# GLOBAL OPERATIONS AND SUPPLY CHAIN MANAGEMENT

**FALL 2017**

**TENTATIVE SYLLABUS**

**Instructor:**

**Office:**

**E-mail:**

**Phone:**

**Office hours:**

**Course website:**

**Class meeting time:**

**Class location:**

***Prerequisites:***

***Required Course Materials:***1. (Textbook) *Operations Management, Managing Global Supply Chains,* 1st edition, Ray R. Venkataraman and Jeffrey K. Pinto, Sage Publications.

Student Resource Website: [edge.sagepub.com/venkataraman](http://edge.sagepub.com/venkataraman)

***Course Description and Objectives:*** Operations is the part of a business organization that is responsible for planning, organizing, and controlling resources to produce goods and/or services. To achieve the highest effectiveness, the operations function needs to be considered in conjunction with the organization’s global supply chains. In today’s highly competitive global business environment, efficient management of operations and supply chain functions plays a significant role in an organization’s success. The goal is not limited to cost savings but also includes leveraging these functions strategically to create value and to make decisions that promote sustainability and ethical behavior.

This course will cover the basic concepts, practices, and techniques to design, analyze and manage the supply chains and to support operations management in manufacturing and service organizations. Course topics will include, product and service design, capacity management, facility location planning, process selection and facility layout, quality management and control, supplier management, logistics, demand management and forecasting, operations planning, inventory management, scheduling, and decision making concepts and tools. The focus will be on integrating management principles with analytical approaches and descriptive information to analyze and understand the operations and supply chain functions, and to excel in decision-making and quantitative problem-solving in the related fields. Upon successful completion of this course, students will be able to:

1. understand the role of supply chain and operations management in the global business environment
2. apply the concepts and practices of supply chain and operations management,
3. learn the basic analytical methodologies of operations management and apply the relevant techniques to address and solve problems encountered in the operations function of the organizations and in supply chains.

***Grading Policy:*** Your final grade will be based on your scores from the exams, in-class and online quizzes, in-class exercises, and clicker activities. The contribution of each item towards your final grade and the cut-off points for letter grades are as follows:

|  |  |
| --- | --- |
| A | 465 |
| A- | 450 |
| B+ | 435 |
| B | 410 |
| B- | 390 |
| C+ | 360 |
| C | 345 |
| D | 300 |
| F | <300 |

Points

|  |  |
| --- | --- |
| Midterm Exam I | 100 |
| Midterm Exam II | 100 |
| Final Exam | 100 |
| Case Analyses (10) | 100 |
| Problem sets (10) | 100 |
| Total Points | 500 |
|  |  |

1. *Exams:* There will be two midterm exams and one final exam. All exams will be closed-book and closed-notes, but you will be allowed to bring one sheet of personal notes (double-sided) to the exams. You must also bring a calculator to the exams.
2. *Case Analyses: Ten* end-of-the chapter cases will be assigned. Students will work in groups of two to analyze these cases and submit a team report.
3. *Problem Sets:* Ten problem sets will be assigned on the course website with the release/due date information. Students will work in groups of two to solve these problem sets.

## Class Policies:

1. *Office Hours:*You are encouraged to utilize the office hours to discuss your questions or comments. You are also welcome to reach me through email and phone.
2. *Lectures:* Class sessions will consist of instructor’s lecturing, dialogue and discussions, interactive class exercises, classroom games, case analyses, and other activities, all of which target you to be active learners.
3. *Lecture Notes and Handouts:*Lecture notes and handouts will be distributed frequently. They will often include partly-finished learning material. For example, I may introduce problems and discussion questions in the notes, but present the answers during the class sessions. Such additional materials (solutions, answers, etc.) will *not* be posted or distributed, and it is your responsibility to be informed about them. The best way to do this is to be present in class and take your own notes.
4. *Course Webpage:* The course webpage (Canvas) will be used to make announcements and post lecture notes, assignments, and other relevant course materials. You are responsible for all the content posted on the webpage. Announcements will be communicated electronically. I encourage you to use the Discussion Forum to post your questions about the course that may be of interest to all students. Posts that include discussions, news, or any information related with the subject matter are also welcome.
5. *Missed Exams:* No make-up exam will be given unless you have excuses due to regularly scheduled, University-approved curricular and extracurricular activities and other legitimate but unavoidable reasons. You must notify the instructor via written documentation prior to the exam date, if a prior notification is not possible, as soon as possible. If you miss the final exam due to illness, a doctor’s verification is required for a make-up final exam.
6. *Grades:* If you have any questions regarding your grade received on exams, case analyses, in-class exercises, and problem sets, you must contact the instructor within a week of getting the grade. All grades will be posted on Angel’s Gradebook.
7. *Disabilities:*Students with disabilities should inform me about their needs as soon as possible.
8. *Miscellaneous:* Professional attitude is expected in all communications and during class sessions. Please refrain from any activities including texting, having side conversations, and reading non-course related materials which may jeopardize not only your own learning but also distract your class mates. Please take responsibility in creating a positive learning environment.

***Course Content and Schedule (subject to change):***

|  |  |  |
| --- | --- | --- |
| **Week** | **Topic** | **Text** |
| 1 | Introduction to Managing Global Operations and Supply Chains Operations and Supply Chain Strategies | Chapter 1  Chapter 2 |
| 2 | Project Management  Project Management (optional)  Learning Curves (optional) | Chapter 3  Chapter 3S  Module E |
| 3 | Product and Service Innovations for Global Operations and Supply Chains  Reliability (optional)  Waiting Line Models (optional) | Chapter 4  Chapter 4S  Module C |
| 4 | Managing for Quality  Quality Improvement and Control Tools | Chapter 5  Chapter 6 |
| 5 | Quality Improvement and Control Tools (continued) | Chapter 6 |
| 6 | **Midterm Exam I**  Capacity Planning for Global Operations and Supply Chains  Decision Making Tools | Chapter 7  Module F |
| 7 | Supply Chain Design and Location Planning for Global Operations and Supply Chains  Process Design and Layout Planning | Chapter 8  Chapter 9 |
| 8 | Tools for Analyzing, Designing, and Selecting Processes and Layouts  Supplier Management | Chapter 9S  Chapter 10 |
| 9 | Logistics Management  The Transportation Models (optional) | Chapter 11  Module B |
| 10 | Demand Management and Customer Service  Demand Forecasting Methods | Chapter 12  Chapter 13 |
| 11 | Demand Forecasting Methods  Lean Operations and Supply Chains | Chapter 13  Chapter 14 |
| 12 | **Midterm Exam II**  Inventory Management | ---  Chapter 15 |
| 13 | Inventory Control Models for Independent Demand | Chapter 16 |
| 14 | Simulation (optional)  Sales and Operations Planning | Module D  Chapter 17 |
| 15 | Linear Programming (optional)  Master Scheduling, Material Requirements Planning | Module A  Chapter 18 |
| 16 | Capacity Requirements Planning, MRP II, and ERP  Detailed Scheduling | Chapter 18S  Chapter 19 |
| 17 | **Final Exam** (Exact date/time/venue to be announced) |  |