

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

1. Course title/number, number of credit hours	
TRANSPORTATION OPERATIONS AND LOGISTICS MANAGEMENT- TTE 4105	3 credit hours
2. Course prerequisites, corequisites, and where the course fits in the program of study	
Prerequisites: TTE 3004C or URP 3000 with minimum grade of "C", or Permission of Instructor	
3. Course logistics	
<p><i>Term:</i> Spring 2019 This is a classroom lecture course <i>Class location and time:</i> CM 130 and W 7:10 - 10:00 PM (Lecture) TBA</p> <p>Exams will be given only at the scheduled times and places. No make-ups, except in documented emergencies. 15-minute quizzes are randomly given throughout the semester.</p>	
4. Instructor contact information	
<i>Instructor's name</i> <i>Office address</i> <i>Office Hours</i> <i>Contact telephone number</i> <i>Email address</i>	Dr. Evangelos I. Kaisar, Associate Professor Engineering West (EG-36) Bldg., Room 214 T-Tr: 1:00 -2:30 PM 561-297-4084 ekaisar@fau.edu
5. TA contact information	
<i>TA's name</i> <i>Office address</i> <i>Office Hours</i> <i>Contact telephone number</i> <i>Email address</i>	
6. Course description	
Transportation system management and operations strategies provide multimodal solutions that relieve congestion, optimize infrastructure investments, promote travel options, and reduce greenhouse gas emissions. Modeling of complex interactions and causal relationships among current issues. Transportation modes and technologies, vehicle dynamics, basic facility design, capacity analysis, transportation planning, evaluation and choice, network analysis, logistics and ITS. Transportation risk assessment and computation; evacuation modeling; reliability analysis; infrastructure interdependency analysis; network impact assessment.	
7. Course objectives/student learning outcomes/program outcomes	
<i>Course objectives</i>	A. Give undergraduate Civil Engineering students substantial exposure to, and working familiarity with the transportation management and operations, policy, planning, and land use. B. Give the students the substantial exposure to intelligent transportation systems, freight transportation, and transportation logistics. C. Give the students the necessary knowledge in supply chain management and hazmat materials related to transportation arena.

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	D. Give the students the experience of collaborating in project teams while working on course projects(s).	
<i>Student learning outcomes & relationship to ABET 1-7 outcomes</i>	<ol style="list-style-type: none"> 1. Ability to understand the principles of transportation logistics and management (1, 2, 4, 7) 2. Ability to understand the concepts of Freight Transportation and terminal operations (2,4,6,7) 3. Ability to understand and perform optimization and simulation techniques (1,2,4,7) 4. Ability to work with peers in project teams to deal with real world problems (1, 2, 3, 4, 5, 6, 7) 	
<i>Relationship to program outcomes</i>	Outcome 1: An understanding of professional and ethical responsibility.	High
	Outcome 2: A working knowledge of fundamentals, engineering tools, and experimental methodologies	High
	Outcome 3: An understanding of the social, economic, and political contexts in which engineers must function.	Low
	Outcome 4: An ability to plan and execute an engineering design to meet an identified need.	High
	Outcome 5: An ability to function on multi-disciplinary teams.	High
	Outcome 6: An ability to communicate effectively.	High
	Outcome 7: Graduates will have proficiency in the following areas of civil engineering: (i) structural engineering, (ii) transportation engineering, (iii) geotechnical engineering, (iv) water resources, and (v) environmental engineering.	High
	Outcome 8: Graduates will have an adequate appreciation for the role of civil engineering in infrastructure planning and sustainability including safety, risk assessment, and hazard mitigation.	Medium
	Outcome 9: Graduates will be successful in finding professional employment and/or pursuing further academic studies.	Medium
8. Course evaluation method		
Class Participation: 5% Homework Assignments: 15% Quizzes: 10% Midterm/Final Exam: 30% Class Project: 40%	<i>Note:</i> The minimum grade required to pass the course is C.	

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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
<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. As one worst quiz will be dropped, there will be no make-up quizzes. <i>Late work</i> is not unacceptable. <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.
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 statement
Students are expected to attend all of their scheduled University classes and to satisfy all academic objectives as outlined by the instructor. 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

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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. 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](http://www.fau.edu/regulations/chapter4/4.001_Code_of_Academic_Integrity.pdf)

17. Required texts/reading

1. Handouts provided by instructor

18. Supplementary/recommended readings

1. Ashford, N., and Wright, P., 1992. "Airport Engineering" J. Wiley, 1992.
2. Wright, P.H. and Ashford. N.J. 1989. "Transportation Engineering –Planning and Design." John Wiley and Sons, Inc.
3. Armstrong, J., 1984 "The Railroad: What It Is, What It Does." Simmons-Boardman.
4. Winston, W.L., 1994, "Operations Research, Applications and Algorithms," Prentice-Hall, Inc

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

Date	Topic
January	<i>Administrative/Introduction to Transportation Management</i>
January	<i>Student Presentations/TRB conference Simulation Review</i>
January	<i>Intelligent Transportation Systems(Introduction)</i>
January	<i>Intelligent Transportation Systems(Applications)</i>
February	<i>Transportation and Logistics</i>
February	<i>Transportation Management & Operation</i>
February	<i>Transportation Discussion/ Student Presentation</i>
February	<i>ITS in Freight Transportation</i>
March	Spring Break
March	Project Presentation/Field Trip

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March	Container Terminals/Logistics and ITS
March	<i>Transportation Discussion/ Student Presentation</i>
April	<i>Hazmat Materials/Supply Chain Management</i>
April	<i>Transportation Discussion/ Student Presentation</i>
April	<i>Safety & Security</i>
April	Group Presentations Review
May	Final Exam (TBA)