## OPRE 3310-502 Operations Management

Fall 2016, Monday \& Wednesday: 5:30 p.m. - 6:45 p.m., Room: JSOM 11.202

## Instructor: Ilhan Emre Ertan

Office: JSOM 3.423
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Office Hours: Mondays 4:15 p.m.- 5:15 p.m. or by appointment

## Course Pre-requisites and Co-requisites:

MATH 1326 (Pre-req.), MATH 2333 (Pre-req.), BA/STAT 3360 (Co-req.)

## Course Description:

This course teaches concepts useful in efficiently managing the transformation of materials, labor, and capital into products or services. Topics covered include: the role of operations management in overall competitive strategy, key performance measures, and tools for improving operations performance. The level of discussion varies from long-term strategic planning to daily control of business processes.

## Learning Objective:

Students will understand the role operations management plays in business processes. Upon completion of the course, students will also be able to:

- Quantitatively analyze and interpret operations information
- Solve typical operations management problems
- Document and report operations performance

Required Textbook: Operations Management by William J. Stevenson, 12th Edition, Irwin/McGraw Hill, ISBN 978-0-07-802410-8

## Grading Policy:

| Homework | $0 \%$ |
| :--- | :--- |
| In-Class Quizzes | $15 \%$ |
| Exam 1 | $20 \%$ |
| Exam 2 | $20 \%$ |
| Exam 3 | $20 \%$ |
| Assessment Quiz | $15 \%$ |
| Participation | $5 \%$ |
| Write-ups | $5 \%$ |
| TOTAL | $\mathbf{1 0 0 \%}$ |
| Cases (BONUS and OPTIONAL) | $+6 \%$ |

## Participation:

You are expected to attend every class and to actively participate in the discussion and activities. To do this you will need to complete the assigned reading prior to coming to class. Half of your participation grade will come from your discussions in class and participation to class activity. So please attend all classes, be there on time, and participate each class.

You need to arrange one-time 15 minutes $1: 1$ session to see your instructor, and be prepared to give a 10 minutes elevator-pitch about your professional goals and career plans. This will cover the second half of your participation grade.

## Homework:

There will be 11 practice assignments posted on e-learning under "Course Content" folder, one week before they are due. You are encouraged to work together on these, but each student should work on their own solution since there will be a quiz on the due date. Please keep in mind that you will not be allowed to collaborate on exam questions, experience has shown that those students who understand and work on assignments carefully get high scores from exams. You DON'T NEED to submit any homework assignments. Homework assignments won't be graded. After the due date the solutions for homeworks will be posted on eLearning as well.

## In-Class Quizzes:

There will also be 6 surprise quizzes ( 3 point each) throughout the semester, testing whether you did the required readings, did the homeworks by yourself and followed the material. The instructor can give these 6 surprise quizzes anytime during the semester without prior notice, so please, come to classroom on time. Quizzes will be similar to the assigned homeworks and class discussions we had already.
There won't be any make-ups unless you provide an official document, explaining your absence or let your instructor know up-front.
On quizzes for the problems requiring calculations, please show your calculation steps explaining how you arrived at the final answer. The 6 quizzes are going to be graded based on your accuracy and clear explanation, NOT the final answer, so please listen classes with a critical thinking and participate sessions.
The lowers scored quiz will be dropped in the end of the semester

## Exams:

All three exams will be in-class and closed-book/closed note. Exams are not cumulative. For each exam, you will be provided with a sheet of relevant equations. If you are unable to attend the day of the exams, an official written explanation and arrangements must be made at the beginning of the semester (by the second week of class). NO MAKE-UP EXAMS WILL BE SCHEDULED afterwards. You need to bring your own calculators and Scantron (882-E or any compatible one) for each exam.

## Assessment Quiz:

There will be 1 UTD wide assessment quiz. The quiz is prepared by an academic committee and will be taken by all OPRE3310 sections each semester. The grading of the assessment quiz is controlled through a standard grading rubric. This rubric measures three important elements of learning: 1) use the correct formula, 2) identify and input correct values into the formula, and 3) correct final answer. Therefore students are encouraged to express their understanding of the problems in a clear and concise written format such as writing any formulas completely and correctly.

## Group Assignments

There will be student groups of size 3-4, according to your comfort level. You need to be in contact with your group members all the time, so pick your group members carefully. Groups will be assigned at the beginning of the semester.

## -Mandatory Write-up group assignment:

Step1: In the beginning of the semester, you will write a one-page ( 500 words count) essay about what do you think about operations management and how you can utilize it in your personal and/or professional life. You need to make a copy of your essay for each team member and your instructor, and pass the writeups on August 31 ${ }^{\text {st }}$ to your team mates and your instructor.

Step 2: Next, you will write-up half-page response essays ( 250 words count each) to each team member's initial essay. You need to reflect on your team mates' write-ups with respect (there is no room and tolerance for any vulgar or offensive language). Again, you need to make copies of your essays for each team member and your instructor, and pass the write-ups on October $\mathbf{5}^{\text {th }}$. Say, you have 4 members (including yourself) in your group. You should have written 3 response essays. You need to make 4 copies of each response essay you wrote. You should have 12 copies in total and collate the essays in bundles to pass; 3 bundles for other members in your group and 1 bundle for your instructor.

Step 3: Next, you will write-up half-page second response essays ( 250 words count each) to each team member's initial and response essays. At this level, you can also reflect on your team mates' feedback for other team mates. For each response essay, you need to keep in mind, how to organize your write-ups to address the dynamics for each team mate. Again, you need to make copies of your essays for each team member and your instructor, and pass the bundled write-ups on November 16 ${ }^{\text {th }}$. Same copying and bundling procedure in Step 2

Step 4: Final, you will write-up a one-page summary essay ( 500 words count) to reflect your thoughts about your team mates' opinions and the new material we learned during the semester. For one last time, you need to make a copy of your final essay for each team member and your instructor, and pass the writeups on December $5^{\text {th }}$.

Your final grade for write-ups will be assessed based on your coherence of your write-ups and how much your write-up addresses constructively to your team mates' ideas and responses.

## -Bonus Group Assignments:

Each group can to contribute to 2 extra credit assignments:

- There will be 2 case-studies related to several chapters and concepts. They will be posted on eLearning during the semester and they will be due on the day of the exam no.3. You need to work with your group and submit as a single report from your group for each case study. Details and the format of the reports for submission will be provided with each case study.


## Assignments \& Academic Calendar:

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| Week | Date | Topic | Reading | Due |
| :---: | :---: | :---: | :---: | :---: |
| 1 | 22-Aug | First day Introduction, Syllabus |  |  |
|  | 24-Aug | Introduction to Operations Management | Ch 1 |  |
| 2 | 29-Aug | Competitiveness, Strategy, and Productivity | Ch 2 | HW1 |
|  | 31-Aug |  | Ch 2 | WP1 |
| 3 | 5-Sep | Labor Day, No Class |  |  |
|  | 7-Sep | Forecasting | Ch 3 | HW2 |
| 4 | 12-Sep | Forecasting | Ch 3 |  |
|  | 14-Sep | Forecasting | Ch 3 |  |
| 5 | 19-Sep | Review |  | HW3 |
|  | 21-Sep | Exam 1: Chapters 1, 2, 3 |  |  |
| 6 | 26-Sep | Management of Quality | Ch 9 |  |
|  | 28-Sep | Inventory Management | Ch 13 | HW4 |
| 7 | 3-Oct | Inventory Management | Ch 13 |  |
|  | 5-Oct | Review | Ch 13 | WP2 \& HW5 |
| 8 | 10-Oct | Assessment Quiz on Inventory Management |  |  |
|  | 12-Oct | Capacity Planning for Products and services | Ch 5 |  |
| 9 | 17-Oct | Capacity Planning for Products and services | Ch 5 |  |
|  | 19-Oct | Process Selection and Facility Layout | Ch 6 | HW6 |
| 10 | 24-Oct | Process Selection and Facility Layout | Ch 6 |  |
|  | 26-Oct | Review |  | HW7 |
| 11 | 31-Oct | Exam 2: Chapters 5, 6, 13 |  |  |
|  | 2-Nov | Supply Chain Management | Ch 15 |  |
| 12 | 7-Nov | Project Management | Ch 17 | HW8 |
|  | 9-Nov | Project Management | Ch 17 |  |
| 13 | 14-Nov | INFORMS Conference, No Class |  |  |
|  | 16-Nov | Scheduling | Ch 16 | WP3 \& HW9 |
| 14 | 21-Nov | Fall Break, No Class |  |  |
|  | 23-Nov |  |  |  |
| 15 | 28-Nov | Behavioral Operations Management(BOM) | Handout |  |
|  | 30-Nov | Behavioral Operations Management(BOM) | Handout |  |
| 16 | 5-Dec | Case Presentations \& Review |  | WP4 \& HW11 |
|  | 7-Dec | Exam 3: Chapters 15, 16, 17, BOM |  | Case1 \& 2 |

The descriptions and timelines are subject to change at the discretion of the Instructor.

## Guidelines for Letter Grades:

The grade will be assigned based on the following scale:

| Grade | A+ | A | A- | B+ | B | B- | C+ | C | C- | D+ | D | F |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Cutoff <br> Percentage | $\mathbf{9 5 \%}$ | $\mathbf{9 0 \%}$ | $\mathbf{8 7 \%}$ | $\mathbf{8 3 \%}$ | $\mathbf{8 0 \%}$ | $\mathbf{7 7 \%}$ | $\mathbf{7 3 \%}$ | $\mathbf{7 0 \%}$ | $\mathbf{6 7 \%}$ | $\mathbf{6 3 \%}$ | $\mathbf{6 0 \%}$ | $<\mathbf{6 0 \%}$ |

## E-Learning:

Your course e-Learning site will be used as the main communication portal throughout the semester. ELearning email is also the appropriate avenue for sending email to your professor. There will be a class handout posted for each lecture summarizing the main points of the topics covered. All grades will be posted as soon as grading has been completed. A copy of the course syllabus will be available at all times, and you will be notified of any changes made during the semester.

## Laptops \& Cell phones:

You may NOT use your cell phones, your laptops, or any other communication devices during the lectures.

## Special Assistance:

For help with test anxiety or time management, the following resources are available: your academic advisor, the Learning Resource Center (MC2.402), the Counseling Center (SU1.608), the New Student Programs Office (SU1.610), your instructor.

## Student Conduct \& Discipline:

The University of Texas System and The University of Texas at Dallas have rules and regulations for the orderly and efficient conduct of their business. It is the responsibility of each student and each student organization to be knowledgeable about the rules and regulations which govern student conduct and activities. General information on student conduct and discipline is contained in the UTD publication, A to Z Guide, which is provided to all registered students each academic year.

The University of Texas at Dallas administers student discipline within the procedures of recognized and established due process. Procedures are defined and described in the Rules and Regulations, Board of Regents, The University of Texas System, Part 1, Chapter VI, Section 3, and in Title V, Rules on Student Services and Activities of the university's Handbook of Operating Procedures. Copies of these rules and regulations are available to students in the Office of the Dean of Students, where staff members are available to assist students in interpreting the rules and regulations (SU 1.602, 972/8836391).

A student at the university neither loses the rights nor escapes the responsibilities of citizenship. He or she is expected to obey federal, state, and local laws as well as the Regents' Rules, university regulations, and administrative rules. Students are subject to discipline for violating the standards of conduct whether such conduct takes place on or off campus, or whether civil or criminal penalties are also imposed for such conduct.

## Academic Integrity:

The faculty expects from its students a high level of responsibility and academic honesty. Because the value of an academic degree depends upon the absolute integrity of the work done by the student for that degree, it is imperative that a student demonstrate a high standard of individual honor in his or her scholastic work.

Scholastic dishonesty includes, but is not limited to, statements, acts or omissions related to applications for enrollment or the award of a degree, and/or the submission as one's own work or material that is not one's own. As a general rule, scholastic dishonesty involves one of the following acts: cheating, plagiarism, collusion and/or falsifying academic records. Students suspected of academic dishonesty are subject to disciplinary proceedings.

Plagiarism, especially from the web, from portions of papers for other classes, and from any other source is unacceptable and will be dealt with under the university's policy on plagiarism (see general catalog for details). This course will use the resources of turnitin.com, which searches the web for possible plagiarism and is over $90 \%$ effective.

## Email Use:

The University of Texas at Dallas recognizes the value and efficiency of communication between faculty/staff and students through electronic mail. At the same time, email raises some issues concerning security and the identity of each individual in an email exchange. The university encourages all official student email correspondence be sent only to a student's U.T. Dallas email address and that faculty and staff consider email from students official only if it originates from a UTD student account. This allows the university to maintain a high degree of confidence in the identity of all individual corresponding and the security of the transmitted information. UTD furnishes each student with a free email account that is to be used in all communication with university personnel. The Department of Information Resources at U.T. Dallas provides a method for students to have their U.T. Dallas mail forwarded to other accounts.

## Withdrawal from Class:

The administration of this institution has set deadlines for withdrawal of any college-level courses. These dates and times are published in that semester's course catalog. Administration procedures must be followed. It is the student's responsibility to handle withdrawal requirements from any class. In other words, I cannot drop or withdraw any student. You must do the proper paperwork to ensure that you will not receive a final grade of " F " in a course if you choose not to attend the class once you are enrolled.

## Incomplete Grade Policy:

As per university policy, incomplete grades will be granted only for work unavoidably missed at the semester's end and only if $70 \%$ of the course work has been completed. An incomplete grade must be resolved within eight (8) weeks from the first day of the subsequent long semester. If the required work to complete the course and to remove the incomplete grade is not submitted by the specified deadline, the incomplete grade is changed automatically to a grade of $\underline{\mathbf{F}}$.

## Student Grievance Procedures:

Procedures for student grievances are found in Title V, Rules on Student Services and Activities, of the university's Handbook of Operating Procedures.

In attempting to resolve any student grievance regarding grades, evaluations, or other fulfillments of academic responsibility, it is the obligation of the student first to make a serious effort to resolve the matter with the instructor, supervisor, administrator, or committee with whom the grievance originates (hereafter called "the respondent"). Individual faculty members retain primary responsibility for assigning grades and evaluations. If the matter cannot be resolved at that level, the grievance must be submitted in writing to the respondent with a copy of the respondent's School Dean. If the matter is not resolved by the written response provided by the respondent, the student may submit a written appeal to the School Dean. If the grievance is not resolved by the School Dean's decision, the student may make a written appeal to the Dean of Graduate or Undergraduate Education, and the deal will appoint and convene an Academic Appeals Panel. The decision of the Academic Appeals Panel is final. The results of the academic appeals process will be distributed to all involved parties.

Copies of these rules and regulations are available to students in the Office of the Dean of Students, where staff members are available to assist students in interpreting the rules and regulations.

## Disability Services:

The goal of Disability Services is to provide students with disabilities educational opportunities equal to those of their non-disabled peers. Disability Services is located in room 1.610 in the Student Union. Office hours are Monday and Thursday, 8:30 a.m. to 6:30 p.m.; Tuesday and Wednesday, 8:30 a.m. to 7:30 p.m.; and Friday, 8:30 a.m. to 5:30 p.m.

The contact information for the Office of Disability Services is:
The University of Texas at Dallas, SU 22
PO Box 830688
Richardson, Texas 75083-0688
(972) 883-2098 (voice or TTY)

Essentially, the law requires that colleges and universities make those reasonable adjustments necessary to eliminate discrimination on the basis of disability. For example, it may be necessary to remove classroom prohibitions against tape recorders or animals (in the case of dog guides) for students who are blind. Occasionally an assignment requirement may be substituted (for example, a research paper versus an oral presentation for a student who is hearing impaired). Classes enrolled students with mobility impairments may have to be rescheduled in accessible facilities. The college or university may need to provide special services such as registration, note-taking, or mobility assistance.

It is the student's responsibility to notify his or her professors of the need for such an accommodation. Disability Services provides students with letters to present to faculty members to verify that the student has a disability and needs accommodations. Individuals requiring special accommodation should contact the professor after class or during office hours.

## Religious Holy Days:

The University of Texas at Dallas will excuse a student from class or other required activities for the travel to and observance of a religious holy day for a religion whose places of worship are exempt from property tax under Section 11.20, Tax Code, Texas Code Annotated.

The student is encouraged to notify the instructor or activity sponsor as soon as possible regarding the absence, preferably in advance of the assignment. The student, so excused, will be allowed to take the exam or complete the assignment within a reasonable time after the absence: a period equal to the length of the absence, up to a maximum of one week. A student who notifies the instructor and completes any missed exam or assignment may not be penalized for the absence. A student who fails to complete the exam or assignment within the prescribed period may receive a failing grade for that exam or assignment.

If a student or an instructor disagrees about the nature of the absence [i.e., for the purpose of observing a religious holy day] or if there is similar disagreement about whether the student has been given a reasonable time to complete any missed assignments or examinations, either the student or the instructor may request a ruling from the chief executive officer of the institution, or his or her designee. The chief executive officer or designee must take into account the legislative intent of TEC 51.911(b), and the student and instructor will abide by the decision of the chief executive officer or designee.

