

TIDEWATER COMMUNITY COLLEGE

Official Course Outline

Course Prefix/Number/Title: ARC 231 Advanced Architectural Design and Graphics I

Credit Hours: 4 **Lecture Hours:** 2 **Lab Hours:** 6 **Total Contact Hours:** 8

Pre-requisites: ARC 121 **Co-requisites:** None

Course Description: Provides fundamental knowledge of the principles and techniques of architectural drawing procedures. Familiarizes student with design process. Provides a better understanding of the relation between architectural design and structural systems.

Course Objectives: This course will explore the complex relationships between architectural concepts and architectural practice, integrate knowledge based on all prior architectural courses, develop in students their problem-solving and creative skills, imagination and artistic talent, progress their understanding of the practice of working drawings and their use of architectural graphics media through the series of assignments and the final project.

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

1. Combine aesthetic and practical components in a building design
2. Develop a design idea into a coherent proposal
3. Demonstrate the skills to produce the complete set of working drawings using modern drafting techniques and methods
4. Utilize the protocols of construction documents
5. Acquire professional attitudes and communication skills in demonstrating a systematic approach to architectural design
6. Expand an analytical approach to solving problems pertaining to the interrelated stages of a design project

Course Content:

- Elements of Design (Line, Color, Shape, Texture, Direction, Form, Size, Value, Space, Type)
- Principles of Design (Unity, Balance, Harmony, Contrast, Rhythm, Variety, Emphasis, Proportion, Functionality, Attraction)
- Architectural Drafting Requirements and Techniques
- Conceptual Design
- Sketching
- Construction Documents
 - Floor Plans
 - Foundation Plans
 - Framing Plans
 - Roof Plans
 - Building Sections
 - Exterior Elevations
 - Schedules: Door, Window, and Finish
 - Site and Grading Plan

Textbook: Osamu A. Wakita, Richard M. Linde. The Professional Practice of Architectural Working Drawings. Wiley; 3rd ed., 2002. ISBN-13: 978-0471395409