

ENVIRONMENTAL PRODUCT OF DESIGN (EPOD)

Courses

EPOD 2004 (3) History and Theory of Environmental Products of Design

Explores the chronology of product design and how it has shaped our engagement with the everyday context. The course will explore impactful precedents and the design thoughts behind them. Surveys advances in production and material technologies that have propelled key product designs from regional exclusivity to global access. Investigate product design's influence on cultural adaptations. Class discussions will give space to think critically about product design intent and perceived successes.

Requisites: Restricted to majors in Environmental Design (ARCH, EPOD, LAND, PLAN) and open option (ENVD).

Recommended: Corequisite EPOD 2100.

Grading Basis: Letter Grade

EPOD 2100 (6) Studio 1: Foundations of Environmental Products of Design

Project-based studio in which students focus on the design of products at a human scale with an emphasis on visualization, both graphic and 3D modeling, digital fabrication file production, and translation to physical form to design and build solutions for real users.

Requisites: Requires prerequisite course of ENVD 1120 (minimum grade C-). Restricted to majors in Environmental Design (ARCH, EPOD, LAND, PLAN) and open option (ENVD).

Recommended: Corequisite EPOD 2004.

Grading Basis: Letter Grade

EPOD 3100 (6) Studio 2: Intermediate Environmental Products of Design

Introduces students to emerging technologies and techniques in digital fabrication and design through a project-based studio environment. Students will be asked to develop design solutions that benefit humanity through material investigations, cradle-to-cradle methodology, and more advanced methods in design optimization.

Repeatable: Repeatable for up to 12.00 total credit hours.

Requisites: Requires prerequisite course of EPOD 2100 (minimum grade C-). Restricted to majors in Environmental Design (ARCH, EPOD, LAND, PLAN) and open option (ENVD).

Recommended: Corequisite EPOD 3101.

Grading Basis: Letter Grade

EPOD 3101 (3) Theory and Ethics in Design

Engages with key theories and provocative ideas at the intersection of design, sustainability, and ethics. Students will explore contemporary challenges designers face, critically analyzing readings and discussions to develop their own principled foundations. The course emphasizes the ethical impact of design outcomes on society, the environment, and individuals. By the end, students will articulate personal values and ethical guidelines, gaining tools to address complex moral issues in their future design work.

Requisites: Restricted to majors in Environmental Design (ARCH, EPOD, LAND, PLAN) and open option (ENVD).

Recommended: Corequisite EPOD 3100.

Grading Basis: Letter Grade

EPOD 3105 (3) Human Centered Design and Entrepreneurship Strategies

Exposes students to innovation and entrepreneurial practices around the topic of Environmental Products of Design through human/user centered design strategies.

Requisites: Restricted to majors in Environmental Design (ARCH, EPOD, LAND, PLAN) and open option (ENVD).

Grading Basis: Letter Grade

EPOD 4100 (6) Studio 3: Capstone in Environmental Products of Design

Draws on design research processes such as design thinking, human-centered design, and speculative/critical design to create a comprehensive proposal. In this capstone experience, students identify a specific need, opportunity, or problem and then develop a design solution that addresses the challenge. This proposal is brought to life through the creation of a full-scale physical prototype.

Requisites: Requires prerequisite courses of EPOD 3100 and 4115 (minimum grade C-). Restricted to majors in Environmental Design (ARCH, EPOD, LAND, PLAN) and open option (ENVD).

Grading Basis: Letter Grade

EPOD 4115 (3) Materials and Manufacturing Processes in Product Design

Explores the creation of products through an environmental lens as they relate to Material Science, Manufacturing Methods and Production Systems. Students have the opportunity to investigate innovative alternative materials and industry production approaches that improve upon pre-existing materials and paradigms; including sustainable materials, advanced production techniques at a variety of scales and a thorough understanding of the environmental cost incurred in the creation of products.

Requisites: Restricted to majors in Environmental Design (ARCH, EPOD, LAND, PLAN) and open option (ENVD) students with 30-180 credits.

Grading Basis: Letter Grade