

MARYVILLE UNIVERSITY
COURSE SYLLABUS INFORMATION

Dean/Chair Approval

SEMESTER/YEAR: Spring 2010

COURSE INFORMATION:

CLASS: BUS 314-1M

TITLE: Operations Management

MEETINGS: Friday 6:00 – 8:50 PM

DATES: 1/15, 1/29, 2/12, 2/26, 3/12, 3/26, 4/09, and 4/23
Alternating Friday Class

LOCATION: REID 3319

CREDIT HOURS: 3

PREREQUISITES: MGMT 321 and MATH 141

TEXT: *Operations Management, 10th Edition*
By William J. Stevenson
McGraw-Hill Companies, 2009

PRE-ASSIGNMENT: Please read Chapters 1, 2 and 3 of the textbook by focusing on the PowerPoint slides posted on the instructor's website one week before the class begins, and then try to finish the assignments listed in the class schedule and bring any questions to class.

INSTRUCTOR INFORMATION:

INSTRUCTOR: **Ping Deng**, Ph.D.

Email: pdeng@maryville.edu; Fax: (314) 529-9975

Web-site: <http://accweb.itr.maryville.edu/pdeng>

Phone: (314) 529-9687 (O); (636) 675-0972 (H)

Office Location: Main Campus, ABAC 2219

Office Hours: Tuesday & Thursday: 12:40 – 3:10 PM

Friday: 5:00 – 6:00PM (alternating weeks)

You may contact me via various ways, but I prefer to communicate with the class via email. You may email me anytime, and I pledge to respond to student emails within 4 hours of receipt. If available, you are encouraged to drop by my office and to discuss any course related questions.

COURSE DESCRIPTION/CONTENT:

This is an introduction course to operations management (OM) and examines business operations as they relate to both product and service type components. The course analyzes a variety of techniques that are applied to both manufacturing and service type organizations. Major topics covered in the class include operations functions, productivity, approaches to forecasting, product and service design, capacity planning and alternatives, work design, location design and planning, quality management & control, total quality management (TQM), supply chain management, inventory management, just-in-time (JIT) systems, and scheduling. As basic understanding of managerial concepts are necessary, MGMT 321 is prerequisite. Moreover, as a fundamental knowledge of quantitative skills is critical, MATH 141 is also prerequisite.

OBJECTIVES OF THE COURSE:

Upon successful accomplishment of this course, students will be able to:

- Define and use some key terminology in operations management.
- Describe and identify the key principles and concepts in operations management.
- Solve typical operations management problems.
- Know how to apply the concepts and techniques to the real business world.
- Discuss operations issues in depth, including their relevance and managerial implications.
- Be aware that many of the operations management principles and concepts are applicable to other aspects of your professional and personal life.

INSTRUCTIONAL METHODS/STUDENT ACTIVITIES:

Lectures and active student learning through application of basic operations management principles to quantitative data, empirical cases, and practical readings are the key ingredient of the class. The lecture will concentrate on practical application of principles to problem solving; a number of examples, cases, and readings will be utilized to illustrate solutions. In addition, PowerPoint presentations will be heavily used to illustrate basic terminologies and concepts. Furthermore, the Internet and website will be widely utilized to the successful completion of the course. As a result, at least before each class the students are required to visit the instructor's website (<http://accweb.itr.maryville.edu/pdeng>) and download the PowerPoint slides and other course related assignments and messages for class preparation and review.

In addition, before each class, students must read the assigned chapters (normally not including the supplement to the chapter) and try to accomplish the particular problems (which will be specified one week in advance). Although students are not required to submit them to the instructors, finishing those pre-assignments will greatly help you to understand the lecture and be an active participant in class. Moreover, active participation and discussion are highly desirable. Discussion and practice based on chapter readings, assignments, and lectures will be part of *every* class. As a key ingredient of active learning, students may organize a study team and meet regularly and try to solve some possibly difficult problems. Through the sharing of experiences and problem solving skills, student participants can play a significant role in the learning.

Furthermore, students are required to attend each class. Attendance together with active participation and discussion is essential for high participation score. You may miss class up to

four and half hours (i.e., one and half times) for excused reasons (e.g., unexpected family or personal emergencies, medical appointments, etc.); any unexcused absence of class is not tolerable and will lead to 10% deduction from your final score. On top of that, if you miss class more than four and half hours even for excused reasons, you will not only lose all the participation score, but also be forced to withdraw the class according to the relevant regulations. Further, as we meet only eight times for the whole course, you must make up what you have missed immediately. Finally, as the class schedule might change with the course progress, students are fully responsible for any updated contents or changes.

Grading Policy:	A final grade will be based upon the following factors:	
	Preparation, Participation and Discussion	10%
	Two Written Assignments	25%
	Mid-term Exam	30%
	Final Exam	35%

Grading Scale:	A 93-100	A- 90-92	B+ 87-89	B 83-86	B- 80-82
	C+ 77-79	C 73-76	C- 70-72	D 60-69	F Blow 60

WRITTEN ASSIGNMENTS AND EXAMS

In order to accomplish the course, students are required to accomplish several assignments. Besides reading the assigned chapters by focusing on the PowerPoint slides and trying to finish the related assignments, as discussed earlier, students are required to finish two written assignments and turn them in for grading. Please remember any late submission will lead to at least 10% lower score for the assignment. The written assignments are selected essentially from the text and may include memo writing, case analysis, and numerical problems. Those exercises intend to improve the students' ability in applying operations management principles/concepts into real problem solving. The specific assignments will be assigned at least one week before the due date. How to finish them will be discussed in detail in class.

In addition, students are required to take two exams. The two exams are partially closed book and partially open-book. The closed book part (50%) intends to test students' understanding of the key terminologies and concepts in operations management; it will be formulated primarily with multiple-choice questions. The questions in the closed-book part focus on the PowerPoint slides as well as the lectures and the related chapter readings. The open-book part (50%) is meant to test students' problem-solving skills of applying the basic concepts and equations in the real issues and problems; they consist of calculation and brief interpretation questions, which focus on the assigned solved problems, the problems solved in class and/or in written assignments. While the mid-term exam covers the first three sessions of the course, the final exam focuses on the later part of the course. Before the exams a number of sample questions will be posted on the instructor's website normally one week in advance so that students have a clear idea of what will be tested. Finally, no make-up exams will be provided unless when the instructor is contacted in advance and supplied with an excuse that is both appropriate and verifiable.

Academic Accommodations: Maryville University provides accommodations and supports for students with disabilities as defined by the Americans with Disabilities Act. If you have a

documented disability and wish to discuss academic accommodations, please contact the course instructor and/or the Director of the Academic Success Center located in the University Library (314-529-6850).

CLASS SCHEDULE

Date	Topics	Readings & Assignments
Session 1 (1/15)	Course introduction and requirement; student survey; operations management & functions; competition; strategy; productivity; forecasting techniques: moving averaging, linear trend, and regression analysis.	Chapters 1, 2 & 3: P1, 4, 5 & 6 (p. 62); Case (pp. 63-64); Reading (pp. 106-108); Solved Problems (SP) 1, 3, 6 & 8 (pp. 110-116); P2, 21, 26, 27 & 31 (pp. 118-125).
Session 2 (1/29)	Problems in Chapter 3; new or redesigned products & services; designing for manufacturing & services; capacity planning & alternatives; techniques for evaluation.	Chapters 4 & 5: Reading (pp. 133-134; pp. 139-140); SP2 & 3 (p. 209); P3, 5 & 14 (pp. 211-213).
Session 3 (2/12)	Work systems; job design; work measurement: Time study and work sampling; location decisions and determinants; evaluation of location alternatives: Cost-profit-volume analysis. The 1st written assignment is due (2/12).	Chapters 7 & 8: Reading (p. 326; p. 356); SP2 & 3 (p. 352); P2, 9, 10 & 13 (pp. 353-355); Reading (pp. 374-376; p. 377; p. 384); SP2, 3 & 4 (pp. 391-392); P2, 3, 7 & 9 (pp. 393-394).
Session 4 (2/26)	The basics of quality; quality gurus and awards; quality certification; ISO 9000 and ISO 14000; TQM. Mid-Term Exam (covering the first three sessions).	Chapter 9: Reading (pp. 406-407; p. 419-420; pp. 440-442); P1 & 3 (p. 450-451). Preparation of mid-term exam.
Session 5 (3/12)	Some of the items in Chapter 9; process improvement; quality inspection and control; process capability; control charts for variables and attributes.	Chapter 10: Reading (pp. 461-462); Case (pp. 497-498); SP2, 3 & 4 (pp. 488-489); P3, 4, 6 & 7 (pp. 492-493).
Session 6 (3/26)	Supply chain management; logistics; E-commerce; inventory management, three versions of economic order quantity (EOQ); reorder point; safety stock. The 2nd written assignment is due (3/26).	Chapters 11 & 12: Reading (pp. 524-525; p. 528; p. 529; p. 535); Case (p. 545); P1 & 2 (p. 544); Reading (p. 555); SP 1, 2 & 3 (pp. 588-589); P3, 5 & 13 (pp. 594-596); Case (pp. 601-603).
Session 7 (4/09)	JIT systems; JIT goals and building blocks; JIT in services; maintenance Scheduling operations; scheduling in different volume systems; loading and sequencing.	Chapters 15 & 16: Reading (pp. 697-698); P2 & 3 (p. 723); P1 & 2 (p. 732); SP2 & 3 (pp. 763-764); P6, 10a; & 16 (pp. 767-769).
Session 8 (4/23)	Final Exam.	Preparation of final exam.

This syllabus is subject to change at the discretion of the instructor to accommodate instructional and/or student needs. It is the student's responsibility to stay informed of such changes.