

# DESIGN + ENVIRONMENTAL ANALYSIS

## College of Human Ecology

### Graduate Study in Design + Environmental Analysis

## Master of Science in HUMAN ENVIRONMENT RELATIONS

### Two-Year Graduate Program

## CONCENTRATION: Sustainable Design Studies

There are many definitions for “sustainable” as it pertains to design. In the Department of Design and Environmental Analysis, “sustainable” is understood as going beyond maintaining the things we have, to retrieving the things we have lost. Through this broader, more challenging strategy for design, environmental damage related to the construction, operation, and decommissioning of the built environment not only can be lessened, it can be reversed. Design can be used as a healing enterprise, as a way to make things better. In today’s world of global environmental degradation, this new understanding of design has become an imperative.

This concentration is for students who are concerned about the roles they will play as professionals in degrading the biophysical world. The prime objective of this concentration is to develop a new worldview founded on a skeptical, critical approach to reasoning, a deep sensitivity for things living, and a broad understanding of the historical and cultural contexts of the human/nature relationship. The secondary objectives are to develop a deeper knowledge of environmental issues, construct conceptual frameworks for analysis of these issues and to demonstrate how ecological knowledge can be applied to design-related enterprises through research-based thesis projects.

More specifically, the MS SDS concentration is for students interested in developing a deeper understanding of the social and physical science aspects of sustainable design. This could include studying green building systems and practices, sustainable planning and management of facilities, or ecologically beneficial behaviors regarding the built environment. Thesis topics have ranged widely and have included investigating the effects of post-secondary education on professionals involved with sustainability, comparing the energy performance of a “green Olympic speed skating oval with a conventional Olympic facility, and examining factors influencing green building practices in the northeastern US.

## CAREERS

Design professions are undergoing significant internal changes in response to the multitude of environmental crises that the planet is facing. Whether the pressures for “green design” are coming from the marketplace, legislation, or a sense of corporate responsibility, these professions are moving to become part of the solution rather than remain part of the problem. Graduate study in Sustainable Design Studies puts students on the leading edge of ecological design practice through a research-based graduate degree, giving them a significant advantage in firms moving towards greater environmental responsibility. Students develop an ecological literacy that blends critical thinking with environmental ethics, ecology with economics, and technology with policy. Through this concentration, students are prepared to become effective agents for change. Graduates of this program have found diverse positions in such organizations as Leo Daly Architects, DEGW Strategic Design Consultants, the US Green Building Council and Greenstar Australia.

## M.S. REQUIREMENTS/SUGGESTED COURSEWORK

The concentration in Sustainable Design Studies requires students to complete a foundation of core courses in ecological literacy with regards to design and construction, critical reasoning, environmental ethics and environmental history. Elective courses are selected in consultation with the graduate thesis committee and could be used to develop a minor area of study as well. Suggested courses vary considerably and students are encouraged to identify courses in addition to those listed that will enhance their focus of study.

**A. Required Core DEA Field Courses:**

DEA 6100	Studies in Design Thinking	3 credits
DEA 6200	Studies in Human-Environment Relations	3 credits
DEA 7100	DEA Graduate Pro Seminar (1 credit / semester x 4 semesters)	4 credits

**B. Required Foundational Courses for Concentration:**

DEA 5540	Workplace Strategy Studio	4 credits
DEA 6250	Human Dimensions of Sustainable Building <sup>i</sup>	3 credits
DEA 6500	Problem-Seeking through Programming	3 credits
ILRLR 6300	Advocacy and Debate <sup>ii</sup>	3 credits

**C. Research Methods:**

DEA 6560	Research Methods in Social Sciences	4 credits
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**D. Statistics: ONE (1) 3-4 credit (5000-level or higher) course**

Various	Statistics <sup>iii</sup>	3-4 credits
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**E. DEA Breadth: Choose ONE (1) of the following courses**

DEA 6520	The Ambient Environment	3 credits
DEA 6610	Environment and Health	3 credits
DEA 6650	Poverty, Children and the Environment	3 credits

**F. Thesis Courses:**

DEA 8990	Master's Thesis <sup>iv</sup>	8-12 credits
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**G. Minor Courses:**

Various	Courses for minor varies: typically 2 or 3, 3-or 4-credit courses	6-12 credits
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Summary of Curriculum	Number of Courses	Course Credits
<b>A. Required DEA Field courses</b>	3 <sup>v</sup>	10
<b>B. Required Foundational Courses</b>	4	13
<b>C. Research Methods</b>	1	4
<b>D. Statistics</b>	1	3-4
<b>E. DEA Breadth</b>	1	3
<b>F. Thesis Courses <sup>iv</sup></b>	1-2	8-12
<b>G. Minor Field Courses</b>	3	6-12
<b>Total Courses 14-15</b>		<b>Total Course Credits: 47-58</b>

<sup>i</sup> Suggested Alternative – PADM 5418: Strategic Stakeholder Engagement<sup>ii</sup> New 6000-level course to come on-line Fall 2020. Take new grad course, rather than ILRLR 3300 "Argumentation + Debate"<sup>iii</sup> e.g: BTRY 6010, BTRY 7180, ILRST 5100, ILRST 6100, PSYCH 6750, HD 6750.<sup>iv</sup> Thesis credits determined at the discretion of thesis committee; the number of courses and credits listed merely indicate typical range.<sup>v</sup> Includes DEA 7100 as 1 course (but is required to be taken 4 times (1 credit each))

**NOTE:** A minimum grade of B- is required for courses taken within the major. If a grade lower than a B- is received on a course taken within the major, the student will be required to retake the course.

Course offerings may change year to year. Consult the online Courses of Study for current offering