

Architectural Drafting

Course Syllabus

Office:

Office Hours:

Office Phone:

Email:

Course Page:

Class Hours:

A. Description

This course is focused on the principles, concepts, and use of complex graphic tools utilized in the field of architecture, structural systems, and construction trades. Emphasis is placed on the application of CAD tools in the creation of floor plans, foundation plans, basic roof design, section and details, and elevation drawings. Mathematics, science, and visual design concepts are reinforced. Work-based learning strategies appropriate for this course are apprenticeship and cooperative education. Hands on experience and SkillsUSA/Canada leadership activities provide many opportunities to enhance classroom instruction and career development.

B. Course Objectives

Students will be able to:

1. Assess conventional design strategies to create design efficiency and flow.
2. Identify commonly used structural components.
3. Draw complete floor plans
4. Draw foundation plans, and basic roof plans.
5. Generate cross sections, elevations, and detail views.

C. Course Topics

The course will cover the following topics:

1. Careers in Architecture
2. Job interview Skills
3. Computer Aided Drafting Terms
4. Constructing Architectural Drawings
5. Critique Architectural Designs
6. Residential space planning
7. Openings
8. Electrical work
9. Foundation plans
10. Roof Design
11. Section Plans
12. Elevation Plans

D. Grading Plans

Coursework will be weighted as follows:

- | | |
|----------------|------------|
| 1. Assessments | 70% |
| 2. Final Exam | 20% |
| 3. Attendance | <u>10%</u> |
| | 100% |

Assessments:

Assessments will be assigned to evaluate your comprehension of the subject. Each evaluation will be graded unless there are major errors or omissions and it is returned for correction or completion. Assessments with minor detail or other non-conceptual errors will be graded as submitted, and letter grades will be given.

Due dates will be given to you for each assignment. Unless you are absent on the date an assignment is due, it will not be accepted later than the class period when it is due. If you are absent from class when an assessment is due it will be accepted late – but only if submitted immediately upon your return and only if an acceptable, written excuse is presented. Due dates will not be changed because of earlier absences.

Final Exam:

The final exam will be comprehensive.

Attendance:

Attendance will be graded as follows:

- | | |
|-----------------|----|
| No absences | A+ |
| One Absence | A |
| Two Absences | B |
| Three Absences | C |
| >Three Absences | F |

Absences for which a medical excuse is provided will be recorded but not figured in the attendance grade. Any significant tardy or early departure from class will be figured as a half absence.

E. Tentative Schedule

This schedule offers you a brief overview of the topics that will be covered throughout the semester. This is only a tentative schedule to give you an idea of the topics that will be covered. The dates and topics, however, are subject to change due to time constraints and proficiency of the class as a whole.

Date	Topic/Activity
	Introduction to the course
	Job seeking
	Job interview skills
	Introduction to computer aided drafting(CAD)
	Construction of CAD drawings
	Introduction to single level residential space planning
	Single level residential space planning
	Door and window types
	Introduction to floor plan symbols
	Rules and standards for electrical placement
	Electrical Symbols
	Drawing, dimensioning, and annotating single-level floor plans
	Drawing single-level residential floor plans
	Introduction to foundation plans
	Common foundation systems
	Footing and foundation wall construction
	Drawing foundation plans
	Introduction to roof plans
	Concepts of roof construction
	Drawing roof plans
	Introduction to sections and details
	Wood sill and floor construction
	Wood frame wall construction
	Insulation, vapor barrier materials and construction techniques
	Sections and details
	Drawing wall sections
	Introduction to exterior elevation
	Exterior elevations
	Generating exterior elevations
	Final exam