MEMO

To: The UVM Faculty Senate
From: Curricular Affairs Committee of the Faculty Senate, Laura Almstead, Chair
Date: December 3, 2020
Re: Approval of a proposal for a new Community-Centered Design Major from the College of Agriculture and Life Sciences

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On December 3, 2020, the Curricular Affairs Committee approved the actions recommended in the following memo.

The Curricular Affairs Committee approved a proposal for a new Community-Centered Design Major from the Department of Community Development & Applied Economics (CDAE) in the College of Agriculture and Life Sciences (CALS). If approved by the Faculty Senate and Board of Trustees, the anticipated start date is fall 2021.

Program Description
Drawing primarily on current course offerings as well as existing faculty expertise, the proposed new Community-Centered Design major offers students the ability learn about creative collaboration and design processes by which we understand complex issues and develop, implement, and share new ideas. Focused on sustainable and responsible solutions for real-world communities, the proposed new major places equal emphasis on theory, critical thinking, reflection, creativity, empathy, and working effectively with others, including community members and professionals in different fields. In addition to learning about general design theories, skills, and contexts, students tailor their educational experience by choosing a concentration that allows students to focus on the application of the design process in a specific context. Through the proposed curriculum, students will learn to be human-centered designers and multi-stage problem solvers in applied and relational contexts. The specific learning objectives provided in the proposal are below.

- Develop human-centric, design-based skills necessary to solving complex social, economic, and environmental problems.
- Capacity to generate ideas, think creatively and critically, and ultimately be a multi-stage problem solver.
- Been exposed to diverse and complex applications of design, including sustainability, human-centered design, socially conscious entrepreneurship, and the design and development of impactful products, services, and communities.
- Demonstrated an ability to communicate clearly and effectively through multi-modal applications.
- Acquired skills and qualifications that are relevant to obtaining employment or pursuing further education in the growing design sector.

Rationale and Justification

As problem solving becomes increasingly complex, it is unlikely that any one area of expertise will have all the answers. Rather than having any single area of technical expertise, community-centered design professionals are experts on the process of organizing teams, listening to end-users, conceptualizing a problem, and working together to create and implement new sustainable and responsible solutions using a systems thinking approach. Through the proposed Community-Centered Design major curriculum, students gain the knowledge and skills required to connect people, ideas, and actions across traditional disciplinary boundaries.

With pressing issues of environmental fragility and social inequity, there will be substantial opportunities to apply a community-centered design problem-solving framework to effect meaningful change at local, national, and global levels. An analysis conducted by UVM's Enrollment Management indicated the national labor market projects a three to six percent growth in design-related fields. Students who complete the proposed Community-Centered Design major will be equipped to enter a range of local and regional entities such as small business, nonprofit organizations, and government institutions. Looking locally, students will be prepared to enter Vermont's environmental, agricultural, social service, and public policy sectors as effective and well-rounded employees.

Evidence for Demand and Anticipated Enrollment

As of summer 2019, six land-grant universities in the US have undergraduate offerings in design-related programs. Undergraduate majors are offered by Iowa State University (BA in Interdisciplinary Design), Oregon State University (BS in Design and Innovation Management), Cornell University (BS in Design and Environmental Analysis) and West Virginia University (BS in Design Studies). Ohio State University and Purdue University offer minors in Design. Several of these programs utilize design in the areas of the arts, architecture, or business. Few include the full depth and breadth that the proposed new Community-Centered Design major will provide students. The analysis conducted by UVM's Enrollment Management indicated that, in New England, bachelor's programs in design are lacking as student interest in the topic increases. Though traditional graphic design programs exist in New England, the transdisciplinary nature of the proposed new major would have a unique niche in the market.

The proposers indicated that institutional research data was available for three of the six design programs offered by other institutions listed above. All three institutions experienced enrollment growth between years one and two of program inception: Iowa State (190% increase), Oregon State University (2879% increase), West Virginia University (54% increase). The two design-related minors offered by CDAE have also experienced a general rise in enrollment – Applied Design and Green Building & Community Design. The proposers suggest this may indicate a growing interest community-focused design, and a Community-Centered Design major will provide students an avenue to explore and evaluate this discipline.

Based on national trends and enrollment in CDAE's existing programs, the proposers anticipate the newly proposed Community-Centered Design major will enroll approximately 30 majors in two years and 40 in five years. While the proposers indicate it is not possible to predict how many students will choose a Community-Centered Design major among those who are currently minors in CDAE or

enrolled in other CDAE majors, they anticipate that a portion of current Public Communication majors will opt to switch to the new major.

Relationship to Existing Programs and Anticipated Impact on Existing Programs
Currently, there are no other UVM majors with the focus and goals of the proposed Community-Centered Design major. The proposed major and courses complement Plant and Soil Science (PSS) offerings in Landscape Horticulture, which includes two design courses: PSS 137 Landscape Design Fundamentals and PSS 238 Ecological Landscape Design. The Chair of the Plant and Soil Science Department provided a letter of support, and a few PSS courses are included in the concentration offerings. The newly proposed major and courses also complement some offerings from the Rubenstein School of Environment and Natural Resources (RSENR), such as NR 288 Ecological Design & Living Technologies. The Dean of RSENR, Nancy Matthews, was given the opportunity to weigh in on the proposal and responded with a positive email, but did not follow up with a letter.

The Department of Studio Art offers courses with design in the title. Design offerings in ARTS include graphic design and studio art courses that include visual design components. CDAE's courses and approach to design are distinct from design courses offered in the ARTS program. Unlike courses in the humanities that are more focused on cultural dimensions of creative expression or performance, CDAE's Community-Centered Design courses draw on theoretical and empirically supported human-centered processes needed to identify complex social problems facing communities in order to develop, test, and share responsible, and sustainable solutions. Furthermore, the design courses offered within CDAE's proposed major focus on community centered design, meaning new content that meets the unique needs of a client, audience, or complex problem, or creates new social conditions to stimulate change.

The proposed curriculum currently includes a few courses from other departments/units. Students in the proposed Community-Centered Design major will enroll in these courses to the extent that capacity exists. The proposers also expressed an interest in and intent to develop collaborations with other interested units within and outside of CALS once the major is established.

Curriculum
Completion of the proposed Community-Centered Design major requires a minimum of 61 credits. Only three new courses are required to launch the proposed major – CDAE 040, CDAE 060, and CDAE 160. Complete, detailed syllabi were submitted with the proposals. Courses are divided CDAE core courses (required for all majors offered by CDAE), Community-Centered Design core courses, and concentration requirements. All students will select a concentration and further focus their education by choosing a track within their concentration. The proposed curriculum includes two concentrations, Applied Design and Relational Design. As noted previously, the proposers expressed an intention to develop collaborations with other departments/programs. The tables below summarize the course requirements; the primary goals of each component are included following the table.

Core Courses

CDAE Core Courses (19 credits)		
CDAE 002	World Food, Population & Development	3 credits
CDAE 024	Fund of Public Communication	3 credits
CDAE 061	Principles of Community Development	3 credits
CDAE 102	Sustainable Community Development	3 credits
CDAE 127	Consumer, Markets & Public Policy	3 credits
CDAE 250	Applied Research Methods	4 credits
Community-Centered Design Core Courses (15 credits)		
CDAE 040*	Small Group Communication	3 credits
CDAE 060*	Design Innovation I	3 credits
CDAE 160*	Design Innovation II	3 credits
Advisor-Approved 200-Level Design Course		3 credits
Capstone Experience (from options below) - CDAE 296 Internship - CDAE 298 Undergraduate Research - CDAE 291 Independent Study (Design for American Leadership) - CDAE 200-level project-based study trip - CDAE 200-level service learning course		3 credits
Concentration (9 courses; minimum of 27 credits)		
Applied Design or *Relational Design* (see tables below for course options)		

Concentration Options

Applied Design Concentration	
Track 1: Communication Design	*Track 2: Green Design*
CDAE 015 Visual Communication CDAE 018 Communication Design I CDAE 116 Communication Design II CDAE 016 Digital Illustration CDAE 111 Design: Narrative Media & Video CDAE 112 Social Media: Theory 2 Practice CDAE 114 Doc. Film for Social Change CDAE 164 Design + Cultural Entrprnrshp CDAE 168 SU: Marketing: Com Entrepreneurs CDAE 178 Socially Responsible Marketing CDAE 196/296 Internship CDAE 231 Applied Computer Graphics CDAE 276 Community Design Studio CDAE 295 Special Topics-Publication Design CDAE 2XX Project-based Study Trip CS 008 Intro to Website Development CS 142 Advanced Website Development CS 148 Database Design for the Web	CDAE 001 Drafting & Design in SketchUp CDAE 006 Energy Alternatives CDAE 101 Drafting & Design: SketchUp II CDAE 131 Appl Des Studio: Lt Frame Bldg CDAE 186 Sustain Dev Sm Island States CDAE 170 Green Building Energy Systems CDAE 237 Economics of Sustainability CDAE 273 Project Development & Planning CDAE 276 Community Design Studio CDAE 278 Applied Community Planning CDAE 196/296 Internship CDAE 2XX Project-based Study Trip PSS 010 Home & Garden Horticulture PSS 123 Garden Flowers PSS 125 Woody Landscape Plants PSS 137 Landscape Design Fundamentals PSS 156 Permaculture PSS 157 Permaculture Design PSS 238 Ecological Landscape Design GEOG 081 Geospatial Cncpt&Visualization NR 143 Spatial Analysis or GEOG 287 Spatial Analysis

Relational Design Concentration	
Track 1: Community Resilience, Advocacy & Social Change	*Track 2: Project Leadership, Management & Planning*
CDAE 113 Activist Journalism CDAE 114 Doc. Film for Social Change CDAE 123 Media-Policy-Action CDAE 141 Crisis Communication CDAE 157 Consumer Law Policy CDAE 159 Consumer Assistance Program CDAE 178 Socially Responsible Marketing CDAE 196/296 Internship CDAE 205 Rural Comm in Modern Society CDAE 259 Consumer Assistance Program II CDAE 260 Smart Resilient Communities CDAE 271 Local Community Initiatives CDAE 276 Community Design Studio CDAE 2XX Project-based Study Trip SPCH 031 Argument & Advocacy SPCH 071 Fundamentals of Debate SPCH 072 Citizen Advocacy & Debate	CDAE 004 US Food Social Equity & Dev CDAE 119 Event Planning for Athletics CDAE 140 Leadership in Practice CDAE 166 Intro to Comm Entrepreneurship CDAE 171 Community& Econ Transformation CDAE 186 Sustain Dev Sm Island States CDAE 196/296 Internship CDAE 218 Community Org & Development CDAE 237 Economics of Sustainability CDAE 266 Dec Making: Comm Entrepreneurs CDAE 267 Strat Plan: Comm Entrepreneurs CDAE 271 Local Community Initiatives CDAE 272 Int'l Economic Development CDAE 273 Project Development & Planning CDAE 276 Community Design Studio CDAE 278 Applied Community Planning CDAE 286 Adv Sust Dev Sm Island States CDAE 2XX Project-based Study Trip PA 206 Intro Cont Public Affairs

*New course; submitted in Courseleaf
**Students must fulfill any prerequisites required by the courses they choose for their concentration.

All students enrolled in a major offered through CDAE complete the CDAE core courses. These courses are designed to teach students about theories, skills, and contexts for complex issues facing local and global communities, including climate change, social inequity, organizing, and sustainable community development. They also introduce students to CDAE's central theories, values, and practices, including community engagement, effective communication, transdisciplinary research, and applied economics.

The Community-Centered Design core requirements teach students about the theories, mindsets, and practices associated with creative problem-solving, as well as historical and contemporary applications of design. Drawing on theory, case studies, and real-world experiences, students engage with and apply design thinking as a framework for community-centered design. Design thinking is a creative problem-solving methodology that enables interdisciplinary teams to tackle complex, open-ended challenges across many different domains. It is inherently project-based and encourages an experimental/iterative approach to solving open-ended problems. As such, it helps students develop resilience, and strengthen their ability to give and receive constructive feedback.

Through their concentration requirements, students focus on the application of the design process in specific context areas that matter most to the student. Rather than training students to become context-specific experts, the goal is to help students develop a basic understanding, respect for, and ability to operate within a given context. The Applied Design concentration emphasizes design processes needed to create tangible output, built or material products, and simulations, interfaces or experiences that address the needs of the user. The Relational Design concentration emphasizes design processes related to understanding and interacting with stakeholders, and creating within the complex relationships among people, across communities, and within systems.

Advising

Each student in the proposed Community-Centered Design major will be assigned a faculty advisor from CDAE in their first semester. Once students have chosen a concentration, they will transition to an advisor with expertise related to the student's focus area. It is expected that one or two faculty members from the CDAE department will serve as Community-Centered Design advisors initially; additional faculty will be assigned as necessary.

A Community-Centered Design Curriculum Subcommittee will be created to provide clarity and oversight on major and concentration requirements. Advisors will be provided with a set list of Community-Centered Design core requirements. Because advisors will be assigned according to the students' choice of concentration, additional prerequisites will be based on requirements to fulfill concentration focus requirements.

Assessment Plan

The department's assessment plan runs on a three-year cycle and includes both direct and indirect assessment components. Direct assessment will include review of sample capstone projects and their application to outcomes and summary report of findings presented to faculty. Indirect assessment will include surveys with seniors and town meetings with students, both of which will also be presented to faculty. CDAE faculty will discuss reports and decide whether any immediate action needs to be taken, and if so, what. Appropriate actions may range from an immediate change to a course or internal departmental policy, to tasking the curriculum committee with proposing a plan for curricular change. The proposed major will also be reviewed with other CDAE majors as part of UVM's Academic Program Review.

Staffing Plan, Resource Requirements, and Budget

Inauguration of the proposed Community-Centered Design major will only require minor advertising costs, which will come from the CDAE department's budget. Current University lab, research, and field experience space will be utilized. The Morrill Hall Computer Lab was just renovated, and an adjacent "flex lab" space added. The investment includes a 30-seat lab, with new desktop computers, hosting necessary software for to support design work, including multi-media, videography, communication design, and audio production and presentation. The three new courses will be absorbed by current faculty. Assistant Professor Steven Kostell and Associate Professor Jane Petrillo will be assigned to the two new design core classes. Associate Professor Heiss and Lecturer James McGuffy will rotate teaching Small Group Communication. As noted above, the proposers anticipate a significant number of Public Communication majors to elect a Community-Centered Design major, reducing demand in other courses within CDAE.

Evidence of Support

Letters were provided by the individuals below. In addition, the proposal was sent to Nancy Matthews, Dean of the Rubenstein School of Environment & Natural Resources (RSENR) and Scott Thomas, Dean of the College of Education & Social Services (CESS) and Interim Dean of the College of Nursing

& Health Sciences (CNHS). No reply was received from Dean Thomas. Dean Matthews responded with a brief, positive email that indicated the proposal "looks exciting" and did not include any concerns.

- Jean Harvey, Interim Dean of CALS
- Bill Falls, Dean of the College of Arts and Sciences
- Linda Schadler, Dean of the College of Engineering and Mathematical Sciences
- Sanjay Sharma, Dean of the Grossman School of Business
- V. Ernesto Méndez, Interim Chair of the Plant and Soil Science Department

Summary

As local and global issues become increasingly complex, it is important to teach students how to be thinkers and doers who possess skills in collaborative problem-solving and design thinking, in addition to any given area of technical or scholarly expertise. Current undergraduate program offerings in New England are too limited in access and scope to fully address the recent interest in design thinking application. The proposed Community-Centered Design major curriculum thoughtfully structured to fill this gap, and is built primarily on existing courses and faculty expertise. Students who complete the proposed Community-Centered Design major will be equipped with the knowledge and problem-solving skills necessary to be successful in a variety of fields including small business, nonprofit organizations, and government institutions as well as Vermont's environmental, agricultural, social service, and public policy sectors.