

FLORIDA ATLANTIC UNIVERSITY™

Graduate Programs—NEW COURSE PROPOSAL¹

UGPC APPROVAL _____
 UFS APPROVAL _____
 SCNS SUBMITTAL _____
 CONFIRMED _____
 BANNER POSTED _____
 CATALOG _____

DEPARTMENT: CIVIL, ENVIRONMENTAL AND
 GEOMATICS ENGINEERING

COLLEGE: ENGINEERING AND COMPUTER SCIENCE

RECOMMENDED COURSE IDENTIFICATION:

PREFIX CCE COURSE NUMBER 5036 LAB CODE (L or C) C

(TO OBTAIN A COURSE NUMBER, CONTACT MJENNING@FAU.EDU)

COMPLETE COURSE TITLE: Civil Engineering Project Management

EFFECTIVE DATE

(first term course will be offered)

CREDITS²: 3

TEXTBOOK INFORMATION:

Halpin, D.W. (2006), Construction Management, 3rd Edition, Wiley
 Extensive use of handouts

GRADING (SELECT ONLY ONE GRADING OPTION): REGULAR SATISFACTORY/UNSATISFACTORY _____

COURSE DESCRIPTION, NO MORE THAN THREE LINES: This is a course in which planning, design, document preparation, bidding, bid tabulation, construction management, cost estimating, conflict resolution and scheduling for civil engineering projects are covered.

PREREQUISITES*: NONE

COREQUISITES*: NONE

REGISTRATION CONTROLS (MAJOR, COLLEGE, LEVEL)*:

* PREREQUISITES, COREQUISITES AND REGISTRATION CONTROLS WILL BE ENFORCED FOR ALL COURSE SECTIONS.

MINIMUM QUALIFICATIONS NEEDED TO TEACH THIS COURSE: PHD IN CIVIL ENGINEERING OR CLOSELY RELATED FIELD

Faculty contact, email and complete phone number:

Dr. Frederick Bloetscher, P.E.
 Building 36, Room 219
 Telephone: 561-297-0744
 E-mail: h2o_man@bellsouth.net or
fbloetsc@fau.edu

Please consult and list departments that might be affected by the new course and attach comments.

No other departments affected.

Approved by:

Department Chair: _____

College Curriculum Chair: _____

College Dean: _____

UGPC Chair: _____

Graduate College Dean: _____

UFS President: _____

Provost: _____

Date:

9/29/14

9/29/14

10/11/14

10/8/14

10-15-14

1. Syllabus must be attached; see guidelines for requirements:

www.fau.edu/provost/files/course_syllabus.2011.pdf

2. Review Provost Memorandum: Definition of a Credit Hour

www.fau.edu/provost/files/Definition_Credit_Hour_Memo_2012.pdf

3. Consent from affected departments (attach if necessary)

Email this form and syllabus to UGPC@fau.edu one week before the University Graduate Programs Committee meeting so that materials may be viewed on the UGPC website prior to the meeting.

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1. Course title/number, number of credit hours			
Civil Engineering Project Management CCE 5036		3 credit hours	
2. Course prerequisites, corequisites, and where the course fits in the program of study			
<p><i>Prerequisite:</i> None <i>Co-Requisites:</i> None.</p> <p>This is a course in which planning, design, document preparation, bidding, bid tabulation, construction management, cost estimating, conflict resolution and scheduling for civil engineering projects are covered.</p>			
3. Course logistics			
<p><i>Term:</i> Fall 2014 This is a classroom lecture course <i>Class location and time:</i> Thurs. 7:10 pm – 10:00 pm</p>			
4. Instructor contact information			
<i>Instructor's name</i>	Dr. Frederick Bloetscher, PE, Associate Professor	Mr. Albert Muniz, P.E.	
<i>Office address</i>	Engineering West (EG-36) Room 219		
<i>Office hours</i>			
<i>Telephone no.</i>	239-250-2423	561-997-80704	
<i>Email address</i>	h2o_man@bellsouth.net	amuniz@hazenandsawyer.com	
5. TA contact information			
Not applicable			
6. Course description			
The class meets twice per week W 7:10-10 p.m. p.m. The class will follow various aspects of management of a project from start to finish. A real example will be used as the backdrop for homework/project exercises.			
7. Course objectives/student learning outcomes/program outcomes			
<i>Course objectives</i>	<ul style="list-style-type: none"> I. Present and discuss the processes by which civil engineering projects are designed and constructed. II. Present and develop scheduling and project management skills. III. Present and develop skills for cost estimating, quantity takeoff and bidding civil engineering projects. IV. Show how design professionals and the construction professions interact to construct a project. 		
<i>Student learning outcomes & relationship to ABET a-k objectives</i>	<ul style="list-style-type: none"> A. Ability to prepare a project progress Report, bid preparation and schedule acceptable to a client (d, e, f, g, h, i, j, k) B. Ability to analyze project schedule (a, b, c, e, f, h, k) C. Ability to function on multi-disciplinary teams (d, e, f, h, j, k) D. Ability to understand professional practice issues such as procurement of 		

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	work; bidding versus quality-based selection processes; how the design and construction professions interact to construct a project; engineering economics, costs estimates, development of specifications, bidding and contract law (d, e, f, g, i)	
<i>Relationship to program outcomes</i>	Outcome 1: An understanding of professional and ethical responsibility.	H
	Outcome 2: A working knowledge of fundamentals, engineering tools, and experimental methodologies.	H
	Outcome 3: An understanding of the social, economic, and political contexts in which engineers must function.	H
	Outcome 4: An ability to plan and execute an engineering design to meet an identified need.	H
	Outcome 5: An ability to function on multi-disciplinary teams.	H
	Outcome 6: An ability to communicate effectively.	H
	Outcome 7: Graduates will have a proficiency in the following areas of civil engineering: (a) structural engineering, (b) transportation engineering, (c) geotechnical engineering, and (d) water resources/environmental engineering.	M
	Outcome 8: Graduates will have an appreciation for the role of civil engineering in infrastructure planning and sustainability, including hazard mitigation.	H
	Outcome 9: Graduates will be successful in finding professional employment and/or pursuing further academic studies.	H

8. Course evaluation method (note percentages subject to change)

Mid Term Exam	30%	<i>Note: The minimum grade required to pass the course is C.</i>
Final Exam	30%	
Final Report	30%	
Homework	10%	

9. Course grading scale

Course grades are assigned according to the attached Department of Civil Engineering Grading Guidelines. Assignments and reports must be prepared according to the required formats (see attached documents: (a) Assignment Presentation and (b) Technical/Project/Laboratory Report Writing). Additional requirements may be given by the instructor. **NOTE: you cannot pass the class if you fail both exams regardless of you grade.**

10. Policy on makeup tests, late work, and incompletes

Exams will be given only at the scheduled times and places. No one is exempt from the final examination. *Makeup tests* are given only if there is solid evidence of a medical or otherwise serious emergency that prevented the student of participating in the exam. Makeup exams will be administered and proctored by department personnel unless there are other pre-approved arrangements. *Late work* is not acceptable. *Incomplete grades* are against the policy of the department. Unless there is solid evidence of medical or otherwise serious emergency situation, incomplete grades will not be given. *Attendance* to class is required. You are expected to attend and participate in all class sessions. Final grades will be reduced by one letter for every three (3) unexcused absences (as determined by the instructor).

11. Special course requirements

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none.

12. Classroom etiquette policy

1. Cell phones and beepers should have the ringers turned off as a courtesy to the instructor and your fellow classmates.
 2. Computers must be closed and turned off in class
 3. You can leave only on breaks
 4. Exams will be given only at the scheduled times and places. No make-ups, except in documented emergencies. No one is exempt from the final examination.
 5. Attendance to class is required. You are expected to attend and participate in all class sessions. Final grades will be reduced by one letter for every three (3) unexcused absences (as determined by the instructor). Attendance to at least one (1) professional meeting is required.
 6. You are expected to complete the assigned reading prior to the date indicated on the class schedule, to do all homework assignments, and to participate fully in the group projects.
 7. Assignments are due at the beginning of class on the date indicated on the assignment sheet.
- University policy requires that in order to enhance and maintain a productive atmosphere for education, personal communication devices, such as cellular phones and laptops, are to be disabled in class sessions. You are expected to complete the assigned reading prior to the date indicated on the class schedule, to do all homework assignments, and to participate fully in the group projects

13. Disability policy statement

In compliance with the Americans with Disabilities Act (ADA), students who require special accommodations due to a disability to properly execute coursework must register with the Office for Students with Disabilities (OSD) located in Boca Raton campus, SU 133 (561) 297-3880 and follow all OSD procedures.

14. Honor code policy

Consultation with your classmates on assignments is expected and encouraged; however what you turn in must be your own work. Representing the work of others as your own is unethical and may result in sanctions (see the FAU Policy on Academic Honesty). FAU is committed to a policy of honesty in academic affairs. The instructor's duty is to pursue any reasonable allegation, taking action where appropriate, as described in the appropriate section of the FAU Catalog (<http://www.fau.edu/ug-cat/academic.htm#irregular>) and the Florida Administrative Code. Please be advised that the copying of material from the world wide web or any other written material is considered plagiarism and is also a breach of the Honor Code.

Students at Florida Atlantic University are expected to maintain the highest ethical standards. Academic dishonesty is considered a serious breach of these ethical standards, because it interferes with the university mission to provide a high quality education in which no student enjoys unfair advantage over any other. Academic dishonesty is also destructive of the university community, which is grounded in a system of mutual trust and place high value on personal integrity and individual responsibility. Harsh penalties are associated with academic dishonesty. See University Regulation 4.001 at www.fau.edu/regulations/chapter4/4.001_Honor_Code.pdf.

Florida Atlantic University

Regulation 4.001 Code of Academic Integrity

(1) Purpose. Students at Florida Atlantic University are expected to maintain the highest ethical standards. Dishonesty is considered a serious breach of these ethical standards, because it interferes with the University mission to provide a high quality education in which no student enjoys an unfair advantage over any other. Dishonesty is also destructive of the University community, which is grounded in a system of mutual trust and places high value on personal integrity and individual responsibility.

(2) Definitions. The FAU Code of Academic Integrity prohibits dishonesty and requires a faculty member, student, or staff member to notify an instructor when there is reason to believe dishonesty has occurred in a

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course/program requirement. The instructor must pursue any reasonable allegation, taking action where appropriate. Examples of academic dishonesty include, but are not limited to, the following:

(A) Cheating

1. The unauthorized use of notes, books, electronic devices, or other study aids while taking an examination or working on an assignment.
2. Providing unauthorized assistance to or receiving assistance from another student during an examination or while working on an assignment.
3. Having someone take an exam or complete an assignment in one's place.
4. Securing an exam, receiving an unauthorized copy of an exam, or sharing a copy of an exam.

(B) Plagiarism

1. The presentation of words from any other source or another person as one's own without proper quotation and citation.
2. Putting someone else's ideas or facts into your own words (paraphrasing) without proper citation.
3. Turning in someone else's work as one's own, including the buying and selling of term papers or assignments.

(C) Other Forms of Dishonesty

1. Falsifying or inventing information, data, or citations.
2. Failing to comply with examination regulations or failing to obey the instructions of an examination proctor.
3. Submitting the same paper or assignment, or part thereof, in more than one class without the written consent of both instructors.
4. Any other form of academic cheating, plagiarism, or dishonesty.

(3) Procedures.

(A) If the instructor determines that there is sufficient evidence to believe that a student engaged in dishonesty, the instructor will meet with the student at the earliest possible opportunity and provide notice to the student of the instructor's perception of the

facts, the charges against the student, and the sanction. The instructor may not remove the student from the course until the appeal process has come to a conclusion.

(B) If, after this meeting, the instructor continues to believe that the student engaged in dishonesty, the instructor will provide the student written notice of the charges and the penalty. A copy of this statement shall be sent to the chair of the department or director of the school/program administering the course.

(C) The student is entitled to an opportunity to be heard at a meeting with the instructor and chair/director to review and discuss the instructor's charges/statement. Such request for a meeting must be made in writing and received by the chair/director within five (5) business days of receipt of the instructor's charges/statement. The purpose of the meeting is to discuss the facts and to advise the student of the appeal process. The chair/director will provide the student, the instructor, and the dean of the college administering the course a summary of both the student's position and the instructor's position.

(D) The student may appeal in writing to the dean of the college administering the course. The appeal must be received by the dean within five (5) business days of receipt of the chair/director's summary from the review meeting. The dean will convene a Faculty-Student Council ("Council"), which will be composed of the dean (or designee), two faculty members, and two students. The dean (or designee) will act as chair of the Council, direct the hearing, and maintain the minutes and all records of the appeal hearing, which will not be transcribed or recorded. The hearing is an educational activity subject to student privacy laws/regulations, and the strict rules of evidence do not apply. The student may choose to be accompanied by a single advisor, but only the student may speak on her/his own behalf. The student and instructor may present testimony and documents on his/her behalf. Additional witnesses may be permitted to speak at the dean's (or designee's) discretion and only if relevant and helpful to the Council. The Council will deliberate and make a recommendation to the dean to affirm or void the

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instructor's findings of academic dishonesty. The dean (or designee) will inform the student and instructor in writing of his/her findings of academic dishonesty after receipt of the Council's recommendation.

(E) The student may request an appeal in writing of the dean's findings of academic dishonesty to the University Provost (or designee) and include relevant documentation in support of such appeal. The University Provost (or designee) will notify the student, dean, and instructor of his/her decision in writing. This decision by the Provost (or designee) constitutes final University action.

(F) If there is a finding that the Code of Academic Integrity has been violated, the chair will notify the University Registrar that the following notation be included on both the student's official transcript and on the student's internal record: "Violation of Code of Academic Integrity, University Regulations 4.001." If such violation is appealed and overturned, the dean or University Provost (or their designees) will notify the University

Registrar that such notation should be removed from the student's transcript and internal record.

(4) Penalties.

(A) The instructor will determine the penalty to be administered to the student in the course. Penalty grades cannot be removed by drop, withdrawal, or forgiveness policy. Students should be aware that, in some Colleges/programs, failure in a course or a finding of dishonesty may result in other penalties, including expulsion or suspension from the College/program.

(B) In the case of a first offense, the student may elect to complete a peer counseling program administered by the Division of Student Affairs by the end of the semester following the semester in which the dishonesty occurred. Upon successful completion of this program, the notation regarding violation of the Code of Academic Integrity will be expunged from the student's official transcript. The grade, however, will remain unchanged and cannot be removed by drop or forgiveness policy. Also, the notation will remain in internal University student records.

(C) In the case of a repeat offense, even if the notation of violation of the Code of Academic Integrity from the first offense had been expunged from the official transcript as a result of successful completion of the peer counseling program, the student will be expelled from the University.

Specific Authority: Article IX of the Florida Constitution, 1001.706, 1001.74 F.S., Board of Governors Regulations 1.001, 6.010, and 6.0105. History—New 10-1-75, Amended 12-17-78, 3-28-84, Formerly 6C5-4.01, Amended 11-11-87. Formerly 6C5-4.001. Amended 5-26-10

See University Regulation 4.001 at www.fau.edu/regulations/chapter4/4.001_Honor_Code.pdf.

15. Required texts/reading

First 2 textbooks are required for both semesters of Civil Engineering Design

1. Halpin, D.W. (2006), Construction Management, 3rd Edition, Wiley
2. Materials as needed for the design project development
3. Handouts provided by instructor
4. Blackboard registration

16. Supplementary/recommended readings

1. none

17. Other

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1. College of Engineering and Computer Science (COECS) Technology Services Group (TSG)

TSG provides support for students with issues related to the use of College computing resources such as lamp.cse.fau.edu, the student web server, and GENIE, the Citrix Remote Application Server. TSG also supports the Microsoft Developer Network Academic Alliance portal through which students taking courses in CEECS can obtain free copies of many software products from Microsoft. Details of these and other resources are described on the TSG web site at tsg.eng.fau.edu.

For support issues not covered on the web site students must send email to help@eng.fau.edu. TSG responds to help requests only through this email address. Do not attempt to phone them or contact them personally. TSG support is limited to assistance with COECS computing resources such as having your password on lamp reset. They do not handle specific course related questions. Those should be directed to the instructor for the course.

2. FAU Information Resource Management (IRM)

IRM provides support for general computing and network issues at FAU. General information and many resources can be found on the IRM site, www.fau.edu/irm/index.php. IRM provides direct student through an online Help Desk at www.fau.edu/helpdesk/. The help desk includes extensive online support resources and a "Ticket" submission system for support requests. Areas of particular concern to students in this course covered by the Help Desk include general Blackboard, FAU NetId and network login, and FAU Google Email. The Help Desk can also be accessed by phone at (561) 297-3999. Phone access should generally be used only if you are unable to log in to FAU systems. For most other issues the phone consultant will simply record your concern and submit a help ticket on your behalf. The help ticket will get the same treatment as one you submit directly.

3. College of Engineering and Computer Science (COECS) Division of Engineering Student Services (ESS)

ESS provides general advising and academic support for students in COECS including free tutoring support for all students in computer science courses. Additional information can be found on their web page at www.eng.fau.edu/engineering-student-services.

4. FAU University Center for Excellence in Writing (UCEW)

The UCEW, sometimes referred to simply as the Writing Center, provides assistance to students with writing assignments through consultants. They can assess student writing skills and suggest approaches to dealing with problem areas. The center web site is at www.fau.edu/UCEW/WC.

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18. Course topical outline, including dates for exams/quizzes, papers, completion of reading		
Date	Topic	Assignment
Week 1 August 29	Introduction/Defining Project Mgmt Types of Organizations Design Procurement	
Week 2 Sept 5	Construction Contracts 16 Section of Construction Bonds	
Week 3 Sept 12	Project Planning Staffing the project Human Resources	
Week 4 Sept 19	Scheduling Pick Your Teams	
Week 5 Sept 26	QTO Cost Estimating	• Ed Small
Week 6 Oct 3	Catch-up/Estimating Discussion Review	
Week 7 Oct 10	Midterm Exam	
Week 8 Oct 17	Construction Sequencing Construction Methods	<ul style="list-style-type: none"> • Material Storage • Laydown Area • Sedimentation control • Excavation • Dewatering • Cut and Fill
Week 9 Oct 24	Presentation QTO Construction Equipment	
Week 9 Oct 26	FE Exam	
Week 10 Oct 31	More Construction Sequencing Construction Methods	<ul style="list-style-type: none"> • Foundations • Steel Erection • Concrete • Scaffolding \Tilt up • Roof • Grading/Paving
Week 11 Nov 7	Draw Schedules/Variance Analysis Change Orders, Claims and Litigation	
Week 12 Nov 14	Safety Risk Considerations <i>Review</i>	
Week 13 Nov 21	Final Exam	
Week 14 Nov 28	NO CLASS - Thanksgiving	
Week 15 TBD Wed?	Final Presentation	
Week 16 Dec 12	Graduation	

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Presentation Rubric

	Excellent	Good	Fair	Poor	Unacceptable
<input checked="" type="checkbox"/> Content	All team members display professional level of knowledge of subject material with no important content left out and no incorrect material presented.	All team members display professional level of knowledge of subject material with minor amount of subject material left out or minor amount of incorrect materials presented.	Majority of team members display professional level of knowledge of subject material with minor amount of subject material left out or minor amount of incorrect materials presented.	Some team members display professional level of knowledge of subject material with minor amount of subject material left out or minor amount of incorrect materials presented.	No team members display professional level of knowledge of subject material with minor amount of subject material left out or minor amount of incorrect materials presented.
<ul style="list-style-type: none">• Subject Matter	All important topics are covered during the presentation with no essential elements missing or misrepresented.				
<ul style="list-style-type: none">• Knowledge of Subject	Each member of the team demonstrates an understanding of the essential topics presented.				
<input checked="" type="checkbox"/> Organization	Presentation has a strong introduction, an effective body of material that supports the conclusions, and a strong ending.	Presentation has deficiencies in only one of the following: introduction, body, or conclusion.	Presentation has deficiencies in two of the following: introduction, body, or conclusion.	Presentation has deficiencies in all of the following: introduction, body, or conclusion.	Presentation is missing introduction, body, or conclusion.
<ul style="list-style-type: none">• Introduction	Presentation starts strong with scope and objectives clearly presented.				
<ul style="list-style-type: none">• Continuity	Facts are presented in a logical sequence and transitions effectively between speakers.				
<ul style="list-style-type: none">• Conclusion	Finishes strong with reasonable summary and/or recommendations presented, as justified from the body of the presentation.				
<input checked="" type="checkbox"/> Delivery	Presentation is effective in terms of rhythm, visuals, and presenters' body language.	Presentation has deficiencies in only one of the following: rhythm, visuals, and presenters' body language.	Presentation has deficiencies in two of the following: rhythm, visuals, and presenters' body language.	Presentation has deficiencies in all of the following: rhythm, visuals, and presenters' body language.	Presentation is clearly not rehearsed, visuals are unprofessional, and/or presenters' body language is unprofessional.
<ul style="list-style-type: none">• Rhythm	Presentation demonstrates effective use of time, presenters seem well-prepared, and appears rehearsed.				
<ul style="list-style-type: none">• Visuals	Visuals are effective, free of clutter, related to the discussion, and meaningful.				
<ul style="list-style-type: none">• Body Language	Presenters maintain eye contact with the audience and are free of any distracting or annoying mannerisms.				

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	Excellent	Good	Fair	Poor	Unacceptable
<input checked="" type="checkbox"/> Discussion	All questions are fielded professionally, confidently, and correctly while avoiding defensive or argumentative responses.	Majority of questions are fielded professionally, confidently, and correctly while avoiding defensive or argumentative responses.	Some questions are fielded professionally, confidently, and correctly while avoiding defensive or argumentative responses.	Only one question is fielded professionally, confidently, and correctly while avoiding defensive or argumentative responses	None of the questions are fielded professionally, confidently, and correctly while avoiding defensive or argumentative responses
• Question and Answer Session	Answers supplied reflect an understanding of the topic.				
<input checked="" type="checkbox"/> Overall Impression	Presentation addresses all important subject matter; demonstrates conceptual understanding of the content, and responds to the purpose of the report; slides are cohesive, clear, concise, and organized well; presentation has many strengths; delivery is professional; question and answers show excellent engineering judgment.	Presentation addresses most of the important subject material; demonstrates conceptual understanding of the content, and responds to the purpose of the report; majority of slides are cohesive, clear, concise, and organized well; presentation has strengths; delivery is professional; question and answers show good engineering judgment.	Presentation addresses some of the important subject material; demonstrates conceptual understanding of the content, and responds to the purpose of the report; some of the slides are cohesive, clear, concise, and organized well; presentation has few strengths; delivery is professional; question and answers show some engineering judgment.	Presentation addresses little of the important subject material; demonstrates conceptual understanding of the content, and responds to the purpose of the report; some of slides are cohesive, clear, concise, and organized well; presentation has requires major revision; delivery is professional; question and answers show lack of engineering judgment.	Presentation is completely unprofessional.