BCN 1251C Construction Drawing

3 Credits · Spring 2017

Meeting Location: RNK210
Afternoon Class: T, R 8-9 Periods (3:00-4:55pm)

Instructor:	TA:	TA:
Nichole Campbell, Ph.D., LEED GA	Logan To	Lina Ortiz
Research Scholar	Graduate Student	Graduate Student
Office: Shimberg Center	RNK328	TBA
Cell: 352-275-1199	Cell: 863-661-7120	TBA
Email: nmcampbell@ufl.edu	Email: logankto@ufl.edu	TBA
Office Hours: TBA	Office Hours: TBA	TBA

Goal
To develop the graphic skills necessary to effectively communicate in the construction industry and to acquire a basic understanding of construction drawings and details.

Objectives
- Develop skills necessary to communicate in the construction industry.
- Develop an understanding of construction drawings and their evolution to the Post Construction Phase.
- Acquire an understanding of the logical assumptions of the way something might be constructed and refine these assumptions through graphical interaction.
- Become familiar with Sketch Up.

Course Learning Outcomes
Upon completion of the course students will demonstrate their ability to:
1. Develop graphical skills necessary to communicate in the construction industry (ACCE SLO 7)
2. Develop an understanding of construction drawings and their evolution from conception to completion (ACCE SLO 7)
3. Use Free-Hand sketches to visualize and communicate two and three dimensional construction drawings (ACCE SLO 7)
4. Demonstrate the ability to manipulate drawings through use of architectural and civil engineering scales (SACS 1, ACCE SLO 7)
5. Express how a structure would be constructed using two dimensional drawing techniques(SACS 1, ACCE SLO 7)
6. Distinguish the differences of typical drawing set elements such as plan, elevation and section (ACCE SLO 7)
7. Relate various viewpoints of a three dimensional object in two dimensions using orthographic projection*(SACS 1, ACCE SLO 7)*
8. Employ techniques acquired during the introduction into three dimensional computer modeling *(ACCE SLO 10)*

SACS 1: Apply knowledge of engineering, materials, methods, equipment, and processes to safely construct buildings and structures.
ACCE SLO 7: Analyze construction documents for planning and management of construction processes.
ACCE SLO 10: Apply electronic-based technology to manage the construction process.
SACS = Southern Association of Colleges and Schools ACCE = American Council for Construction Education SLO= Student Learning Outcome

CLO= Course Learning Outcome

ASSESSMENT METHODS AND TARGETS:

Assessment	*CLO 1*	*CLO 2*	*CLO 3*	*CLO 4*	*CLO 5*	*CLO 6*	*CLO 7*	*CLO 8*	*Target*
Final Exam	X								At least 80% receive a C- or better
Midterm Exam	X								At least 80% receive a C- or better
In-Class Exercises	X	X	X	X		X	X		At least 80% or better receive an A
SketchBook			X						At least 80% receive a B- or better
Plan Portfolio					X				At least 80% receive a B- or better
Revit/Sketchup Project								X	At least 80% receive a B- or better

Teaching Philosophy
The teaching format is oriented towards instruction, examples, physical and/or visual aids and a large amount of practice, in class and as assignments. Students are encouraged to ask questions and interject their experiences to increase the overall learning experience.

Suggested Texts
Architectural Drawing and Light Construction, Philip A. Grau, Edward J. Muller, 8th Edition ISBN-10: 0135132150, ISBN-13: 9780135132159

Building Construction Illustrated, Francis D.K. Ching Architectural Graphic Standards, Ramsey and Sleeper Architectural Graphics, Francis D.K. Ching

Reading Architectural Working Drawings, E L Muller Construction Details for Commercial Buildings, G E Wiggins

Required Materials
- 12"x18" drafting board w/ parallel gliding edge **OR** T-square
- Scales: architects and engineers
- Drafting tape or Drafting Dots
- Circle template (general use 3" max circle)(OPTIONAL)
- 45° Triangle & 60°/30° Triangle
- 0.3mm, 0.5mm, 0.7mm Mechanical pencils
- White eraser or similiar
- Sketchbook

Paper Policy
Standard 11x17 and 8.5 x 11 paper will be provided.

Grading Policy: Tentatively Grades and scores will be determined from the following:

In-class exercises & Homework	15%
Sketchbook portfolio	15%
Midterm Exam	15%
Final Project (Includes Plan Portfolio & Sketch Up Portfolio)	50%
Attendance	5%

Most of the work will be completed in-class throughout the semester, therefore attendance is critical.

BCN Standard Grading Scale:

A	93 – 100
A-	90 – 92.9
B+	87 – 89.9
B	83 – 86.9
B-	80 – 82.9
C+	77 – 79.9
C	73 – 76.9
C-	70 – 72.9
D+	67 – 69.9
D	63 – 66.9
D-	60 – 62.9
E	< 60

Honor Code
We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity. Any violation of the Honor code will not be tolerated. A student that is found guilty of Academic Dishonesty will be given a failing grade for the course.

Disabled Students
Any student that needs accommodation regarding physical access, class attendance, notes, or lectures, please contact instructor. Students requesting classroom accommodation must first register with the Dean of Students Office. The Dean of Students Office will provide documentation to the student who must then provide this documentation to the Instructor when requesting accommodation.

College of Design, Construction and Planning Spray Painting Policy
Spray painting, or the use of any other sort of aerosol spray, is not allowed in the Architecture Building, Rinker Hall and in Fine Arts C, except within the spray booth found in Room 211 of Fine Arts C. Students found in violation of this policy will be referred to the Dean of Students for disciplinary action.

DATE				CONTENT
Week 1	Thursday	January	5	Introduction
Week 2	Tuesday	January	10	Line Types
	Thursday	January	12	Multi-view Drawings Overview
Week 3	Tuesday	January	17	Axonometric Drawings
	Thursday	January	19	Floor Plan
Week 4	Tuesday	January	24	Elevation
	Thursday	January	26	Section
Week 5	Tuesday	January	31	Site Plan & Dimensioning
	Thursday	February	2	Stairs & Wood Framing
Week 6	Tuesday	February	7	Doors & Windows
	Thursday	February	9	Trusses & Roof Types
Week 7	Tuesday	February	14	Plan Reading Practice
	Thursday	February	16	Wall Coverings & Finishes
Week 8	Tuesday	February	21	**Midterm Exam**
	Thursday	February	23	Plan Portfolio: Intro; **Sketch Book Due**
Week 9	Tuesday	February	28	Plan Portfolio: Floor Plan
	Thursday	March	2	Plan Portfolio: Floor Plan (cont.)
Week 10				**SPRING BREAK**
Week 11	Tuesday	March	14	Plan Portfolio: Elevations
	Thursday	March	16	Plan Portfolio: Elevations (cont.)
Week 12	Tuesday	March	21	Plan Portfolio: **Elevations & Plan Critiques**
	Thursday	March	23	Plan Portfolio: Door & Window Schedules
Week 13	Tuesday	March	28	Plan Portfolio: Cover
	Thursday	March	30	**Mid-point Review**
Week 14	Tuesday	April	4	Sketch Up Introduction
	Thursday	April	6	Refinements & Production
Week 15	Tuesday	April	11	Refinements & Production
	Thursday	April	13	Refinements & Production
Week 16	Tuesday	April	18	**3:00PM SUBMISSION DEADLINE - FINAL PROJECT**
	Reading Days 20-21			NO CLASS
FINALS WEEK	Tuesday	April	25	NO CLASS