RINKER SCHOOL OF CONSTRUCTION MANAGEMENT
UNIVERSITY OF FLORIDA

CONSTRUCTION DRAWING

COURSE NUMBER: *BCN 1251C*

NUMBER OF CREDIT HOURS: *3*

RINKER HALL ROOM 140

	TUESDAY	THURSDAY
SECTION 07GH	10:40 AM – 12:35 PM	10:40 AM – 12:35 PM
SECTION 0627	3:00 PM – 4:55 PM	3:00 PM – 4:55 PM

INSTRUCTOR: *Robert Ries*

332 Rinker Hall
email through Canvas preferred
rries@ufl.edu
352 273 1155

OFFICE HOURS: *Tuesdays 12:50 – 1:40 pm*

GRADUATE TEACHING ASSISTANT: *Mr. Xiaoxun Jian*

341 Rinker Hall
xiaoxun@ufl.edu

OFFICE HOURS: *Monday and Wednesday 11:30 am – 2:00 pm*

ADDITIONAL RESOURCES:

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

Architectural Graphics, Francis D.K. Ching

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

Other resources provided on course website

COURSE DESCRIPTION: *Provides basic working knowledge of architectural graphics, practice in instrumental drawing and experience in free hand sketching.*

PREREQUISITE KNOWLEDGE AND SKILLS: *None*

PURPOSE OF COURSE: *An effective construction process depends on communication of the owner's and architect's objectives and intent for a project. Construction drawings, and specifications are the documents are the basis for a contractual agreement between an owner and contractor as well as communicate in drawings and words what should be constructed. Construction documents and shop drawings are used throughout the construction process to estimate costs correctly, schedule activities optimally, order acceptable materials, allocate labor efficiently, build accurately, and generally manage construction up to project close out.*

The course will introduce construction drawings and specifications and the use of drawings and specifications in the construction process. The course will focus on plan reading skills and use of drawings in the construction process from a construction manager's perspective.

COURSE OBJECTIVES: *By the end of this course, students will be able to:*

1. *Explain the role of construction drawings and specifications in the construction process. [SACS SLO 1, ACCE SLO 7]*
2. *Demonstrate plan reading skills by interpreting and explaining typical construction documents such as scaled plan, elevation, section, detail, structural, mechanical, and electrical drawings and door, window, finish, and equipment schedules. [SACS SLO 1, ACCE SLO 7]*
3. *Utilize software to apply graphical skills to create construction drawings. [SACS SLO 1, ACCE SLO 10]*
4. *Read and create construction drawings in order to facilitate communication in the construction industry. [SACS SLO 1, ACCE SLO 7]*

HOW THIS COURSE RELATES TO THE STUDENT LEARNING OUTCOMES IN THE CONSTRUCTION MANAGEMENT PROGRAM:

This course relates to

SACS SLO 1: Apply knowledge of engineering, materials, methods, equipment, and processes to safely construct buildings and structures.

and

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

TEACHING PHILOSOPHY: *In this course, lecture and lab sessions complement one another. Students will be able to apply and reinforce learning through hands-on assignments with construction documents and communication tools that reinforce the concepts in lectures and provides real-world examples used in the construction industry. Students will demonstrate learning by demonstrating plan reading skills acquired in the course and creating examples of construction documents. Examples and practice in-class and in assignments will assess and guide learning. Questions and discussions that enhance learning for all are strongly encouraged.*

INSTRUCTIONAL METHODS: *Lectures will introduce concepts and labs will allow students to apply and demonstrate skills; a final project will assess knowledge and skills acquired in the course.*

COURSE POLICIES:

ATTENDANCE POLICY: *Required at all lectures and labs. Requirements for class attendance and make-up exams, assignments, and other work in this course are consistent with university policies that can be found at: https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx*

MAKE-UP POLICY: *Missed assignments, quizzes, and exams can be made up with instructor's permission prior to assignment due date or quiz/exam date.*

ASSIGNMENT POLICY: *Assignments submitted after the late submission date without instructor's permission will be penalized.*

COURSE TECHNOLOGY: *Software will be available in the Rinker School computer lab and through UF Apps. Some software may be available for installation on student computers.*

UF POLICIES:

UNIVERSITY POLICY ON ACADEMIC ACCOMMODATIONS:

Students who would like to request academic accommodations should contact the disability Resource Center: https://disability.ufl.edu/students/

UNIVERSITY POLICY ON ACADEMIC MISCONDUCT: Academic honesty and integrity are fundamental values of the University community. Students should be sure that they understand the UF Student Conduct Code at https://sccr.dso.ufl.edu/process/student-conduct-code/

The Honor Pledge: We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity by abiding by the Student Honor Code. On all work submitted for credit by Students at the University of Florida, the following pledge is either required or implied: "On my honor, I have neither given nor received unauthorized aid in doing this assignment."

COMMUNICATION COURTESY: All members of the class are expected to follow rules of common courtesy in all email messages, discussions and other communication.

COURSE EVALUATION: Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available at https://gatorevals.aa.ufl.edu/students/. Students will be notified when the evaluation period opens, and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via https://ufl.bluera.com/ufl/. Summaries of course evaluation results are available to students at https://gatorevals.aa.ufl.edu/public-results/.

GETTING HELP:

For issues with technical difficulties for E-learning, please contact the UF Help Desk at:

- helpdesk@ufl.edu; (352) 392-HELP (4357); https://lss.at.ufl.edu/

GRADING POLICIES:

Attendance	*10%*
In-class exercises & Homework	*35%*
Midterm Exam	*20%*
Final Project	*35%*
TOTAL	*100%*

Most of the work will be completed in-class throughout the semester, therefore attendance is critical. There are no make-ups for missed classes unless you discuss your absence with the instructor before the classes you miss and provide appropriate documentation within 1 week to support your absences. Three (3rd) unexcused absences without penalty; fourth (4th) absence FINAL LETTER GRADE DOCKED 1 LETTER!

GRADING SCALE:

Letter Grade	*% Grade*
A >=	*93.3*
A- >=	*90*
B+ >=	*86.7*
B >=	*83.3*
B- >=	*80*
C+ >=	*76.7*
C >=	*73.3*
C- >=	*70*
D+ >=	*67.7*
D >=	*63.3*
D- >=	*60*
E < 60	

https://catalog.ufl.edu/UGRD/academic-regulations/grades-grading-policies/

COURSE SCHEDULE:

Week #	Module	Day	Date	Topics
1				
	1 + 2	Thurs	24-Aug	Contract document overview; Plans and specifications
2	3 + 4	Tues	29-Aug	Scale and Lettering
		Thurs	31-Aug	Line Types Symbols Abbreviations
3	5	Tues	5-Sep	Basic projections
	5	Thurs	7-Sep	Basic projections; **Rinker School Welcome Reception 4:30 pm**
4	5	Tues	12-Sep	Sketch-Up
		Thurs	14-Sep	**Rinker School Career Fair, NO AM CLASS** PM: Guest lecture: Construction documents for procurement
5	6	Tues	19-Sep	Floor Plans
	7	Thurs	21-Sep	Reflected-Ceiling Plans and Details
6	8	Tues	26-Sep	Elevations
		Thurs	28-Sep	Sections
7	6,7,8	Tues	3-Oct	Sketch-up
		Thurs	5-Oct	Wrap up classroom drawings and Sketch-up model
8		Tues	10-Oct	Field work: site visit
	9, 10	Thurs	12-Oct	Stairs; Schedules and Specifications
9	11	Tues	17-Oct	Mechanical/Plumbing/Electrical
	12	Thurs	19-Oct	Structural
10	13	Tues	24-Oct	Site Plan
		Thurs	26-Oct	Review for Midterm Exam; Portfolio: Floor Plan
11	P1	Tues	31-Oct	**Midterm Exam**
		Thurs	2-Nov	Portfolio: Sketch-up review; Floor Plan
12	P2 P3	Tues	7-Nov	Portfolio: Floor Plan and Reflected Ceiling Plan
		Thurs	9-Nov	Portfolio: Detail wall section
13	P3	Tues	14-Nov	Portfolio: Elevations and Sections
		Thurs	16-Nov	Portfolio: Sections, Area detail, and Large-scale Details
14	P4	Tues	21-Nov	Portfolio: Door & Window Schedules
		Thurs	23-Nov	**Thanksgiving**
15	P5	Tues	28-Nov	Portfolio: Site Plan
		Thurs	30-Nov	Portfolio: Cover Page and Table of Contents
16		Tues	5-Dec	**5:00PM PROJECT SUBMISSION DEADLINE**

Disclaimer: This syllabus represents the current plans and objectives. As we go through the semester, those plans may need to change to enhance the class learning. Such changes, communicated clearly, are not unusual and should be expected.