## IE 1205: Introduction to Industrial Engineering Fall 2015

Instructor(s): Dr. Bonnie Boardman

Office Number: 420N

Office Telephone Number: 817-272-3220 Email Address: boardman@uta.edu

Faculty Profile: <a href="https://mentis.uta.edu/public/#profile/profile/view/id/224/">https://mentis.uta.edu/public/#profile/profile/view/id/224/</a>

Office Hours: Monday: 10:00-12:00; Wednesday: 10:00-12:00

Section Information: IE 1205-001 Time and Place of Class Meetings: TR 11:00-12:20; UH 04

**Description of Course Content:** Introduction to basic engineering concepts. Opportunities are provided to develop skills in oral and written communication, and department-specific material. Case studies are presented and analyzed.

## **Student Learning Outcomes:**

- Understand the types of work industrial engineers do and how industrial engineering fits into various organizations
- Create an individualized, detailed plan including a semester by semester class schedule to complete the BSIE curriculum.
- Use the UTA research databases and appropriately cite your sources using Microsoft Word.
- Use Microsoft Excel to analyze data collected in lab experiments. Evaluate the results of the analysis.
- Describe basic concepts of a variety of industrial engineering tools.
- Develop a PowerPoint presentation.
- Develop an understanding of the jobs that IEs can do, whatever the job is labeled.

**Required Textbooks and Other Course Materials:** *Introduction to Industrial Engineering*, by Jane M. Fraser, online at <u>www.introtoie.com</u>.

## **Course Topics:**

- 1. Introduction to IE 1205
- 2. Scholarly Grit Exercise
- 3. Microsoft Word with Lab
- 4. Microsoft Excel with Lab
- 5. BSIE Curriculum Overview with Lab
- 6. UTA Libraries: Introduction, Catalog System, On-Line Research Databases with Lab
- 7. Introduction to Statistics and Quality Control with Lab
- 8. Introduction to Ergonomics with Lab
- 9. Introduction to Concept Maps with Lab

- 10. Introduction to Operations Research with Lab
- 11. Graphing Excellence with Lab
- 11. Microsoft PowerPoint with Lab

As the instructor for this course, I reserve the right to adjust this schedule in any way that serves the educational needs of the students enrolled in this course.

## **Course Requirements**:

**Assignments** – Several out of class assignments will be given during this course. The purpose of these assignments is to allow you to practice the concepts discussed in the course. Assignments must be handed in at the designated time and will count for 55% of your final grade.

**Examinations** – There will be one midterm and a final given during this course. There will be no make-up examinations. You must take all tests at their scheduled times. Examinations will account for 30% of your final grade. The final exam is scheduled for **Tuesday, December 15<sup>th</sup>, 11:00-12:20**.

**Attendance** - At The University of Texas at Arlington, taking attendance is not required. Rather, each faculty member is free to develop his or her own methods of evaluating students' academic performance, which includes establishing course-specific policies on attendance. As the instructor of this section, I believe that participation in classroom exercises is vital for learning the material. The best way to get a good education at UTA is to become involved as much as you can in class discussions and departmental activities. Your participation will be measured through in class activities and quizzes. This participation will count for 15% of your final grade.

Grading: Grades in this course will be earned based on the following criteria:

A = 90% and above B = 80% - 89% C = 70% - 79% D = 60% - 69% F = 0% - 59%

Students are expected to keep track of their performance throughout the semester and seek guidance from available sources (including the instructor) if their performance drops below satisfactory levels.

**Drop Policy:** Students may drop or swap (adding and dropping a class concurrently) classes through selfservice 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 twothirds 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 (<u>http://wweb.uta.edu/ses/fao</u>).

**Disability Accommodations: UT** 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), The Americans with Disabilities Amendments Act (ADAAA),* and *Section 504 of the Rehabilitation Act.* 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 disability. Students are responsible for providing the instructor with official notification in the form of a letter certified by the <u>Office for Students with Disabilities (OSD)</u>. Students experiencing a range of conditions (Physical, Learning, Chronic Health, Mental Health, and Sensory) that may cause diminished academic performance or other barriers to learning may seek services and/or accommodations by contacting:

The Office for Students with Disabilities, (OSD)www.uta.edu/disabilityor calling 817-272-3364.Counseling and Psychological Services, (CAPS)www.uta.edu/caps/or calling 817-272-3671.

**Title IX:** The University of Texas at Arlington is committed to upholding U.S. Federal Law "Title IX" such that no member of the UT Arlington community shall, on the basis of sex, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any education program or activity. For more information, visit www.uta.edu/titleIX.

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 will appropriately reference any work from other sources. I will follow the highest standards of integrity and uphold the spirit of the Honor Code.

Instructors may employ the Honor Code as they see fit in their courses, including (but not limited to) having students acknowledge the honor code as part of an examination or requiring students to incorporate the honor code into any work submitted. 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**: 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:** 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.

**Inclement Weather Policy**: In the event that weather or other conditions are such that normal campus operations could be impeded the following policy will apply for this class. If the University is closed, this class will not meet. Any assignments due or examinations scheduled will be due or rescheduled to the very next class period that the class meets. Local media should announce any closings. You can also get information on UTA's homepage.

**The English Writing Center (411LIBR)**: Hours are 9 am to 8 pm Mondays-Thursdays, 9 am to 3 pm Fridays and Noon to 5 pm Saturdays and Sundays. Walk In *Quick Hits* sessions during all open hours Mon-Thurs. Register and make appointments online at <u>http://uta.mywconline.com</u>. Classroom Visits, Workshops, and advanced services for graduate students and faculty are also available. Please see <u>www.uta.edu/owl</u> for detailed information.

**Emergency Exit Procedures:** Should we experience an emergency event that requires us to vacate the building, students should exit the room and move toward the nearest exit, you can find this information posted near the doors in this room. When exiting the building during an emergency, one should never take an elevator but should use the stairwells. Faculty members and instructional staff will assist students in selecting the safest route for evacuation and will make arrangements to assist handicapped individuals.

**Emergency Phone Numbers:** In case of an on-campus emergency, call the UT Arlington Police Department at **817-272-3003** (non-campus phone), **2-3003** (campus phone). You may also dial 911. Non-emergency number 817-272-3381.