

Production/Operations Management

OSCM 3321 Summer I, 2018

Instructor: Dr. José Humberto Ablanedo-Rosas

E-mail: jablanedorosas2@utep.edu

Office: BUSN 206 **Phone**: (915) 747 6041 **Fax**: (915) 747 5348

Class Hours: MTWRF 9:20-11:30 am BUSN 313

Office Hours: MTWRF 8:00 am - 9:20 am

Textbook. There are three options:

- 1) Operations Management: Sustainability and Supply Chain Management, Student Value Edition Plus MyOMLab with Pearson eText -- Access Card Package, 12th Edition by Jay Heizer, Barry Render, and Chuck Munson. Pearson, ISBN-13: 978-013-447181-5.
- 2) MyOMLab with Pearson eText -- Instant Access -- for Operations

 Management: Sustainability and Supply Chain Management, 12th Edition by Jay

 Heizer, Barry Render, and Chuck Munson. Pearson, ISBN-13: 978-013-416534-9.
- 3) MyOMLab without Pearson eText -- Instant Access -- for Operations
 Management: Sustainability and Supply Chain Management, 12th Edition by Jay
 Heizer, Barry Render, and Chuck Munson. Pearson, ISBN-13: 978-013-416531-8.

Reference books

Secrets from my Money-Smart Brother, by Hongman Gao, Soar with Eagles, (ISBN: 978-0-9814756-8-4).

The travels of a T-shirt in the global economy, by Pietra Rivoli, Wiley, Second Edition (ISBN: 978-0-470-28716-3).

Food Supply Chain Management, by Madeleine Pullman and Zhaohui Wu, Routledge (ISBN: 978-0-415-88589-8).

How to Implement Lean Manufacturing, by Lonnie Wilson, McGraw Hill, Second Edition (ISBN: 978-0-07-183573-2).

Welcome to Production/Operations Management, the official information for OSCM 3321 course, including grades, will be posted on Blackboard. You are responsible for reading the "Announcements", "Assignments", and any other information concerning this course; check your Blackboard account daily.

Course description (From Goldmine)

Production management and its relationship to marketing, finance, and accounting functions are described. Forecasting demand, aggregate planning, inventory planning and control, and scheduling provide the basis for linking strategic plans to the production plan. Other topics discussed include: quality control, product and process design, facility location and layout, productivity improvement and project management.

Objectives:

At the completion of this course students will be able to:

- 1. Identify the three major functional areas of organizations and describe how they interrelate.
- 2. Define competitiveness, strategy, productivity, and explain why these concepts are important.
- 3. Explain the strategic importance of product and service design.
- 4. Define reliability and perform simple reliability computations.
- 5. Discuss ways of measuring capacity and describe determinants of effective capacity.
- 6. Describe and use techniques that apply to decision making under uncertainty.
- 7. Explain the strategic importance of process selection.
- 8. Describe and use various quality tools.
- 9. Use and interpret quality control charts.
- 10. Explain the purpose of acceptance sampling.
- 11. Describe the master scheduling process and explain its importance.
- 12. Describe the inputs, outputs, and nature of MRP processing.
- 13. Explain the objectives of inventory management.
- 14. List each of the goals of a lean system and explain its importance.
- 15. Explain the importance of maintenance in production systems.
- 16. Discuss the key issues of supply chain management.
- 17. Explain what scheduling involves and the importance of good scheduling.

Prerequisite: OMB 2301 with a grade of "C" or better.

Lectures

Important material from the textbook and some outside sources will be covered in class. YOU MUST READ IN ADVANCE THE MATERIAL TO BE COVERED IN CLASS. You should plan to take careful notes as not all material can be found in the text. Discussion is encouraged about the topics being covered. You take full responsibility when you miss class or come to class late.

Exams

They are in-class exams. They cover the class materials and chapters in the textbook taught up to the date of the last class before the exam. The maximum completion time is 90 minutes. There is not make-up of any exam.

Final Exam

This is an optional comprehensive final exam covering all the class lecture materials and chapters in the textbook taught during the semester. The maximum completion time is two and a half hours. If you take the final exam, the lowest score of the four exams will be dropped. No makeup comprehensive exam will be offered.

Grading Policy:

- 25 % Homework
- 25 % First exam
- 25 % Second exam
- 25 % Third exam

There are no curves, bonus points, extra credit, etc. At discretion of the instructor, the grading scale may be adjusted depending on the distribution of final grades. The final numerical grade is not rounded up, for example, a final score of 89.99 is not rounded up and since 89.99 < 90 the corresponding final grade is "B".

- A numerical grade ≥ 90
- B $80 \le \text{numerical grade} < 90$
- C $70 \le \text{numerical grade} < 80$
- D $60 \le \text{numerical grade} < 70$
- F numerical grade < 60

COURSE POLICIES

1. Academic Integrity

Cheating is unethical and not acceptable. Plagiarism is using information or original wording in a paper without giving credit to the source of that information or wording: it is also not acceptable. Do not submit work under your name that you did not do yourself. You may not submit work for this class that you did for another class. If you are found to be cheating or plagiarizing, you will be subject to disciplinary action, per UTEP catalog policy. Refer to http://www.utep.edu/dos/acadintg.htm for further information.

2. Missed Classes

You are expected to come to class, pay attention, and take good notes. If you miss the class, it is your responsibility to obtain notes from your classmates and complete the corresponding assignments.

3. Homework

Homework has to be done in MyOMLab, it is assigned after covering each chapter, you will have 2 days to complete it. Homework cannot be made up after its due date, if you expect to miss class, be sure you will be able to do the homework before its due date.

4. Exams

Exams are basically from material discussed in the class. You are responsible to bring a green scantron, and a calculator to the exam as you need to solve quantitative questions. A missed exam will result in a score of 0 (zero) for that exam, and **THERE ARE NO MAKEUP EXAMS**. Please note the final exam will be comprehensive covering all materials in the class. Graded exams will be returned during the following class. Do not discard them once you have looked at them – they may come handy if there is a discrepancy later on.

5. Need for Assistance

If you have a disability and need classroom accommodations, please contact The Center for Accommodations and Support Services (CASS) at 747-5148, or by email to cass@utep.edu, or visit their office located in UTEP Union East, Room 106. For additional information, please visit the CASS website at www.sa.utep.edu/cass.

6. Student Services

The following is a list of student services:

- **Student Counseling Center**: http://sa.utep.edu/counsel/; (915) 747-5302; 202 Union West; walk-ins encouraged.
- **Student Health Center**: http://chs.utep.edu/health; (915) 747-5624; many services free to students paid for through student health fee.
- **Center for Accommodations and Support Services**: http://sa.utep.edu/cass; 106 Union East; (915) 747-5148; for disability accommodations.
- **Student Engagement and Leadership Center**: http://sa.utep.edu/selc; 106 Union West; (915) 747-5670; includes study space with workstations; family friendly room with lactation space.
- Career Center: http://sa.utep.edu/careers; 103 Union West; (915) 747-5640.
- Minetracker: https://minetracker.utep.edu/ Events, news and organizations.

7. Student Responsibility

Individual students must operate with integrity in their dealings with faculty and other students; engage the learning materials with appropriate attention and dedication; maintain their engagement when challenged by difficult learning activities; contribute to the learning of others; and perform to standards set by the faculty.

Course Outline:

Lecture	Class Discussion	After Lecture Assignment
1 (June 11)	Operations and Productivity (Ch 1) & Operations Strategy	HW # 1
	in a Global Environment (Ch 2)	HW # 2
2 (June 12)	Project Management (Ch 3)	HW # 3
		SIM Ch 3
3 (June 13)	Forecasting (Ch 4)	HW # 4
		SIM Ch 4
4 (June 14)	Design of Goods and services (Ch 5)	HW # 5
	Sustainability in the Supply Chain (Supplement 5)	HW # 6
5 (June 15)	First Partial Exam (Ch 1, 2, 3, 4, 5 & Supp 5)	
	Managing Quality (Ch 6)	HW # 7
		SIM Ch 6
7 (June 19)	Statistical Process Control (Supplement 6)	HW # 8
8 (June 20)	Process Strategy (Ch 7) & Capacity and Constraint	HW # 9
	Management (Supplement 7)	HW # 10
	Location Strategies (Ch 8)	HW # 11
	Second Partial Exam (Ch 6, 7, 8 & Supp 6 & 7)	
11 (June 25)	Layout Strategies (Ch 9)	HW # 12
12 (June 26)	Human Resources, Job Design, and Work Measurement (Ch 10)	HW # 13
13 (June 27)	Supply Chain Management (Ch 11) & Supply Chain Management Analytics (Supplement 11)	HW # 14
		HW # 15
		SIM Ch 11
14 (June 28)	Inventory Management (Ch 12)	HW # 16
		SIM Ch 12
	Aggregate Planning and S&OP (Ch 13)	HW # 17
16 (July 2)	Material Requirements Planning (MRP) and ERP (Ch 14)	HW # 18
17 (July 3)	Short-Term Scheduling (Ch 15)	HW # 19
July 4	Independence Day – No Class	
18 (July 5)	JIT, TPS, and Lean Operations (Ch 16)	HW # 20
19 (July 6)	Third Partial Exam (Ch 9, 10, 11, 12, 13, 14, 15, 16 & Supp 11)	
20 (July 9)	Final Exam (Comprehensive) 10:00 am – 12:45 pm	