Senate of the Urbana-Champaign Campus

PROPOSAL TITLE: Sustainability General Education Requirement

AUTHOR: Senator Jessica Nicholson

CONTRIBUTORS: Sustainability Gen Ed Working Group, iSEE, iCap Education SWATeam

COMMITTEE SPONSOR: (Ed Pol, Campus Operations, or Senate Executive Committee)

BRIEF DESCRIPTION

Ensuring the well-being of our present and future generations is a large, complex and interdependent challenge that requires sustainability-based technological, social, and economic changes. It is more important than ever for our society to implement sustainable practices that preserve our environmental resources, distribute them equitably, and combat increasingly evident issues such as excessive pollution, resource overuse, and destructive corporate practices. Rapid environmental changes due to these problems have caused subsequent issues, most notably climate change, and other detrimental effects to environmental and human well-being in many communities. These effects are becoming increasingly evident and require work within all industries and circles of influence to change. This means that students in all fields of study at our university can benefit from sustainability education to contribute to the improvement of our environmental state. The Institute for Sustainability, Energy, and Environment (ISEE) lists over 500 courses across 50+ departments related to sustainability, energy conservation and environmentalism, demonstrating that the University already has many of the resources needed to provide increased sustainability education. Several schools, including Dickinson College and the University of Vermont, a public land-grant research university similar to University of Illinois, have implemented a university-wide requirement of a course related to sustainability. The University of Illinois at Urbana-Champaign, however, currently has no university-wide formal sustainability course requirement. The need for increased sustainable practices and sustainable changes in industry are more relevant now than ever. We must prioritize these needs, and one of the best ways to do so is to educate students who will go on to make significant changes within their industries and circles of influence. General Education requirements can change to accommodate issues that arise in the changing social, economic and ecological

environment. The Sustainability Gen-Ed requirement described in this proposal supports a vision to apply conceptual classroom learning along with personal experiences to provide an understanding of the impact of individual and industry-based actions on complex, real-world issues in the realm of sustainability.

PROPOSED MAIN MOTION

Let it be resolved that the University require students in all degree programs to take a 3-credit-hour elective that explores questions and solutions to sustainability challenges and opportunities with relation to students' respective fields of study. This 3 credit-hour requirement will be a subset of the Natural Sciences and Technology general education category. Of the 6 credit hours students must take in this category, students will choose between courses in physical sciences, life sciences, technology, and this **sustainability requirement**. For this new sustainability section, Course Explorer will list recommended courses based on ISEE's designated course lists that are deemed appropriate to fulfill the Sustainability general education requirement. The General Education Board will work to approve courses to fulfill this requirement, using iSEE's curated course list as an initial set of courses under consideration.

RATIONALE FOR A SUSTAINABILITY GENERAL EDUCATION REQUIREMENT

The Education Objectives section (pages 124 to 139) of the Illinois Climate Action Plan outlines the need for more formal sustainability education, stating that "The multidisciplinary principles of sustainability should permeate higher education curricula. All fields — from engineering to behavioral sciences, economics to the fine arts — can be brought into the 21st century through synthesis with environmental topics." This section goes on to share three distinct, desired sustainability outcomes as developed by the Illinois Faculty Coalition. These learning outcomes are sustainability in day-to-day life, knowledge and skills, and sustainability as a personal vision. Each desired outcome encompasses many multidisciplinary, sustainability-related principles; educational topics that are essential to equipping students with the skills needed to reach a better climate state and a more equitable society. Our sustainability general education requirement would ensure that all students benefit from the many courses offered by our university that teach sustainability topics meant to achieve these outcomes.

Many universities have already implemented a similar requirement that requires some level of sustainability-focused education for all undergraduate students. These schools are listed under Appendix _, along with the results of a brief interview with some schools on the impact of their requirement. The purpose of this conversation was to gain insight from other schools on the

benefits and costs they encountered during the implementation of their requirement. Using the results of these interviews, we can predict what to expect when our university transitions to a Sustainability General Education requirement. Some of the most common takeaways include that

Before this resolution passed through the Illinois Student Government, we conducted a random-sample student survey to gauge student awareness of environmental issues, level of education on environmental topics, and opinions on whether or not a Sustainability Gen Ed Requirement would have a positive impact. 1 corresponds to "Strongly Disagree" while 4 corresponds to "Strongly Agree." Our survey gained 464 Responses and figures of the results are shown in Appendix D. We found that many students feel they are aware of the critical state of climate change, yet a good portion feel uneducated on how they can make an environmentally sustainable impact within their field of study. 43.1% of students are unaware of the 500+ courses relating to sustainability at our university. Most importantly, however, 91.2% of students who responded either agree or strongly agree that a Sustainability Gen Ed Requirement would have a positive impact.

ICAP EDUCATION OBJECTIVES AND OTHER SUSTAINABILITY GOALS

The courses that fulfill our requirement will focus on one or more of the three outcomes listed by the iCap and shown below.

SUSTAINABILITY IN DAY-TO-DAY LIFE

- 1. Students will learn ways in which natural resources are used to produce what they consume, such as the food they eat, the water they drink, and the energy they use.
- Students will understand ways in which their lifestyle and well-being are interconnected with those of diverse producers and consumers around the world, including impoverished communities.

SUSTAINABILITY KNOWLEDGE AND SKILLS

- 3. Students will learn core concepts of ecology and develop skills relevant to their chosen field to provide a basis for environmental sustainability.
- 4. Students will learn to think holistically about sustainability using perspectives across multiple disciplines.

- 5. Students will understand relationships between global environmental and economic trends and their impact on diverse cultures and communities.
- 6. Students will develop an integrated vision for sustainability that embraces their personal lives, professions, local communities, and the world-at-large.

COURSES TO FULFILL REQUIREMENT AND TOPICS COVERED

iSEE has created lists of courses offered by UIUC that focus on sustainability, energy and environment for multiple semesters. All course lists can be found on iSEE's page below. iSEE's Spring 2021 list shows the 177 of these courses that were offered for this semester, and the second is a comprehensive list of all 548 courses offered by the university that focus on sustainability, energy, and environment. The courses in this list that do not require prerequisites would fulfill our proposed requirement, so they are offered as a starting point for the Gen Ed Board to create a complete list of courses to fulfill this requirement.

iSEE's Course List Page:

https://sustainability.illinois.edu/education/student-resources-courses/

Courses offered Spring 2021: 177

https://drive.google.com/file/d/1wWC-Fav3ssTTOZEPTBfc6Vjs2CfU7Dg_/view?usp=sharing

Total Courses offered since 2017: 548

https://drive.google.com/file/d/1SB0qPkxWRDHDzY1rmJc0xgzTE6LuYhPk/view?usp=sharing

CAPACITY, BUDGET AND STAFF IMPLICATIONS

A: Current Capacity, Estimated Seat Demand, and Additional Seats Needed (In Progress)

B: Budgetary and Staff Implications and Needs

COLLEGE IMPLEMENTATION NEEDS

We, as a working group, invited each College Dean to meet with us about college-specific needs and considerations regarding implementation of this requirement. Some Deans mentioned concerns and considerations that must be taken into account for their college in order to add the

requirement to their curriculum. Based on our discussions, here are some of the listed steps that must be taken per college upon passage of the proposal in order to best apply the requirement in each college. These are especially relevant if this Sustainability Gen-Ed were to become a stand-alone requirement.

- Transfer students
- Sustainability Minor students
- (In progress)

FUTURE OF THE REQUIREMENT

While this proposal is a significant addition to the options students have regarding sustainability education, it only adds an elective subset to the Natural Sciences and Technology general education category. This ensures that the requirement replaces no existing general education requirements nor adds additional gen-ed hours for students to complete. Instead, students will choose 2 courses from the 3 subsets within Natural Sciences and Technology in order to fulfill the 6 credit-hour requirement; Physical Sciences, Life Sciences, and **Sustainability via this proposal**. We anticipate that this proposal will significantly increase enrollment in the many sustainability courses offered by our campus as shown by the report above. It will also encourage creation of new courses that cover critical sustainability topics.

Implementation of this proposal will ensure that we develop a strong foundation of course offerings in sustainability education that provide students with ample opportunities to take such courses. Our ideal outcome would be to build on this proposal by finding a way to eventually transition this gen-ed option to a stand-alone sustainability requirement. This proposal will have a significant impact, but it can also be a necessary step towards this stand-alone requirement due to the course structure we build by implementing this current proposal.

APPENDICES

Appendix A: Procedural Background

This Proposal was initially passed as a resolution through the Third Assembly of the Illinois Student Government.

Header Details:

RES.03.35 OCTOBER 30, 2019 SENATE OF THE ILLINOIS STUDENT GOVERNMENT

3RD ASSEMBLY

SPONSOR(S): Senator Eleena Ahmed, Senator James Kosmopoulos, Senator Deniz Namik, Senator Nathan Poulosky, Senator John Compton, Senator Arnoldo Ayala, Senator Alissa Xiao, Senator Sudarshana Rao, Senator Alec Navickis

ENDORSEMENT(S): Outreach Coordinator Tyeese Braslavsky, Chair Sihah Reza

Passage:

Passed through committee to Senate floor 17-0-0 Recommendation to pass 17-0-0 **12/4/2019** Passed on floor 26-1-1

Appendix B: List of Contributors
Sustainability General Education Working Group iSEE
Illinois Student Government
iCap Education SWAT Team
(In Progress)

Appendix C: Endorsements and Letters of Support

I. ISG and Academic Senate Assembly Sponsors and Endorsements

This resolution was passed through the Illinois Student Government during the third assembly, so below are additional sponsors and endorsements from members of the Academic Senate and the 4th and 5th assemblies of ISG.

4th Assembly:

SPONSOR(S): Senator Creen Ahmad, Senator Tyeese Braslavsky, Senator Tyler Swanson, Senator Suda Rao, Senator Enoma Egiebor, Senator Vada Gregory, Senator Nicole Arnold, Senator Bruce Rosenstock, Senator Charles Fogelman ENDORSEMENT(S): Chair of Community and Governmental Affairs Bryce Tune

5th Assembly:

SPONSOR(S): Senator Alexandra Gergova, Senator Jack Reicherts, Senator Alexandra Nevarez (In Progress)

ENDORSEMENT(S):

II. Endorsement Letter with Signatures from Faculty and RSOs

We, signed below, fully endorse this resolution to create a Sustainability General Education Requirement for all incoming students. Given the increasing importance of sustainability for the well-being of our society, it is critical that all students at the University become more educated on topics relating to sustainability. All of us signed faculty and registered student organizations recognize the immense value of sustainability education and the long-term benefit it enables students to create. This Sustainability General Education resolution will allow students to learn sustainable practices that they can apply to their careers, their personal lives, and their circles of influence. Based on this benefit, we strongly encourage the Academic Senate to pass this resolution so that the General Education Board may implement the requirement.

Signed,

University Faculty

Name	Position and Department	
Gillen Wood	Professor, Environmental Humanities and English	
Robert McKim	Professor Emeritus, Religion	
Leon Liebenberg	Teaching Associate Professor, MechSE	
Clara Bosak-Schroeder	Assistant Professor, History	
Bullard, Clark W	Professor Emeritus, Engineering	
Brian Deal	Professor, Architecture	
Bill Stewart	Professor, Recreation, Sport and Tourism	
Ann Witmer	Lecturer, Agricultural and Biological Engineering	
Lisa Lucero	Professor, Anthropology	
Zsuzsa Gille	Professor, Sociology	
Mary-Pat McGuire	Associate Professor, Landscape Architecture	
Don Wuebbles	Professor, Atmospheric Sciences	
Steve Witt	Director, Global Studies	
Ashlynn Stillwell	Associate Professor, CEE	
Sean Kennedy	Assistant Professor, Urban Planning	
Roderick Wilson	Assistant Professor, History	

John Barnard	Assistant Professor, Comparative Literature	
Richard Brazee	Associate Professor, NRES	
Sotiria Koloutsou-Vakakis	Lecturer and Research Scientist, CEE	
Murugesu Sivapalan	Professor, CEE	
Jennifer Fraterrigo	Associate Professor, NRES	
Jim Miller	Professor, NRES	
Carena Van Riper	Assistant Professor, NRES	
Elif Ertekin	Associate Professor, MechSE	
Brian Dill	Associate Professor, Sociology	
Scott Willenbrock	Professor, Physics	
May Berenbaum	Professor, Biology	

Organizations, Committees, Institutes, and Registered Student Organizations

Organization Name		
Illinois Institute for Sustainability, Energy, and Environment (iSEE)		
Center for Global Studies Advisory Committee		
Students for Environmental Concerns UIUC (SECS)		
ActGreen UIUC		
Green Greeks		
Illinois Enactus		
Illini Rotaract		
Red Bison		

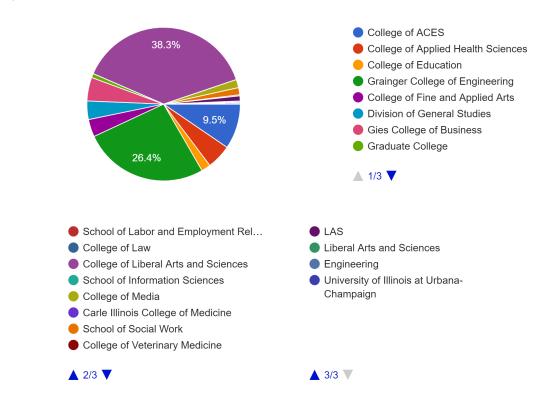
Appendix D: Universities with Similar Requirements

University	Requirement	Link
University of Vermont	Sustainability	https://www.uvm.edu/generaleducatio n/sustainability
Dickinson College		
Purdue University		
The State University of New York	Natural Sciences - a gen-ed subject area of which students pick 7/10	https://www.suny.edu/attend/academic s/genedreq/
University of Wisconsin Green-Bay	Sustainability Perspective category, 3-4 credit hours	http://catalog.uwgb.edu/undergraduate/planning/general-education/#text
Northland College	Environmental curriculum, students must take 5 classes from 3 categories	http://catalog.northland.edu/preview_p rogram.php?catoid=20&poid=1453
University of Connecticut	Environmental Literacy	https://sustainability.uconn.edu/student -resources/
San Francisco State University	Environmental Sustainability	https://ueap.sfsu.edu/bacc-reqs/ge-slos/es
Appalachian State University		http://bulletin.appstate.edu/preview_pr ogram.php?catoid=20&poid=8708
ESF	Natural Sciences	https://www.esf.edu/provost/gened.asp
Governor's State University		https://www.govst.edu/uploadedFiles/ Future Students/Audience Sub Landi ng/GE%20Fact%20Sheet-updated-201 516.pdf
Northern Vermont University	an in-depth course in climate change, social justice, or sustainability	https://www.northernvermont.edu/nvu- online/about-nvu-online/general-educa tion-requirements-online-students
Western Michigan University		http://catalog.wmich.edu/content.php? catoid=36&navoid=1669

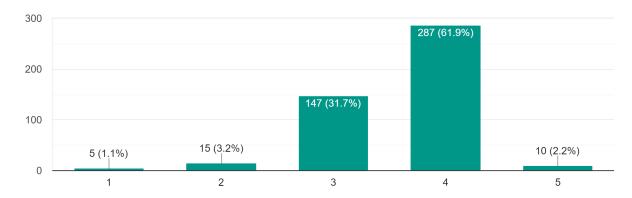
Appendix E: Student Survey #1 Results

College of Residence

462 responses

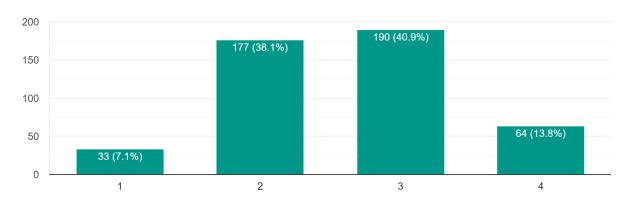


You believe that you are aware of the critical environmental state caused by climate change. 464 responses



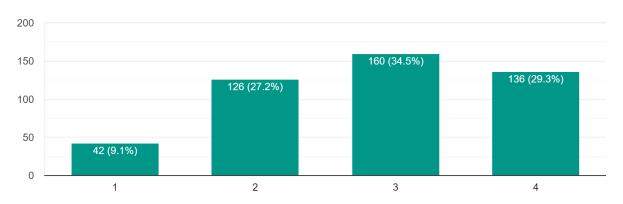
You believe that other students are aware of the critical environmental state caused by climate change.

464 responses

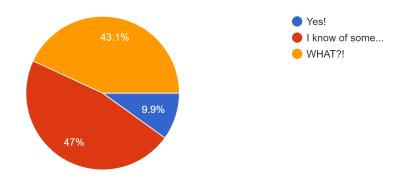


You feel educated on how you can make an environmentally sustainable impact within your field of study.

464 responses



Are you aware of the 500+ courses related to sustainability on our campus? 464 responses



You feel that a Gen-Ed requirement for a Sustainability Course (without increasing the number of Gen Ed credit hours) would have a positive impact.

464 responses

