

Sustainability Specialization Proposal

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Submitted by: Terry Link, Office of Campus Sustainability, Geoff Habron, Fisheries and Wildlife and Sociology, and Laurie Thorp, Residential Initiative on the Study of the Environment

Background

The idea of sustainability has evolved from the pursuit of ‘sustainable development’. The most visible roots of sustainable development emerge from the 1987 Brundtland Report, “Our Common Future” which summarized the outcome of the World Commission on Environment and Development formed in 1983. The commission sought to address growing concern "about the accelerating deterioration of the human environment and natural resources and the consequences of that deterioration for economic and social development." Sustainability addresses wholeness and balance among a) social equity, b) economic vitality, and c) ecological integrity in order to “*meet the needs of the present without compromising the ability of future generations to meet their own needs*” (World Commission on Environment and Development 1987).

In the two decades since the report the idea of sustainability has evolved, deepened and engaged civil society, the business sector, and government from local to global levels. The emergence of employment web sites dedicated to jobs in sustainability mark the rapid growth of career opportunities. Programs of study around sustainability continue to emerge with European universities initiating efforts to transcend disciplinary focus and develop programs and degrees that address this more holistic approach of study. Throughout the U.S. a number of colleges and universities offer programs and degrees in sustainability (University of Michigan, Colorado State, Aquinas College, Duke, Portland State University, University of Massachusetts, University of Minnesota, University of New Mexico, University of Texas etc.). In fact, Arizona State opens the first ‘school’ of sustainability in the fall of 2007 providing undergraduate, masters, and doctorate degrees in sustainability. Additionally MSU holds a membership in the Association for the Advancement of Sustainability in Higher Education (AASHE), a membership-based association of colleges and universities working to advance sustainability in higher education in the US and Canada. AASHE sponsors the Sustainability Across the Curriculum Leadership Workshop series. The growth in sustainability across campuses led to the development of the Higher Education Associations Sustainability Consortium (HEASC). Interest in sustainability also led to development of a peer-reviewed publication, the *International Journal of Sustainability in Higher Education*.

In response to requests from MSU students who seek to gain more visible sustainability skills that also appear on their transcripts, we propose the development of a specialization in sustainability open to all undergraduates at Michigan State University. A team of faculty and students has been working for more than a year to conceptualize and develop a program that will provide graduates of the specialization with needed competencies for success. This specialization offers a unique competency-driven approach rather than relying solely on credits or courses. Therefore the specialization requires that students provide evidence of their proficiency in

specified competencies through a learning portfolio built from curricular, co-curricular, and extra-curricular experiences.

Sustainability requires wholeness and balance among a) social equity, b) economic vitality, c) ecological integrity and d) aesthetic understanding in order to “*meet the needs of the present without compromising the ability of future generations to meet their own needs*” (World Commission on Environment and Development 1987). We believe that in order to achieve these outcomes students should achieve proficiency in 1) critical thinking, 2) systems thinking, 3) personal awareness and development (knowledge of self) and 4) civic engagement, as well as the above mentioned social, economic, ecological, and aesthetic dimensions. In order to optimize learning, students will engage in direct experiences that expose them to the social, economic, environmental and civic processes involved in sustainability by making sense of it in practical and personal ways. As such, the many co-curricular activities that MSU students seek out during their tenure will be practice fields for developing these competencies.

Aligning with this model of education including extra-curricular and inter/intra-personal development we would ideally like to see the sustainability specialization develop into a Living-Learning community. As a residential initiative we envision a union of academics and operations whereby students study the place where they live. This “hidden curriculum” of sustainability at our institution is ripe for undergraduate research projects (many currently being funded by the VP for Finance and Operations) and community engagement. We also see great promise in housing sustainability specialization students in a shared residence hall, possibly with other connected specializations in a hub model. We would encourage living-learning environments beyond the typical freshman-sophomore range through shared living in off-campus housing that might be facilitated by the program.

During the past 200 years, humans have come to be a major altering force on the life support systems of the planet. This requires graduates to be able, as educator Parker Palmer writes, “To think the world together”. The complexity that engulfs us requires an integrative and purposeful look at the whole in the company of many, making it imperative for graduates to master the classical disciplines such as ethics, economics, ecology or civics, in addition to the transdisciplinary attributes of sustainability. Graduates will be expected to demonstrate an ability to use a systems approach to connect the many facets of complex issues, use critical thinking to weigh and evaluate choices, and connect personal choices with community and global consequences.

The Learning Program

The program requires students in the specialization to demonstrate advanced knowledge in one of the four personal development competencies – Self-Authorship, Systems Thinking, Civic Engagement, Critical Thinking (see Competencies section for details) and basic knowledge in the other three personal development competencies. In addition, students must demonstrate knowledge in the four content areas – Ecological Integrity, Social Equity, Economic Vitality, and Aesthetic Understanding with added strength associated with their primary thematic focus (the student’s major). Our model illustrates that students can acquire desired competencies and content knowledge through both curricular and extra-curricular avenues. We recognize that creating a (credit-only) specialization as transdisciplinary as sustainability could create a

labyrinth too difficult for a student to schedule and complete. Our model acknowledges and rewards purposeful and reflective learning based upon a combination of disciplinary curriculum and extracurricular experiences. The evaluation of the competencies will rely upon student work demonstrated through both curricular and extracurricular performance AND portfolio presentation.

- Students must first complete UGS 100, Intro to Sustainability (offered Spring Semester), 3-4 credits. With this course they will learn the fundamental principles/theories of sustainability, systems thinking, group process skills, and how to document and assess their learning using a portfolio
- Students will select a specialization advisor from a list of affiliated faculty. They will be required to meet with this advisor at the beginning of every semester to plan competency learning into their semester and review their portfolio progress from the previous semester.
- Students will be required to complete one semester of UGS 390, Applications in Sustainability (offered each semester), 1-2 cr. This is a semester long outreach/engagement/service learning experience approved by their advisor. The student must be prepared to spend at least 6 hours per week engaged in a project associated with their sustainability track.
- Students will be required to present their portfolio to a review panel (3 sustainability advisors) prior to graduation. This review process will be scheduled much like a graduate committee defense. Students who fail this review may request an Extension (ET) to complete requirements in conjunction with University grading policy.
- Require 12 credits associated with 4 core competencies and content areas (IAH, ISS, ISB, ISP count). Requiring a set of credits that are flexible AND requiring a portfolio provides accountability. These other 12 credits could be used for other specializations as well. While we do not require a “double” specialization, we certainly align the sustainability specialization to foster double specializations.