

# Production and Operations Management

**29:623:311:H6**

**Summer 2017**

- **Course Information**

Instructor: Junming Liu, 1003B, 1 Washington Park

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Time & Place: Mon & Wed 6:00 PM-9:30 PM (1WP-512)

Office Hours: Wednesday 3:00 pm-4:00 pm or by appointment

**Textbooks:** “Operations Management”, by Jonathan Eckstein. ISBN-13: 978-1-59271-268-7

- **COURSE OBJECTIVES**

The objective of decision modeling is to develop mathematical models for a variety of business Production and Operations Management problems. Applications can be drawn from manufacturing, transportation and distribution, marketing and finance. Because Operations problems are usually complicated, the mathematical models used to represent them are typically analyzed and solved using computer software (spreadsheet add-ons or dedicated programs).

- **Grading Policy:**

Midterm exam: 25%

Final exam: 35%

Quiz: 10%

Homework: 30%

At the end of course, homework, and exam scores with the weights specified in the syllabus will be combined to get an overall score from 0-100. This score may contain fractions, but it won't be rounded. I then rank these scores, and choose sensible cutoffs between A, B+, B, C+, C, D and F. The cutoffs do not come in predetermined places. An example, 90 is not guaranteed to be an “A”.

- **Class Policy**

Class materials for each class will be posted on Blackboard before class day. The use of cell phones or other mobile communication devices is disruptive, and is therefore prohibited during class. Except in emergencies, those using such devices must leave the classroom for the remainder of the class period. Students are permitted to use computers during class for note-

taking and other class-related work only. Those using computers during class for work not related to that class must leave the classroom for the remainder of the class period.

- **Exams and Quizzes**

There will be two in-class quizzes and a final exam. All quizzes and exams will be closed-book and closed-notes. The final exam will be cumulative, covering all topics in the course.

*No make-up tests will be given.*

- **Assignments**

Assignments are due the beginning of the class period on the day they are due. **No assignment will be accepted after class or late including the reasons of absence.** If you are not in class on the due date, the assignment must be mailed so that it is postmarked on the due date.

- **General Information**

Academic Integrity

As a member of the Rutgers University community you are not to engage in any academic dishonesty. You are responsible for adhering to basic academic standards of honesty and integrity as outlined in the Rutgers University Policy on Academic Integrity for Undergraduate and Graduate Students.

- **Computer Software/Online Resources:**

Most of the material and assignments will require the use of computer software. There are several software packages that can be used. If you are already familiar with one, feel free to use it.

Most of the examples and cases will use MS Excel and the [Solver Add in](#), which is general purpose decision modeling software, useful both for decision models as well as Operations Management

Most relevant material will be posted on Blackboard. If you miss a class or forget your copy at home, please make sure you download and print an extra copy yourself in case we still need it for the next class.

### **Course Schedule- Summer 2017**

**\*Schedule is tentative and Subject to Change**

<b>Dates</b>	<b>Material to be covered</b>	<b>In-Class</b>
<b>July 10</b>	<b>Introduction to POM and Linear Programming (Ch. 1,2)</b>	
<b>July 12</b>	<b>Linear Programming (Ch. 3)</b>	
<b>July 17</b>	<b>LP:Sensitivity Analysis (Ch. 3)</b>	
<b>July 19</b>	<b>LP: Applications (Ch. 4) Quiz I</b>	
<b>July 24</b>	<b>Distribution and Network Models (Ch. 5)</b>	
<b>July 26</b>	<b>Integer Linear Programming (Ch. 10)</b>	<b>Midterm Exam (tentative)</b>
<b>July 31</b>	<b>Integer Linear Programming (Ch. 12)</b>	
<b>August 2</b>	<b>Project Scheduling(Ch . 9) Quiz II</b>	
<b>August 7</b>	<b>Inventory Models</b>	
<b>August 9</b>	<b>Waiting Line Models</b>	
<b>August 14</b>	<b>Waiting Line Models Course Review</b>	
<b>August 16</b>	<b>Final Exam</b>	<b>Final Exam</b>