

## **BCN 5789C CONSTRUCTION PROJECT SIMULATION**

**Tuesday and Thursday 10:40 AM - 12:35 PM**

**INSTRUCTOR:** R. Raymond Issa, Ph.D., J.D., P.E., F.ASCE,API

**CLASSROOM:** RNK 230

**OFFICE:** RNK 325

**OFFICE HOURS:** By Appointment

**EMAIL:** raymond-issa@ufl.edu

### **COURSE DESCRIPTION**

A construction project is simulated with each student being responsible for designing, developing, estimating, scheduling, contracting, and administering the works for the completion of a small commercial or light industrial project.

### **COURSE LEARNING OUTCOMES (CLOs)**

Upon completion of the course, students will demonstrate their ability to:

1. Formulate the overall design of the project and prepare a 3D virtual model.
2. Perform quantity takeoffs and develop a complete estimate of project costs.
3. Organize the elements of the project into a viable construction work plan and schedule.
4. Set up a project administration system for contracts, schedule of values, and pay applications.
5. Organize, present, and defend the technical and financial data of the project.
6. Prepare a project proposal from a commercial development/investment perspective.

### **RECOMMENDED TEXT**

Materials on CANVAS.

## **COURSE POLICY**

### **ATTENDANCE POLICY**

Attendance is expected.

School sponsored activities in which the appropriate faculty coach has provided a previous written notification of the activity will warrant an excused absence.

You are responsible for all material presented in class, lecture notes on CANVAS, handouts, guest speakers, and anything said or written by the instructor.

### **SUBMISSION POLICIES**

ALL LATE WORK IS PENALIZED, regardless of the reason. You should consider the due date in a similar fashion to submitting a bid.

Each assignment submittal is due at the start of class on the due date. *Partial submissions are unacceptable. However, something is better than nothing.*

## COURSE TECHNOLOGY

DCP and Rinker School policy require students to have a personal laptop computer available for use in class with access to all required software.

## ONLINE COURSE EVALUATION

Students are expected to provide professional and candid feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals.

## GRADING POLICIES

### SUBMITTALS AND ASSIGNMENTS

ITEMS	POINTS	APPROX. %
Revit, Synchro, BIM 360, Walk-Through Use and Class participation	100 points	7%
Submittal Number 1 Assignments #1-4	375 points	23%
Presentation #1: Site Selection & Project Feasibility	50 points	3.33%
Submittal Number 2 Assignments #5 - 7	425 points	30%
Presentation #2 Pre-Construction Phase	50 points	3.33 %
Submittal Number 3 Assignments #8 - 12	450 points	30 %
Presentation 3 (Final Presentation)	50 points	3.33 %
<b>Total</b>	<b>1500 points</b>	<b>100%</b>

### GRADING SCALE

Final grades will be assigned according to the following scale. Divide the total points you earn by the total possible points to obtain your percent.

The point value for each assignment will be clearly indicated when assigned.												
Letter Grade	A	A-	B+	B	B-	C+	C	C-	D+	D	D-	F
Numeric Grade	93-100	90-92	87-89	83-86	80-82	77-79	73-76	70-72	67-69	63-66	60-62	0-59

### COURSE DELIVERY METHOD

This course will be conducted with a two-period session of lecture, followed by a two-hour period of "lab sessions". You are expected to follow along during the lecture and take notes in order to apply the new concepts to your assignments during the lab period. The lab period will be a workshop / seminar style where you are expected to work on the assignment and ask questions to help you successfully master each topic. To accommodate full coverage of all necessary topics for completing all course deliverables, discussion of project requirements and related topics will also take place during these lab sessions.

## ASSIGNMENTS AND FINAL PROJECT SUBMISSION

- **Late submissions are not acceptable, regardless of circumstances.**
- All work turned in for this course should be of professional quality (grammar, etc.).
- All the assignments and final project have to be **submitted exclusively in Canvas.**
- It is **your responsibility** to verify the successful submission of the assignments/ final project in Canvas. Submission by **email** or the **digital media** (such as USB drive) **will not be accepted.**
- In the case you have technical difficulties with Canvas, please contact the UF Help Desk at learning-support@ufl.edu, or (352) 392-4357 - select option 2 or go to Ground floor of the Hub. If your technical difficulties will cause you to miss a due date, you **MUST** report the problem to UF Help Desk **before the due date/time.** Include the ticket number that you are given in an e-mail to the instructor to explain the late assignment due to problem with Canvas.

## UF POLICY

**University Policy on Accommodating Students with Disabilities:** Students requesting accommodation for disabilities must first register with the Dean of Students Office (<http://www.dso.ufl.edu/drc/>). The Dean of Students Office will provide documentation to the student who must then provide this documentation to the instructor when requesting accommodation. You must submit this documentation prior to submitting assignments or taking the quizzes or exams. Accommodations are not retroactive. Therefore, students should contact the office as soon as possible in the term for which they are seeking accommodations.

**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 Honor Code at <http://www.dso.ufl.edu/students.php>.

**University Policy on Teaching 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/>.

## CLASS DEMEANOR

It is expected that everything submitted for a grade will be professional, with correct spelling and grammar. The expectations and caliber of the work expected in this course are elevated to the level of the business community and evaluated against that baseline. If your work product is considered unacceptable in the workplace, then it is unacceptable here. The goal is for all work to represent what you would submit to your immediate boss in a job scenario. If your boss will not accept your work, then we will not accept it either. Your work is subject to electronic verification by TurnItIn® or other technologies.

## HONOR CODE

- **The Honor Code will be applied in the class.** We, the members of the University

of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity. On all work submitted for credit by students at the university, the following pledge is either required or implied: **"On my honor, I have neither given nor received unauthorized aid in doing this assignment."**

- **Duplication of an assignment and quiz/exam/project/activity** both manually or by computer will be considered an act of academic dishonesty and dealt with accordingly. 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.
- Do not allow others to access your files as that will also be considered violation of the Honor Code.
- Visit the website <http://www.dso.ufl.edu/sccr/honorcodes/honorcode.php> for more information about the University of Florida Student Honor Code.

## GETTING HELP

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

- [Learning-support@ufl.edu](mailto:Learning-support@ufl.edu)
- (352) 392-HELP - select option 2
- <https://lss.at.ufl.edu/help.shtml>

Other resources are available at <http://www.distance.ufl.edu/getting-help> for:

- Counseling and Wellness resources
- Disability resources
- Resources for handling student concerns and complaints
- Library Help Desk support

## CLASS SCHEDULE

		SPRING 2022	NOTES
WEEK	Date	Planned Topics *SUBJECT to Change	
		<b>PROJECT FEASIBILITY PHASE</b>	
1	Thurs – Aug. 25	Course Introduction and Review of Syllabus Industry Trends	Course expectations and Milestones
2	Tues – Aug. 30	Site Selection and Use Calculations <i>Site Looking for Use vs. Use looking for a Site</i>	<i>Detailed in Assignment #1</i>
	Thurs – Sept. 1	Individual Project Workday – Site Selection and Use Ideation	
3	Tues – Sept. 6	Site Feasibility Understanding Project Owners – Project Feasibility Analysis Site Due Diligence	<i>Detailed in Assignment #1</i>
	Thurs – Sept. 8	Understanding Project Owners – Delivery Methods Pre-Qualifications	<i>Detailed in Assignment #2</i>
4	Tues – Sept. 13	Programming and Design Conceptual Designs and Estimates Project Narrative	<i>Detailed in Assignment #3</i>
	Thurs- Sept. 15	Programming and Design Conceptual Designs and Estimates Project Narrative	<i>Detailed in Assignment #3</i>

5	Tues – Sept. 20	Sustainability and LEED Considerations	<i>Detailed in Assignment #4</i>
	<b>Thurs – Sept. 22</b>	<b>Presentation #1 Site Selection and Project Feasibility</b>	<b>Project Submittal #1 Due Assignments #1-4</b>
6	Tues – Sept. 27	Individual Project Workday –	
	Thurs – Sept. 29	Individual Project Workday –	
		<b>PRECONSTRUCTION PHASE</b>	
7	Tues – Oct. 4	Drawings and Detailed Estimates	<i>Detailed in Assignment #5</i>
	Thurs- Oct. 6	Schedules	<i>Detailed in Assignment #6</i>
8	Tues – Oct. 11	Design – Schedule- Cost Relationships	
	Thurs – Oct. 13	Cost loaded Schedules - Line of Credit Analysis	<i>Detailed in Assignment #7</i>
9	Tues – Oct. 18	Individual Project Workday –	
	<b>Thurs – Oct. 20</b>	<b>Presentation #2 Pre-Construction Phase Presentation</b>	<b>Project Submittal #2 Due Assignments #5-7</b>
		<b>CONSTRUCTION PHASE</b>	
10	Tues – Oct. 25	Contracting – AIA & AGC forms <b>Review on your own</b>	<i>Detailed in Assignment #8</i>
	Thurs – Oct. 27	Individual Project Workday –	
11	Tues – Nov. 1	Negotiation Strategies Notice to Owner <b>Review on your own</b>	<i>Detailed in Assignment #8</i>
	Thurs – Nov. 3	Individual Project Workday –	
12	Tues – Nov. 8	Site Utilization Plans Project Start-up Project Safety Plans	<i>Detailed in Assignment #9</i>
	Thurs – Nov. 10	Establishing a Schedule of Values Progress Measurement Pay Applications	<i>Detailed in Assignment #10</i>
13	Tues – Nov. 15	Owner Directed Change Orders	<i>Detailed in Assignment #11</i>
	<b>Thurs – Nov. 17</b>	<b>Change Order Presentations</b>	
14	Tues – Nov. 22	Individual Project Workday –	
	Thurs – Nov. 24	Thanksgiving Holiday	
15	Tues – Nov. 29	Substantial Completion Final Payments and Release of Liens Project Close-out	<i>Detailed in Assignment #12</i>
	Thurs- Dec 1	In-Class Work Session	
16	<b>Tues – Dec. 6</b>	<b>Final Presentations</b>	<b>Project Submittal #3 Due Assignments #8-12</b>