

INDE 7397 - LOGISTICS & TRANSPORTATION - FALL 2012

Instructor: Ali Ekici

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Office: E221A Engineering Building 2

Office hours: Tuesday-Thursday 2:30-4:00 pm or by appointment

Class meeting times: Tuesday-Thursday 4:00-5:30 pm

Class meeting location: SW229

Course website: <http://blackboard.egr.uh.edu/>

PREREQUISITE: INDE 6372 - Linear Optimization

TEXTBOOK: The Logic of Logistics: Theory, Algorithms, and Applications for Logistics and Supply Chain Management, by D. Simchi-Levi, X. Chen and J. Bramel.

REFERENCES:

- Introduction to Logistics Systems Planning and Control, by G. Ghiani, G. Laporte, and R. Musmanno.
- The Vehicle Routing Problem: Latest Advances and New Challenges, by B. Golden, S. Raghavan, and E. Wasil.
- The Vehicle Routing Problem, by P. Toth and D. Vigo.

OPTIMIZATION MODELING SOFTWARE:

You may need to solve some homework problems using mathematical programming modeling software or by developing a simple computer program. For computer programming, you can use any language you want. For mathematical programming, I recommend GAMS or CPLEX. GAMS is available in IE Graduate Computer Lab, and CPLEX can be downloaded for free from IBM website.

COURSE DESCRIPTION AND OBJECTIVES:

Description:

This course seeks to familiarize graduate students with problems in the design and control of modern logistics systems, and quantitative methods for modeling, analyzing and developing solutions to these problems. Topics to be covered include:

1. facility location planning
2. long-haul transportation management
3. short-haul transportation management

Objectives:

1. To develop a deeper understanding of logistics problems, including design and operational problems
2. To develop skills in the use of the operations research/management science tools to address logistics problems

3. To become familiar with some of the complicated nature of practical logistics problems, and to learn how these problems can be attacked with industrial engineering tools

GRADING:

Homework: All homework assignments will be required. They will be posted on the course website with associated due dates. Homework is due at the beginning of class. Late assignments carry no credit. Depending on their length and difficulty, the total number of points in each homework might vary. Collaboration towards its solution is strongly encouraged, but each student must turn in his/her own written solutions in his/her own words; photocopies will not be accepted. Should some submitted homework assignments be identical or suspected to be identical, all involved parties will be subject to questioning. Failure to satisfactorily explain the similarity will result in our proceeding under the assumption that a transgression against the academic honesty policy may have occurred. Homework is meant to be a learning tool. If you are having difficulty, find help right away, don't wait until you fall even further behind! Good sources of help are fellow students and your instructor. None of the homework will be dropped, so please make every attempt to submit all homework assignments on time. No extra credit will be given for extra work and/or redoing assignments.

Exams: There will be two exams. The first exam will be an in-class exam on October 23, and the second exam will be a take-home exam which will be administered during December 6 - December 10. In-class exam will be during regular class hours. It will be closed book, closed notes and must be done individually. You are not allowed to discuss or exchange information on exam questions or answers with others either in or outside of this class. During take-home exam, you are allowed to refer to any source including textbooks and journal articles, but you cannot receive help from other people including your classmates. Academic misconducts are strictly prohibited. To protect the honest majority, any cheating on any exam, big or small, will be penalized by an "F" in the course.

Grading Policy:	Homework Assignments:	50%
	Exams:	25% each

RULES AND POLICIES:

Announcements: Students are responsible for all announcements made in class and for all changes in the schedule that are posted on the class website.

Re-grades: Grading mistakes can and do occur. If you feel your assignment or exam is graded incorrectly, you may submit it for a re-grade within a one-week period of its return date with a written explanation. In that case, I reserve the right to re-grade the entire document, which may result in either an increase or a decrease in your total grade. We are not trying to scare off students whose exams were graded incorrectly, but we are trying to avoid frivolous requests. Re-grade requests are not accepted after the one-week time limit.

Make-ups: According to the University Policy, a makeup examination will be administered only if the instructor is furnished with written evidence that a student is:

1. Participating in an activity appearing on the University Authorized Activity List and must be preceded by authorized, written notice.

2. Confined to home or bed by physician on account of illness. (A card from the health center saying that you visited the health center does not count. I need to see a report which clearly states that you were not in a physical condition to take the exam at the scheduled date/time.)
3. Bereaved by a death in his/her immediate family.
4. Participating in legal proceedings that require his/her presence.

If you miss an exam due to a valid excuse as listed above, you have to notify the instructor as soon as possible but no later than 48 hours after the scheduled exam, and provide a written evidence as soon as possible. Otherwise, you will not be allowed to take a makeup exam and you will receive a grade of ZERO (0) for that exam.

Academic Dishonesty: Academic misconduct is not tolerated at University of Houston. In case of violations, the instructor reserves the right to take the appropriate action to ensure a fair grade policy. In addition, violations will be dispatched in accordance with the university policy. You must sign the academic honesty statement which will be distributed in class and is available on the course web site, and submit it to your instructor by Tuesday, September 4. If you fail to do this, you will be dropped from the course.

Students with Disabilities: Any student with documented physical, cognitive or learning disabilities covered by the University's Services for Students with Disabilities should notify the instructor within the first week of classes. Students are responsible to specify exam accommodations that are needed by showing their Student Accommodations Form (SAF) to instructor and must also have the instructor complete the Request for Individualized Testing Accommodations (RITA) Form.

Classroom Conduct: To ensure a smooth lecture, students are required to turn off completely their cellular phones (no vibrating mode) as well as any other electronic device (unless instructed otherwise) at the beginning of each lecture. Any student failing to meet these requirements will be asked to leave the classroom.

Dropping the Course: You may drop the course without receiving a grade until 11:59pm Wednesday September 12, which is the University's last day to drop without record. After this date and until 11:59pm, Friday November 2, you may drop with a W if you have not exceeded your total W limit. Do not assume that you will be dropped by the instructor if you stop attending class. You are responsible for completing the withdrawal procedure.

Religious Holy Days: Students whose religious beliefs prohibit class attendance on designated dates or attendance at scheduled exams may request an excused absence. To do this, you are strongly encouraged to request the excused absence, in writing, by the last day to drop without record for Fall 2012 (Wednesday September 12). Please submit this written request to your instructor immediately, to allow the instructor to make appropriate arrangements. For more information, see the Student Handbook.