SUSTAINABILITY, ENERGY & ENVIRONMENT

Courses

SEE 250. Introduction to Sustainability, Energy & the Environment. 3 Hours
A multidisciplinary introduction to Sustainability, Energy and the Environment (SEE) and to the SEE minor. Emphasis on learning how to view complex issues from different disciplinary points of view, developing reading and critical thinking skills about current issues in sustainability, gaining an awareness of different ethical positions and how these influence the quest for solutions, and learning how scientific and sociopolitical processes work to investigate and address sustainability issues.

SEE 301. Global Change & Earth Systems. 3 Hours
Multidisciplinary introduction to the science of the earth system. Focus is on the interrelatedness of geological, biological, chemical and physical processes, and on methods used to understand both the past natural history and potential future scenarios for change in the earth system.

SEE 303. Constructions of Place. 3 Hours
Multidisciplinary, arts-based course that explores the complex connections between our sense of place and the physical and environmental conditions that influence landscapes and communities.

SEE 390. Special Topics in Sustainability, Energy and the Environment. 1-3 Hours
Examination of a specific problem or topic relating to sustainability, energy and the environment at the regional, national, or global scale including particular topics relating to global sustainability policy and sustainable development goals, human rights and climate change and access to modern energy systems. Students will analyze the topic from multiple perspectives possibly including artistic, technical, scientific, social, economic, ethical, and faith-based. Students will apply interdisciplinary knowledge to characterize systems, resources, and stakeholders relevant to the particular problem or topic and discuss solutions to establish more resilient and sustainable systems. Prerequisite(s): SEE 250.

SEE 401. Sustainability Research I. 3 Hours
Interdisciplinary exploration of the issues of sustainability. The scientific, moral, spiritual, social, political, historical, ethical and economic dimensions of sustainability will be explored. Exploration of the foundations of ethical theory and their application to environmental issues. Students will pursue a research project with the primary focus on sustainability on campus. Prerequisite(s): PHL 103 or ASI 112 or ASI 120; completion of General Education Natural Science or CAP Natural Science Requirements; junior or senior standing.

SEE 402. Sustainability Research II. 3 Hours
Interdisciplinary exploration of the issues of sustainability as they affect the Dayton community. Course will also explore political philosophy and the ethical foundations of public policy. Students will choose an in-depth community-based research project. CAPSTONE COURSE for the BS in Sustainability, Energy and Environment, or BA in Sustainability Studies. Prerequisite(s): PHL 103 or ASI 120; SEE 250; SEE 280 and Junior or Senior standing.

SEE 477. Sustainability, Energy & Environment Honors Thesis Project. 3 Hours
First of two courses leading to the selection, design, investigation, and completion of an independent, original Honors Thesis project under the guidance of a faculty research advisor. Restricted to students in the University Honors Program with permission of the program director and department chairperson. Students pursuing an interdisciplinary thesis topic may register for three semester hours each in two separate disciplines in consultation with department chairpersons. Prerequisite(s): Approval of University Honors Program.

SEE 478. Sustainability, Energy & Environment Honors Thesis Project. 3 Hours
Second of two courses leading to the selection, design, investigation, and completion of an independent, original Honors Thesis project under the guidance of a faculty research advisor. Restricted to students in the University Honors Program with permission of the program director and department chairperson. Students pursuing an interdisciplinary thesis topic may register for three semester hours each in two separate disciplines in consultation with department chairpersons. Prerequisite(s): Approved 477; approval of University Honors Program.

SEE 490. Experiential Study in Sustainability, Energy and the Environment. 1-3 Hours
Experiential study of a topic in Sustainability, Energy and the Environment. Students will study a topic of their choosing in consultation with instructor or faculty advisor. Topics will be problem-driven and focused on developing sustainable solutions at the local, national, or global scale. Prerequisite(s): SEE 250.

SEE 401. Sustainability Research I. 3 Hours
Interdisciplinary exploration of the issues of sustainability. The scientific, moral, spiritual, social, political, historical, ethical and economic dimensions of sustainability will be explored. Exploration of the foundations of ethical theory and their application to environmental issues. Students will pursue a research project with the primary focus on sustainability on campus. Prerequisite(s): PHL 103 or ASI 112 or ASI 120; completion of General Education Natural Science or CAP Natural Science Requirements; junior or senior standing.

SEE 402. Sustainability Research II. 3 Hours
Interdisciplinary exploration of the issues of sustainability as they affect the Dayton community. Course will also explore political philosophy and the ethical foundations of public policy. Students will choose an in-depth community-based research project. CAPSTONE COURSE for the BS in Sustainability, Energy and Environment, or BA in Sustainability Studies. Prerequisite(s): PHL 103 or ASI 120; SEE 250; SEE 280 and Junior or Senior standing.