|  |
| --- |
| **1. Course title/number, number of credit hours** |
| Transportation Operations & Logistics Management – TTE 4105 |  3 credit hours |
| **2. Course prerequisites, corequisites, and where the course fits in the program of study** |
| Prerequisites: TTE 4005 Transportation Planning & Logistics , or *URP 3000,* or permission of Instructor |
| **3. Course logistics** |
| *Term*: Spring 2014This is a classroom lecture course*Class location and time*: W 6:00 - 8:50 PM (Lecture) TBAExams 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.  |
| **4. Instructor contact information** |
| *Instructor’s name**Office address**Office Hours* *Contact telephone number**Email address* | Dr. Evangelos I. Kaisar, Associate ProfessorEngineering West (EG-36) Bldg., Room 214T-Tr: 1:00 -2:30 PM561-297-4084ekaisar@fau.edu  |
| **5. TA contact information** |
| *TA’s name**Office address**Office Hours* *Contact telephone number**Email address* |  |
| **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** |
| *Course objectives* | 1. Give undergraduate Civil Engineering students substantial exposure to, and working familiarity with the transportation policy, planning, and land use.
2. Give the students the substantial exposure to intelligent transportation systems, freight transportation, and transportation logistics.
3. Give the students the experience of collaborating in project teams while working on course projects(s).
 |
| *Student learning outcomes**& relationship to ABET a-k objectives* | 1. Ability to understand the principles of the transportation policy and planning. (a, b, c)
2. Ability to understand the principles of freight transportation and terminal operations. (a, b)
3. Understand the concepts of logistics. (b)
4. An ability to understand the concepts of public transportation. (b, k)
5. An ability to understand and perform travel demand forecasting. (a, k)
6. An ability to work with peers in project teams to deal with real world

 problems. (a, b, k) |
| *Relationship to program outcomes* | **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% | *Note*: The minimum grade required to pass the course is C. |
| **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** |
| *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 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.***Late work* is not unacceptable.*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. 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** |
| 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) |
| **15. Required texts/reading** |
| * 1. Handouts provided by instructor
 |
| **16. 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
 |
| **17. Course topical outline, including dates for exams/quizzes, papers, completion of reading** |
| **Date** | **Topic** |
| January   |  A *Administrative/Introduction to Transportation Management*   |
| January   |  *Student Presentations/TRB conference* *Simulation Review* |
| January   |  *Intelligent Transportation Systems(Introduction)* |
| January   |  *Transportation Discussion/ Student Presentations* |
| February   |  *Transportation Management & Operation(Guest Speaker)* |
| February   |  *Transportation Discussion/ Student Presentation* |
| February   |  *Freight Transportation*  |
| February   |  *Transportation Discussion/ Student Presentation* |
| March   |  **Spring Break**  |
| March   |  **Project Presentation***/****Field Trip*** |
| March  | *Hazmat Materials/Supply Chain Management* |
| March   |  *Transportation Discussion/ Student Presentation*  |
| April  |  *Ports/Terminals/Logistics* |
| April  |  *Transportation Discussion/ Student Presentation* |
| April  |  *Transportation and Land Use Planning (Student Presentation)* |
| April  |  **Group Presentations**  Review  |
|  |   |
| May |  **Final Exam (TBA)** |