# DESIGN FOR SUSTAINABILITY (SUST)

**SUST 304 Theories and Methods in Sustainability (5 Credits)**
Current methods and theories of sustainability are explored through a series of presentations, discussions and short projects. This course capitalizes on holistic design processes and project planning with the goal of closed system developments, while concentrating on the four pillars of sustainability (Ecology, Economy, Equality, Education).
**Attributes:** Natural Sciences

**SUST 308 Foundation of Sustainable Materials (5 Credits)**
Students work in a highly interdisciplinary environment, researching and analyzing sustainable materials as they pertain to the different disciplines. Through a series of lectures and exemplary projects, students gain an understanding of the implications of the use of materials and the effects of their supply chains on the environment. Transportation and local production are key components in solving current issues in manufacturing standards.
**Prerequisite(s):** DRAW 100 or FOUN 111.
**Attributes:** Studio Elective Requirement

**SUST 384 Design for Sustainability (5 Credits)**
The concept of "green design" is introduced and integrated into design projects. Specific techniques, guidelines and examples are used to emphasize the practical aspects of green design. Valuable case studies are included. While considering the profitability of the product, students are required to design in a way that benefits the global environment.
**Prerequisite(s):** SUST 304 or SUST 290.
**Attributes:** Studio Elective Requirement

**SUST 439 Biomimicry: Collaborative, Nature-inspired Innovation (5 Credits)**
Borrowing from nature's genius is essential for creative professionals in all design fields, as the possibilities for applying natural strategies to innovative design solutions are endless. Given the importance of creating sustainable living in the 21st century, designers practicing biomimicry thinking enhance their career opportunities by mastering the biomimicry framework. Students may obtain the Biology to Design Certificate from Biomimicry 3.8 as part of this course.
**Prerequisite(s):** INDS 210; FASH 216; FASH 315; FIBR 276; ARCH 301; FURN 302; JEWL 304; MTJW 304; SERV 311; SCPT 320; IDUS 321 or GRDS 348.
**Attributes:** Studio Elective Requirement

**SUST 704 Applied Theories in Sustainability (5 Credits)**
Using critical inquiry to define an epistemological framework, students combine traditional systems and social theories with sustainable practices—such as biomimicry, life cycle assessment and economic responsibility—to create ethical solutions.

**SUST 708 Principles of Sustainable Materials (5 Credits)**
Students evaluate the appropriate use of re-usable and biodegradable materials when designing for a closed loop system. Working in an interdisciplinary environment, students analyze the effect sustainable materials, stewardship and logistics have on the environment, economy and current standards of living.

**SUST 713 Innovation in Sustainable Branding (5 Credits)**
In an interdisciplinary environment, students collaborate to create and apply sustainable methodologies to innovative products, environments or services that transform current user needs and behaviors into meaningful sustainable solutions. The concept of sustainability is integrated into the students' design and development processes with the specific intent to drive consumer behavior change through strategic business practices. Innovative sustainability strategies are leveraged to enhance brand equity and business performance.
**Attributes:** Studio Elective Requirement

**SUST 718 Visualizing Sustainable Stories (5 Credits)**
Exciting content coming soon!
**Prerequisite(s):** SUST 704.
**Attributes:** Studio Elective Requirement

**SUST 720 Designing in Deep Time (5 Credits)**
Students are exposed to super forecasting, anti-fragility, world making, and transformative scenario planning, exploring methodologies that reshape traditional approaches to complex social challenges to address extended time frames. Engaging with speculative design, design fiction, and indigenous ways of being and knowing, students navigate creative landscapes where paradigm-shifting ideation stimulates innovation. In co-creation workshops and rapid prototyping sessions, students participate in shaping worldviews and design narratives to address sustainability challenges. Exploring the similarities and differences in various cultural and scientific perspectives on the nature of time, students gain a nuanced understanding of temporal experiences.
**Prerequisite(s):** SUST 704 and SUST 713.
**Attributes:** Studio Elective Requirement

**SUST 738 Adaptive Strategies in Social Innovation (5 Credits)**
Exciting content coming soon!
**Prerequisite(s):** DMGT 732.
**Attributes:** Studio Elective Requirement

**SUST 739 Biomimicry Methodology (5 Credits)**
Borrowing from natures genius is becoming an essential tool for creative professionals in all design fields. Keeping in mind the importance of creating sustainable living in the 21st century, students investigate biomimicry thinking, frameworks and existing case studies. Students may obtain the Biology to Design Certificate as part of this course.
**Attributes:** Studio Elective Requirement

**SUST 743 Sustainable Living Laboratory (5 Credits)**
This course focuses on design's influence on people's daily life, and identifies precise interventions that direct human habits toward more sustainable behavior. Students apply research in behavioral economics and cognitive psychology to help individuals alter long-term habits to enhance their positive impacts on the environment and society. Students develop design solutions that create viable sustainable behaviors and life practices.
**Prerequisite(s):** (SDES 711 or IDUS 711) and SUST 704.
**Attributes:** Studio Elective Requirement

**SUST 748 Design for Sustainability M.A. Final Project (5 Credits)**
In this final studio, M.A. students apply all previously acquired skills to develop a truly sustainable product, building, environment or service concept that addresses all aspects of the development process. Students integrate a closed loop system and demonstrate the understanding of the interdependence of the four E's (Ecology, Economy, Equality and Education). With the collaboration of the supervising professor, students must demonstrate command of project planning, development and realization for the topic of their choice.
**Prerequisite(s):** SUST 713 and minimum score of 5 in 'Graduate Prerequisite Test'.
**Attributes:** Studio Elective Requirement

**SUST 754 Beyond Sustainability: Ethical Interventions for Social Innovation (5 Credits)**
Students learn to uncover and address root causes of complex challenges to create design interventions that dramatically enhance short-term and long-term conditions in society. With a focus on aligning various perspectives, needs and aspirations of different stakeholder groups, this class helps students create solutions that are mutually beneficial to all stakeholders and to society as a whole.
**Prerequisite(s):** DMGT 732.
**Attributes:** Studio Elective Requirement

**SUST 779F Graduate Field Internship (5 Credits)**
Students in this course undertake a field assignment under the supervision of a faculty member.

**SUST 779T Graduate Teaching Internship (5 Credits)**
Students in this course undertake a teaching assignment under the supervision of a faculty member.

**SUST 791 Design for Sustainability M.F.A. Thesis I: Planning and Research (5 Credits)**
Students conduct comprehensive research to define a ground-breaking sustainable solution to a real problem as outlined in their personal proposal. They create a solid theoretical foundation for a unique contribution to the field that improves quality of life, maximizes economic returns and minimizes consumption of resources. This becomes the framework for the generation of their final design solutions.
**Prerequisite(s):** SUST 713 and minimum score of 6 in 'Graduate Prerequisite Test'.
**Attributes:** Studio Elective Requirement

**SUST 792 Design for Sustainability M.F.A. Thesis II: Design Execution (5 Credits)**
Based on the opportunities identified in the comprehensive research conducted in the previous thesis course, students continue the process by developing concepts that expands the profession's body of knowledge. Students demonstrate leadership skills for the creation and management of effective sustainable design strategies. Students produce a comprehensive written thesis document in conjunction with a conclusive presentation that demonstrates mastery in integrating cross-disciplinary, collaborative, multi-stakeholder and multicultural strategies and methods to generate innovative approaches to solving complex sustainability problems.
**Prerequisite(s):** SUST 791.
**Attributes:** Studio Elective Requirement