

6500 330 001:
Principles of Supply Chain & Operations Management

Fall 2014

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Class Times: 11:00 AM to 11:50 AM on Mondays, Wednesdays and Fridays in CBA 132

Office Hours: Mondays 12:30 PM – 3:00 PM;
Wednesdays 1:00Pm – 3:00 PM;
Other times by appointment.

Textbook: **Bozarth & Handfield, Introduction to Operations and Supply Chain Management,**
3rd Edition, PRENTICE HALL

Course Description:

This course is a survey of the strategic concepts and quantitative tools often used in supply chain & operations management. These topics are organized into four categories: describing a production & operations system and its supply chain, planning for a production & operations system and its supply chain, controlling a production & operations system and its supply chain, and improving a production & operations system and its supply chain. The objective of this course is to provide the student with insight into the issues, models, and numerical methods particular to operations management and supply chain management.

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

- Demonstrate an understanding of forecasting tools
- Demonstrate an understanding of decision models
- Demonstrate an understanding of quality concepts
- Demonstrate an understanding of inventory management models
- Demonstrate an understanding of product and process designs, capacity planning, location analysis, aggregate production and project scheduling
- Demonstrate an understanding of the basic elements of supply chain management.

Course Structure:

- The course consists of lectures, quantitative problem solving, and a simulation session called “Beer Game”. The lecture slides and materials are drawn not only from the textbook, but also other sources. Please download and print lecture slides and materials on **Springboard** in advance.
- It is necessary for you to read the assigned chapters & scan the lecture slides in advance, in order to synthesize concepts from lectures, readings and cases, and participate meaningfully.
- Homework assignments and the review questions for each chapter will also be posted on Springboard.
- You need to find and download additional articles by instruction. There is an array of online sources available to you from the UA Library (and which your fees are paying for). To find articles, my suggestion is that from the UA home page (www.uakron.edu) you go to the *Libraries* tab. You will see a box called *Research*. Choose the link for *Databases by Title*. From that databases page, find and select “*Academic Search Complete*” or “*Business Source Complete*.” You will be prompted to log in. At the top of that page hit the link “*Choose Database*,” then at the top click the box to “*Select All*.” You will then have the ability to use multiple search fields to find nearly anything you are looking for. You can search by topic, journal name, author, or by many other variables.
- If you miss a class, make arrangements with a classmate to obtain a copy of the lecture notes. Go through the lecture material, PowerPoint slides and textbook readings. Then if you have any questions regarding the material, see the instructor during office hours and I will be glad to help you catch up with the concepts.

Grading:

The final grade for the course will be determined as a composite of individual assignments and three tests. The purpose of multiple forms of evaluation is to fairly assess our diverse styles of learning and abilities. The point distribution for the course is as follows:

Component	Points
Test One	60
Test Two	60
Test Three	60
Final Exam	60
Five assignments (15 points each)	75
Team Project 1 & 2 (30 points each)	60
Participation & 1-page Summary	25
Total	400

Course Grades: Final letter grades in the course will be based on a scale with the scale never going above the following:

A 93%	B+ 87%	C+ 77%	D+ 67%
A- 90%	B 83%	C 73%	D 63%
	B- 80%	C- 70%	D- 60%
			F Below 60%

If a student is on the borderline between an A and a B or a B and a C, then based on his/her overall class performance, instructor will decide whether adjustment of the course grade is warranted.

Exams:

There will be three non-cumulative exams and a cumulative final exam. The three exams will have about 20 multiple-choice questions and 5 short-answer questions. A multiple-choice question, if correctly answered, will earn you 2 points and a short-answer question will earn you 4 points. The final exam will be a cumulative one and will have about 35 multiple-choice questions. Tests will be in closed-book and closed-note format. The formulae needed for each exam will be provided. On Springboard, several review questions for each lecture will be posted. These review questions will be helpful to understand materials covered in each chapter. Prior to the exam, some exemplar problems will be posted. Calculators are required and should be brought for the tests. During examinations, students may be asked to display their University of Akron picture IDs by placing them on their desks.

Individual Assignments:

There are five individual assignments which should be submitted individually. Each assignment's due date is shown in the class schedule. The assignments involve several problems which can be solved through Excel or by hand. Each assignment will be submitted into the dropbox on Springboard.

Team Project:

There are two team projects: (1) a production-scheduling assignment and (2) a research project. The production-scheduling assignment will be posted later on Springboard.

For the research paper, a group of students need to choose one company and investigate the operations of that company in depth, applying the knowledge learned from the course. Each team is expected to address the following issues:

- Introduction of the company and/or the reason that your team has chosen that company;
- Products and/or services
- Industry which the company belongs to;
- Corporate strategy and operation strategy
- The production process and/or service operations
- Operations (processes and the flow of material, information & money)
- Mapping the elements of the whole supply chain, if possible (first and second-tier "suppliers", "producers" and distributors);
- Special characteristics,
- Performance measures;
- References: books, articles, papers, special reports or interviews and company websites.

Class Attendance & Participation:

This is an active learning class. Student participation is an essential part of this course. A student can participate through questions, responses, and/or sharing anecdotes and/or relevant news items. Making smaller contributions, including asking good questions, will also be considered. Do not be afraid to make points that you may regard as minor, ask clarifying questions, or otherwise contribute in small ways.

Academic Integrity:

It is each student's responsibility to know what constitutes academic dishonesty and to seek clarification directly from the instructor if necessary. Examples include:

- Submission of an assignment as the student's original work that is entirely or partly the work of another person
- Failure to appropriately cite references from published or unpublished works or print/non-print materials
- Providing and/or receiving information from another student other than the instructor
- Observing or assisting another student's work
- Cooperation with a person involved in academic misconduct

Students are encouraged to express their views in a thoughtful and constructive manner. Any behavior that disrupts or detracts from the progress of the class will result in disciplinary action. Arrive in class in time so we can start class on time without disruptions. Please turn off or silence all cell phones during class.

Accessibility:

If you believe that you may need an accommodation based on the impact of a disability, please consult www.uakron.edu/access and contact the Office of Accessibility at 330-972-7928. The office is located in Simmons Hall, 105.

Course Schedule:

The course schedule follows on the next page. This schedule is tentative, subject to revision, depending on progress.

Tentative Class Schedule

Approx. Week	Topic	Required Reading	Important Events and Due Dates
Week 1 - 2	Introduction	Chapter 1	
	SC&OM Strategy	Chapter 2	
Week 2 - 3	Process Choice & Layout	Chapter 3	
	Business Processes	Chapter 4	
Week 3 - 4	Capacity Planning (& Waiting Line Theory) & Decision Analysis	Chapter 6	=> <i>Assignment 1 is released</i>
Week 4 - 5	Forecasting	Chapter 9	=> <i>Assignment 2 is released</i>
Week 6 (Sep 29th)	Exam 1	Chapters 1, 2, 3, 4, 6, & 9	

Approx. Week	Topic	Required Reading	Important Events and Due Dates
Week 6 - 7	S&OP Planning	Chapter 10	
Week 7 - 9	Inventory Management	Chapter 11	=> <i>Beer Game (Oct 10th)</i> => <i>Assignment 3 is released</i>
Week 9 - 10	Managing production	Chapter 12	=> <i>Assignment 4 is released</i> => <i>Group Assignment 1 is released (Oct 20th)</i> => <i>Time for Group Assignment 1 (Oct 24th)</i>
Week 11 (Nov 3rd)	Exam 2	Chapters 10, 11, & 12	

Approx. Week	Topic	Required Reading	Important Events and Due Dates
Week 11	JIT/Lean Production	Chapter 13	
Week 11 – 12	Managing Quality	Chapter 5	
Week 12 – 13	Project Management	Chapter 14	=> <i>Assignment 5 is released</i>
Week 14	Developing Products and Services	Chapter 15	=> <i>Time for Group Assignment 2 (Nov 24th)</i>
Week 15	Supply Management	Chapter 7	=> <i>Group Assignments 1 & 2 are due (Dec 3rd)</i>
	Logistics	Chapter 8	
Week 15 (Dec 5th)	Exam 3	Chapters 5, 7, 8, 13, 14, & 15	

Week 16 (Dec 11th)	Final Exam	All chapters (12:15 pm – 2:15 pm)	
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