a summer stipend to develop program objectives for the major.

Program Response: Faculty are currently engaged in the process of revising program and course objectives and benchmarks. It has been difficult to do this in the past with just two full-time faculty and with the need to bring in many different part-time faculty and full-time faculty assigned from other programs. With new faculty now hired, this will be easier but the program concurs that administrative support for this effort moving forward would be helpful.

3. Align the HDFS curriculum to the National Council on Family Relations' Certified Family Life Educator (CFLE) standards and apply to receive CFLE program approval. Given the greater emphasis devoted to human development content in the existing program, this proposal will involve collapsing human development portions of the program to make space for new and revised courses devoted to family science content.

Program Response: Faculty have been evaluating the potential costs and benefits of aligning with accreditation as a Certified Family Life Educator program. The costs appear significant at this point, but the program will continue to examine this option.

4. As the program faculty makes curricular changes necessary to better align with the National Council on Family Relations (NCFR) Certified Family Life Educator (CFLE) designation, the program chair is encouraged to consider area of expertise and “giftedness” of individual faculty members when assigning course loads.

Program Response: The program was puzzled by this suggestion. Faculty workloads are determined by the department chair and approved by the Dean in accord with the CBA, while specific course assignments in HDFS are determined by the faculty collaboratively, with the participation of the program coordinator.

5. When revising the HDFS curriculum, the program faculty should be sure to agree upon the course descriptions and objectives, as well as particular assignments unique to each class. For instance, the program faculty may wish to delineate desired assignments for each class that are non-negotiable, no matter who teaches the course

Program Response: Establishing course descriptions and objectives is on the agenda, specifically identifying the skills and experiences critical to each of the three levels of courses in the HDFS sequence. The program is not yet ready to agree that specific assignments should be defined, though specific skills and experiences should be included in the objectives.

6. Consider revising the purpose and content of the introductory course: HDFS 001 Intro to HDFS. This course sounds like it might best function as an overview course for the HDFS program. Consider incorporating an introductory HDFS text which familiarizes students with the foundational areas of HDFS and deliberate if this first-year course is the best context for service-learning. Several current students suggested that they did not feel adequately prepared for the service experience at that time.

Program Response: The objectives and process for HDFS 001 are a regular topic of discussion, which includes appropriate service-learning activities. This discussion continues. The program notes that it uses a developmental model of service-learning, where the first year is truly an introduction to service-learning. Students are asked to serve as additional adults who can interact with the youth but they are not expected to discipline or intervene. It was noted that students often want to be able to do more on their own possibly leading to a sense of not being prepared. The entire major sequence of courses is designed to prepare students for an upper level two-semester internship experience and related academic course, which ultimately serves to prepare them for professional work after graduation.

7. Develop a manageable assessment plan. The HDFS program has collected a variety of data to measure program outcomes, although identifying one program objective on which to collect one or two data points each year may be most effective with a year-end review and goal setting to follow.

Program Response: Faculty are engaged in defining benchmarks and assessments for students, along with program objectives. This effort was aided by support from the Provost's Assessment Fellow this past year.

8. Increase release time for the HDFS program coordinator from 3 load units per year (1 course reduction) to 6 load units per year (1 course reduction each semester). The HDFS program has a lot of work to do in the next several years and the program coordinator needs adequate time to develop proposals and guide them through the various institutional channels. There are a number of tasks (e.g., Student Handbook, assessment plan, curricular revisions and additions/deletions) that could be better addressed with sufficient administrative time.

Program Response: The Coordinator role and compensation are being examined at the college level.

9. Commit to four full-time, tenure track faculty, along with an effective cadre of adjuncts who can offer specialty expertise All faculty should be equally resourced and engaged in research and scholarly activities with students. For the sake of retention, equity and team collaboration and identity, it is recommended that all four full-time faculty be in tenure track positions.

Program Response: The Program concurs with the reviewer's reasoning and recommendation that all full-time faculty be tenure track. Since the submission of their report, one faculty member has left the program to pursue another position. The program is currently in the middle of a nationwide search for a faculty member to take on the position she vacated. They have also defined their need to nurture a pool of potential part-time faculty to allow greater flexibility in the program to cover sabbaticals and course releases and buy-outs.

10. Establish strong connections to professional organizations. Consider establishing a student affiliated council and socialize students into the profession through membership and conference attendance.

Program Response: Two of the current three faculty are active members of the National Council on Family Relations and one is active in the Family Science Association. More student involvement in these and other professional organizations is desirable.

11. The HDFS program must attend to immediate demands of the undergraduate program, however, within about five years, they could make a significant contribution to the master's in counseling program through the addition of a couples, marriage, and family therapy track. In light of current faculty expertise, this could be an exciting way for HDFS to break into and contribute to graduate education.

Program Response: The specific recommendation is no longer relevant given the departure of one faculty member who was the licensed marriage and family counselor. The Program believes it may likely contribute to other graduate programs of the college. One possibility is strengthening the gerontology certificate and minor programs. The hope is that these are included in the deliberation of the future directions of HDFS.

## **Summary and Conclusion:**

Having reviewed the self-study report submitted by the Human Development and Family Studies Program, the external reviewer's report and the program's response to the report, the subcommittee strongly recommends approval of the program.

The external reviewer was highly favorable in her summary of the program's strengths, noting 1) its contribution to the College and University as a whole, 2) the high quality of faculty teaching and advising, 3) the commitment of the program to high impact practices, and 4) the high level of student satisfaction and professional preparedness. In addition, the HDFS program has already taken steps to address most of the recommendations in this report and has given thought and attention to many of its own visionary goals. In sum, the subcommittee concurs with the reviewer's positive assessment of the department.

### **Overview of Interdisciplinary Studies**

The Master's Degree in Interdisciplinary Studies in Education (M. Ed.) was first introduced in the early 1970s. It was conceived by College of Education and Social Services (CESS) faculty in educational studies, administration, and counseling as a self-designed, interdisciplinary, professional degree for leaders in non-public school settings who thought of themselves as "educators," even though they worked in venues outside conventional public school sites. Students in the program are well-placed professionals in their careers; when they enter the Interdisciplinary Studies Program, they primarily want to deepen, enlarge, and enrich their already considerable stores of personal and professional knowledge and leadership competencies. Few, if any, are interested in a graduate program whose exclusive intention is to prepare them for licensure or professional certification. This program is truly unique in that it is tailored to meet the professional, intellectual, and personal needs of individuals.

The M. Ed. in Interdisciplinary Studies is a 36-credit, individually designed program, with a thesis option (often done as a Scholarly Personal Narrative (SPN)). At least 18 credits must be taken in CESS and must include two courses in Educational Foundations and one in SPN writing. Individual programs are designed using the student's Statement of Professional Purpose in consultation with the student. The application process requires a face-to-face interview between the Program Coordinator and the prospective student and a 2,000+ word writing sample. Based on the Program Coordinator's judgment regarding fit, personal and career expectations, and the writing sample, a successful candidate is encouraged to complete an application to the program. All students who apply are accepted to the program, provided they are admitted by the Graduate College. Each year the program interviews approximately 100 students and between 12 – 24 students are admitted each year.

One of the creators of the program, Dr. Robert J. Nash, has served as the Program Coordinator for a number of years. He is the sole full-time faculty member assigned to the program and as such serves as an advisor as well as teaching several elective courses. The Program has unlimited potential to expand, but with limited staffing the number of students has intentionally been kept to a manageable size—at the present time around 42 students. Recently, the Coordinator has been granted a part-time Assistantship, currently held by a doctoral student to help run administratively the program.

The purpose of this program is to help people understand a variety of perspectives on the world. Students learn to understand how to construct, apply, and present knowledge from a multi-perspectival approach. The program's focus on diversity is empathized throughout course work, with a focus on pluralistic definitions of diversity, including philosophical, inter-generational, and political diversity.

With the changing demands facing the human service professions today, professionals need to cultivate entirely new interdisciplinary skill sets, social justice understandings, ethics training, and a variety of creative approaches to institutional and societal problem-solving. The M. Ed. degree in Interdisciplinary Studies is a vital addition to more traditional professional training programs. More and more in-place social service professionals who already have undergraduate and/or graduate degrees in their specializations continue to pursue a less specialized, more professionally diverse and flexible type of graduate work.

### **Strengths and Weaknesses**

The Interdisciplinary Studies program is held in extremely high regard in higher education circles, and in human services throughout the state of Vermont and nationwide. This allows the Program to attract students of all ages and stages whose professional and academic qualifications are very high. Thus, the enrollment levels have continued to grow for over a quarter of a century.

Another strength of the program is the Program Coordinator, Dr. Robert J. Nash, who has dedicated almost 50 years of service to the program. Over the years he has continued to shape and reshape the program based on student interests and needs. He has constructed a model of graduate education for human service professionals called “meaning-making.” Human service education and meaning-making provide the philosophical and pedagogical scaffolding for the Interdisciplinary degree.

Overall, the program has a number of strengths. These strengths should be leveraged as the program continues to evolve:

- The program serves the state of Vermont. Many of the students come from Vermont and stay in Vermont upon degree completion. As a Land Grant, this program, which prepares advanced degree recipients to improve their professional practice is an asset.
- The intergenerational student body adds a richness to the classroom.
- The program design facilitates a platform to enhance interprofessional work, which better serves the communities in which the students and graduates work.
- The advising and instruction are student-centered and led by an ethic of care. This approach helps larger classes feel small and facilitates the development of authentic learning communities.
- The curriculum design and pedagogical approaches create a space for transformational learning and personal growth.
- Students have sense of belonging to program and to one another.
- The curriculum includes applied ethics, which should be embedded in all graduate and professional education.
- Students and graduates shared how their graduate experience and curricular content has been applied in their professional settings, demonstrating the value of the program to their personal and professional lives.
- The values of the Interdisciplinary Studies Program are consistent with Common Ground values of the University.

One identified weakness of the program is the lack of a succession plan if Dr. Nash would move to a part-time schedule or retire. Additionally, in several places it is mentioned that the program could grow in size if more faculty were available to interview, evaluate, and advise students.



A second weakness is the infancy of the program assessment. A plan was developed for the self-study and data has begun to be collected.

### **External Reviewers' Recommendations for Improvements and to Build on Strengths**

Several recommendations emerged that, if implemented, could better position the Interdisciplinary Studies Program for the future:

- Define interdisciplinarity, as it is understood by the program and the University. Consider how it fits within scholarly definitions of interdisciplinarity.
- Develop a succession plan for the program. Because the program has been developed and led by one faculty member with tremendous expertise and programmatic knowledge, when Dr. Nash retires, the program would need to re-establish itself. To do so, there is an immediate need to identify next generation of faculty leadership.
- To prepare for the transition when Dr. Nash retires, immediately bring another faculty member into the admission process so that they can learn from Dr. Nash about the values of the program. In addition, as a matter of course, multiple faculty should be involved in the admission process, and the process itself should be reviewed.
- Hire additional faculty for program. Consider hiring at least 2 core faculty, so that the level of high touch and student-centeredness can be maintained and workload can be shared. In addition, a faculty member with a doctoral degree in interdisciplinary studies would be ideal to serve as coordinator, as they would be well-positioned to continue to advocate for the value of interdisciplinarity.
- Program assessment needs more attention. First, expected program outcomes should also include developing and applying interdisciplinary knowledge and skills to solve real-world, contemporary problems of educators. Second, program and capstone rubrics warrant review so that they better reflect expected learning outcomes at the graduate level. Third, the alumnx survey should be reviewed in light of stated learning outcomes and should have a specific timeline for data collection and analysis and a process for using these data to make evidence-based improvements. Fourth, the program already has a number of data sources available that could be used for formative and summative assessment.
- Develop a program handbook to outline administrative details, policies, and expectations so that as program evolves there is internal consistency. Also, such a document can be helpful to guide students as they seek out courses outside of the college, as processes, faculty access, etc. may be quite different than within the program and college.
- Seek opportunities to share the workload for administrative details, paperwork, etc. If there are no existing departmental staff who can assist, perhaps an administrative graduate assistant could benefit from the experience to learn how to manage an academic program.
- If the program were to grow in future (with the support of additional faculty), a stronger website presence would be an asset. Most of the program marketing comes through word of mouth, particularly from alumnx who have benefitted from their UVM experience. After discovering the program, potential students learn much more from Dr. Nash and current students. Having more details specific to the expected outcomes and curriculum on the website, which also showcases the outstanding scholarship and student successes would enhance marketing efforts and broaden the reach of the program outside of Vermont.

- Change the timing of the comprehensive examination process. Current students and alumna shared that moving the comps process earlier in the program would be a benefit to them, as it would provide a more formative assessment. Because it is later in the program, the assessment is more summative in nature.

## **Summary and Conclusions**

The Interdisciplinary Studies program is held in extremely high regard in higher education circles, and in human services throughout the state of Vermont and nationwide. This allows the Program to attract students of all ages and stages whose professional and academic qualifications are very high.

The Interdisciplinary Studies Program is also highly valued by the Department, College, and Graduate College. The program is well-established, which provides a solid foundation upon which to advance Dr. Nash's legacy. UVM is positioned to be a leader in graduate education related to preparing educators to be stewards of interdisciplinary and interprofessional knowledge.

The Department and Dr. Nash had no corrections to the Reviewer's report and have read and approved this APR Subcommittee report. The APR Subcommittee attests that, to date, the APR process has been followed.



TO: Laura Almstead, Chair, Curricular Affairs Committee

FROM: Rory Waterman

DATE: January 2, 2019

RE: Late-add course update

Program: A 'withdrawal' course to serve students who drop below full-time.

Background: Anecdotal but consistent reports from academic advisors indicate anxiety from students pursuing an academic withdrawal. These concerns are greater among first-year students with concerns over the impact on financial aid with the reduced course load. Additionally, some students (e.g., international) cannot go below full-time under risk of losing their visa. These stressors, genuine or perceived, may be a factor in retention.

In the summer of 2018, the Provost's Office approved a pilot "late-add" course to address these students' needs. The late-add course needed to conform to the standard procedure of a UVM course including a full semester duration, starting at the beginning of classes, open to all students. The aim was students withdrawing from BCOR 11 & 12 and CHEM 31 & 32 students and going below full-time. This population represents a broad swath of UVM students. These students were allowed to be added up to two days after the withdrawal deadline for one or two credits to restore full-time status. Over the five years prior, there has been a significant population of students (~150/year) who withdrew or earned a D or F in BCOR 11 and CHEM 31, regardless of college of origin and had fulltime status lost or at risk. While, this population has been on the decline, this group is still large enough to have impact.

Three on-line courses (f18, s19, & f19) were developed with light delivery early in the semester with a ramp-up in activity after the withdrawal deadline. Student services staff from affected colleges, instructors of the courses, and relevant chairs and directors were informed in several venues about the course and target audience.

As part of the experiment, CAS agreed to report on this effort directly to the Curricular Affairs Committee.

Results: The results from this three-semester pilot are incomplete in the absence of retention data for the fall 2019 cohort. The participants are also skewed toward CAS students because CAS Student Services informed the late-add course instructor when each eligible student submitted a withdrawal from the relevant courses. Those students were then contacted directly. Finally, the total participants across three semesters was 31, proving too few data for statistical significance. Nevertheless, retention among participants was lower than UVM overall (80%).

Conclusions: The experiment was inconclusive. The data collected reflect a series of individual anecdotes, which vary from students on track to leave regardless of intervention to those who chose to remain despite significant misgivings. It is, of course, unclear the effect of the late-add course on these individuals other than self-report.

We are unchanged in the hypotheses that particular support for first-year withdrawals may impact retention and such support should be uniform at UVM.

**I. Proposal for the addition of a new concentration in ENSC: Environmental Health  
Dr. Don Ross (CALS), Dr. Charlotte Mehrtens (CAS) and Dr. Jennifer Pontius  
(RSENR)**

The Environmental Sciences (ENSC) major is a cross-college major with CALS, CAS and RSENR. This major, which explores the scientific basis to environmental issues, asks students to choose one of eight environmental science concentrations (listed below). We also have an option for a self-designed concentration. Due to increasing student interest and job growth in the area of environmental health we propose the addition of a new concentration in this interdisciplinary field.

**II. Rationale**

Increasing student interest in the field of environmental health is evidenced by a sharp increase in environmental health focused self-designed concentrations over the past several years, including six ENSC majors who have elected to pursue the self-designed track of environmental health in the fall, 2019 semester alone. Formalizing this concentration is also in response to the growing demand for scientists who understand the scientific background behind environmental health issues. The US Bureau of Labor Statistics cites significant growth in the field of environmental health, defined as professionals who *“Conduct research or perform investigation for the purpose of identifying, abating, or eliminating sources of pollutants or hazards that affect the health of the population.”* (<https://www.bls.gov/oes/current/oes192041.htm#nat>) Formalizing a concentration in Environmental Health also builds on the strengths of the university, with relevant courses offered across units.

ENSC Learning Outcomes (below) focus on training students to use their strong foundation in natural sciences and environmental processes to address complex environmental problems. Students are also required to gain a depth of understanding in a focused environmental science sub-discipline through their selected concentration. Historically there have been nine formal concentrations for students to select among, which have changed periodically to address pressing environmental issues, changes in the environmental job market, and student interest. The proposal for this new formal concentration reflects the increasing awareness of environmental health as a pressing issue, growth in employment opportunities and student interest.

ENSC Learning Outcomes

Successful ENSC graduates are able to:

- Apply** a range of scientific methodologies and disciplinary perspectives through scientific inquiry, modeling and real-world experience to address pressing environmental issues.
- Employ** a systems approach to analyze how human and ecological systems interact to influence processes in air, on land, and in water, including the transport and fate of nutrients and contaminants through the environment.
- Assess and articulate** the scientific evidence surrounding key environmental issues and evaluate ongoing efforts to mitigate environmental problems.
- Design** solutions to real world problems in collaboration with community partners.
- Deepen** their understanding of the concepts, processes, problems and solutions of their chosen concentration.

**III. N/A**

#### **IV. Current Curriculum**

This addition to the ENSC concentration options does not impact the required prerequisite courses (biology, chemistry, calculus, statistics and geology or plant and soil science) or the required environmental sciences ENSC core courses. In addition to this foundation, students currently select from among eight concentrations. (requirements listed below).

##### **The current list of ENSC concentrations includes:**

Agriculture and the Environment: *Impacts of agriculture on the environment and strategies for minimizing environmental degradation*

Conservation Biology and Biodiversity: *Endangered species and ecosystems, and strategies for conserving the diversity of Earth's life forms*

Ecological Design: *Use of ecological systems to improve environmental quality*

Environmental Analysis and Assessment: *Techniques for measuring environmental impacts and managing environmental data*

Environmental Biology: *Ecological and molecular analysis of endangered populations, phenomena affecting biological diversity, the interrelationship of organisms and their environments, and conservation genetics*

Environmental Geology: *Earth science, geomorphology, and the analysis of ground water*

Global Environmental and Climate Change: *Environmental processes in air, soil, and water*

Water Resources: *Global water supply and human impacts on surface waters*

#### **V. Units impacted**

Historical enrollment data over the past five years was examined in order to determine the seating capacity for a potential addition of 2-5 ENSC majors in any given semester. There appeared to be space available in all proposed courses.

The proposed ENSC concentration in environmental health examines health issues from a different, but complimentary perspective from the new “Health and Society” major and minor in CAS. Using a natural science lens, this formal concentration focuses on identifying environmental hazards (pollutants, toxins, spread of disease, etc.) and investigating their direct impact on human health. Only one course (NR 107) overlaps the two courses of study (<https://www.uvm.edu/cas/healthsociety/health-and-society-course-requirements>), which would allow an ENSC major to elect to minor in H&S (there is no minor in ENSC so the reverse – a major in H&S and minor in ENSC – is not an option).

#### **VI. Justification:**

The rationale for adding an Environmental Health concentration is based on an increase in the frequency of students requesting curriculum to build their knowledge base in this discipline. Because of its growing popularity, a list of possible courses was already created to guide self-design concentrations. This list serves as the basis for this proposal to formalize and provide consistency for an environmental health concentration within the environmental science major.

Formalizing this concentration is also in response to the growing demand for scientists who understand the scientific background behind environmental health issues. The US Bureau of Labor Statistics cites significant growth in the field of environmental health, defined as professionals who “*Conduct research*

*or perform investigation for the purpose of identifying, abating, or eliminating sources of pollutants or hazards that affect the health of the population.”* <https://www.bls.gov/oes/current/oes192041.htm#nat>  
The broad fields of “the environment” and “health” are areas of excellence at UVM and this concentration takes advantage of expertise across campus. There are multiple UVM faculty pursuing research in these areas (ex, Drs. Chris Landry and Giuseppe Petrucci in Chemistry, Dr. Nicolas Perdrial in Geology). This ENSC concentration fills the need for a natural science-based curriculum focusing on the intersection of human health and pressing environmental issues such as pollution, environmental toxins, and air and water quality.

## VII. Program of Study

**The proposed addition:** Fourteen credit hours selected from the following:

| <b>Required course:</b>  |                                  |                |   |
|--|----------------------------------|----------------|---|
| <b>class</b>   | <b>title</b>                     | <b>credits</b> | <b>prereq</b>   |
| NR 107   | Env & Health                     | 3              | soph standing   |
| <b>Select at least 11 additional credits from the following:</b> |                                  |                |   |
| <b>class</b>   | <b>title</b>                     | <b>credits</b> | <b>prereq</b>   |
| ANTH 288   | Anthro & human health            | 3              | ANTH 021 or 026 or 089; 173 or 174                            |
| BCOR 101   | Genetics                         | 3              | BCOR 011 & 012 (or BIOL 001 & 002) and CHEM 031 or 035 or 051 |
| BIOC 201   | Biochem                          | 3              | CHEM 026, 042, 048 142 and BCOR 012 (or 002), 102, 103        |
| BIOC 275   | Adv Biochem of Human Disease     | 3              |   |
| BIOL 261   | Neurobiol                        | 3              | BCOR 103 or NSCI 110  |
| BIOS 200   | Biostatistics                    | 3              | STATS 111, 141 or 143 or 211                                  |
| CHEM 142   | Organic chemistry                | 4              | CHEM 141 or 047 or 143  |
| HSCI 102   | Epidemics: Dynamics Inf Dis      | 3              |   |
| MMG 101  | Microbio & Inf Disease           | 3              | 1 semester of bio   |
| NFS 114  | Human Health in the Food Syst    | 3              | NFS 43 or NFS 73  |
| NR 143   | Intro to GIS                     | 3              | Junior standing   |
| NURS 200   | SU: Health and Sustainability    | 3              | junior standing (preference to Nursing students)              |
| PH 304   | Environmental Public Health      | 3              |   |
| PH 308   | Environmental Public Health<br>2 | 3              | PH 304  |

|           |  |   |  |
|-----------|--|---|--|
| PHRM 201  | Intro to Pharmacology                                  | 3 | intro courses in bio & organic chem      |
| PHRM 240  | Molecules & Medicine                                   | 3 | bio & organic chem                       |
| PHRM 272  | Toxicology   | 3 | organic chemistry                        |
| STAT 200  | QR: Med Biostat & Epidemiology                         | 3 | STAT 111, STAT 141, STAT 143 or STAT 211 |
| ENVS 195* | When the topic is Emerging Technologies & Human Health | 3 |  |

3 credit hours of related undergraduate research or internship may be applied towards the concentration.

*\* We believe that Degree Works can handle this configuration, but we do not object to removing this from the list of courses, as we recognize that special topics are not typically included.*

#### **VIII. Resources:**

Because it builds on courses already offered across the university, no additional resources are required for this concentration. We anticipate 10-15 ENSC majors may elect this path in each year and these individuals will move from within the major itself, from other concentrations.

#### **IX. N/A**

#### **X. Requested date for implementation:**

Fall, 2020. The courses comprising this ENSC concentration are offered on a regular basis throughout the academic year

#### **XI. Assessment**

Assessment of ENSC learning outcomes includes direct assessment of student performance and experience within their concentration (addressing ENSC Learning Outcome #5). This includes evaluation of the number of course credits applied towards concentrations, GPA within concentration courses, internship and research credits, and indirectly through student exit surveys and job placement data.

#### **XII. N/A**

#### **Abstract**

The environmental science program proposes the addition of a new concentration in environmental health in response to increasing student interest and growing demand for scientists with skills to identify, abate, or eliminate sources of environmental hazards that affect the health of the population. The broad fields of “the environment” and “health” are areas of excellence at UVM and this concentration takes advantage of expertise across campus. Because students select a minimum of 14 credits from courses regularly offered across campus (e.g. BCOR, CHEM, HSCI, NR, NURS, PH, PHRM), no additional resources will be required for this concentration. Based on current numbers of students creating a “self-designed” concentration in environmental health, we anticipate 10-15 ENSC majors may elect this path in each year.



To: Associate Dean Kate Finley Woodruff, UVM's College of Agriculture and Life Sciences

From: CALS Curriculum Committee

Date: December 11, 2019

**RE: New Concentration in Environmental Health (ENSC)**

Dear Associate Dean Kate Finley Woodruff:

The Environmental Sciences (ENSC) major is a cross-college major with CALS, CAS and RSEN. Faculty within these colleges have proposed that a new concentration in Environmental Health be added to the existing Environmental Sciences major.

The proposed concentration in Environmental Health was approved by CALS Curriculum Committee on December 3, 2019, and at the CALS Faculty meeting on September 25, 2019.

The proposal is ready to be submitted by the CALS Dean's Office to the Faculty Senate's Curricular Affairs Committee for review.

Sincerely,

Sarah Heiss and Farryl Bertman

Co-Chairs of the CALS Curriculum Committee





The University of Vermont

November 25, 2019

Faculty Senate  
University of Vermont  
335 Waterman, 85 S. Prospect St.  
Burlington, Vermont 05405

Dear Faculty Senate:

I am a faculty member in the Wildlife and Fisheries Biology Program and serve as Chair of the Curriculum Committee in the Rubenstein School of Environment and Natural Resources. I am writing to confirm that our Curriculum Committee reviewed the Environmental Sciences proposal to add a new concentration to their major: Environmental Health. The Committee provided feedback on the proposal and approved advancing it to the Rubenstein School faculty. The faculty discussed the proposal and voted to approve (November 19, 2019 faculty meeting).

Should you require any additional information about our review or the faculty vote, please do not hesitate to contact me by email at [jmurdoch@uvm.edu](mailto:jmurdoch@uvm.edu) or telephone at (802) 656-2912.

Sincerely,

James D. Murdoch, Ph.D.  
RSENr Curriculum Committee Chair

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Associate Professor & Chair  
Wildlife and Fisheries Biology Program

cc. Nancy Mathews, Rubenstein School Dean  
Nathan Sanders, Rubenstein School Associate Dean  
Jennifer Pontius, Rubenstein School Environmental Sciences Director

**From:** [Jennifer Dickinson](#)  
**To:** [Catherine Symans](#)  
**Subject:** Fw: new concentration in environmental science  
**Date:** Wednesday, December 18, 2019 8:55:28 AM

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Here's the last piece to add to the package!

J.

Jennifer Dickinson  
Associate Provost for Academic Affairs  
Associate Professor, Anthropology  
University of Vermont

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**From:** Charlotte Mehrstens  
**Sent:** Tuesday, December 17, 2019 8:59 PM  
**To:** Jennifer Dickinson  
**Subject:** Fwd: new concentration in environmental science

hi J-

here is a letter of support from HSci for the environmental health concentration in ENSC.  
should i send it to Nicole Phelps for forwarding on to CAC?

thanks,  
char

Begin forwarded message:

**From:** "Deming, Paula" <[paula.deming@med.uvm.edu](mailto:paula.deming@med.uvm.edu)>  
**Subject:** Re: new concentration in environmental science  
**Date:** December 17, 2019 at 3:20:06 PM EST  
**To:** "[Charlotte.Mehrtens@uvm.edu](mailto:Charlotte.Mehrtens@uvm.edu)" <[Charlotte.Mehrtens@uvm.edu](mailto:Charlotte.Mehrtens@uvm.edu)>  
**Cc:** "Fewell, Victoria L" <[victoria.fewell@med.uvm.edu](mailto:victoria.fewell@med.uvm.edu)>

Dear Charlotte,

Thank you for sharing this proposal with me. I have talked to our Health Sciences faculty. We are excited about opportunities in Environmental Health and would like to meet with you. I have copied Vicki Fewell who will be able to help with scheduling.

Best wishes,  
Paula

Paula Deming, PhD  
Associate Professor  
Endowed Professor of Health Sciences  
Chair, Biomedical and Health Sciences  
University of Vermont  
802-656-2506

---

**From:** Charlotte Mehrtens <[Charlotte.Mehrtens@uvm.edu](mailto:Charlotte.Mehrtens@uvm.edu)>

**Date:** Tuesday, December 17, 2019 at 9:16 AM

**To:** "Deming, Paula" <[paula.deming@med.uvm.edu](mailto:paula.deming@med.uvm.edu)>

**Subject:** new concentration in environmental science

Dear Dean Deming,

On behalf of the three college/school Program Directors for the crosss-college Environmental Science major I am contacting you to inform you that we have proposed a new concentration in Environmental Science in environmental health. Environmental Science majors in the Rubenstein School, College of Agriculture and Life Science and Arts and Sciences are required to take core courses in environmental science, 3 semesters of chemistry (through organic), a year of biology (BCOR sequence), 2 semester of calculus and statistics and then choose one of nine areas of concentration in fields such as Water Resources, Conservation Biology or Environmental Geology (a complete list can be found at: <http://www.uvm.edu/~ensc/?Page=discover/envsci.html&SM=discovermenu.html#focus> ). A concentration is between 11 and 14 credit hours (3-5 classes). One of the nine concentration areas is a self-designed concentration and over the past 5 years we've had 4 students elect to assemble a suite of courses in the subject of environmental health. We finally decided to formalize this topic into its own concentration area. The list of courses is attached.

The Curriculum Committees of all three schools/colleges have approved the new concentration. The Senate CAC would like to know that your program is not opposed to the new concentration and it will not adversely affect your class sizes. Using the other concentrations as a guideline, we do not anticipate more than 10 students will choose this concentration area, and given the large list of possible classes that a student can choose suggests that some of the classes in your unit might see only 1 new ENSC student in them. We do not believe that this new environmental science concentration will negatively impact your program. The environmental science majors are well grounded in the basic sciences and may bring new insights into your faculty's classes. We hope that you will support our new concentration area.

If you have any questions I and my colleagues would be happy to meet and discuss this further.

best,  
charlotte

Charlotte Mehrtens  
Emeritus Professor of Geology  
Environmental Science Program Director, College of Arts and Sciences  
[charlotte.mehrtens@uvm.edu](mailto:charlotte.mehrtens@uvm.edu)

Charlotte Mehrtens  
Emeritus Professor of Geology  
Environmental Science Program Director, College of Arts and Sciences  
[charlotte.mehrtens@uvm.edu](mailto:charlotte.mehrtens@uvm.edu)