

Drafting and Design Technology

DDT 132 Architectural Drafting

Instructor: Mike Hubka

Office: Bld. 115 Rm #106

Office Hours: Posted

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Credit hours: 3

Theory: 2 hrs.

Lab: 3 Hrs.

Program/Degree: Drafting and Design Technology / Associate in Applied Science Degree

Description This course in architectural design and drafting introduces basic terminology, concepts and principles of architectural design and drawing. Topics include design considerations, simple beam design, site plans, and construction drawings. Upon completion, students should be able to draw, dimension, and specify basic residential architectural and light construction drawings.

Prerequisites: DDT 111,112,103 or Permission of Instructor

Text: Architecture residential drawing and design
Clois E. Kicklighter
The Goodheart-Willcox Company, Inc.

Supplies: Two 3.5 - 1.44 Mb Floppy disks or one Zip disk
A three ring binder

Course Rationale: Sketches and drawings prepared by architects and architectural designers convey conceptual designs which must be further developed into formal drawings to be used by builders and craftsmen during the construction phase of a project. The clear and accurate development and interpretation of the conceptual drawings become a key step toward a successful construction project. Common construction practices, and the development of architectural drawings will be the focus of this course and will include:

- 1.Principles of light construction.
- 2.Structural member selection
- 3.Typical architectural detailing.
4. Design and planning of homes and small commercial buildings.

Course Objectives:

1. Introduce the student to terminology and methods used in residential and light construction.
2. Calculate structural requirements for wood construction including rafters, joist, headers and beams.
3. Prepare, using sketches, residential floor plans, elevations and details.

Assignment Schedule

Week	Topic	Lab Assignments
1 1/10	Introduction to course Video	Read Chapter 2 Sketching
2 1/17	Sketching Lab Floor plan, elevations	Read Chapter 5&6 As Assigned By Instructor
3 1/24	Chapter 9 Construction terminology Footings and foundations Calculation of loads for wall footings Piers and grade beams Foundation Plan	As Assigned By Instructor
4 1/31	Chapter 10 & 11 Lumber and its properties Foundation Plan	As Assigned By Instructor
5 2/7	Chapter 12 – Wood frame construction Engineered frame systems and trusses	As Assigned By Instructor
6 2/14	Quiz 1 Lab	As Assigned By Instructor
7 2/21	Chapter 13– Doors & Windows Insulation and moisture considerations	As Assigned By Instructor
8 2/28	Chapter 16 & 17 The Floor Plan Roof Designs	As Assigned By Instructor
9 3/7	Chapter 18 Elevations	As Assigned By Instructor
10 3/14	Quiz 1 Lab	

Assignment Schedule

11	3/21	Spring Break
12	3/28	Spring Break
13	4/4	Sections and Interior Elevations
14	4/11	Stresses in Members Beam Sizing Beam sizing Software
15	4/18	Field Trip
16	4/25	Lab Work
17	5/2	Review & Finish Labs
18	5/9	Final

Grading Policy:

Quiz (X2)	300
Lab Projects	300
Final Exam	200
Attendance, Attitude & Participation	200
Total	1000

NOTE: Northwest-Shoals Community College's policy regarding attendance and academic honesty will be **strictly enforced!** You should attend classes promptly at specified starting times. Make-up test will be given only with **proper** excuse. **It is "your" responsibility to contact the instructor for make-up assignments and arranging for make-up test.**

Completing laboratory assignments is an integral part of you training. **All students must satisfactorily complete at least 75% of all daily lab assignments to receive a passing grade in this course.** The exact number of assignments for the course shall depend on the abilities of the entire class as a whole, and shall be determined by the end of the semester.

AMERICANS WITH DISABILITIES ACT (ADA)

It is the policy of Northwest-Shoals Community College to comply with the Americans with Disabilities Act (ADA). Any student covered under this act needing and desiring reasonable accommodations for this class should notify the instructor

