

## **Student Learning Outcomes**

### **Architecture and Environmental Design**

#### **Science Division**

#### **Architecture 100 – Environmental Design I**

A student who successfully completes this course will be able to:

1. Define and utilize design terms correctly.
2. Identify design principles and apply them to the evaluation of two and three dimensional designs.
3. Apply the problem solving process to specific design situations.

#### **Architecture 101 – Environmental Design II**

A student who successfully completes this course will be able to:

1. Apply design principles to the development of two and three dimensional design.
2. Present two and three dimensional design projects explaining their problem solving procedure using both verbal and graphic methods.

#### **Architecture 120 – Introduction to Computer Aided Drafting**

A student who successfully completes this course will be able to:

1. Understand basic industry graphic communication language and terminology.
2. Use common CAD creation and editing functions given a basic drawing problem.
3. Create and manipulate basic and multi-view drawings using common CAD tools and commands.

#### **Architecture 145 – History of Architecture: Early Design to Gothic**

A student who successfully completes this course will be able to:

1. Define and discuss general architectural terms correctly from the early through Gothic periods.
2. Recognize principles of design function and identify aesthetic characteristics of various styles from the periods presented.
3. Relate the impact of various cultural influences to the development of architectural styles.

#### **Architecture 146 – History of Architecture: Renaissance to Modern**

A student who successfully completes this course will be able to:

1. Define and discuss general architectural terms correctly from the Renaissance through Modern periods.
2. Recognize principles of design function and identify aesthetic characteristics of various styles of the periods presented.
3. Relate the impact of various cultural influences to the development of architectural styles.

**Architecture 200 – Architectural Design I**

A student who successfully completes this course will be able to:

1. Define and utilize design terms and principles as they apply to the architectural and design industry.
2. Identify and address the constraints of a given design project.
3. Address constraints of proposing a variety of possible solutions.

**Architecture 201 – Architectural Design II**

A student who successfully completes this course will be able to:

1. Identify, address and prepare a rich variety of possible solutions to a given problem.
2. Evaluate alternative solutions of a given design project.
3. Be able to evaluate and provide constructive criticism when presented with a design proposal

**Architecture 220 – Architectural and Computer Aided Drafting**

A student who successfully completes this course will be able to:

1. Formulate and organize CAD drawing files.
2. Differentiate and use basic and advanced CAD tools for drawing.
3. Organize and produce finished drawings per graphic and industry standards.

**Architecture 221- Architectural and Computer Aided Drafting II**

A student who successfully completes this course will be able to:

1. Plan and construct CAD drawing files using common and advanced CAD tools.
2. Produce a CAD drawing to represent the field conditions using the principles of inventory and measurement techniques.
3. Identify the consideration of basic building code applications affecting drawing design considerations.

**Architecture 250 – Materials and Construction**

A student who successfully completes this course will be able to:

1. Identify the sources and properties of common materials used in building construction.
2. Identify the history, manufacture processing and use and common units of measurement for materials commonly used in building construction.

**Architecture 270 – Portfolio Design**

A student who successfully completes this course will be able to:

1. Plan, prepare and present a portfolio representing their skills.

## **CERTIFICATE**

### **Computer Aided Drafting Technician Certificate**

A student who successfully completes this certificate program will be able to:

1. Create, manipulate, and organize CAD drawings using AEC industry standards.
2. Plan and generate CAD drawing files using common and advanced CAD tools.
3. Produce a CAD drawing to represent existing field conditions using the principles of inventory and measurement techniques.
4. Perform basic arithmetic calculations, reading and writing appropriate to work in an industry office setting.
5. Understand the composition and interrelationship of construction drawings.

## **ASSOCIATES DEGREE**

### **Architecture and Environmental Design Associate of Arts Degree**

A student who successfully completes this degree program will be able to:

1. Express a general breadth of knowledge using both verbal, written and a variety of graphic techniques.
2. Apply design principles to the analysis or development of two and three dimensional design.
3. Present two and three dimensional design project solutions explaining their problem solving procedure utilizing a variety of verbal and graphic techniques.
4. Relate the impact of various influences to the development of architectural characteristics and styles.

**Three Year Plan for SLO Assessment**

**YEAR 1: Assess Architectural History Classes (145 and 146)**

**YEAR 2: Assess Architectural Design Classes (100, 101, 200, 201)**

**YEAR 3: Assess Drafting Classes (120, 220, 221)**

**If ARCH270 is offered, assess SLOs the year it is offered.**