IE 5334-001 Spring 2013 TR 11:00AM – 12:20PM Room 404 Woolf Hall

Instructor: Dr. K.J. Rogers, P.E. Phone: (Woolf Hall) 817-272-2495

Office: 420F, Woolf Hall Email: jrogers@uta.edu Website: http://ie.uta.edu/ Office Hours: TR before and after class (other times by appointment as requested)

Required Texts: World Class Warehousing and Material Handling by Frazelle. McGraw-Hill, 2002

Warehouse & Distribution Science - version 0.95 by John J. Bartholdi, III and Steven T. Hackman, August, 2011.

Reference: Facilities Planning. Tompkins, White, et.al. John Wiley, 4th edition, 2010.

Course Description: 5334. LOGISTICS DISTRIBUTION SYSTEMS DESIGN (3-0). The design and analysis of distribution systems of people, processes and technology. The focus is on distribution, warehousing, and material handling. Topics include the role of the warehouse in the extended enterprise, warehouse planning, process design, layout, equipment selection, workforce & workplace issues, and performance measures. Prerequisites: IE 3301, 5301 or concurrent enrollment, and 5329 or concurrent enrollment or equivalent.

Course Learning Outcomes: This course is designed for the student already knowledgeable of basic queuing theory, inventory control, and probability models. By the end of the course, the student will be able to analyze and evaluate the underlying behavior of logistics warehouse/distribution systems using a systematic approach.

Tentative Course Outline / Specific Areas of Study Planned:

- Introduction to Logistics & Supply Chain Design Issues / Why Have a Warehouse?
- Distribution Center Material Handling Systems Master Planning and Layout Design and Analysis
- Warehouse/Distribution Center Activity Profiling
- Warehouse Management Systems
- Warehouse Operations Innovation Including Workforce Issues
- Performance Metrics, Benchmarking, Demand Chain Integration, etc.

General Policies/Guidelines:

- ♦ If you require an accommodation based on disability, I would like to meet with you in the privacy of my office, during the first week of the semester, to make sure you are appropriately accommodated.
- Part of the course grade will be based on a term project (with oral presentation) in a relevant area of mutual interest to instructor and student. We will explore specific topics early in the semester to allow sufficient time for proper research and project preparation.
- If you miss a test with an <u>approved excuse (e.g. from a doctor stating you are too ill to sit for the test)</u>, you may take a comprehensive final as a makeup.
- ♦ Course Evaluation & Final Grade: Grades are based on performance. No curves planned.
 - Course grade will be comprised of performance on exams, homework, quizzes, and projects.

Exams 80% Project 20%

• Performance standard: $D \ge 60\%$, $C \ge 70\%$, $B \ge 80\%$, $A \ge 90\%$

Key Dates:

02/26	Project Topic Due (title and 1 paragraph abstract due at beginning of class)
02/28	Midterm Exam
03/11-03/15	Spring Vacation
04/23	Projects Due (written reports & group presentation files due at the beginning of class)
05/07	Final Exam <i>Note Time!</i> [11:00AM-12:30PM]

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Distance Education Policies: The IMSE Dept. offers most graduate IE courses on-line through streaming-video and Blackboard. Log on using your netID and password at http://elearn.uta.edu for access to class notes and assignments. A distance student is defined as a student enrolled in the distance section (typically "002" or "003") of an IE course. Please visit the IMSE website http://www.uta.edu/ie/distance_education_policy.html for details. Pay special attention to Policy #2: Distance students are required to communicate with the faculty before the second class period. This "first contact" is important and I look forward to hearing from all distance students via email soon.

Drop Policy: Students may drop or swap (adding and dropping a class concurrently) classes through self-service in MyMav from the beginning of the registration period through the late registration period. After the late registration period, students must see their academic advisor to drop a class or withdraw. Undeclared students must see an advisor in the University Advising Center. Drops can continue through a point two-thirds of the way through the term or session. It is the student's responsibility to officially withdraw if they do not plan to attend after registering. **Students will not be automatically dropped for non-attendance**. Repayment of certain types of financial aid administered through the University may be required as the result of dropping classes or withdrawing. For more information, contact the Office of Financial Aid and Scholarships (http://wweb.uta.edu/ses/fao).

Americans with Disabilities Act: The University of Texas at Arlington is on record as being committed to both the spirit and letter of all federal equal opportunity legislation, including the *Americans with Disabilities Act (ADA)*. All instructors at UT Arlington are required by law to provide "reasonable accommodations" to students with disabilities, so as not to discriminate on the basis of that disability. Any student requiring an accommodation for this course must provide the instructor with official documentation in the form of a letter certified by the staff in the Office for Students with Disabilities, University Hall 102. Only those students who have officially documented a need for an accommodation will have their request honored. Information regarding diagnostic criteria and policies for obtaining disability-based academic accommodations can be found at www.uta.edu/disability or by calling the Office for Students with Disabilities at (817) 272-3364.

Academic Integrity: All students enrolled in this course are expected to adhere to the UT Arlington Honor Code: *I pledge*, on my honor, to uphold UT Arlington's tradition of academic integrity, a tradition that values hard work and honest effort in the pursuit of academic excellence. *I promise that I will submit only work that I personally create or contribute to group collaborations, and <i>I will appropriately reference any work from other sources*. *I will follow the highest standards of integrity and uphold the spirit of the Honor Code*. Per UT System Regents' Rule 50101, §2.2, suspected violations of university's standards for academic integrity (including the Honor Code) will be referred to the Office of Student Conduct. Violators will be disciplined in accordance with University policy, which may result in the student's suspension or expulsion from the University.

Student Support Services Available: UT Arlington provides a variety of resources and programs designed to help students develop academic skills, deal with personal situations, and better understand concepts and information related to their courses. Resources include tutoring, major-based learning centers, developmental education, advising and mentoring, personal counseling, and federally funded programs. For individualized referrals, students may visit the reception desk at University College (Ransom Hall), call the Maverick Resource Hotline at 817-272-6107, send a message to resources@uta.edu, or view the information at www.uta.edu/resources.

Electronic Communication Policy: UT Arlington has adopted MavMail as its official means to communicate with students about important deadlines and events, as well as to transact university-related business regarding financial aid, tuition, grades, graduation, etc. All students are assigned a MavMail account and are responsible for checking the inbox regularly. There is no additional charge to students for using this account, which remains active even after graduation. Information about activating and using MavMail is available at http://www.uta.edu/oit/cs/email/mavmail.php.

Student Feedback Survey: At the end of each term, students enrolled in classes categorized as lecture, seminar, or laboratory shall be directed to complete a Student Feedback Survey (SFS). Instructions on how to access the SFS for this course will be sent directly to each student through MavMail approximately 10 days before the end of the term. Each student's feedback enters the SFS database anonymously and is aggregated with that of other students enrolled in the course. UT Arlington's effort to solicit, gather, tabulate, and publish student feedback is required by state law; students are strongly urged to participate. For more information, visit http://www.uta.edu/sfs.

Final Review Week: A period of five class days prior to the first day of final examinations in the long sessions shall be designated as Final Review Week. The purpose of this week is to allow students sufficient time to prepare for final examinations. During this week, there shall be no scheduled activities such as required field trips or performances; and no instructor shall assign any themes, research problems or exercises of similar scope that have a completion date during or following this week *unless specified in the class syllabus*. During Final Review Week, an instructor shall not give any examinations constituting 10% or more of the final grade, except makeup tests and laboratory examinations. In addition, no instructor shall give any portion of the final examination during Final Review Week. During this week, classes are held as scheduled. In addition, instructors are not required to limit content to topics that have been previously covered; they may introduce new concepts as appropriate.

Librarian to Contact: Sylvia George-Williams sylvia@uta.edu Subject quide for IMSE: http://libquides.uta.edu/IMSE