



COURSE SYLLABUS

Operations Management - POM 5210

Winter 2018

Department of Decision & Information Sciences

School of Business Administration

Instructor: Dr. Osman T. Aydas - Assistant Professor of Supply Chain Management

Office Hours: Tuesday and Thursday 2:00 PM - 3:20 PM and by appointment.

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Class Time: This course is offered as an online course

Course Description

Operations Management - 11886 - POM 5210 - 010

Study of operations of manufacturing and service organizations. Introduction to operational design and control issues such as forecasting, capacity planning, facility location and layout, production control, material requirements planning, scheduling and quality assurance. Includes international, legal and ethical aspects, as well as computer exercises.

Prerequisite(s): Student must meet prerequisite (QMM 5100) or have taken a course in statistics.

The following major topics are covered:

- Operations Strategy in a Global Environment
- Project Management
- Forecasting
- Managing Quality
- Process Strategy
- Supply Chain Management
- Inventory Management
- Aggregate Planning
- Material Requirements Planning and ERP

- Short-Term Scheduling
- Lean Operations
- Decision-Making Tools
- Linear Programming
- Simulation

Learning Outcomes

This course is intended to present students a state-of-the-art view of the operations function. Operations is an exciting area of management that has a profound effect on productivity. The goal of this course is to present a broad introduction to the field of operations in a realistic, practical manner. Even if you are not planning on a career in the operations area, you will likely be working with people in operations. Therefore, having a solid understanding of the role of operations in an organization will be of substantial benefit to you. This course will also help you understand how operations management affects society and your life. You will become familiar with both the methodology and application of operations management within the context of managerial decision making, business process design and analysis. Specifically, by the end of this course, you should be able to:

- Identify and explain global operations strategy options
- Use a Gantt chart for scheduling, crash activity times for a project
- Apply moving-average, exponential smoothing, and trend methods for forecasting
- Explain Total Quality Management principles and Six Sigma
- Describe process strategies that can produce offerings that meet customer requirements within cost and managerial constraints
- Identify sourcing strategies and steps in supplier selection
- Compute inventory reorder point and explain safety stock
- Identify optional strategies for developing an aggregate plan
- Build gross and net material requirements plans
- Explain the relationship between short-term scheduling, capacity planning, and aggregate planning
- Identify six attributes of Lean organizations

- Create a decision tree with sequential decisions
- Construct and solve linear programming models, including an objective function and constraints
- Use Excel spreadsheets to create a simulation

Required Textbook

Operations Management: Sustainability and Supply Chain Management (12th Edition) with MyOMLab by Jay Heizer; Barry Render; Chuck Munson.

ISBN: MyOMLab w/Student Value Edition - 9780134471815 **OR** MyOMLab w/etext - 9780134165325

Evaluation

This course will be VERY “hands on”. We will do many short modeling/analysis assignments, weekly quizzes, case studies and simulation exercises. While assignments and case studies will target developing your model building and analytical thinking skills, weekly quizzes will ensure your comprehension of the course material in a weekly manner. Simulation exercises will give you the opportunity to test your theoretical knowledge, gained from this course, in a near real-life problem setting. There will be one midterm and one final exams. The overall grading breakdown will be:

Midterm Exam: 20%

Final Exam: 20%

Quizzes: 20%

Case Studies / Assignments: 30%

Simulation Exercises: 10%

Assignments will be individual but you can collaborate with your classmates in terms of idea sharing and problem solving. However, everyone will do and turn in their own assignment (otherwise, you will receive zero on the assignment). Assignments should be downloaded and submitted through Moodle. Make sure you check the course Moodle site regularly as the deadline of assignment submissions will be announced in Moodle. Late submissions will be penalized by 20% of the grade for every day following the deadline. Moodle quizzes will also be done individually. I will give you specific guidance on each assignment and will provide more details on the midterm and final exams.

Grading Scale:

A	3.6 - 4.0	90% and above
B	3.0 - 3.5	$\geq 75\%$ but $\leq 90\%$
C	2.0 - 2.9	$\geq 60\%$ but $\leq 75\%$
D	1.0 - 1.9	$\geq 45\%$ but $\leq 60\%$
F	No Credit - 0.0	$\leq 45\%$

Table 1: Grading Scale

Notices

- Any student who feels he or she may need an accommodation based on the impact of a disability should contact me privately to discuss his or her specific needs.
- If you are having trouble in class, please come and see me.
- Feel free to contact the instructor through email anytime when you need help; you can expect to hear back within 24 to 48 hours.
- Online expectations (Moodle): It is the responsibility of the student to check the Moodle site of the course regularly to be informed on course tasks, schedule, deadlines, announcements and expectations.
- Cell phones should be kept at vibration mode during the class.
- Cheating on assignments, project or exercises will not be tolerated.
- There will be no make-up for assignments, exercises, quizzes or the project except for the following four reasons supported by medical or other appropriate documentation. You must inform the instructor at least two days before the exam, and provide the instructor with supporting document(s).
 1. Participation in an authorized University activity.
 2. Confinement due to illness, under a doctor's care.
 3. Death in the immediate family.
 4. Participation in legal proceedings that requires your presence.

This policy will be strictly enforced - no exceptions. Anyone who does not have a valid reason will receive zero on the course component.

Course Schedule

The Moodle site is the final say on course schedule. However, here is a basic tentative topic outline:

Operations Management POM 5210
Winter 2018
Tentative Schedule of Topics

Week #	Week of:	Topics Covered	Reading
Wk 1	8-Jan	Operations Strategy in a Global Environment	Ch 2
Wk 2	15-Jan	Project Management	Ch 3
Wk 3	22-Jan	Forecasting	Ch 4
Wk 4	29-Jan	Managing Quality	Ch 6
Wk 5	5-Feb	Process Strategy	Ch 7
Wk 6	12-Feb	Supply Chain Management	Ch 11
Wk 7	19-Feb	Inventory Management	Ch 12
Wk 8	26-Feb	Midterm Exam	
Wk 9	5-Mar	Aggregate Planning	Ch 13
Wk 10	12-Mar	Material Requirements Planning and ERP	Ch 14
Wk 11	19-Mar	Short-Term Scheduling	Ch 15
Wk 12	26-Mar	Lean Operations	Ch 16
Wk 13	2-Apr	Decision-Making Tools	Module A
Wk 14	9-Apr	Linear Programming	Module B
Wk 15	16-Apr	Simulation	Module F
Wk 16	23-Apr	Final Exam	

Table 2: Tentative Schedule of Topics

Class Policies:

1. **Academic Conduct Policy:** All members of the academic community at Oakland University are expected to practice and uphold standards of academic integrity and honesty. Academic integrity means representing oneself and one's work honestly. Misrepresentation is cheating since it means students are claiming credit for ideas or work not actually theirs and are thereby seeking a grade that is not actually earned. Following are some examples of academic dishonesty:

- (a) *Cheating on examinations.* This includes using materials such as books and/or notes when not authorized by the instructor, copying from someone else's paper, helping someone else copy work, substituting another's work as one's own, theft of exam copies, or other forms of misconduct on exams.
- (b) *Plagiarizing the work of others.* Plagiarism is using someone else's work or ideas without giving that person credit; by doing this students are, in effect, claiming credit for someone else's thinking. Whether students have read or heard the information used, they must document the source of information. When dealing with written sources, a clear distinction should be made between quotations (which reproduce information from the source word-for-word within quotation marks) and paraphrases (which digest the source of information and produce it in the student's own words). Both direct quotations and paraphrases must be documented. Even if students rephrase, condense or select from another person's work, the ideas are still the other person's, and failure to give credit constitutes misrepresentation of the student's actual work and plagiarism of another's ideas. Buying a paper or using information from the World Wide Web or Internet without attribution and handing it in as one's own work is plagiarism.
- (c) *Cheating on lab reports* by falsifying data or submitting data not based on the student's own work.
- (d) *Falsifying records* or providing misinformation regarding one's credentials.
- (e) *Unauthorized collaboration on computer assignments* and unauthorized access to and use of computer programs, including modifying computer files created by others and representing that work as one's own.

2. **Add/Drops:** The university policy will be explicitly followed. It is the student's responsibility to be aware of deadline dates for dropping courses.

3. **Special Considerations:** Students with disabilities who may require special accommodations should

make an appointment with campus Disability Support Services, 106 North Foundation Hall, phone (248) 370-3266. Students should also bring their needs to the attention of the instructor as soon as possible by providing the “Letter of Accommodations” created by DSS. For academic help, such as study and reading skills, contact the Academic Skills/Tutoring Center, 103 North Foundation Hall, phone 248 370-4215.

4. **Excused Absence Policy:** This policy for university excused absences applies to participation as an athlete, manager or student trainer in NCAA intercollegiate competitions, or participation as a representative of Oakland University at academic events and artistic performances approved by the Provost or designee. Students shall inform their instructors of dates they will miss class due to an excused absence prior to the date of that anticipated absence. For activities such as athletic competitions who schedules are known prior to the start of a term, students must provide their instructors during the first week of each term a written schedule showing days they expect to miss classes. For other university excused absences students must provide each instructor at the earliest possible time the dates that they will miss.

Make-up work:

- It is the responsibility of the student to request from the instructor an opportunity to complete missed assignments, activities, labs, examinations or other course requirements in a timely manner.
 - Students are responsible for all material covered in classes that they miss, even when their absences are excused, as defined above.
 - Missed classroom activities will be rescheduled at the discretion of the instructor.
5. **Religious Observance Policy:** It is the responsibility of the student to request (within the first week of classes) from the instructor an excused absence due to a religious observance during the semester.
6. **Emergency Preparedness:** In the event of an emergency arising on campus, the instructor will notify you of actions that may be required to ensure your safety. It is the responsibility of each student to understand the evacuation and “lockdown” guidelines to follow when an emergency is declared. These simple steps are a good place to start:
- OU uses an emergency notification system through text, email, and landline. These notifications include campus closures, evacuation, lockdowns and other emergencies. Register for these notifications at oakland.edu/uts/emergencynotification
 - Based on the class cellphone policy, ensure that one cellphone is on in order to receive and share

emergency notifications with the instructor in class.

- If an emergency arises on campus, call the OUPD at 248-370-3331. Save this number in your phone, and put it in an easy-to-find spot in your contacts.
- Review protocol for evacuation, lockdown, and other emergencies via the classroom's red books (hanging on the wall) and oakland.edu/prepared.
- Review with the instructor and class what to do in an emergency (evacuation, lockdown, snow emergency).

7. **Faculty Feedback:** As a student in this class, you may receive "Faculty Feedback" in your OU e-mail if your professor identifies areas of concern that may impede your success in the class. Faculty Feedback typically occurs during weeks 2-5 of the Fall and Winter terms, but may also be given later in the semester and more than once a semester. A "Faculty Feedback" e-mail will specify the area(s) of concern and recommend action(s) you should take. Please remember to check your OU email account regularly as that is where it will appear.