CREDIT HOURS: 3.00

CONTACT HOURS: 45.00

COURSE DESCRIPTION:
This course will explore the basic principles of energy consumption, indoor air quality and contentment in the home. Students will assess the need for comfort and accommodations as well as the physics of heat transfer and loss calculations. Students will also assess bioclimatic design, passive solar design, natural cooling and day lighting as it relates to an ecologically aware interior.

PREREQUISITES: NONE

EXPECTED COMPETENCIES:
Upon completion of this course, the student will be familiar with:

- Discuss the environmental, social and economical imperatives of sustainably designed interiors.
- Define sustainability as it relates to commercial and remedial interiors.
- Understand the importance of indoor environmental quality, how IEQ impacts building occupants and how it can be improved.
- Demonstrate an understanding of the ethical issues related to the sustainable design, renovation and maintenance of residential and commercial interiors.
- Demonstrate an understanding of the laws of thermodynamics, their relation to sustainable building interiors and their implications for interior energy efficiency.
- Interpret and discuss blueprints, plans, and symbols.
- Exhibit an understanding of the ecology of living systems and its relation to sustainable interiors.
- Discuss the benefits of sustainable designed interiors.
- Analyze and discuss the cost implications of sustainable interiors using life cycle assessment as a tool.
- Develop knowledge of materials with sustainable qualities and compare their advantages for different interior applications.
- Evaluate existing interiors and develop renovation strategies that improve the IEQ.

ASSESSMENT METHODS:
Student performance may be assessed by examination, quizzes, case studies, oral conversation, group discussion, oral presentations. The instructor reserves the option to employ one or more of these assessment methods during the course.

GRADING SCALE:
90%-100% = A
80%-89.9% = B
70%-79.9% = C
60%-69.9% = D
<60% = E