FAU

FLORIDA ATLANTIC UNIVERSITY

COURSE CHANGE REQUEST
Graduate Programs

Department Civil, Environmental &Geomatics Engineering

College College of Engineering & Computer Science

UGPC Approval _____
UFS Approval _____
SCNS Submittal _____
Confirmed _____
Banner Posted _____
Catalog _____

***Current* Course Prefix and Number**	***Current* Course Title**
CEG 6105	Advanced Foundation Engineering

Syllabus must be attached for ANY changes to current course details. See Guidelines. Please consult and list departments that may be affected by the changes; attach documentation.

Change title to:

Change prefix

From: **To:**

Change course number

From: **To:**

Change credits*

From: **To:**

Change grading

From: **To:**

*Review Provost Memorandum

Change description to:

Change prerequisites/minimum grades to:

None

Change corequisites to:

None

Change registration controls to:

Please list existing and new pre/corequisites, specify AND or OR and include minimum passing grade.

Effective Term/Year for Changes: Fall 2019

Terminate course? Effective Term/Year for Termination:

Faculty Contact/Email/Phone Ramesh Teegavarapu, 7-3444

Approved by	***Date***
Department Chair	3/1/2019
College Curriculum Chair	3/11/19
College Dean	3/11/2019
UGPC Chair	
UGC Chair	
Graduate College Dean	
UFS President	
Provost	

Email this form and syllabus to UGPC@fau.edu one week before the UGPC meeting.

Department of Civil Environmental and Geomatics Engineering
Florida Atlantic University
Course Syllabus

1. Course title/number, number of credit hours

Advanced Foundation Engineering – CEG6105	3 credit hours

2. Course prerequisites, co-requisites, and where the course fits in the program of study

Prerequisites: None

3. Course logistics

Term: Fall 2018
This is a classroom lecture course.
Class location and time: FL 404 07:10 PM - 10:00 PM (Lecture).

4. Instructor contact information

Instructor's name	Dr. Jamie Polidora, PE, CPM, LEED AP
Office address	N/A
Office Hours	N/A
Contact telephone number	561-866-9189
Email address	jfraser4@fau.edu

5. TA contact information

TA's name	N/A
Office address	
Office Hours	
Contact telephone number	
Email address	

6. Course description

Rigid and flexible earth retaining structures; shallow and deep foundations; laterally loaded piles, sheet- pile walls, braced excavations; cellular coffer-dams, buried culverts; consolidation settlement, stress distribution, elastic settlement, load bearing capacity, seepage and dewatering of foundation excavations.

7. Course objectives/student learning outcomes/program outcomes

Course Objectives	I. To provide students with knowledge of analysis of statically determinate structures II. Develop students' ability to determine internal forces of statically indeterminate structures by force method and displacement method III. To understand the basics and use matrix method of structural analysis with computer applications

Student learning outcomes & relationship to ABET 1-7 objectives	I. Ability to apply the principles of shear strength and settlement analysis for foundation systems (1,2, 4) II. Ability to read and understand soil boring data for foundation design (1,2,4) III. Ability to design shallow and deep foundations. (1,2,5) IV. Ability to analyze and design earth retaining structures (1,2,4,5)

8. Course evaluation method

Homework assignments and class participation: 10% Class attendance 5% Midterm examination 35% Final Examination: 50% **All Examinations will be closed book.**	*Note:* The minimum grade required to pass the course is C.

9. Course grading scale

There are not any fixed criteria for the grading scale. The overall performance as related to course objectives and outcomes is evaluated and considered during grading.

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

Normally no make-up quizzes or examinations are given except in case of a medical or otherwise serious emergency that prevented the student from participating in the exam. Makeup exam would be administered and proctored by department personnel unless there are other pre-approved arrangements.

All completed homework assignments shall be submitted in hard copy format.Late submission of 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.

11. Special course requirements

None

12. Classroom etiquette policy

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.

13. Attendance Policy

Students are expected to attend all of their scheduled University classes and to satisfy all academic objectives. The effect of absences upon grades is determined by the instructor, and the University reserves the right to deal at any time with individual cases of non-attendance.
Students are responsible for arranging to make up work missed because of legitimate class absence, such as illness, family emergencies, military obligation, court-imposed legal obligations or participation in University-

approved activities. Examples of University-approved reasons for absences include participating on an athletic or scholastic team, musical and theatrical performances and debate activities. It is the student's responsibility to give the instructor notice prior to any anticipated absences and within a reasonable amount of time after an unanticipated absence, ordinarily by the next scheduled class meeting. Instructors must allow each student who is absent for a University-approved reason the opportunity to make up work missed without any reduction in the student's final course grade as a direct result of such absence.

14. Disability policy statement

In compliance with the Americans with Disabilities Act Amendments Act (ADAAA), students who require reasonable accommodations due to a disability to properly execute coursework must register with Student Accessibility Services (SAS) and follow all SAS procedures. SAS has offices across three of FAU's campuses – Boca Raton, Davie and Jupiter – however disability services are available for students on all campuses. For more information, please visit the SAS website at www.fau.edu/sas/.

15. Counseling and Psychological Services (CAPS) Center

Life as a university student can be challenging physically, mentally and emotionally. Students who find stress negatively affecting their ability to achieve academic or personal goals may wish to consider utilizing FAU's Counseling and Psychological Services (CAPS) Center. CAPS provides FAU students a range of services – individual counseling, support meetings, and psychiatric services, to name a few – offered to help improve and maintain emotional well-being. For more information, go to http://www.fau.edu/counseling/

16. Code of Academic Integrity Policy Statement

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_Code_of_Academic_Integrity.pdf

17. Required texts/reading

1. Principles of Foundation Engineering, B. M. Das and N. Sivakugan, Ninth Edition, *Thomson*, 2016.

18. Supplementary/recommended readings

1. U.S. Navy Design Manual DM 7.02, *Foundations and Earth Structures,* Naval Facilities Engineering Command, Alexandria, VA, 1986.

19. Course topical outline, including dates for exams/quizzes, papers, completion of reading

Date	Topic
August 20	Chapter 1: Introduction Chapter 2: Geotechnical Properties and Soil Exploration

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August 27	Chapter 3: Natural Soil Deposits and Subsoil Exploration
September 3	**No Class – Labor Day**
September 10	Chapter 5: Soil Improvement
September 17	Chapter 6: Shallow Foundations; Ultimate Bearing Capacity
September 24	Chapter 8: Vertical Stress Increase in Soil
October 1	Chapter 9: Settlement of Shallow Foundations ***Midterm Exam Review***
October 8	**Midterm Exam**
October 15	Chapter 10: Mat Foundations
October 22	Chapter 12: Pile Foundations
October 29	Chapter 13: Drilled –Shaft Foundations
November 5	Chapter 16: Lateral Earth Pressure
November 12	**No Class – Veteran's Day**
November 19	Chapter 1 7: Retaining Walls Chapter 18: Sheet Pile Walls
November 26	Chapter 19: Braced Cuts ***Final Exam Review***
December 3	**No Class – Reading Day**
December 10	**Final Exam 7:10 PM – 10:00 PM**