



## Production/Operations Management

OSCM 3321

Spring Semester 2014

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**Class Hours:** 9:00 am - 10:20 am TR at COBA 309

**Office Hours:** Tuesday & Thursday from 10:30 am to 12:30 pm, or by appointment.

### Textbook

*OSCM 3321 Department of Information and Decision Sciences UTEP Edition*

McGraw Hill, Edition: UTEP Edition, ISBN-13: 978-0-07-759160-1, ISBN-10: 0-07-759160-7

### Reference books

*Operations Management*, by William Stevenson, McGraw Hill, Eleventh Edition (ISBN13: 978-0073525259, ISBN10: 0073525251)

*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).

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: QMB 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 80 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 % Quizzes
- 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  $\geq 90$
- B  $80 \leq$  numerical grade  $< 90$
- C  $70 \leq$  numerical grade  $< 80$
- D  $60 \leq$  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. Quizzes

Please notice that you should take a quiz on Blackboard after each chapter, you will have 7 days to complete it. Quizzes cannot be made up after its due date, if you expect to miss class, be sure you will be able to take the quiz 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](mailto: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](http://www.sa.utep.edu/cass).

## 6. 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:

<b>Lecture</b>	<b>Class Discussion</b>	<b>Quiz</b>
<b>1</b> (Jan 21)	Introduction to Operations Management	Chapter 1
<b>2</b> (Jan 23)	Competitiveness, strategy, and productivity	Chapter 2
<b>3</b> (Jan 28)	Product and service design	Chapter 4
<b>4</b> (Jan 30)	Reliability	Supplement to Chapter 4
<b>5</b> (Feb 4)	Strategic capacity planning for products and services	
<b>6</b> (Feb 6)	Strategic capacity planning for products and services	Chapter 5
<b>7</b> (Feb 11)	Exam # 1	
<b>8</b> (Feb 13)	Decision Theory	
<b>9</b> (Feb 18)	Decision Theory	Supplement to Chapter 5
<b>10</b> (Feb 20)	Process selection and facility layout	
<b>11</b> (Feb 25)	Process selection and facility layout	Chapter 6
<b>12</b> (Feb 27)	Management of quality	
<b>13</b> (Mar 4)	Management of quality	Chapter 9
<b>14</b> (Mar 6)	Quality control	
<b>15</b> (Mar 18)	Quality control	Chapter 10
<b>16</b> (Mar 20)	Acceptance sampling	Supplement to Chapter 10
<b>17</b> (Mar 25)	Exam # 2	
<b>18</b> (Mar 27)	Aggregate planning and master scheduling	
<b>19</b> (Apr 1)	Aggregate planning and master scheduling	Chapter 11
<b>20</b> (Apr 3)	MRP and ERP	
<b>21</b> (Apr 8)	MRP and ERP	Chapter 12
<b>22</b> (Apr 10)	Inventory management	
<b>23</b> (Apr 15)	Inventory management	Chapter 13
<b>24</b> (Apr 17)	JIT and lean operations	Chapter 14
<b>25</b> (Apr 22)	Maintenance	Supplement to Chapter 14
<b>26</b> (Apr 24)	Supply Chain Management	Chapter 15
<b>27</b> (Apr 29)	Scheduling	
<b>28</b> (May 1)	Scheduling	Chapter 16
<b>29</b> (May 6)	Sustainable supply chain management	
<b>30</b> (May 8)	Exam # 3	
(May 13)	<b>Final Exam</b> (Comprehensive) 10:00 am 12:45 pm	