

**UNIVERSITY of MASSACHUSETTS DARTMOUTH**  
**Charlton College of Business**  
**Decision and Information Science Department**  
**Online**

**COURSE:** **POM 651—Advance Operations Analysis**  
Prerequisite: Completion of foundation courses; MBA students, only.  
POM 500 (Business Statistics or Equivalent) and MS Excel

**Professor:** Dr. Soheil Sibdari; email: via Blackboard (myCourse)

**Office:** Charlton College of Business, Room 230; Phone: (508) 999-8019

**Office hours:** by email/appointment

**COURSE DESCRIPTION:**

Techniques for the analysis and improvement of the value-adding activities of an organization. Such activities are called by a number of names: processes, operations, production, or just plain work. Value is added only when the output from a process meets the needs of customers, both internal and external. The course focuses on the efficient and effective management, in both manufacturing and service environments, of processes.

**COURSE OBJECTIVES:**

As an MBA-level Operations Management (OM) course, with more of a macro (or global) orientation than micro, POM 651s main objectives are to:

- develop an understanding of the state-of-the-art thinking on operational issues that firms face today in a global environment; thus, develop a sense of the importance of the operations function and operations strategy for firms,
- develop the ability to analyze operations problems from a company-wide perspective by examining the relationship of operations with the other functions, and the global environment,
- provide a team- (or group-) work environment for applying OM concepts (as well as all other accumulated knowledge) to case studies and to a real operations improvement study (i.e., group term-project),
- broaden your knowledge and appreciation of the subject matter through some additional reading.

**COURSE MATERIAL**

**Textbook:** "Operations Management in the Supply Chain: Decisions and Cases" (McGraw-Hill/Irwin Series, Operations and Decision Sciences) **6th Edition**, by Roger Schroeder, M. Johnny Rungtusanatham, Susan Goldstein (ISBN-13: 978-0073525242)

**Required** software: Microsoft Excel

**COMPETENCIES and CONTACT HOURS**

In this course, students will be introduced to International supply chain management. The student will understand:

- |                              |    |    |
|------------------------------|----|----|
| • Introduction to statistics | 9  | 9  |
| • Management science         | 9  | 18 |
| • Operations Management      | 12 | 30 |

**CLASSROOM POLICY:**

**Academic Honesty:**

All university policies regarding academic honesty such as exam policies and plagiarism will be followed in this class. Students are encouraged to read the detail instructions provided by the registration office.

**myCourses:**

This course is supported by a web corner in myCourses where all hand-outs, announcements, lecture notes, articles, etc. will be uploaded. A valid UMass Dartmouth username and password is required to access this website (the same as your email account). Regular check and review of the course website is expected from

students. Attendance in the online section is measured on the basis of quality (grades) and quantity (count) of student's response on the case studies, and punctuality in meeting deadlines on all assignments and report.

### **Emailing:**

Your emails should be sent to [ssibdari@umassd.edu](mailto:ssibdari@umassd.edu) with the subject of your email should clearly reflect the contents or issue/urgency/etc. For example you may send emails with subject line "POM651-Homework 2 question". Emails will be responded within 48 hours. During holidays and weekend emails will not be routinely viewed and responded.

### **Weekly Activity:**

This course will be offered in a weekly basis with all activities of the week to be assigned at once at the beginning of the week (Mondays 7:00am). The details of the classes and weekly activities will be available online through Blackboard (i.e. myCourse). In the class schedule there is a column called "Activity" that describes the major activity of the week. Students need to read the chapter using the book, power point slides and other book and online resources.

### **GRADING ACTIVITIES:**

In the following, we explain about different classroom activities including Exam, Quiz, Case, and Assignment.

### **Exam:**

There will be two exams that can be written or multiple choice. All corresponding chapters in the first part of the will appear in Exam 1 and the second part will appear in Exam 2 that is not comprehensive but indirect questions from the first part might appear in Exam 2. The exams will be delivered according to the course schedule. There will be exam due date and failing to take the test on-time results in a zero credit for the exam. Late submission of the exam results in 50 percent point deduction. Personal issues or technical problems need to be addressed to the department chair or your adviser who can recommend the instructor about the validity of the personal issue. If verified by the officials, a makeup exam is offered but might be in a different setting than the original exam (for example the exam might have been multiple choice while the makeup test will be in-class and written). The exams must be done **individually**.

### **Weekly Quiz:**

There will be one quiz per week for most chapters. The quizzes are multiple choice and will be available to students on Monday of each week and be due on Sunday of the same week for one entire week. There is one chance to take the quiz. The quizzes must be done **individually** and late submissions of the quiz result in a 50 percent point deduction. The answer to the quizzes will appear after the quiz availability date that is the Monday

### **Homework assignments:**

There will be two homework assignments that are available in this syllabus. Assignment 1 contains the first set of chapters and Assignment 2 contains the second set of chapters with due date on available in the schedule table. For each assignment you may submit one file in MS WORD or PDF. You may take a picture of your hand writing and submit a picture PDF to save time. Homework assignments must be done **individually**.

### **Case study:**

There are two case studies for this class that are listed at the end of this syllabus. Cases are due according to the schedule and can be submitted in the dropbox with the link and their due dates are all located in the Assignment and Case tab in the left margin of the myCourse site. The cases must be submitted **individually**, although collaboration and working with your classmates are recommended in which case you need to mention their names in your case reports (Note that the reports must not be the same or one being copy of the other one). You need to provide the following sections in your case. Your case submission will be two to three pages depending on the number of questions provided in each case. You need to have the following sections for each case. Remember that for each case set you have two cases assigned.

**Section 1- CASE SUMMARY** (one page with size 11, 1.5 space, any font) Students need to read the case and provide a summary of the case. Please summarize the case such that a reader of your report can have a general understanding of the **purpose, method,** and the **results** of the case without reading it.

**Section 2- ANSWER QUESTION** (in half a page to one page or less depending on the number of questions, with size 11, 1.5 space, any font) In addition, you need to answer the questions at the end of each case study (there might be cases for which no question is provided in which case you do not need to provide Section 2).

**Section 3-COURSE RELATIONSHIP** (in half a page to one page with size 11, 1.5 space, any font): You need to provide the relationship between the case and different chapters of the book. In other words, What methods (eg. Inventory Management, Capacity Control, etc.) of the course are directly been used in the

**Class Schedule: (This schedule is tentative and subject to change according to class pace and student needs)**

Week	Date		Class Subject	CH.	Weekly Activity
1	3/20	3/24	Introduction	1, 4	Online quiz
2	3/25	3/31	Lean Thinking	5, 6, 7	Online quiz,
3	4/1	4/7	Forecasting	11	Online quiz, <b>Assignment 1</b>
4	4/8	4/14	Capacity Planning	12	Online quiz, <b>Case Set 1, Exam 1</b>
5	4/15	4/21	Scheduling and Project	13, 14	Online quiz
6	4/22	4/28	Inventory Control	15	Online quiz, <b>Assignment 2</b>
7	4/29	5/5	-	-	<b>Case Set 2, Exam 2</b>

Assignment 1, Exam 1: Chapters 1, 4, 5, 6, 7, 11

Assignment 2, Exam 2: Chapters 12, 13, 14, 15

Case 1: (1) Early Supplier Integration, and (2) Eastern Gear

Case 2: (1) Consolidated Electronic, and (2) Merriwell Bag Company

List of Homework Assignments: (there is no homework from chapter 1, All the page numbers are according to according to 6<sup>th</sup> edition of the textbook)

**Assignment 1:** (Chapters 1, 4, 5, 6, 7, 11)

1. Chapter 4—Questions 1-4 and 11-12 (page 84) (6 total)
2. Chapter 5—Questions 4-7 and 13-15 (page 107-109) (7 total)
3. Chapter 6—Questions 1-6 and Problems 1-3 and 6 (page 131-132) (10 total)
4. Chapter 7—Questions 4-7 and Problems 1-6 (page 158) (10 total)
5. Chapter 11 - Questions 1-3 (page 276) and Problem 8 (page 278)

**Assignment 2:** (Chapters 12-15)

1. Chapter 12 – Questions 1-5 (page 313) and Problem 10 (page 317)
2. Chapter 13 - Questions 4-8 (page 337) and Problem 3 (page 338)
3. Chapter 14 - Questions 1-6 (page 365) and Problem 8 (page 367)
4. Chapter 15 - Questions 1-2 (page 397) and Problem 8, 9 (page 398 and 399)

**EVALUATION POLICY:**

The course grading criteria is based on the following scale. However, slight changes of percentages might occur as a result of the schedule change depending on student needs and class pace. The grading of all the written assignments including case studies will use the following rubrics in the last page of this document. Please read carefully and write your reports accordingly.

Exam	40%
Quiz	20%
Assignments	20%

Cases	20%
Total	100%

Project Rubrics	100%	75%	50%	25%-0%
<p><b>Content:</b></p> <p>Main context of the project containing the body of the project or case report. Content is the main part of the project.</p>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Is well thought out and supports the solution to the challenge or question</li> <li><input type="checkbox"/> Reflects applications of critical thinking throughout the project</li> <li><input type="checkbox"/> Clearly answers the questions</li> <li><input type="checkbox"/> Is pulled from a variety of sources is accurate (including books and articles)</li> <li><input type="checkbox"/> Subjective content and accurate. May not be used in other reports</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> well organized and provide a comprehensive overview of the solution to the question</li> <li><input type="checkbox"/> provides more than three applications of critical thinking that is apparent</li> <li><input type="checkbox"/> Has clear goal that is related to the topic</li> <li><input type="checkbox"/> Is pulled from several sources (including articles)</li> <li><input type="checkbox"/> Has clear goal that is related to the topic.</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Supports the solution to the questions</li> <li><input type="checkbox"/> Has at least one application of critical thinking</li> <li><input type="checkbox"/> Has no clear goal or the goal that is not apparent</li> <li><input type="checkbox"/> Is pulled from a limited number of sources</li> <li><input type="checkbox"/> Has some non-supported claims and contains factual errors. Does not provide relevant to the course content</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Provides inconsistent information for solution of questions</li> <li><input type="checkbox"/> No evidence of critical thinking</li> <li><input type="checkbox"/> Has no clear goal</li> <li><input type="checkbox"/> Is pulled from few sources</li> <li><input type="checkbox"/> Significant factual errors</li> <li><input type="checkbox"/> Contains claims and conclusions with no evidence and resources</li> </ul>
<p><b>Introduction and background:</b></p> <p>Contains a section of title, abstract, and the introduction section</p>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Title is self-explanatory, clear, and unique</li> <li><input type="checkbox"/> Abstract summarizes the question, provide list of methods and list the results</li> <li><input type="checkbox"/> Introduction presents the overall topic and draws the audience into the presentations with a meaningful insight about the project</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> The title is self-explanatory but can apply to other projects</li> <li><input type="checkbox"/> Abstract contains either two of the three major goals of question, method, and results</li> <li><input type="checkbox"/> Introduction supports the question and provide a summary of the project compelling questions related to the question of interest</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> The title is self-explanatory but not unique</li> <li><input type="checkbox"/> Abstract contains one of the three major goals of question, method, and results</li> <li><input type="checkbox"/> Introduction summarizes the project and methods. The sequencing of information is unclear. Does not provide interest to audience</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> The title is not self-explanatory not unique. Contains errors</li> <li><input type="checkbox"/> Abstract is general and is a repeat from the introduction. Does not summarize the project</li> <li><input type="checkbox"/> Introduction is irrelevant to the subject. Is borrowed from other research</li> </ul>
<p><b>Organization:</b></p>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Information is clearly focused in an organized and thoughtful manner</li> <li><input type="checkbox"/> Information is constructed in a logical pattern to support the solution</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Information supports the solution. The flow of information is apparent and contents are presented in logically right format and order</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Project has a focus but might stray from it at times</li> <li><input type="checkbox"/> Information appears to have a pattern, but the pattern is not consistently carried out in the project</li> <li><input type="checkbox"/></li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Information loosely supports the solution</li> <li><input type="checkbox"/> Content is unfocused and haphazard</li> </ul>
<p><b>Presentation</b></p>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Multimedia (including tables, graphs, and pictures) is used to clarify and illustrate the main points</li> <li><input type="checkbox"/> Format enhances the content</li> <li><input type="checkbox"/> Presentation captures audience attention</li> <li><input type="checkbox"/> Presentation is organized and well laid out</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Multimedia is used to illustrate the main points</li> <li><input type="checkbox"/> Format is appropriate for the content</li> <li><input type="checkbox"/> Presentation captures audience attention</li> <li><input type="checkbox"/> Presentation is well organized</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Multimedia loosely illustrates the main points</li> <li><input type="checkbox"/> Format does not suit the content</li> <li><input type="checkbox"/> Presentation does not capture audience attention</li> <li><input type="checkbox"/> Presentation is loosely organized</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Presentation appears sloppy and/or unfinished</li> <li><input type="checkbox"/> Multimedia is overused or underused</li> <li><input type="checkbox"/> Format does not enhance content</li> <li><input type="checkbox"/> Presentation has no clear organization</li> </ul>