

Department of Information Systems and Operations Management

Course Name and Number: Operations Management (OPMA 3306-003), Spring 2019

Instructor Name: Sina Zare, M.Sc., PhD Candidate

Office Number: COBA 240A

Office Telephone Number: 817-272- 3508

Email Address: sina.zare@uta.edu

Faculty Profile: https://www.uta.edu/profiles/sina%20-zare

Time and place of class meetings: COBA 239, Tu/Th 5:30 - 6:50 P.M.

Office Hours: Thursday 4:50 - 5:30 P.M., and by appointment

Description of Course Content

This course is an introduction to the concepts, principles, problems, and practices of Operations Management (OM). Emphasis is on managerial processes that lead to effective operations in both manufacturing and service settings. Topics include operations strategy, process design, capacity planning and management, facilities location and design, resource allocation, demand forecasting, production scheduling, inventory control and management, quality assurance and control, supply chain management, and project management. These topics are integrated with hands-on cases involving the execution of operational processes in a live SAP Enterprise Resource Planning data base. Prerequisite: BSTAT 3321 or BSTAT 3322.

Student Learning Outcomes

This course covers multiple subjects involving qualitative and quantitative methods. After completing the course, the student will be able to do the following:

- 1. Identify and accurately apply OM concepts with competitive strategy in order to make operational decisions.
- 2. Apply quantitative OM tools (i.e., forecasting, project management, capacity and resource planning, scheduling, inventory management, and quality management) and be able to correctly solve OM problems using these quantitative tools.
- Identify qualitative factors affecting operations functions in order to compare different options within business settings and be able to clearly articulate those factors and options.
- 4. Clearly and accurately describe how OM decisions relate to each other in order to assess the overall impact of decisions.

- 5. Contrast and compare different options related to OM concepts in order to select the best option given business and environmental conditions and be able to concisely explain the various alternatives, which is best, and why.
- 6. Explain OM's role within organizations for both service and manufacturing environments.
- 7. Develop and explain alternatives for resource and capacity planning within given constraints.

Required Textbooks and Other Course Materials

Operations and Supply Chain Management, the Core, 4th edition, McGraw-Hill Companies, Inc. 2017 by F. Robert Jacobs and Richard B. Chase. Two alternatives are available to students: (1) ISBN 978-1-259-95920-2 is a hardcover book with Connect (for online homework assignments) and access to the eBook and LearnSmart (for online reading assignments); or (2) ISBN 978-1-259-95920-1 has Connect and access to the eBook and LearnSmart with no hardcover book.

Connect, the eBook, and LearnSmart are <u>required</u> for course completion. Students can purchase either of the options listed above from the UTA Book Store, or directly from the McGraw-Hill web site: http://www.mheducation.com/highered/home-guest.html. Instructions for linking to the online course portal will be provided at the start of the semester.

Students may be required to purchase case studies, user licenses for in-class simulations, or other supplemental materials. Additional suggested readings will be posted in Blackboard and/or made available from the UTA Library.

What's New / What You Should Know About This Course Section

SAP Case Studies:

- 1. This section of OPMA 3306 uses SAP University Alliances curriculum materials and provides students with hands-on user experience in the SAP enterprise resource planning system. Successful completion of this course can be counted toward the SAP Student Recognition Award. Information on that Award program is posted in the Blackboard course portal.
- 2. Assignments and quantitative problems, with solutions and explanations, will be available to students in McGraw-Hill's Connect online portal. The Connect exercises are graded as the "Homework" component of the course.
- 3. Selected video recordings of class sessions from prior semesters will be posted in the Blackboard course portal for students to use as optional study aids.

DataCamp Case Studies (Extra Credit)

DataCamp is a time flexible, online data science learning platform offering tutorials and courses that help the students to learn more about data science. DataCamp provides students with unique educational resources through which they can enhance their analytical skills required to conduct different analyses on Operations Management context related problems. Students can master data analysis from the comfort of their browser, at their own pace, and tailored to their needs and expertise. DataCamp focuses on different vastly used programming languages such as R and Python through which students will learn about Big Data analysis and data visualization in developing statistical models for forecasting demand and evaluating predictive power of the developed models. Moreover, students will use DataCamp real world case studies to develop time series forecasting models using R. Accomplishing case studies designed on DataCamp will also help students to demonstrate their programming skills when they apply for academic and industrial job positions. There is a subscription fee to get premium access to DataCamp courses and case studies, but all students enrolled in our class are entitled to get full FREE access to the premium membership account. Please note that both case studies assigned on DataCamp are not mandatory. However, you can earn bonus points by completing these case studies at your own pace. Further information about grading criteria will be discussed in our first class meeting.

Descriptions of Major Assignments and Examinations: The full course grade will be determined as follows:

Component	Points Possible
Exam 1 (Mid-term)	100
Exam 2 (Mid-term)	100
Exam 3 (Comprehensive Final)	200
Enterprise Resource Planning Cases	100
Homework	100
Attendance and Class Participation	100
Total Possible	700

Detailed specifications regarding requirements and grading standards will be explained in class and/or posted in the Blackboard course portal.

Please note that there is no grading point associated with the LearnSmart exercises. They are assigned to give you the opportunity to practice on conceptual part of the course.

Grading: Points earned and accumulated will be used in the following grade calculation:

Points Earned	Letter Grade
630-700	A
560-629	В
490-559	C
420-489	D
419 and Below	F

Grades are earned on the basis of performance, not given on the basis of effort or need. Your grade represents your performance in this course, not your potential as a student or as a human. If you feel an error has been made in the calculation of your grade, you may contact the instructor via e-mail. Grades are otherwise non-negotiable.

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.

Blackboard Course Portal

Blackboard is the online content management utility for courses at UTA. Course announcements, assignment instructions, and assessments will be available on the Blackboard portal for this class. Each student is responsible for establishing access to the Blackboard course portal, for activating utilities such as the Respondus Lockdown Browser as needed, and for contacting the UTA Help Desk as needed to resolve any technical problems with Blackboard.

Detailed instructions for individual and team assignments will be posted in the Blackboard course portal. Homework/quiz assignments, and possibly some exams, may also be completed in Blackboard. Students should use Mozilla Firefox or Microsoft Internet Explorer as the browser for any Blackboard work; the Google Chrome browser is not supported. Students should use the Blackboard portal to initiate any e-mail communication with the Instructor, as this will cause your course number and section number to be displayed in the subject line of the e-mail message.

We will be using Blackboard for this class. You can access the Blackboard at https://elearn.uta.edu/. You will need to use your Net ID and password to access your class Information. It is the student's responsibility to check blackboard for the syllabus and any changes to the syllabus, class assignments, and other course materials that will be made available. All of your assignments will be submitted through blackboard, it is the student's responsibility to learn how to use blackboard in order to access and upload assignments.

Students may be required to purchase case studies, simulation codes, or other supplemental materials for the class project. Details will be communicated to you during the semester.

Descriptions of major assignments and examinations: Detailed Schedule attached at the end of the syllabus.

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 course, I will keep track of the students' attendance, and CourseKey will be used to take attendance 11:00 -11:10 AM in COBA 245E. There is no attendance points being granted to those students who arrive after 11:10 AM. The incremental points

associated with daily attendance will be scaled to 2 points and added to your attendance and participation grading criteria. Please download and setup your CourseKey mobile or computer application through the following link:

http://thecoursekey.com

You will be responsible for all material covered in class and for knowledge of any announcements or changes to the schedule made in class, even if you are unable to attend class.

Students are required to read and be prepared to discuss the assigned textbook chapters and workbook exercises on the scheduled class days. Class attendance and lateness policies will be discussed during the first week of class. Those policies include all provisions for grade adjustment or drop policies included in the applicable Graduate or Undergraduate Catalog in effect at the start of the semester. No student will be dropped from the class rolls for never attending class or for accumulating excess absences.

COURSE POLICIES

Expectations for Out-of-Class Study: A general rule of thumb is this: for every credit hour earned, a student should spend 3 hours per week working outside of class. Hence, a 3-credit course might have a minimum expectation of 9 hours of reading, study, etc. Beyond the time required to attend each class meeting, students enrolled in this course should expect to spend at least an additional 9 hours per week of their own time in course-related activities, including reading required materials, completing assignments, preparing for exams, etc.

Exam Policy: All tests will be closed book and tables will be provided if needed. For all exams, one single, one-sided study sheet (8 1/2 by 11 inches) will be allowed. Students are only allowed to have formulas on the study sheet. A calculator, scantron (for multiple choice tests only), and pencil will be required for each exam. Cell phones and laptops are not allowed during exams. I reserve the right to assign seating for test periods. Students are required to take tests at the scheduled time.

Due Dates: Homework assignments and team project deliverables are due to be submitted in Blackboard by 12:05 p.m. Central time on the due date specified in this Syllabus, in the Blackboard course portal, or announced in class. Some assignments may be designated by the instructor for delivery in hard-copy form during specified class meetings.

Late submission of homework quiz assignments and other graded individual assignments will not be accepted for grade credit. Late submission of group project deliverables will result in a penalty of 20% of the total available points for each day after the specified due date.

Make ups: There are **NO** make-up exams.

Class Issues

Students should have completed MATH 1315 or equivalent; thereby students should be comfortable with business math concepts. Students should understand certain statistical concepts such as population, mean, and standard deviation. Students should also be proficient in accessing information via the internet and using Microsoft Word, Excel, and PowerPoint. In compliance with UTA policy, I am only obligated to respond to emails from your UTA address.

Also, in compliance with UTA policy, grades will not be sent via email or given over the phone. I will not release course grades before they are available online. Check the UTA website "Academic Notices" to find out when course grades are available.

Any outside-of-class work that you hand in should conform to common professional presentation standards: be neatly presented and typed (unless otherwise directed). Late assignments will not be accepted.

To show courtesy to your fellow classmates, students are expected to arrive on time and turn off all sound generating devices (pagers, cell phones, etc.) before entering the classroom.

Laptops and other electronic devices: There are instances in which learning is enhanced by the use of laptops or tablet computers during class. Use of these devices in the classroom is acceptable as long as the use of these devices does not distract students or the instructor in any way. The instructor reserves the right to designate the classroom as an electronic device-free zone at any time.

Classroom behavior: Students in this class will likely come from a variety of cultures and educational backgrounds. Although standards for classroom conduct vary across cultures, we will conform to expectations that are common in higher education in the U.S. Unless the instructor specifically says otherwise, during classroom sessions students should abide by the following policy: If you're not talking with the instructor, you should not be talking at all.

Your participation in classroom discussion is required and assumed. Negative grade adjustments may be applied if you fail or refuse to participate in classroom discussions, behave in a way that disrupts the class, or leave the classroom early without consulting the instructor.

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/aao/fao/)

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 Office for Students with Disabilities (OSD). Only those students who have officially documented a need for an accommodation will have their request honored. 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/disability or calling 817-272-3364. Information regarding diagnostic criteria and policies for obtaining disability-based academic accommodations can be found at www.uta.edu/disability. Counseling and Psychological Services, (CAPS) www.uta.edu/caps/ or calling 817-272-3671 is also available to all students to help increase their understanding of personal issues, address mental and behavioral health problems and make positive changes in their lives. Non-Discrimination Policy: The University of Texas at Arlington does not discriminate on the basis of race, color, national origin, religion, age, gender, sexual orientation, disabilities, genetic information, and/or veteran status in its educational programs or activities it operates. For more information, visit uta.edu/eos.

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:

Students enrolled all UT Arlington courses 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.

UT Arlington faculty members 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.

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.

Campus Carry

Effective August 1, 2016, the Campus Carry law (Senate Bill 11) allows those licensed individuals to carry a concealed handgun in buildings on public university campuses, except in locations the University establishes as prohibited. Under the new law, openly carrying handguns is not allowed on college campuses. For more information, visit http://www.uta.edu/news/info/campus-carry/

Student Feedback Survey

At the end of each term, students enrolled in classes categorized as "lecture," "seminar," or "laboratory" shall be directed to complete an online 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.

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, on the first floor of the COB. 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 individuals with disabilities.

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.

Writing Center

The Writing Center, 411 Central Library, offers individual 40-minute sessions to review assignments, Quick Hits (5-10 minute quick answers to questions), and workshops on grammar and specific writing projects. Visit https://uta.mywconline.com/ to register and make appointments. For hours, information about the writing workshops we offer, scheduling a classroom visit, and descriptions of the services we offer undergraduates, graduate students, and faculty members, please visit our website at www.uta.edu/owl/.

The IDEAS Center (2nd Floor of Central Library) offers free tutoring to all students with a focus on transfer students, sophomores, veterans and others undergoing a transition to UT Arlington. To schedule an appointment with a peer tutor or mentor email <u>IDEAS@uta.edu</u> or call (817) 272-6593.

Bomb Threats:

Effective April 8, 1997, the College of Business Administration has adopted a policy to deal with the classroom disruption caused by bomb threats in the building. (A) Section 22.07 of the Texas Criminal Law Statutes governs terrorist threats and classifies bombs threats as Class A misdemeanors. Section 12.21 of the Texas Criminal Law Statues states that a Class A misdemeanor is punishable by (1) a fine not to exceed \$4,000, (2) a jail term of not more than one year, or (3) both such a fine and confinement. (B) If anyone is tempted to call in a bomb threat, be aware that UTA will soon have technology to trace phone calls. (C) Every effort will be made to avoid cancellation of presentation/tests caused by bomb threats to the Business Building. Unannounced alternate sites will be available for these classes. If a student who has a class with a scheduled test or presentation arrives and the building has been closed due to a bomb threat, the student should immediately check for the alternate class site notice which will be posted on/near the main doors on the south side of the Business Building. If the bomb threat is received while class is in session, your instructor will ask you to leave the building and reconvene at another location. (D) Students who provide information leading to the successful prosecution of anyone making a bomb threat will receive one semester's free parking I the Maverick Garage across from the Business Building. UTA's CrimeStoppers will provide a reward to anyone providing information

leading to an arrest. To make an anonymous report, call 817-272-5245.

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

Stop. Think. Protect Yourself. You Have Choices.

The safety and security of our campus is the responsibility of everyone in our community. Each of us has an obligation to be prepared to appropriately respond to threats to our campus, such as an active aggressor.

This graphic provides each member of the UTA community with information and options for responding to an active threat. These options are not chronological but are designed to address dynamic situations. Assess the situation (your location, the location of the threat, type of threat, etc.), identify and weigh your options, develop a plan of action and commit to it.

YOUR OPTIONS TO AN ACTIVE THREAT					
	You Have Choices!				
A V O I D	 AVOID the situation. <u>Stay away</u> from the area and campus. If you can safely leave the area, RUN. Get others to leave the area, if possible. Prevent others from entering the area. 	 Know your exit and escape options. If in a parking lot, get to your car and leave. If in an unaffected area, stay where you are. When you are safe, call UTA PD at 817. 272.3003 or 911 with information you have. 			
D E N Y	 If you can't leave the area safely, DENY or slow Lock/barricade doors with heavy items. Turn off lights/projectors/equipment. Close blinds and block windows. Stay away from doors and windows. 	 Silence phones and remain quiet. Don't let your phone give you away. HIDE and take cover to protect yourself. Be prepared to run or defend yourself. 			
D E F E N D	 If you can't AVOID or DENY entry to the intrude As a last resort, <u>FIGHT for your life</u>. Use physical force and any weapons available - fire extinguishers, books, chairs, belts, umbrellas, pens/scissors, hot coffee/drinks, trash cans, etc. 	 r, DEFEND your location: Use the element of surprise. Work together as a team. Develop a plan. Commit to your actions. Your life depends on it. Be aggressive, loud, and determined in your actions. 			
Follow ALL instructions. For more information, go to: police.uta.edu/activeshooter Emergency: 817.272.3003 Non-Emergency: 817.272.3381					

Additional information for active threat and other emergency situations can be found through the links below:

police.uta.edu

police.uta.edu/activeshooter police.uta.edu/em

THE UNIVERSITY OF TEXAS AT ARLINGTON

TENTATIVE CLASS SCHEDULE

Examinations, assignments, and due dates are presented in the Course Schedule below

Date	Topic	Reading	Assignment
Tu 01/15/2019	Syllabus/Course/Introduction Strategy and Sustainability	Chapter2	
Th 01/17/2019	Strategy & Sustainability	Chapter2	HW 1 Assigned
Tu 01/22/2019		Chapter3	O
Th 01/24/2019	\mathbf{c}	*	HW1 Due
Tu 01/29/2019	· · ·		HW2 Assigned
Th 01/31/2019	Inventory Management	Chapter11	V
Tu 02/05/2019	Inventory Management	Chapter11	HW2 Due
Th 02/07/2019	Inventory Management	Chapter11	
Tu 02/12/2019	1st Exam review		
Th 02/14/2019	1st Midterm exam		SAP Case 1: Navigation Due
Tu 02/19/2019	Strategic Capacity	Chapter4	
Th 02/21/2019	Strategic Capacity	Chapter4a	
Tu 02/26/2019	Manufacturing Processes	Chapter6	HW3 Assigned
Th 02/28/2019	Sales and Operations Planning	Chapter8	SAP Case 2: Sales Order to Cash
Tu 03/05/2019	Sales and Operations Planning	Chapter8	HW3 Due
Th 03/07/2019	Sales and Operations Planning	Chapter8	
Tu 03/19/2019	Sales and Operations Planning	Chapter8	HW4 Assigned
Th 03/21/2019	2nd Exam review		SAP Case 3: Purchase Order to Pay
Tu 03/26/2019	2nd Midterm exam		HW4 Due
Th 03/28/2019	Material Requirement	Chapter9	
Tu 04/02/2019	Material Requirement	Chapter9	
Th 04/04/2019		Chapter9	HW5 Assigned
	Planning		SAP Case 4: Production Planning
Tu 04/09/2019	Quality Management	Chapter10	
Th 04/11/2019	Quality Management	Chapter10	HW5 Due
	Quality Management	Chapter10	HW6 Assigned
	Project Management	Chapter5	
Tu 04/23/2019	Project Management	Chapter5	HW6 Due
Th 04/25/2019	Project Management	Chapter5	HW7 Assigned SAP Case 5: Prod Execution
	Location, Logistics, and Distribution	Chapter14	DataCamp Projects Due
Th 05/02/2019	Final Exam Review		HW7 Due
Th 05/09/2019	Final Exam (Comprehensive)		5:30 P.M 8:00 P.M.

Note: As the instructor of this class, I reserve the right to modify the Course Schedule, course content, and point values associated with graded components as needed in response to events that occur during the semester. Any such changes will be discussed during class meetings. It is the student's responsibility to be aware of these changes. - Sina Zare