ARCHITECTURAL & ENGINEERING DESIGN III

CLASS SYLLABUS

Course Code	C17H10
Prerequisites	Architectural & Engineering Design II, Geometry
Class Time	Fall 2025 – 4th Block (12:02 pm – 1:25 pm)
Location	406
Instructor	Jeremy Whitaker
Instructor's Email	jeremy.whitaker@claibornecsd.org
Planning Time	M-F 1st Block (7:55 am – 9:15 am)
Phone	(423)626-3532
Remind Code	@bh6edbkh82

COURSE DESCRIPTION

Architectural & Engineering Design III is the third course in the Architectural & Engineering Design program of study. In this advanced course, students will apply technical drawing and design skills developed in the previous courses to specific architectural and mechanical design projects and contexts. In the process, students will expand their problem-solving and critical-thinking skills by assessing the requirements of a project alongside the available resources in order to accomplish realistic planning. Upon completion of this course, proficient students will be able to employ methods of data collection and analysis to provide others with appropriate information for projects and to develop their own designs. Students will also be able to engage with industry-specific technology to create visual representations of project outcomes. In addition, students will continue compiling artifacts for inclusion in a portfolio, which they will carry with them throughout the full sequence of courses in this program of study.

TEXT

Print Reading for Industry,*Tenth Edition*
Brown, Ryan K. and Brown, Walter C.
Goodheart-Wilcox Publishing Company, Inc.

Print Reading for Construction, *Sixth Edition*
Brown, Walter C. and Dorfmueller, Daniel P.
Goodheart-Wilcox Publishing Company, Inc.

Drafting & Design: Engineering Drawing Using Manual and CAD Techniques, *Seventh Edition*
Kicklighter & Brown
Goodheart-Willcox Publishing Company, Inc.

Tools for Success: Soft Skills for the Construction Industry
Rigolosi, Steven A.
Prentice Hall

STANDARDS

If all standards in the course are covered, the course is recommended for two credits. If only one credit is to be offered, the following two options are recommended:

1. Safety

- Safety Rules
- Safety Equipment

Option A

2. Architectural Design

- 2.1 Civil Drawings
- 2.2 Site Analysis
- 2.3 Design Constraints
- 2.4 Planning and Diagramming Techniques
- 2.5 Building Model
- 2.6 Comprehensive Set of Drawings
- 2.7 Sustainable Design
- 2.8 Wall Section

Option B

3. Mechanical Design

- 3.1 Three-Dimensional Models
- 3.2 Field Measurements
- 3.3 Assembly Model
- 3.4 Schematic Design (Design Process)
- 3.5 Schematic Design (Models)

4. Research Project

- 4.1 Research Project

5. Design Project

- 5.1 Schematic Designs for Project
- 5.2 Drawings, Models and Presentation Boards
- 5.3 Comprehensive Set

6. Project Management

- 6.1 Project Management
- 6.2 Project Management Strategies
- 6.3 Report

7. Portfolio

- 7.1 Portfolio

A description of each standard can be found on the Tennessee Department of Education's website at:
https://www.tn.gov/content/dam/tn/education/ccte/arch/cte_std_arch_eng_design_3.pdf

GRADING POLICY

The final grade for each grading period will be an average of the following categories:

- **Daily Work:** Most Daily Work will be completion assignments and will be graded on either using a rubric, or pass/fail, depending on the type of the assignment.
- **Attendance:** The Attendance grade will be calculated using the Classroom Attendance policy described below.

- **Participation:** The Class Participation grade will be dependent on how well the student follows classroom rules and procedures, how he or she interacts and works with other students, and how he or she participates in classroom discussions.
- **Test:** Each section covered in class will be followed by review questions and exercises. These will be averaged to compute the Test grade. The number of test grades per grading period will depend on how many sections are covered.

MAKE-UP WORK POLICY

Students may make-up any work missed by an excused absence within two days of returning to school. It is the student's responsibility to ask the instructor for any make-up work. Any lab work must be made up on the student's own time.

CLASSROOM ATTENDANCE

Students start each nine week period with an attendance grade of 100. For each unexcused absence, four (4) points will be deducted and for each unexcused tardy, one (1) point will be deducted. No points will be deducted for excused absences or tardies.

SUGGESTED MATERIALS

While it is not a requirement for the course, it is recommended that each student have a three-ring binder and USB flash drive. These two items will help the student maintain a portfolio that will be very helpful in both their college career and finding employment.

OUTSIDE RESOURCES

Google Classroom (https://edu.google.com/intl/ALL_us/workspace-for-education/classroom/)
Autodesk Education Community (https://www.autodesk.com/education/home)

CLASSROOM RULES

These rules are in addition to the ones stated in the Claiborne County Department of Education's Student Code of Conduct and the Claiborne High School Student Handbook.

1. Students are expected to treat the teacher, the equipment, and each other with the utmost respect. Disrespect will not be tolerated in any form or fashion.
2. Students are to follow all safety procedures when operating any equipment in the CAD lab.
3. Horseplay will not be allowed.
4. Trash is to be placed in the trash can, not left at the computers on the tables, or on the floor.
5. The door that exits to the hallway in front of the cafeteria is the main door for the room. The other door is for emergency use only. Students are not allowed to enter the classroom through this door.
6. Students are not allowed to enter the office or the store room without permission.
7. All students are expected to be quiet when announcements are made over the intercom system. Anyone talking during the announcements may be required to write the announcements repeatedly.
8. Use of wireless communication devices for non-educational purposes is not allowed during class time.

Punishment for breaking these rules will be decided by
Mr. Whitaker and/or a member of the school administration.

CHS | ARCHITECTURAL & ENGINEERING Design DEPARTMENT

Please <u>Sign</u> and <u>Return</u> this page only. The rest of the packet is yours to keep.

Parent/Guardian: By signing below, I am stating that I have received and read the syllabus for Architectural & Engineering Design III.

Parent/Guardian Name: _____
Please Print

Parent/Guardian Signature: _____

Date: _____

Student: By signing below, I am stating that I have received and read the syllabus for Architectural & Engineering Design III.

Student Name: _____
Please Print

Student Signature: _____

Date: _____