

## **OPMA 3306, Fall 2011**

**Instructor:** Rajat Mishra

**Office Number:** COBA 506B

**Office Telephone Number:** 817-272-3707 [But don't leave voice mail—use e-mail instead!]

**Email Address:** rajat.mishra@mavs.uta.edu

**Office Hours:** Before and after the class and by appointment

**Course Number, Section Number, and Course Title:** OPMA 3306, Section 003 Operations Management

**Time and Place of Class Meetings:** Monday & Wednesday 5:30PM - 6:50PM, CRB 114

**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 for achieving effective operations in both the manufacturing and service sectors. Topics include operations strategy, process design, capacity planning, facilities location and design, forecasting, production scheduling, inventory control, quality management, and project management. The topics are integrated using a systems model of the operations of an organization. By the end of this course, you will understand:

- Basic terminology, concepts, and techniques of OM
- Qualitative and quantitative tools used in OM and the appropriate use of these tools
- Relationships among various aspects of OM
- Relationships among OM and other organizational functions such as marketing, finance, product selection and design, etc.
- OM's role in an organization's competitive ability to achieve a competitive advantage

**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 tasks.

- Identify and relate OM concepts with competitive strategy in order to make operational decisions
- Apply quantitative OM tools (i.e., forecasting, project management, capacity and resource planning, scheduling, inventory management and quality management) in order to understand the outcomes given certain information
- Identify qualitative factors affecting operational characteristics in order to compare different options within a business setting
- Explain how OM decisions relate to each other in order to assess the overall impact of decisions
- Contrast and compare different options related to OM concepts in order to select the best option given business and environmental conditions.

**Requirements:** 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.

Students are expected to arrive on time and turn off all sound generating devices (pagers, cell phones, etc.) before entering the classroom. Cell phones (including cell phone calculators) are not to be used in class, at any time. During tests, cell phones will be placed in your book bag or on the floor, not in pockets of your clothing. Touching your cell phone during a test will result in a grade of 0 on the test. Students are to read the assigned material and be ready to participate in class discussion. Students are responsible for all material in the assigned chapters whether or not it is covered during class, unless otherwise stated. While I do keep office hours, students should make every effort to find an answer or solution to the problem and bring specific questions about the material. Items that will be needed for tests such as a calculator, Scantron (Form No. 882-E), photo ID, etc. will be announced in class prior to the testing period. I reserve the right to assign seating for test periods. Students are required to take tests at the scheduled time. Tests will not be accepted after the end of the scheduled time. Assignments that are turned in late will receive a 20% penalty. Each assignment should be viewed as a take-home test in which there will be no collaboration unless collaboration is specifically authorized by the instructor. Students are to work individually on each assignment. Violations will be handled in accordance with UTA Policy on Academic Dishonesty.

**Required Textbooks and Other Course Materials:** Pearson Custom Business Resources: “OPMA 3306 / Intro to OM” 13 digit ISBN 978-0-558-21212-4; 10 digit ISBN 0-558-21212-3. Available at UTAbookstore. UTA bookstore website can be found using Follett’s website <http://www.efollett.com> and then selecting State and University.

**Grading Policy:** Grade Assignment: 90 to 100- A, 80 to 89- B, 70 to 79- C, 60 to 69- D, below 60- F  
Grade Determination: 40% Midterm Exams (2\*20), 30% Final Exam, 10% Homework, 10% Class Participation, 10% Group Project.

**Attendance Policy:** 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 OR EXCESSIVE ABSENCES.**

**Absences based on Religious Beliefs:** A student who misses an examination, work assignment, or other project due to the observance of a religious holy day will be given the opportunity to complete the work missed within 15 days following the due date of the assignment, test, or other project missed. To be eligible for such a make-up, the student must notify me in writing of classes scheduled on dates he or she will be absent to observe a religious holy day. Notification must be made within the first 15 (fifteen) class days through either a written correspondence, personal delivered, acknowledged and dated by me or written correspondence sent certified mail, return receipt requested to me. Failure to follow the rules provided above within the time frames listed will result in the absence being considered unexcused.

**Drop Policy:** Refer to the university drop policy as posted on the university website, [www.uta.edu](http://www.uta.edu).

**Americans with Disabilities Act:** The University of Texas at Arlington is on record as being committed to both the spirit and letter of federal equal opportunity legislation; reference Public Law 92-112 - The Rehabilitation Act of 1973 as amended. With the passage of federal legislation entitled Americans with Disabilities Act (ADA), pursuant to section 504 of the Rehabilitation Act, there is renewed focus on providing this population with the same opportunities enjoyed by all citizens. As a faculty member, I am required by law to provide "reasonable accommodations" to students with disabilities, so as not to discriminate on the basis of that disability. Student responsibility primarily rests with informing faculty of their need for accommodation and in providing authorized documentation through designated administrative channels. Information regarding specific diagnostic criteria and policies for obtaining academic accommodations can be found at [www.uta.edu/disability](http://www.uta.edu/disability). Also, you may visit the Office for Students with Disabilities in room 102 of University Hall or call them at (817) 272-3364.

**Academic Integrity:** It is the philosophy of The University of Texas at Arlington that academic dishonesty is a completely unacceptable mode of conduct and will not be tolerated in any form. All persons involved in academic dishonesty will be disciplined in accordance with University regulations and procedures. Discipline may include suspension or expulsion from the University. "Scholastic dishonesty includes but is not limited to cheating, plagiarism, collusion, the submission for credit of any work or materials that are attributable in whole or in part to another person, taking an examination for another person, any act designed to give unfair advantage to a student or the attempt to commit such acts." (Regents' Rules and Regulations, Series 50101, Section 2.2)

**Student Support Services Available:** The University of Texas at 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. These resources include tutoring, major-based learning centers, developmental education, advising and mentoring, personal counseling, and federally funded programs. For individualized referrals to resources for any reason, students may contact the Maverick Resource Hotline at 817-272-6107 or visit [www.uta.edu/resources](http://www.uta.edu/resources) for more information.

**E-Culture Policy:** The University of Texas at Arlington has adopted the University email address as an official means of communication with students. Through the use of email, UT-Arlington is able to provide students with relevant and timely information, designed to facilitate student success. In particular, important information concerning registration, financial aid, payment of bills, and graduation may be sent to students through email. All students are assigned an email account and information about activating and using it is available at [www.uta.edu/email](http://www.uta.edu/email). New students (first semester at UTA) are able to activate their email account 24 hours after registering for courses. There is no additional charge to students for using this account, and it remains active as long as a student is enrolled at UT-Arlington. Students are responsible for checking their email regularly.

**Make-up Exam Policy:** There are no make-ups. In case of EXTREME emergencies I will apply the following rule: for the first test you miss, I add that percent of your grade to the percent of the final. For example, if you miss test one which is worth 15% of your class grade, then your final will account for 35%.

This rule does not apply to students who avoid taking the test as a matter of convenience. For this rule to be applied, you will have to contact me within 48 hours of the test and provide a typed request

describing the circumstances and provide verifiable documentation. Upon verification of the event, I will inform you of my decision.

Misrepresentation of an absence is a form of academic dishonesty. Violations will be handled in accordance with UTA Policy on Academic Dishonesty. You are encouraged to review the provided information regarding this policy in your UTA Catalog. If you miss a second test, you will receive a grade of zero for that test. Everyone is expected to take the final. I strongly encourage you to not miss a test since a large percentage of your grade would be determined by the final.

**Grade Grievance Policy:** The University's grade grievance policy can be found in the University catalog.

**Course Schedule:** A tentative schedule for this term accompanies this syllabus. I reserve the right to adjust and/or alter the course outline as circumstances warrant.

| Day | Date  | Topic                              | Chapter |
|-----|-------|------------------------------------|---------|
| Wed | 1/18  | Introduction/Syllabus              |         |
| Mon | 1/23  | Competing with Operations          | 1       |
| Wed | 1/25  | Competing with Operations          | 1       |
| Mon | 1/30  | Forecasting                        | 2       |
| Wed | 2/01  | Forecasting                        | 2       |
| Mon | 2/06  | Decision Making                    | 3       |
| Wed | 2/08  | Decision Making                    | 3       |
| Mon | 2/13  | Linear Programming                 | 4       |
| Wed | 2/15  | Linear Programming                 | 4       |
| Mon | 2/20  | Process Strategy                   | 5       |
| Wed | 2/22  | Process Strategy                   | 5       |
| Mon | 2/27  | Mid Term Exam 1                    | 1-4     |
| Wed | 2/29  | Operations Planning and Scheduling | 6       |
| Mon | 3/05  | Operations Planning and Scheduling | 6       |
| Wed | 3/07  | Capacity Planning                  | 7       |
| Mon | 3/12  | Capacity Planning                  | 7       |
| Wed | 3/14  | Resource Planning                  | 8       |
| Mon | 3/19  | Resource Planning                  | 8       |
| Wed | 3/21  | Inventory Management               | 9       |
| Mon | 3/26  | Inventory Management               | 9       |
| Wed | 3/28  | Mid Term Exam 2                    | 5-8     |
| Mon | 4/02  | Group Assignment Discussion        |         |
| Wed | 4/04  | Process Analysis                   | 10      |
| Mon | 4/09  | Process Analysis                   | 10      |
| Wed | 4/11  | Quality and Performance            | 11      |
| Mon | 4/16  | Quality and Performance            | 11      |
| Wed | 4/18  | Project Management                 | 12      |
| Mon | 4/23  | Project Management                 | 12      |
| Wed | 4/25  | Exam Review                        |         |
| Mon | 4/30  | Exam Review                        |         |
|     | Final |                                    | 1-12    |

**Suggested Homework Questions:**

P 27-28: 2-5

P 89-92: 3-5, 15-18

P 62-65: 1, 2, 7i-7ii, 7iv, 7a-7c, 11, 12

P 301-303: 4, 7, 9, 13, 14, 19, 20

P 118: 2-3

P 192-193: 1, 5

P 259-264: 6, 7, 19

P 196: 16-18

P 379-384: 4, 5, 7, 8, 23, 24