COURSE OUTLINE

Course Number	Course Title	Credits
ARC 229	**Architectural Design I**	**4**
Hours: Lecture/Lab/Other	**Co- or Pre-requisite**	**Implementation Semester & Year**
1 lecture/6 studio per week	**ARC 123 with a minimum grade of C**	**Spring 2022**

Catalog description:

Sophomore level design course emphasizing the exploration and development of architectural design concepts and their transition into physical form. Two to Three major design problems challenge the student's preconceptions about architecture and stimulate the growth of an architectural vocabulary.

General Education Category:
Not GenEd

Course coordinator:
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Information resources:

Architectural Graphic Standards, on reserve in Library
Architecture and Architecture Record Magazines, in Library

In addition to reference books listed above, additional books, periodicals, and other print materials are available in the freshman architecture studio.

Course Student Learning Outcomes (SLO):

Students in Architecture Design I shall gain the skills and knowledge defined by the following performance criteria which constitute the minimum requirements for meeting the demands for success in course. These Student Learning Outcomes are taken from the NAAB requirements of accredited schools of architecture. The criteria encompass three levels of accomplishment:

Upon successful completion of this course the student will be able to:

1. Demonstrate the ability to apply basic organizational, spatial, structural, and constructional principles to the conception and development of interior and exterior spaces, building elements, and components. [Supports ILG # 1-11; PLO # 1-7]
2. Demonstrate the ability to employ basic methods of data collection and analysis to inform all aspects of the programming a project and process of design. [Supports ILG # 1-11; PLO # 1-7]
3. Demonstrate the ability to employ appropriate representational media, (Graphic Skills) including computer technology, to convey essential formal elements at each stage of the programming and design process. [Supports ILG # 1, 4, 10, 11; PLO # 1-8]
4. Demonstrate Critical Thinking Skills through the ability to make a comprehensive analysis and evaluation of a building, building complex, or urban space. [Supports ILG # 1-11; PLO # 1-7]

5. Demonstrate the ability to respond to natural and built site characteristics in the development of a program and design of a project. [Supports ILG # 1, 3 -11; PLO # 1-7]
6. Demonstrate the ability to identify and assume divergent roles that maximize individual talents, and to cooperate with other students when working as members of a design team and in other settings. [Supports ILG # 1, 3-11; PLO # 1-7]
7. Demonstrate the ability to design both site and building to accommodate (accessibility) individuals with varying physical abilities. [Supports ILG # 1-11; PLO # 1-7]
   Demonstrate the ability to discuss his/her work during a critique and critically evaluate and justify his/her own design and process. First Course SLO listed here [Supports ILG # 1, 3-11; PLO # 1-8]

Course-specific Institutional Learning Goals (ILG):

Institutional Learning Goal 1. Written and Oral Communication in English. Students will communicate effectively in both speech and writing.
Institutional Learning Goal 2. Mathematics. Students will use appropriate mathematical and statistical concepts and operations to interpret data and to solve problems.
Institutional Learning Goal 3. Science. Students will use the scientific method of inquiry, through the acquisition of scientific knowledge.
Institutional Learning Goal 4. Technology. Students will use computer systems or other appropriate forms of technology to achieve educational and personal goals.
Institutional Learning Goal 5. Social Science. Students will use social science theories and concepts to analyze human behavior and social and political institutions and to act as responsible citizens.
Institutional Learning Goal. 6. Humanities. Students will analyze works in the fields of art, music, or theater; literature; philosophy and/or religious studies; and/or will gain competence in the use of a foreign language.
Institutional Learning Goal 7. History. Students will understand historical events and movements in World, Western, non-Western or American societies and assess their subsequent significance.
Institutional Learning Goal 8. Diversity and Global Perspective: Students will understand the importance of a global perspective and culturally diverse peoples
Institutional Learning Goal 9. Ethical Reasoning and Action. Students will understand ethical frameworks, issues, and situations.
Institutional Learning Goal 10. Information Literacy: Students will recognize when information is needed and have the knowledge and skills to locate, evaluate, and effectively use information for college level work.
Institutional Learning Goal 11. Critical Thinking: Students will use critical thinking skills understand, analyze, or apply information or solve problems.

Program Learning Outcomes for Architecture (PLO)

1. Use **analytical skills** to **determine** the **major elements** of a work of architecture and/or an architectural design **project**.
2. **Comprehend** and **apply** the various stages of the **creative thought process** to **produce** an architectural **design**.
3. Understand and apply the basic principles of sustainable design.
4. Use two- and three-dimensional **visual communication skills** (freehand, traditional, and computer-generated drawings and physical models) to convey a complete architectural **idea**.
5. Demonstrate knowledge of the important **buildings and stages** in the **history** of architecture and the **social** and **technological** factors that **influenced** them.
6. **Critically evaluate the built environment** – its relationship to the natural world and the reciprocal sociological and psychological influences on man.
7. Demonstrate knowledge of architectural **materials** and **structural systems** and their appropriate applications in building construction.
8. Develop portfolio

Units of study in detail – Unit Student Learning Outcomes:

Unit I **Precedent Analysis [**Supports Course SLO # 2-5]

Learning Objectives

The student will be able to:

- Employ basic research methods of image and fact collection for a comprehensive analysis and evaluation of a significant building and its architect.
- Demonstrate critical thinking through a comprehensive analysis and evaluation of a significant building.
- Employ appropriate representational media, including computer technology, to convey essential formal elements for a comprehensive analysis and evaluation of a significant building and its architect.
- Demonstrate ability to articulate visually his/her analysis and evaluation of a significant building and its architect.

Unit II **Site Analysis [**Supports Course SLO # 2, 3, 5-8]

Learning Objectives

The student will be able to:

- Analyze natural and built site characteristics in the development of a program and design of an architecture project. Employ appropriate representational media, (Graphic Skills) including computer technology, to convey essential formal elements at each stage of the programming and design process.
- Identify and assume divergent roles that maximize individual talents, and to cooperate with other students when working as members of a team.

Unit III **Design [**Supports Course SLO # 1, 2, 3, 5-8]

Learning Objectives

The student will be able to:

- Respond to natural and built site characteristics in the development of a program and design of an architecture project.
- Design an architecture project informed by a comprehensive program, from schematic design through the development of programmatic spaces, structural, accessibility, wall sections, and building assemblies, as may be appropriate; and to assess the completed project with respect to the program's design criteria.
- Demonstrate the understanding of design both site and building to accommodate individuals with varying physical abilities.
- Make technically precise descriptions and documentation of a proposed design for purposes of review.
- Discuss his/her work during a critique and critically evaluate and justify his/her own artistic and vocational practice.

REQUIREMENTS:

1. **READINGS**: Readings will be assigned as they relate to the lecture topics. These will come primarily from required and suggested texts but also from a variety of references, which will either be photocopy

handouts or available on reserve. It is important to do the readings and develop a WORKING KNOWLEDGE of the ideas they contain.

2. **PROJECTS**: Students are required to complete all the parts of the projects throughout the semester. Each part will be given a percentage of the semester's total grade; any part missed because of absence will not be given credit.

3. **SKETCHBOOK**: Compilation of a sketchbook throughout the semester is an essential aspect of this course. The student will be expected to sketch from the planned field trips during studio time throughout the semester. You will be encouraged to keep a documentation/sketches and notes of your observations and analysis/evaluation of places and buildings in your search for design solutions the built environment. You should purchase a sketchbook (8 1/2" x 11" or larger will be required). In addition, you should have a variety of drawing instruments, charcoal, soft pencil, and ink pens.

4. **QUIZZES**: There may be pop quizzes during the semester at the discretion of the instructor. These will normally occur at the beginning of the class to test if you are doing the readings and understanding the readings and lectures.

5. **EVALUATION**: Your final grade for the course will be compiled from the relative excellence of your DESIGNS, SKETCHBOOK, your ATTENDANCE, CLASS PARTICIPATION, POFESSIONALISM and, QUIZ grades. Attendance and participation are of extreme importance since it is the primary source of learning and will be reflected in the final grade.

6. **PORTFOLIO**: You are required to submit a copy of all projects and (some) sketches completed in the course in a portfolio on the date and time of the final exam. This is to be a copy (photocopies of reductions) 8 1/2" x 11" format. This will not be returned to the student. This portfolio should be bound in a clear covered binder with the students resume as the first page.

Evaluation of student learning:

Grading of Projects – 80% of course grade
IMPORTANT NOTE: All assignments and gathering of research will be completed outside of class time. Students are expected to devote at least 10 additional hours per week to this course beyond scheduled class meeting times.

All component stages of each project (including the final stage) are due at the date and time indicated at the outset of each stage. For the final stage of each project, a drop of one full letter grade will be given to a project submitted at the same specified hour at the next class meeting time. A project submitted after this late period will be reviewed, but will receive the grade of “F”.

The grades of all projects except the last will be of equal value. The last project will have a value two times that of each of the preceding projects.

The student is responsible for his/her regular attendance, participation in studio discussions and reviews of student work, and for on-time submission of his/her work for discussion and evaluation.

The following statement is meant to clarify the evaluation criteria in studio work. Individual work will be graded in consideration of these criteria. Values of quality, aesthetics, etc., are based upon the instructor’s judgment of the work produced, the effort employed, and the total result achieved.

Analytic Skills:

- An ability to understand and identify the problem, its specific components, particularity, and constraints

- An ability to apply logic and intuition to discern possible strategies for resolving the major and minor issues that need to be addressed in the problem.

Synthetic Skills:

- An ability to harmoniously satisfy and integrate all aspects of a problem (architectural program) through the development of an appropriate architectural concept and its expression in physical form as an architectural design.

Technical Skills:

- An ability to discern and resolve the major problems inherent in the architectural design.
- An ability to produce a clear and explicit presentation of the architectural design, 2-dimensionally and 3-dimensionally, verbally and visually.

The grade of “A” will be earned by students who demonstrate mastery of the essential objectives of the project, as well as demonstrating excellence in aesthetics and originality, and in completing course objectives and learning unit objectives with at least 90% accuracy.

The grade of “B” will be earned by students who demonstrate more than adequate mastery of the essential objectives of the project, as well as demonstrating a more than adequate level of aesthetics and originality, and in completing course objectives and learning unit objectives with at least 80% accuracy.

The grade of “C” will be earned by students who demonstrate adequate mastery of the essential objectives of the project, as well as demonstrating an adequate level of aesthetics and originality, and in completing course objectives and learning unit objectives with at least 70% accuracy.

The grade of “D” is undesirable and indicates a less than adequate mastery of the essential objectives of the project and a less than adequate level of aesthetics and originality, with a minimum level of completion of course objectives and learning unit objectives.

The grade of “F” will be earned by students who do not demonstrate achievement.

Professionalism – 20% of course grade

Professionalism refers to the degree of seriousness and commitment the student brings to his/her work in the course. It includes regular, on-time attendance in all lectures and studio classes, completing assignments on time, and contributing constructively to the overall demeanor and learning atmosphere of the lecture and studio.

Grading of professionalism will reflect the student’s sincere effort to strive for, develop, and demonstrate the following specific criteria:

Contribution: To support the creative learning environment through excellence in behavior and attitude, individually and collectively.

Dedication: To the study of architecture, including the willingness to put forth the time and effort to search and explore, study and analyze, and to develop and nurture the ability to imagine and create and follow-through to completion each design project.

Commitment: To embrace a sincere and open-minded attitude toward new ideas, approaches and interpretations of what constitutes good architecture, including a new sense of aesthetics, structure and materials, construction and technology.

Participation: To communicate effectively one-on-one with the course instructor and other students and to make productive contributions to the studio-learning environment through group interaction and sharing of ideas.