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**	TTE 6526	***Current* Course Title**	Airport Planning and Design

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	3/11/2019
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.

Florida Atlantic University
Department of Civil Engineering

Instructor:	**Aleksandar Stevanovic, Ph.D., P.E.** Office: 225 EG, Office Hours: Wednesday 10-12 AM; Thursday 9-11 AM Telephone: 561-297-3743, E-mail: astevano@fau.edu
Course Description (including prerequisites):	**Airport Planning and Design (TTE 6526) 3 credits.** **Room: CM 130 Day: Wednesday Time: 4:00-6:50 PM** *Prerequisite: None* To provide the student with tools and methods to analyze and plan effectively airports. The course will emphasize in the following issues: 1) technology of air vehicles related to airport engineering, 2) operating principles and costs, and 3) airport planning and systems analysis techniques.
Course Objectives (what we will do in this class):	**I.** Ability to conceptualize, and solve air-transportation problems. **II.** Analyze and design airport facilities by identifying the parameters needed to perform this analysis. **III.** To investigate different solution in air traffic management via class room discussion, problem sets and semester long project.
Course Outcomes (what we expect you to learn):	**A.** Analyze the effect of airport environmental variables on aircraft operations. **B.** Estimate the capacity of any airport configuration and understand the influence of weather, aircraft mix, and other operational parameters in capacity. **C.** Estimate the delays at an airport given certain supply and demand factors. **D.** Analyze the noise impacts of aircraft in the vicinity of airports. **E.** Estimate the economic benefits and impacts of airports in the community. **F.** Understand development of a master plan for an airport facility. **G.** Use some of computer simulation software packages used in industry in the planning and design of airports (i.e., SIMMOD).
Textbook and Other Required Materials:	• ***"Planning and Design of Airports" (5th edition) by Horonjeff, McKelvey, Sproule, and Young (ISBN-10: 0071446419; ISBN-13: 978-0071446419) (mandatory).*** • Handouts provided by instructor. • Blackboard registration.
Recommended Optional Materials:	• De Neufville, R., and A. Odoni, "Airport Systems – Planning, Design, and Management", McGraw-Hill, 2003. • Ashford, N., H.P. M., Stanton, and C. A. Moore, "Airport Operations", McGraw-Hill, 2nd edition, 1997. • Wells, A.T., S.B., Young, "Airport Planning & Management", McGraw-Hill, 5th edition, 2004.
Course Structure and Approach:	*The class meets once per week for a 2-hour & 50-minute lecture. Homework assignments are given periodically. Examinations consist of mid-term exam, final exam, and a presentation on class project. The course requires the students to have some confidence in computer literacy such as the use of spreadsheets, basic programming skills and willingness to actively participate in a group learning environment. This course will also test students' ability to write about topics of technical nature.*

Evaluation:

The course grade is based on the following components:

Class Participation	5%
Homework Assignments	25%
Mid-term	20%
Class Project	25%
Final Exam	25%

The grading of the course will be based on one mid-term exam, one final exam, class participation, homework assignments, and class project. The homework assignments will follow the class lectures. The project will be defined later during the course and it may be individual effort or a group-based exercise. The emphasis will be on real-world applications of the material covered in the class with a variety of computer applications of methods and techniques.

Grade	Range	Grade	Range
A	[93.34-100]	C	[73.34-76.67)
A-	[90.00-93.34)	C-	[70.00-73.34)
B+	[86.67-90.00)	D+	[66.67-70.00)
B	[83.34-86.67)	D	[63.34-66.67)
B-	[80.00-83.34)	D-	[60.00-63.34)
C+	[76.67-80.00)	F	[0.00-60.00)

Course Policies:

1. Cell phones and beepers should have the ringers turned off as a courtesy to the instructor and your fellow classmates.
2. Department policy is to require class attendance. When in class, you are expected to participate in all class sessions. Exams will be given only at the scheduled times and places. No make-ups will be given, except in documented emergencies. No one is exempt from the final examination.
3. 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. Homework and other assignments will be submitted electronically through your Blackboard accounts by midnight of the day when the assignment is due. Late assignments will not be accepted.
4. Consultation with your classmates on assignments is expected and encouraged; however you must turn in 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, 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.

University Policies:

Code of Academic Integrity and instructional policies can be found at following website: *http://www.fau.edu/regulations/chapter4/4.001_Code_of_Academic_Integrity.pdf*. It is your responsibility to be familiar with these rules. 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, SU 133, (561) 297-3880, or in Davie, MD I (954) 236-1222, and follow all OSD procedures.

Lecture Schedule Class meets W 4:00 pm to 6:50 pm			
Week #	**Topic**	**Assignment Due**	**Textbook Reading**
1. Jan 12	*History of Airport Engineering*		*Chapter 1*
2. Jan 19	*Aircraft Technology & Airport Design*		*Chapter 2*
3. Jan 26	*Guest Speaker*	*Assignment 1*	
4. Feb 2	*Air Traffic Management*		*Chapter 3*
5. Feb 9	*Airport Master Planning & Forecasting*		*Chapters 4&5*
6. Feb 16	*Airport Design*	*Assignment 2*	*Chapter 6*
7. Feb 23	*Structural Design of Airport Pavements& Airport Lighting, Marking, and Signing*		*Chapters 7&8*
8. Mar 2	*Mid-Term Exam*	*Assignment 3*	
9. Mar 9	*Spring Brake*		
10. Mar 16	*Airport Drainage & Airport Security*		*Chapters 9&11*
11. Mar 23	*Airport Terminal Planning & Design*	*Assignment 4*	*Chapter 10*
12. Mar 30	*Airport Airside Capacity Analysis*		*Chapter 12*
13. Apr 6	*Airport Capacity & Simulation Models*	*Assignment 5*	*Chapter 12*
14. Apr 13	*Airport Financing*		*Chapter 13*
15. Apr 20	*Environmental Planning*	*Assignment 6*	*Chapter 14*
16. Apr 27	*Class Project Presentations*	*Class Project*	
17. May 4	*Final Exam*		