

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:

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

Pick 1 out of the following 4 courses:

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| 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 | | |
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| 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 |

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| 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**