

**WILLIAM PATERSON UNIVERSITY**  
**CHRISTOS M. COTSAKOS COLLEGE OF BUSINESS**  
**Course Outline**

Course Number & Title: MGT4310 - Production and Operations Management  
Semester: Winter 2012-2013, Online  
Professor: Dr. Cesar Perez-Alvarez  
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**Course Description**

The main emphasis is on techniques and methods employed by managers to plan and control manufacturing and other operating systems. Applications of quantitative methods and various analytical techniques are stressed for operations system design, planning, control, problem solutions, productivity, inventory, scheduling, quality and capacity management, control system development, new technology evaluation and transportation problems. The learning process is enhanced by means of critically analyzing business cases.

**Course Prerequisites**

MGT 2000, either MATH 1400 or MATH-1170, ECON-2100 and either MATH 1450 or ECON 2110

**Course Objectives**

- Develop a basic knowledge and understanding of basic Production & Operations Management (POM) concepts and their applications
- Explain how a firm's operations function is managed
- Introduce a number of Operations Management tools that can be applied in job settings
- Enhance skills needed to solve complex, real- business problems in Production and Operations Management

**Student Learning Outcomes**

Upon completion of this course, students should be able to:

- Understand and perform statistical quality controls.
- Select facility location and arrange the facility.
- Determine best timing and quantity in decisions of the type make versus buy.
- Integrate supply-chain management into e-commerce strategies
- Use basic POM methodologies in the solution of problems

**Course Topics**

- Operations and Productivity
- Strategy and Global Environment
- Forecasting; Forecasting and Design
- Computer Applications
- Managing Quality
- Process and Capacity Planning
- Location and layout strategies
- Supply Chain Management
- Inventory Management
- Aggregate Planning
- Short-Term Scheduling
- Project Management

## Text

Heizer, J. and Render, B. (2011). Operations Management, 10<sup>th</sup>. Edition. Prentice-Hall, Upper Saddle River, New Jersey 07458. ISBN-10: 0136119417; ISBN-13: 9780136119418

## Or

Heizer, J. and Render, B. (2009). Operations Management, 9<sup>th</sup>. Edition. Prentice-Hall, Upper Saddle River, New Jersey 07458. ISBN-10: 0138128782, ISBN-13: 9780138128784 / Flexible edition: ISBN-10: 0136073662 ISBN-13: 9780136073666

## Class Requirements

- There will be twelve online quizzes and two online tests.
- Quizzes will be based on material in the corresponding chapter, excluding problems and calculations.
- Quizzes will be **timed**; once you start them, you will have **20 minutes** to answer all the **20 questions**. You are expected to read the chapters thoroughly before taking each quiz. **Exceeding the allotted time will result in points being deducted.**
- Quizzes for a particular week will be available during the entire week. They need to be completed by midnight on Sunday.
- If you do not take a quiz during the corresponding week, you will not be able to take it later on.
- If you experience any problems taking any of the quizzes, send me a notification immediately after the problem takes place. I will fix it so that you can take it again.
- There will be no make-ups for any quizzes.
- Only **ten out of the twelve** quizzes will be included in the final grade. The selection will be **based on the highest scores of the quizzes taken**. If you do not take a quiz, a zero score will be obtained and included in the ten quizzes mentioned above.
- The midterm and final tests will be **problem-based**. The final test is not cumulative.
- The midterm and the final will be **completed online at specific dates and times**. Each test will contain four to five problems; you will have **up to half hour to complete each problem**. You will be able to move to the next problem, after you have completed one. Once a solution has been submitted, you won't be able to go back and modify it.
- The midterm will be made up of problems in chapters 1, 3, 4, and supplement 6.
- The final will be made up of problems in chapters 7, 8, 12 and supplement 7.
- You will find on Blackboard a sample of problems, similar to those in the midterm and the final.
- You will also find **audio lectures** in some of the chapters. I **highly recommend** that you use these lectures in preparing for both the midterm and the final. In doing so, you will become acquainted with the procedures needed to solve problems in the corresponding chapters.
- **Please note that the midterm and the final must be taken during these times:**

**Midterm: Thursday, January 7<sup>th</sup> from 6 pm until 8 pm**

**Final: Sunday, January 14<sup>th</sup> from 6 pm until 8 pm**

- **There will not be deadline extensions.**

## Grading Policy

Grade for the course will contain the following:

Midterm	300 points
Final	300 points
Online quizzes (10 @ 40 points each)	400 points

Letter grades will be based on the following: A (950-1000), A- (900-949), B+ (850-899), B (810-849), B- (770-809), C+ (730-769), C (690-729), C- (640-689), D (600-639), F (Below 600)

## Academic Integrity Policy

Students are expected to maintain the highest standards of academic honesty. Academic dishonesty includes, but is not necessarily limited to, the following:

- Cheating: Giving or receiving unauthorized assistance in any academic exercise or examination. Using or attempting to use any unauthorized materials, information or study aids in an examination or academic exercise.
- Plagiarism: Representing the ideas or language of others as one's own.
- Falsification: Falsifying or inventing any information, data or citation in an academic exercise.
- Multiple Submissions: Submitting substantial portions of any academic exercise more than once for credit without the prior authorization and approval of the current instructor.
- Complicity: Facilitating any of the above actions or performing work that another student then presents as his or her assignments.
- Interference: Interfering with the ability of a fellow student to perform his or her assignments.

Academic dishonesty will lead, among other potential sanctions, to failing the course.

## Schedule

Date	Topic	Readings	Activities
<b>Week 1</b>			
12/26	Operations Intro	Ch. 1	Online Quiz 1
12/27	Operations Strategy	Ch. 2	Online Quiz 2
12/28	Project Management	Ch. 3	Online Quiz 3
<b>Week 2</b>			
12/31	Forecasting	Ch. 4	Online Quiz 4
01/01	Design of goods and services	Ch. 5	Online Quiz 5
01/02	Quality management I	Ch. 6	Online Quiz 6
01/03	Quality management II	Supl. 6	Online Quiz 7
01/04	Supply Chain Management	Ch. 11	Online Quiz 8
<b>Week 3</b>			
<b>01/07</b>	<b>Midterm</b>		Midterm test
01/08	Process Strategy	Ch. 7	Online Quiz 9
01/09	Capacity Planning	Supl. 7	Online Quiz 10
01/10	Location Strategies	Ch. 8	Online Quiz 11
01/11	Inventory Management	Ch. 12	Online Quiz 12
<b>Week 4</b>			
<b>01/14</b>	<b>Final</b>		Final test