

# Construction Capstone Project

BCN 4787C, Section 9507

T, Period 4-5 (10:40 AM - 12:35 PM), 238 Rinker Hall  
R, Period 4-5 (10:40 AM - 12:35 PM), 225 Rinker Hall

*Fall 2016*

**Instructor:**           **Bryan Franz, Ph.D.**  
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Office hours are M/W between 1:00 - 2:30 PM, and by appointment.

## **Course Description:**

This course simulates the construction process and each student is responsible for designing, developing, estimating, scheduling, contracting and administering the work for the completion of a small commercial, residential 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, a schedule of values and monthly payment applications.
5. Organize, present and defend the technical and financial data of the project.
6. Prepare a project proposal from a commercial development and investment perspective.

Additional information on the BCN undergraduate learning outcomes is available at: <https://catalog.ufl.edu/ugrad/current/construction/ALC/building-construction.aspx>. For this course, the CLOs will be evaluated according to the table below.

Course Learning Outcome (CLO)	Assignment(s)	Student Learning Outcome (SLO)		Percent students passing with a 70% or higher
		SACS	ACCE	
1. Design and model project	Assignments 6	1	10, 18, 19	70%
2. Perform takeoff and estimate costs	Assignment 7	2	4	70%
3. Organize work plan and schedule	Assignment 8	3	5, 8, 16	70%
4. Set up project administration system	Assignments 9-12	4	7, 10	70%
5. Present technical and financial data	Presentations 1-3	5	2	70%
6. Prepare project proposal	Assignments 1-5		1, 9, 12, 18	70%

*SACS = Southern Association of Colleges and Schools, ACCE = American Council for Construction Education*

## **Required Texts:**

There are no required textbooks for this course. All text materials will be provided electronically.

### **Course Schedule:**

A detailed course schedule, with a week-by-week topic list and due dates for deliverables, is provided on the **e-Learning** course website: [elearning.ufl.edu](http://elearning.ufl.edu).

### **Evaluation of Grades:**

Two, 2-hour class meetings will be held each week. During these meetings, we will review the expected course deliverables, host relevant guest speakers from the construction industry, and give you an opportunity to present and receive feedback on the progress of your work. Becoming comfortable presenting your ideas is a key objective for this course. Each student will prepare and give three presentations during the semester: one for each major phase of the construction process. Should public speaking be a concern, please contact the instructor as early as possible. Students are responsible for the content of all reading materials, whether or not the material is covered in class. See the detailed course schedule for deliverable due dates.

All BCN graduating seniors must take the AIC Certification Examination for Level 1 - Associate Constructors Exam (Construction Fundamentals) as a requirement of this course. Your score on the exam counts for 10% of your overall grade. Students who pass the exam with a score of 70% will receive the full 10% credit. Students who achieve less than 70% will receive 0% credit. Information about the AIC and the Associate Constructors Exam can be found at: <http://www.professionalconstructor.org>.

Follow the link below for registration information and study guide:

[http://www.professionalconstructor.org/?page=AC\\_Certification](http://www.professionalconstructor.org/?page=AC_Certification)

Date of the exam: November 5, 2016

Late Fee: September 30, 2016

Registration period ends: October 17, 2016

As part of your J1 Registration, you paid the \$155 fee for the exam. Those students who pass the exam, with a 70% or higher, will be reimbursed \$100. Those who pass the exam, with an 80% or higher, will receive a full reimbursement of the \$155 fee.

Final grades will be calculated based on the following weighting:

#### *Feasibility phase assignments*

1: Project proposal	50
2: Site selection	80
3: Feasibility analysis	50
4: Prequalification	115
Presentation #1	45

#### *Preconstruction phase assignments*

5: Green building	25
6: Design drawings	70
7: Project estimate	95
8: Project schedule	100
Presentation #2	25

#### *Construction phase assignments*

9: Contracts	60
10: Payment applications	75
11: Change orders	70

<i>Close-out phase assignments</i>		
12: Close-out		50
Presentation #3		25
AIC Exam		100

You are responsible for addressing grades within one week of the grade being posted on the course's e-Learning website. After one week, the grade stands for the class regardless of cause or circumstance.

**Grading Policy:**

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. Decimal points will not be rounded.

Percent	Letter Grade	Grade Points
93.0 - 100	A	4.00
90.0 - 92.99	A-	3.67
87.0 - 89.99	B+	3.33
83.0 - 86.99	B	3.00
80.0 - 82.99	B-	2.67
77.0 - 79.99	C+	2.33
73.0 - 76.99	C	2.00
70.0 - 72.99	C-	1.67
67.0 - 69.99	D+	1.33
63.0 - 66.99	D	1.00
60.0 - 62.99	D-	0.67
0 - 59.99	E	0.00

More information on grades and grading policies at UF is available at:  
<https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx>

**Class Attendance and Make-Up Policy:**

Attendance is mandatory. The only exception is if you are on a school sponsored activity. Job interviews are **NOT** excused absences. Attendance is taken using a sign-in sheet. Signing in for another student is a violation of the honor code and could result in an automatic failure of the class. You are responsible for all material presented in class, lecture notes on the course's e-Learning website, handouts, guest speakers, and anything said or written by the instructor. Unexcused absences have a direct bearing on whether or not you can appeal or negotiate a grade you receive.

Allowing some groups extra time to complete assignments, while others are delivered on time is inherently unfair. Therefore: **ALL LATE WORK IS PENALIZED**, regardless of the reason. You should consider each due date as firm deadline, in a similar fashion to submitting a bid. The following rules apply to all assignments:

- Each assignment must be submitted **AT THE START OF CLASS** on the given due date to receive full credit. **NOT** by the end of class and **NOT** by the end of the business day.
- Late submissions receive an automatic 10% reduction for each class period late. For example, if an assignment is due on Tuesday, and you do not turn it in at the beginning of class, you have

until the beginning of the next class (Thursday) to turn it in for a -10% reduction. You'll receive a 20% reduction if you wait until the following Tuesday, and so on.

- Partial submissions are unacceptable. If your binder is missing an assignment, that assignment will earn 0 points. Once you turn in your binder, you cannot add missing items. It may be better to wait until the entire package is finished than turn in incomplete work.
- Once an assignment has been graded and returned to the class, late submissions are not accepted.

Requirements for attendance, make-up exams, assignments and other work in this course are consistent with UF policies found at: <https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx>.

### **Students Requiring Accommodations:**

Students with disabilities requesting accommodations should first register with the Disability Resource Center (352-392-8565, [www.dso.ufl.edu/drc/](http://www.dso.ufl.edu/drc/)) by providing appropriate documentation. Once registered, students will receive an accommodation letter which must be presented to the instructor when requesting accommodation. Students with disabilities should follow this procedure as early as possible in the semester.

### **Course Evaluation:**

Students are expected to provide feedback on the quality of instruction in this course by completing online evaluations at <https://evaluations.ufl.edu>. Evaluations are typically open during the last two or three weeks of the semester, but students will be given specific times when they are open. Summary results of these assessments are available to students at <https://evaluations.ufl.edu/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. Work that may have been previously accepted during your academic career may no longer be acceptable here. When available, use software to produce your work. 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 won't accept, then we won't either.

This course has been taught for many years and as a result there may be a temptation to "rely on the work of others" for inspiration. Should the instructor determine that a student's work is substantially similar to that of another (either past or present) the student may be subject to a rejection of that assignment and will be cited with an honor court violation. Similarly, the use of materials, worksheets, or data from previous semesters is considered cheating. Your work is subject to electronic verification by TurnItIn® or other technologies.

### **Materials and Supplies Fees:**

A materials and supply fee of \$10.00 is required for this course.

### **University Honesty Policy:**

UF students are bound by The Honor Pledge which states, "We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honor and integrity by abiding by the 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." The Honor Code specifies a number of behaviors that are in

violation of this code and the possible sanctions (<https://www.dso.ufl.edu/sccr/process/student-conducthonor-code/>). Furthermore, you are obligated to report any condition that facilitates academic misconduct to appropriate personnel. If you have any questions or concerns, please consult with the instructor or TAs in this class.

**Counseling and Wellness Center**

Contact information for the Counseling and Wellness Center is available on the web at <http://www.counseling.ufl.edu/cwc/Default.aspx> or by phone at (352) 392-1575; and the University Police Department: (352) 392-1111 or 9-1-1 for emergencies.