

Sustainability & Environmental Stewardship Minor

Overview

The Sustainability & Environmental Stewardship Minor is designed to encourage undergraduate students from any discipline to explore the three pillars of sustainability (economic, environmental and social) beyond course work in their major. The Sustainability Minor will be administered by the Liberal Studies Program at MSU. Liberal Studies works across departments and across the university. The Liberal Studies degree values a broad, integrated and interdisciplinary approach to higher education. Interdisciplinary studies foster connections among disciplines and draw upon multiple areas of knowledge. Students choose one of three program options: Environmental Studies, Global and Multicultural, or Quaternity (on campus or online degree completion).

With support from Liberal Studies, MSU is uniquely positioned to prepare students to understand and address sustainability challenges. An interdisciplinary undergraduate Sustainability Minor will enhance the value of undergraduate degrees by identifying students who have taken initiative to learn and experience the integration of economic, social and environmental sustainability within their disciplines. The Sustainability Minor (on campus or online option) is supported by the Institute on Ecosystems (IoE), Campus Sustainability Advisory Council (CSAC) and the Office of Sustainability.

Description of the program

The Sustainability & Environmental Stewardship Minor is designed to encourage undergraduate students from any discipline to explore the three pillars of sustainability (economic, environmental and social) beyond course work in their major. As a result, the minor includes courses from the College of Agriculture, the College of Engineering, the College of Education, Health and Human Development, the College of Letters and Science and the Honors College. The Minor is administered by Liberal Studies and complements their existing Liberal Studies, Environmental Studies degree Option.

The Minor requires a minimum of 21 credits, with at least 9 credits unique to the minor. The student's major advisor must certify that the coursework is complete. Course substitutions are allowed by approval of Liberal Studies and the student's major advisor.

Students are expected to create a diverse program, with the guidance of their faculty advisor, using courses from all three areas. No more than 12 credits may be used to simultaneously fulfill the Sustainability Minor requirements, University Core and the student's major. At least 9 credits must be unique to the minor. The student's minor advisor must certify that the 12-credit restriction is not exceeded.

Required Courses:

Must take:

LS 103	Gateway to Sustainability Studies	3
LS 411	Sustainable Cities	3

Pick 1 out of the following 4 courses:

ARCH 231CS	Issues in Sustainability	3
ECHM 205CS	Energy and Sustainability	3
HSTR 205CS	The World Environment	3
SFBS 146	Introduction to Sustainable Food and Bioenergy Systems	3

Restricted Electives. Take 12 credits, at least 1 course from each area.

Economic		
AGBE 315	Ag in a Global Context	3
AGBE 353	Co-operative Business Principles and Practice	3
BMGT 410	Sustainable Business Practices	3
ECNS 132	Econ & the Environment	3
ECNS 317	Economic Development	3
ECNS 332	Econ of Natural Resources	3
EELE 455	Alternative Energy Power Gen	3
SFBS 429	Small Business and Entrepreneurship in Food and Health	3
Environmental		
AGSC 341	Field Crop Production	3
ANSC 222	Livestock in Sustain Systems	3
ARCH 431	Sustainability in Architecture	3
BIOB 160	Principles of Living Systems	4
BIOB 170IN	Principles of Biological Diversity	4
BIOE 416	Alpine Ecology	3
BIOE 421	Yellowstone Wildlife Ecology	3
BIOE 427RN	Research in Freshwater Ecology	3
BIOE 428	Freshwater Ecology	3
BIOE 440R	Conservation Biology	3
BIOE 445	Macrosystems Ecology: Linking Plants, Animals, and Ecosystems Across Scales	3
BIOE 455	Plant Ecology	3
ECHM 405	Sustainable Energy	3
EENV 340	Principles of Environmental Engineering	3
EENV 434	Groundwater Supply/Remediation	3
EENV 440	Water Chemistry for Envr Engr	3
EENV 441	Natural Treatment Systems	3
EENV 443	Air Pollution Control	3
EENV 445	Hazardous Waste Treatment	3
ENSC 110	Land Resources and Environmental Sciences	3
ENSC 245IN	Soils	3
ENSC 407	Environmental Risk Assessment	3
ENSC 410R	Biodiversity Survey and Monitoring Methods	3
ENSC 443	Weed Ecology and Management	3
ENSC 444	Watershed Hydrology	3
ENSC 448	Stream Restoration Ecology	3
ENSC 460	Soil Remediation	3
ENSC 461	Restoration Ecology	3
ENSC 465	Environmental Biophysics	3
ENSC 468	Ecosystem Biogeochem and Global Change	3
ERTH 101IN	Earth System Sciences	4
ERTH 212RN	Yellowstone: Scientific Lab	4
ERTH 303	Weather and Climate	3
GPHY 326	Geography of Energy Resources	3
GPHY 329	Environment and Society	3
GPHY 402	Water and Society	3
HORT 105	Introduction to Horticulture	3
HORT 345	Market Gardening	3
WILD 325	Wildlife-Livestock Nutrition	3
WILD 355	Wildlife and Livestock Habitat Restoration	3

WILD 438	Wildlife Habitat Ecology	3
Social		
AGBE 337	Agricultural Law	3
AGSC 465R	Health, Agriculture, Poverty	4
ECIV 401	Civil Eng Practice and Ethics	1
EGEN 125CS	Tech, Innovation, and Society	3
EGEN 310R	Multidisciplinary Engineering Design	3
EIND 300	Engineering Management & Ethics	3
EIND 413	Ergonomics & Human Factors Engineering	3
EMEC 465	Bio-inspired Engineering	3
HSTA 468	History of Yellowstone	3
HSTA 470	American Environmental History	3
HSTA 482	Technology and the Fate of Humanity	3
NASX 415	Native Food Systems	3
NRSM 101	Natural Resource Conservation	3
NRSM 421	Holistic Thought/Mgmt	4
PHL 322	Philosophy & Environmntl Ethics	3
PSCI 362	Natural Resource Policy	3
PSCI 436	Politics of Food & Hunger	3
SFBS 296	Practicum: Towne's Harvest	3
SFBS 451R	Sustainable Food Systems	3
TE 250CS	Technology and Society	3

***At least 9 credits overall MUST be upper division, 300 & 400 level**