



Course Description

IND2608 | Sustainable Design | 3.00 credits

This course provides an introduction to basic theories and practices of ecological design in interiors. Students will learn to take responsibility for their work by understanding the impact their designs have on our environment and ways to mitigate this impact by gaining a practical understanding of the field of sustainable design. Prerequisites: ARC1126, IND1200, IND1300; Corequisite: ARC2461

Course Competencies:

Competency 1: The student will demonstrate knowledge of sustainable design philosophies, products, and processes with emphasis on environmental awareness in the creative process by:

1. Acknowledging sustainable design (green design, eco-design, environmentally conscious design, etc.) as an emerging field of importance in residential and commercial design
2. Recognizing the role of interior designers in ensuring global environmental sustainability
3. Understanding the meaning of sustainable design and how it applies to society
4. Identifying the terminology associated with sustainable design
5. Learning about governing organizations associated with sustainable design
6. Evaluating the cost of sustainable design and other initial and long-term methods
7. Exploring buildings that have already met sustainable design requirements

Competency 2: The student will describe a wide range of global, social, and cultural points of view and apply various perspectives to analyze human behavior by:

1. Identifying global sustainability as it relates to interior design
2. Demonstrating critical awareness of ecological concerns and understanding the ecological impacts implicit with design activities
3. Becoming aware of the environment and how their materials and design selections can impact it
4. Identifying the impact of the design process on natural systems, people, places, life cycles, energy, and natural resources
5. Citing the historical timeline of human and environmental interactions
6. Understanding the possible impacts of building technology systems on people's health and safety
7. Examining the dynamic of ethics and aesthetics as integral components of sustainable development

Competency 3: The student will demonstrate an understanding of the impact of their interior design projects on the environment by:

1. Integrating concepts of sustainability into the design process from the inception of the design through the execution of the design development
2. Applying theoretical knowledge and practical experience concerning the environmental ramifications of product specifications and interior design
3. Developing a vocabulary of technical terms related to environmental systems and sustainable design
4. Investigating new technologies and materials that make sustainable design possible
5. Understanding renewable resources, environment pollution, and water and energy conservation
6. Improving water use efficiency by selecting alternatives for indoor water use reduction
7. Identifying alternatives for energy usage through optimizing energy performance, renewable energy production, green power, and carbon offsets
8. Identifying strategies for enhancing indoor environmental quality through indoor air quality, low emitting materials, thermal comfort, interior lighting, daylighting, acoustic performance, and quality views
9. assessments
10. Gaining knowledge of the resources available in the interior design market that meet green certification programs for the interior design profession
11. Identifying and describing product standards, criteria, and certification organizations.

12. Demonstrating a comprehensive presentation, describing the design solution including sketches, diagrams, and final drawings and models
13. Conducting verbal presentations of their work

Learning Outcomes:

- Solve problems using critical and creative thinking and scientific reasoning
- Formulate strategies to locate, evaluate, and apply information
- Demonstrate knowledge of ethical thinking and its application to issues in society
- Use computer and emerging technologies effectively
- Describe how natural systems function and recognize the impact of humans on the environment