

**I. COURSE DESCRIPTION:**

Department Information

Division: Science & Math Division

Department: Architecture

Course ID: ARCH 100

Course Title: Environmental Design I

Units: 3

Lecture hrs: 2

Laboratory hrs: 3

Prerequisite: None

Co-requisite: None

Departmental Advisory: None

Catalog and Schedule Description: Introduction to the design process, to the vocabulary of design and the basic principles of environmental design, landscape design, and urban planning.

**II. NUMBER OF TIMES COURSE MAY BE TAKEN FOR CREDIT: 1**

**III. EXPECTED OUTCOMES FOR STUDENTS:**

Upon successful completion of the course, the student should be able to:

- A. Recognize essential principles of the profession of architecture
- B. Examine the roles of allied professions
- C. Identify the need for a value system in the evaluation of architecture
- D. Analyze an architectural composition by applying design principles
- E. Formulate and express an evaluation of building or structure
- F. Compare and contrast poor architectural examples with valuable and enriching architecture
- G. Assess the architectural principles that provide the foundation for new design development

**IV. CONTENT:**

- A. A Definition of Architecture
  1. The importance of defining terms
- B. The Purpose of Architecture
  1. Why we need architecture
  2. What are the goals of architecture
- C. Elements of Place
  1. Components of a successful environment
  2. Activity planning and design
  3. Context
- D. American Institute of Architects
  1. Education and training of an architect
  2. Professional practice
- E. Small Practice
  1. Residential design
  2. Understanding the needs of a client
- F. Large Practice
  1. Commercial design
  2. Institutional design
  3. Complexity/specialization
- G. Historic Preservation/Rehabilitation/Reuse
  1. New opportunities: merging architecture and history
  2. Economics
  3. Cultural resources protection
  4. Career opportunities
- H. Engineering

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1. Structures: making design work
2. Mechanical
3. Electrical
4. Civil
5. Career opportunities
- I. Environmental
  1. New regulations
  2. Analyses of project impacts
  3. Career opportunities
- J. Planning
  1. City design/urban planning
  2. Architecture in the context of city plans
  3. Principles of planning
  4. Design review
  5. Career opportunities
- K. Landscape Architecture
  1. Site planning includes more than just the building
  2. Landscape design principles
  3. Environmentally-friendly design
  4. Career opportunities
- L. Interior Design
  1. Architectural interiors
  2. Principles of interior design
  3. Professional associations
  4. Career opportunities
- M. Entertainment
  1. New opportunities for architects
  2. Recreation/entertainment design principles
  3. Career options-unusual paths

**V. METHODS OF INSTRUCTION:**

- A. Lectures, accompanied by the use of:
  - Overhead projections
  - Slides
  - Videos
  - Films
  - Guest speakers
  - Instructor-prepared information and learning guides
- B. Class and small group discussions : Class-wide, and small group, interactive discussion is used as a means of provoking thought and evoking critical thinking skills.
- C. Critical evaluation of videotapes, film, audiotapes, newspaper, journal articles.
- D. Field trips to:
  1. Professional meetings
  2. Architectural offices
  3. Commission hearings
  4. Construction sites
  5. Significant structure sites
- E. Demonstrations : presenting the techniques of using the tools available to address the task

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**VI. TYPICAL ASSIGNMENTS:**

- A. Reading Assignment: Reading assignments are required and may include (but are not limited to) the following: Read the chapter about architectural ethics in design.
  - 1. Small Group Discussion: The Fountainhead (film)
- B. Writing Assignment: Writing assignments are required and may include (but are not limited to) the following:
  - 1. Typical Project: Building upon concepts covered in both readings and class lecture, students are to select another place of interest. Students are to conduct research into its history, construction, and modifications. Include: the Internet, local archives, city/county building and planning departments. Students are to prepare a written summary of their findings, and present these to the class.
- C. Critical Thinking Assignment: Critical thinking assignments are required and may include (but are not limited to) the following: Building upon concepts presented in class lecture and readings, students prepare photo-recording of a place of interest selected by student. Using only photographs mounted on a board and no text, the student is to photographically depict the "sense of place". Students are to present their "place" to the class.

**VII. EVALUATION:**

A student's grade will be based on multiple measures of performance and will reflect the objectives explained above. A final grade of "C" or better should indicate that the student has the ability to successfully apply the principles and techniques taught in this course. These evaluation methods may include, but are not limited to, the following:

- A. Methods of Evaluation:
  - 1. Class participation
  - 2. Projects
    - a) Meeting stated goals
    - b) Presentation
    - c) Creativity
    - d) Neatness
  - 3. Notebook of class composed of all class notes and assignments.
- B. Frequency of Evaluation:
  - 1. Projects-four times per semester
  - 2. Participation-throughout semester
  - 3. Final review of student notebook and final exam

**VIII. TYPICAL TEXTS:**

- 1. Architecture and Participation, Blundell-Jones, Peter, et al.; Routledge, 2005.
- 2. Environmental Design: Methods and Tools, Abele, Eberhard, et al.; Springer, 2004.
- 3. Environmental Diversity in Architecture, Steemers, Koen, et al.; Routledge, 2004
- 4. Great Streets, Jacobs, Allan; MIT Press, 1995.
- 5. The Architect: Chapters in the History of the Profession, Kostof, Spiro; University of California Press, 2000.

**IX. OTHER SUPPLIES REQUIRED OF STUDENTS:**

- A. Disposable 35 mm camera (for the first assignment)
- B. T-square or parallel rule (at least a 36")
- C. Triangles: a large adjustable 45 degree, a small 45 degree angle (about 2-3") is helpful for lettering
- D. Circle template (small up to 3")
- E. Triangular scales (rulers) get an architectural scale (1/8", 1/4" etc.) and an engineer's (10 scales, 20 scales etc.)
- F. Roll of drafting tape
- G. 18" and 12" roll of white or buff tracing paper

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- H. Exacto knife that takes a #11 blade and plenty of extra blades
- I. Foam core boards

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