

MGMT 3305 – Production and Operations Management

Course Description/Overview

Production and Operations Management (POM) is concerned with management of resources and activities that produce and deliver goods and services to the customers. Efficient and effective management of operations will provide an organization with major competitive advantage. The ability to respond to customer needs at lower cost, higher quality and faster delivery is critical to survive and succeed in a global competitive environment. By integrating operations successfully into their business models, companies such as Toyota (manufacturing) and Wal-Mart (retailing) have shown that efficient and effective operations are critical for the success of an organization.

This course will focus on basic concepts, issues, and techniques for efficient and effective management of operations. Both qualitative concepts and quantitative problems will be used to learn in this course. Topics include operations strategy, product and service design, capacity planning, location planning, demand forecasting, aggregate planning, master scheduling, material requirements planning, enterprise resource planning, inventory management, lean operations and supply chain management.

Prerequisite Knowledge

MATH 1324, STAT 2331, Microsoft Excel

Course Technology

This online course will be delivered using ASU Blackboard and Pearson's MyOMLab. This course can be accessed at <http://blackboard.angelo.edu>.

In addition to a competent level of computer and Internet literacy and capability, certain minimum technical requirements must be met to enable you to have a successful learning experience. Please review the important technical requirements and the Web browser configuration information, which is located on the log in page of Blackboard and MyOMLab. In other words, check out your computer system to see if it meets the minimal requirements before you begin this course.

1. You must use a recent version of Adobe Acrobat Reader and Adobe Flash Player for MyOMLab. You may be prompted to install Flash or upgrade your current Flash if necessary when you set-up your MyOMLab account. These are already installed in the ASU labs. For your own computers you can download them for free at <http://get.adobe.com/reader> and at <http://get.adobe.com/flashplayer>
2. Pop-up blockers must be set to allow pop-ups from Blackboard and MyOMLab. While pop-up blockers are used to prevent annoying advertising messages that pop up on a computer screen during internet surfing, some Web applications (such as Blackboard and MyOMLab) are incompatible with pop-up blockers and do not perform correctly until all pop-up blockers are disabled. Pop-up blockers on university computers must be disabled or reconfigured for MyOMLab as well.

Technical Support

The Technology Service Center (TSC) may be contacted for any technical support by calling (325) 942-2911 or 1-866-942-2911 or by email at helpdesk@angelo.edu

Class Meeting Times

This is an on-line course and students are required to log into Blackboard and MyOMLab to complete all their course work (homework, exams, etc.) as per the course schedule. **Note:** Please study regularly and it is each student's responsibility to ensure ahead of time that his/her computer meets the system requirements for this course (including MyOMLab).

Faculty/Instructor Information

Name: Raj Kamalapur, Ph.D.
Title: Associate Professor
Office: RAS 205
Phone: 325-486-6632
E-Mail: raj.kamalapur@angelo.edu
Office Hours: Tue and Wed: 10.30 am - 12.30 pm
Mon: 3.30 pm - 5.30 pm, and by appointment
Hobbies: Playing Golf, Tennis, Biking, Music, Travel, etc.

Course Objectives

Learning Objectives:

Upon completion of this course, students will be able to...

1. Understand the strategic role and the importance of operations management in creating and enhancing a company's competitive advantage
2. Understand the key concepts and issues of operations management in both the manufacturing and service organizations
3. Understand the interdependence of the operations function with the other key functional areas of an organization
4. Apply analytical skills and problem-solving tools to the analysis of different operations management problems

Students learning outcomes for this course will be assessed using weekly homework from each chapter along with four exams.

Course Textbook and Required Readings

Operations Management: Sustainability and Supply Chain Management Plus MyOMLab with Pearson eText and Access Card Package, 12th Edition, by Jay Heizer, Barry Render, Chuck Munson. Publisher: Pearson

There is a PDF file explaining very easily how to sign up and get access to the course in MyOMLab for homework and exams. You have the option of buying the access code with or without the eBook. You can find this PDF file on the course Blackboard in the 'MyOMLab Registration' folder with the title **Student Registration Requirements**.

Grading Policies

This course employs the following to measure student learning.

Grade Calculations	Percent of Grade
Weekly Homework (All Chapters)	40%
Exams (Total Four Exams)	60%

On-going grades for the students are available under 'My Grades' in the course Blackboard.

Angelo State University employs a letter grade system as shown below. Grades in this course are determined on a percentage scale:

- A = 90.0 – 100 %
- B = 80.0 – 89.9 %
- C = 70.0 – 79.9 %
- D = 60.0 – 69.9 %
- F = below 60%

Class Participation

This course is an on-line 16-week, 3-credit-hour course that, on campus, would require you to attend class for 2.5 hours per week. You should plan to spend this much time on the course and plus another 4-6 hours each week for reading, practicing, working on homework, etc. Generally, different students learn differently and may need more time to learn, understand and complete the work. Some chapters are longer than others, so plan to spend the appropriate time needed for each chapter. Also, some additional material may be covered in some chapters to add more value to this course. Be sure to read the textbook, review the materials uploaded to Blackboard and work on all questions and problems available in MyOMLab to help you prepare and do well in this course. To succeed in online learning, **students need to stay motivated** and committed to learning, **possess good time management skills** which will help them to complete all their work on a regular basis.

This on-line course is built on a two-step learning process. For each chapter you will

(1) Learn it, and then (2) Do it

First, you will read and learn the course material (many resources are uploaded for each chapter in the course Blackboard). I recommend that you review PowerPoint slides first to gain a general understanding of the material, and then review chapter from textbook, solved examples, solved problem videos (some selected problems), practice problem solutions, etc. As quantitative problems will be a significant part of the exams and homework assignments, spend enough time working and understanding quantitative problems (some Excel problem solutions are uploaded as examples to help you learn and understand the problems).

Next, you will do it (in MyOMLab) what you have learned by working on your study plan questions (for practice) and homework assignments (concepts and problems). You will close the loop by going back to your homework assignments and study plan (if needed) to review and work on areas you need to improve your understanding. This will surely help you gain a good understanding of the material and help you to do well in this course.

There are total of 12 weekly modules in this course and total of four exams. Although this is an online course, it is not a self-paced study. Each module will be available from Tuesday through Monday each week. The main purpose of this is to keep the class on the same topic each week, so that everyone will be somewhat together on the homework assignments and any exams during that week. Unless otherwise stated, weekly homework assignments are due by midnight on the due date (to be precise at 11.59 pm)

Homework

Each week, there will be homework assignments (in MyOMLab). Also, during first week of the class each student needs to provide a **brief introduction of themselves** on discussion board (more details provided in Blackboard). The homework assignments are open book and open notes which will help you learn and test your knowledge in both areas, i.e. ‘concepts and problems’. The ‘homework concepts’ can be attempted **one time** and the ‘homework problems’ can be attempted **multiple times** up until the due date. The homework concepts consist of multiple-choice questions and some questions are assigned where students need to watch a short video before answering the questions. The highest grade for homework will be recorded after due date. **Note:** Please make sure to work regularly and do not wait until the last day to complete your assignments. There are **no make-ups** for any missed or late homework assignments.

Problem 1.17 Question Help

As part of a study for the Department of Labor Statistics, you are assigned the task of evaluating the productivity of small businesses. Data for one of the small businesses you are to evaluate is shown below for last year and the monthly average this year.

Labor \$7 per hour;
Capital 0.79% per month of investment;
Energy \$0.40 per BTU.

Click the icon to view the data for one of the small businesses you are to evaluate.

a) Determine the multifactor productivity with dollars as the common denominator for last year.

The multifactor productivity with dollars as the common denominator for last year is dozen/\$. (Round your response to three decimal places.)

Help Me Solve This

- View an Example
- eText Pages
- Calculator

For homework problems, I upload many problem solutions **using Microsoft Excel** (for every chapter), and you can use these Excel solutions to complete some homework assignments and also use them as examples to create your own Excel solutions for other assigned problems. For most problems in this course, plan to use Microsoft Excel, as Excel will help you with the calculations and saves you significant amount of time in solving these problems.

In addition, for homework problems, there are excellent sources available within MyOMLab to **help you learn and answer** homework problems. If you need help with any homework problems, click on ‘**Question Help**’ (as shown above) to ‘Help Me Solve This.’ or ‘View an Example’ (View an Example may not be available for all problems). A new pop-up window opens to help you learn and answer this problem (make sure that you allow pop-ups for this website.) You can also click on ‘**Check Answer**’ (as shown below) to see if your answer is correct or not. Use these useful resources to help improve your learning and to do well in this course.

Check Answer

Question points: 1 [Scoring options](#)

Previous Remove Next

Exams

Four equally-weighted online exams will be given in MyOMLab. In computing your final average on exams, your lowest exam score will be dropped. Note that there are **no make-up exams**. If you miss one exam, that score becomes the lowest score that is dropped when computing your final average for the exams. Exams will be open book and open notes; however, you **cannot collaborate or take help** from anyone else, either in person or using digital medium. You need to take all exams on the given date and time, and you will have **one attempt** to complete the exam within the allotted time. The exams will consist of multiple choice questions and quantitative problems. Dates for the exams are listed on the course schedule and more details about exams will be provided on the course Blackboard.

Note: For Exams, Question Help, Check Answer, etc. **will NOT** be available. Good luck.

Policy on Server Unavailability

Angelo State University is committed to providing a reliable online course delivery system to all users. However, in the event of any unexpected Blackboard server outage or any ASU technical difficulty which prevents students from completing a time sensitive activity, I will extend the due date and provide an appropriate accommodation based on the situation. The accommodations will be made as soon as the ASU IT Department confirms that there was such a problem. Students should report any problems to the professor through their ASU email account and also email learning@angelo.edu and helpdesk@angelo.edu

Note that this **does not apply to individual technical problems** that you may encounter on your personal computer and your network. So it is the **responsibility of every student** to plan ahead and work with a reliable computer and with good Internet connection.

Communication and Response Time

I will upload many course related documents on the Blackboard. Communications about your course will be in the form of ASU email or announcements on the course Blackboard. Make sure to check your ASU email and course Blackboard on a regular basis.

Email is the preferred and quickest way of communicating with me. You need to **use ASU email account** when communicating with me for this course, as I **may not** respond to other email accounts like Yahoo, Gmail, etc. (as some emails from these accounts may come from unreliable sources). I recommend that you include 'MGMT 3305 Online' in the subject line of all emails sent to me for this course. I will do my best to respond to any weekday emails within 24 hours (most often, it is much earlier than that). I may or may not be able to check and respond to emails during the weekend. So plan accordingly, as weekend emails may be answered on the following Monday if not during the weekend.

Missed/Late Work

No late work will be accepted for any reason. Reasonable deadlines have been set to ensure that you have adequate time to complete all assignments during the week, so plan ahead and work regularly, and **do not wait until the last day** to complete your work.

Also, there is **no extra credit work** for any individuals. Extra credit work for individuals discriminate against the students who submit their work in good order and on time. Therefore, I do not allow extra credit assignments, unless I do so for the entire class. If you keep up with your regular work each week, there will be **no need** for extra credits.

Course Policies

Academic Honesty and Integrity

Angelo State University expects its students to maintain complete honesty and integrity in their academic pursuits. Students are responsible for understanding and complying with the university Academic Honor Code and the ASU Student Handbook.

Angelo State University expects its students to maintain complete honesty and integrity in their academic pursuits. Students are responsible for understanding the Academic Honor Code, which is contained in both print and web versions of the Student Handbook.

It is the professor's intention to be as fair and impartial as is humanly possible. Therefore, **all students will be asked to adhere to the same set of guidelines and rules** UNLESS there are disabilities or documented extenuating circumstances that have been discussed with the professor and the Student Life Office. Please make sure you inform the professor as soon as any situation arises. Do NOT wait until the problem is compounded by poor class performance, poor attendance, etc.

Academic integrity is expected. This includes, but is not limited to, any form of cheating, plagiarism, unauthorized sharing of work, or unauthorized possession of course materials. The professor assumes that all students can be trusted. Please do not violate this trust. Violation of academic integrity will result in a failing grade for the course.

Courtesy and Respect

Courtesy and Respect are essential ingredients to this course. We respect each other's opinions and respect their point of view at all times while in our class sessions. The use of profanity & harassment of any form is strictly prohibited (Zero Tolerance), as are those remarks concerning one's ethnicity, life style, race (ethnicity), religion, etc., violations of these rules will result in immediate dismissal from the course.

College of Business Code of Ethics

Students, faculty, administrators and the staff of the College of Business should always:

- Be forthright and truthful in dealings with all stakeholders
- Take responsibility for one's actions and decisions
- Serve as an example of ethical decision-making and behavior to others
- Admit errors when they occur, without trying to conceal them
- Respect basic dignity of others by treating them as one would wish to be treated

Accommodations for Disability

As stated in the Angelo State University Operating Policy and Procedure (OP 10.15 Providing Accommodations for Students with Disabilities), the Student Life Office is the designated campus department charged with the responsibility of reviewing and authorizing requests for reasonable accommodations based on a disability, and it is the student's responsibility to initiate such a request by contacting the Student Life Office at (325) 942-2191 or (325) 942-2126 (TDD/FAX) or by e-mail at Student.Life@angelo.edu to begin the process. The Student Life Office will establish the particular documentation requirements necessary for the various types of disabilities.

Student absence for religious holidays

As stated in the Angelo State University Operating Policy and Procedure (OP 10.19 Student Absence for Observance of Religious Holy Day), a student who intends to observe a religious holy day should make that intention known in writing to the instructor prior to the absence. A student who is absent from classes for the observance of a religious holy day shall be allowed to take an examination or complete an assignment scheduled for that day within a reasonable time after the absence.

Course Drop

To view the information about how to drop this course or to calculate important dates relevant to dropping this course, you can visit

http://www.angelo.edu/services/registrar_office/course_drop_provisions.php.

Incomplete as a Course grade

As stated in the Angelo State University Operating Policy and Procedure (OP 10.11 Grading Procedures), the grade I is given when the student is unable to complete the course because of illness or personal misfortune. An I that is not removed before the end of the next long semester automatically becomes an F. A graduate student will be allowed one year to remove a grade of I before it automatically becomes an F. To graduate from ASU, a student must complete all I's.

Grade Appeal Process

As stated in the Angelo State University Operating Policy and Procedure (OP 10.03 Student Grade Grievances), a student who believes that he or she has not been held to appropriate academic standards as outlined in the class syllabus, equitable evaluation procedures, or appropriate grading, may appeal the final grade given in the course. The burden of proof is upon the student to demonstrate the appropriateness of the appeal. A student with a complaint about a grade is encouraged to first discuss the matter with the instructor. For complete details, including the responsibilities of the parties involved in the process and the number of days allowed for completing the steps in the process, see Operating Procedure 10.03 at: <http://www.angelo.edu/content/files/14196-op-1003-grade-grievance>.

Course Outline

Week	Due Date (Homework)	MGMT 3305 - Course Schedule (Homework Assignments are due by Midnight)
Course Module 1 (Chapters 1, 4, 5)		
1	<u>Tue (09/03)</u>	Chapter 1 – Operations and Productivity Homework (Concepts and Problems) Student Self Introduction on Blackboard
2	Mon (09/09)	Chapter 4 – Demand Forecasting Homework (Concepts and Problems)
3	Mon (09/16)	Chapter 5 – Design of Goods and Services Homework (Concepts and Problems)
4		Exam 1 - (Chapters 1, 4, 5) Fri (09/20)
Course Module 2 (Chapters 6, 7, 8)		
5	Mon (09/30)	Chapter 6 – Managing Quality Homework (Concepts and Problems)
6	Mon (10/07)	Chapter 7 – Process Strategy Homework (Concepts and Problems)
7	Mon (10/14)	Chapter 8 – Location Strategies Homework (Concepts and Problems)
8		Exam 2 - (Chapters 6, 7, 8) Fri (10/18)
Course Module 3 (Chapters 11, 12, 13)		
9	Mon (10/28)	Chapter 11 – Supply Chain Management Homework (Concepts and Problems)
10	Mon (11/04)	Chapter 12 – Inventory Management Homework (Concepts and Problems)
11	Mon (11/11)	Chapter 13 – Aggregate Planning and S&OP Homework (Concepts and Problems)
12		Exam 3 - (Chapters 11, 12, 13) Fri (11/15)
Course Module 4 (Chapters 14, 15, 16)		
13	Mon (11/25)	Chapter 14 – Materials Requirements Planning Homework (Concepts and Problems)
14	Mon (12/02)	Chapter 15 – Short Term Scheduling Homework (Concepts and Problems)
15	Mon (12/09)	Chapter 16 – Lean Operations Homework (Concepts and Problems)
16		Exam 4 - (Chapters 14, 15, 16) Fri (12/13)

Note: Some chapters are longer than others. So plan accordingly to spend the appropriate time needed to complete your work. Also, based on how the course is progressing, course schedule may be **updated or changed** to meet the course requirements. Good Luck 😊