
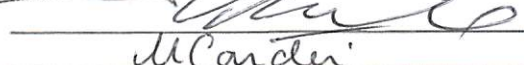
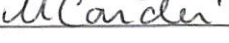
 FLORIDA ATLANTIC UNIVERSITY	COURSE CHANGE REQUEST Graduate Programs		UGPC Approval _____ UFS Approval _____ SCNS Submittal _____
	Department Civil, Environmental & Geomatics Engineering College College of Engineering & Computer Science		Confirmed _____ Banner Posted _____ Catalog _____
Current Course Prefix and Number CEG 6129		Current Course Title Pavement Analysis and Design	
<i>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.</i>			
Change title to: Change prefix From: To: Change course number From: To: Change credits* From: To: Change grading From: To: <small>*Review Provost Memorandum</small>		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 Department Chair  College Curriculum Chair  College Dean  UGPC Chair _____ UGC Chair _____ Graduate College Dean _____ UFS President _____ Provost _____		Date 3/8/19 3/11/19 3/11/2019 _____ _____ _____ _____	

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

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1. Course title/number, number of credit hours	
Pavement Analysis and Design –CEG6129	3 credit hours
2. Course prerequisites, corequisites, and where the course fits in the program of study	
Prerequisites: None	
3. Course logistics	
Term: Spring 2018 This is a lecture course with accompanying research and design projects Class location and time: T 7:10 – 10 PM; Lecture FL 427	
4. Instructor contact information	
<i>Instructor's name</i>	Dr. K. Sobhan, Professor
<i>Office address</i>	Engineering West (EG-36) Bldg., Room 221; EDU 481 (Spring 2018)
<i>Office Hours</i>	T-R 11:00 -12:00 PM
<i>Contact telephone number</i>	561-297-3473
<i>Email address</i>	ksobhan@fau.edu
5. TA contact information	
<i>TA's name</i>	TBA
<i>Office address</i>	
<i>Office Hours</i>	
<i>Contact telephone number</i>	
<i>Email address</i>	
6. Course description	
Introduction to the analysis of stress, strain and deflection in flexible and rigid pavements, materials characterization, Traffic analysis, AASHTO and Mechanistic design, non-destructive testing, pavement rehabilitation	
7. Course objectives/student learning outcomes/program outcomes	
<i>Course objectives</i>	<ul style="list-style-type: none"> A. To develop an understanding of the stresses and strains in pavement systems B. To provide a background in mechanistic-empirical design approach C. To understand materials properties as they relate to pavements D. To learn the AASHTO design of flexible and rigid pavements E. To learn how to use mechanistic design software
<i>Student learning outcomes & relationship to ABET a-k objectives</i>	<ul style="list-style-type: none"> I. Ability to design flexible and rigid pavements (a,b,c,e,f,k) II. Understand the concepts of resilient modulus and cumulative damage (a,b,e,k) III. Understand pavement distress such as fatigue and rutting (a,b,e,k)

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	IV. Ability to calculate stress/strain/deflection using design software (a,b,c,e,i,k)	
8. Course evaluation method		
Mid Term Exam	25%	<i>Note:</i> The minimum grade required to pass the course is C.
Research Project Part A	15%	
Research Project Part B	15%	
Final Exam	35%	
Quizzes	10%	
9. Course grading scale		
There is not any fix 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		
<p><i>Makeup tests</i> 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 exam should be administered and proctored by department personnel unless there are other pre-approved arrangements.</p> <p><i>Late work</i> is not acceptable.</p> <p><i>Incomplete grades</i> 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.</p>		
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. 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)—in Boca Raton, SU 133 (561-297-3880); in Davie, LA 203 (954-236-1222); or in Jupiter, SR 110 (561-799-8585)—and follow all SAS procedures.		
14. Honor code policy		
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		

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15. Required texts/reading

Pavement Analysis and Design, 2nd Edition, Y. H. Huang, Prentice Hall, 2004

16. Supplementary/recommended readings

1. AASHTO Guide for Design of Flexible Pavements (1993)
2. Mechanistic-Empirical Pavement Design Guide (MEPDG), AASHTO 2004

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

Date	Topic
Week 1: Topic 1	1. Historical Perspectives and Mechanistic Design Philosophies
Week 2: Topic 2	2. Stresses and Strains in Flexible Pavements
Week 3: Topic 3	3. Mechanistic / Computer Modeling of Pavement Systems
Week 4: Topic 4	4. Traffic Volume and Loading
Week 5: Topic 5	5. Material Characterization
Week 6: Topic 6	6. Stresses and Strains in Rigid Pavements
Week 7: Topic 7	7. AASHTO Flexible Pavement Design
Week 8: Topic 8	8. AASHTO Rigid Pavement Design
Week 9: Topic 9	9. Pavement Distresses and Performance
Week 10: Topic 10	10. Pavement Rehabilitation