**Course Outline**

**Course Number & Title:** MGT4310 - Production and Operations Management  
**Semester:** Winter 2014-2015, Online  
**Professor:** Dr. Cesar Perez-Alvarez  
**Office & Phone No.:** V3066, (973) 720 3361  
**E-mail:** perezc@wpunj.edu

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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
Or
Heizer, J. and Render, B. (2011-2014). Operations Management, Either the 11th, 10th or 9th Editions. Prentice-Hall, Upper Saddle River, New Jersey 07458. Hardcover or Flexible edition. (You would need to pay a fee to the publisher to be able to access MyOMLab)

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 25 minutes to answer all the 25 questions. You are expected to read the chapters thoroughly before taking each quiz. Exceeding the allotted time may 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: Sunday, January 4th from 6 pm until 8 pm
  - Final: Sunday, January 11th from 6 pm until 8 pm
- There will not be deadline extensions.

Grading Policy
Grade for the course will contain the following:

<table>
<thead>
<tr>
<th>Component</th>
<th>Points</th>
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<tbody>
<tr>
<td>Midterm</td>
<td>300</td>
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<tr>
<td>Final</td>
<td>300</td>
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<tr>
<td>Online quizzes (10 @ 40 points each)</td>
<td>400</td>
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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 of 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

<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
<th>Readings</th>
<th>Activities</th>
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<tbody>
<tr>
<td><strong>Week 1</strong></td>
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<tr>
<td>12/22</td>
<td>Operations Intro</td>
<td>Ch. 1</td>
<td>Online Quiz 1</td>
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<tr>
<td>12/23</td>
<td>Operations Strategy</td>
<td>Ch. 2</td>
<td>Online Quiz 2</td>
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<tr>
<td>12/24</td>
<td>Project Management</td>
<td>Ch. 3</td>
<td>Online Quiz 3</td>
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<tr>
<td>12/26</td>
<td>Forecasting</td>
<td>Ch. 4</td>
<td>Online Quiz 4</td>
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<tr>
<td>12/27</td>
<td>Design of goods and services</td>
<td>Ch. 5</td>
<td>Online Quiz 5</td>
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<tr>
<td><strong>Week 2</strong></td>
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<tr>
<td>12/29</td>
<td>Supply Chain Management</td>
<td>Ch. 11</td>
<td>Online Quiz 8</td>
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<tr>
<td>12/30</td>
<td>Quality management I</td>
<td>Ch. 6</td>
<td>Online Quiz 6</td>
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<tr>
<td>12/31</td>
<td>Quality management II</td>
<td>Suppl. 6</td>
<td>Online Quiz 7</td>
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<td>01/02</td>
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<tr>
<td><strong>01/04</strong></td>
<td>Midterm</td>
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<td>Midterm test</td>
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<tr>
<td><strong>Week 3</strong></td>
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<tr>
<td>01/05</td>
<td>Process Strategy</td>
<td>Ch. 7</td>
<td>Online Quiz 9</td>
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<tr>
<td>01/06</td>
<td>Capacity Planning</td>
<td>Suppl. 7</td>
<td>Online Quiz 10</td>
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<tr>
<td>01/07</td>
<td>Location Strategies</td>
<td>Ch. 8</td>
<td>Online Quiz 11</td>
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<tr>
<td>01/08</td>
<td>Inventory Management</td>
<td>Ch. 12</td>
<td>Online Quiz 12</td>
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<td>01/09</td>
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<tr>
<td><strong>01/11</strong></td>
<td>Final</td>
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<td>Final test</td>
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