MGMT 3305 – Production Operations Management

Course Description/Overview

Description: Operations Management is concerned with management of resources and activities that produce and deliver goods and services to customers. This course will focus on the basic concepts, issues, and techniques for efficient and effective management of operations. Topics include operations strategy, product and service design, capacity planning, location planning, demand forecasting, aggregate planning, master scheduling, material requirements planning, enterprise resource planning, quality management, inventory management and supply chain management.

Prerequisite Knowledge
MATH 1324

Course Technology
Basic knowledge of internet searches and basic use of Microsoft office products.

Class Meeting Times
TR 11:00 am – 12:15 am

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

Faculty/Instructor Information

Name: Rene Segoviano  
Title: Senior Instructor  
Office: Norris-Vincent 242  
Phone: 325/374-6630  
E-Mail: rene.segoviano@angelo.edu  
Office Hours: MW 8:00 am – 10:30 a.m. via WebEx at https://angelostate.webex.com/meet/rene.segoviano

I will respond to any e-mail inquiries or telephone calls within 24 hours and by Monday if your message comes to me over the weekend.

Required Course Topics – Material covered in every MGMT Course Textbook and Required Readings

Introduction to Operations Management - Operations Management is the set of activities that creates value in the form of goods and services by transforming the inputs
into valuable outputs. Suggested topics could include definition of operations management, importance of operations management, difference between goods and services, decisions in operations management, systems approach to decision making, historical evolution of operations management, etc.

**Demand Forecasting** - Demand forecasting is the area of predictive analytics dedicated to understanding future demand for goods or services. Suggested topics could include qualitative forecasting and quantitative forecasting techniques, simple moving average, weighted moving average, exponential smoothing, associative forecasting, forecasting accuracy metrics, etc.

**Quality Management** - Quality management includes the tools and concepts to assure that processes are performing and products are produced in an acceptable manner. Suggested topics could include the importance and history of quality, statistical process control, process capability, different costs of quality, quality awards and certifications, quality management tools, etc.

**Aggregate Planning** - Aggregate planning is a process by which a company determines levels of production, workforce, inventory, etc. for a product group over a specific planning period. Suggested topics could include objectives of aggregate planning, aggregate planning strategies, capacity planning, demand options and supply options, aggregate planning inputs and outputs, etc.

**Inventory Management** - Inventory management refers to the process of efficiently and effectively managing a company’s inventory to minimize costs and maximize profits. Suggested topics could include understanding inventory and types of inventory, objectives of inventory management, costs of inventory management, classification of inventory, continuous review system, periodic review system, economic order quantity, periodic order quantity, etc.

**Supply Chain Management** - Supply chain management involves efficient and effective ways to procure, produce and distribute goods and services to meet the needs of end Fall 2019 customers. Suggested topics could include importance of supply chain management, benefits and risks in global supply chain, bull-whip effect in supply chain management, sourcing and procurement, production and logistics management, E-business, cross docking, RFID, Third party logistics, etc.

**Course Textbook and Required Readings**

You can use the link below to obtain the ebook directly from the vender or you may obtain the book from the bookstore. (Using the link from the vendor is the cheaper option.)

The hard copy of the book is not required for the class, but if you wish to purchase one for reference, here is the order information:

Bookstore option:
Jacobs, Operations & Supply Chain Management, 16e
Loose-leaf with Connect Access
ISBN: 9781264340583

PowerPoint slides are available on Blackboard.

**Grading Policies**

This course employs the following to measure student learning.

<table>
<thead>
<tr>
<th>Grade Calculations</th>
<th>Percent of Grade</th>
<th>Due</th>
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</thead>
<tbody>
<tr>
<td>Exams</td>
<td>65%</td>
<td>As per the class schedule.</td>
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<tr>
<td>Group Project</td>
<td>25%</td>
<td>As per the class schedule.</td>
</tr>
<tr>
<td>Class Attendance</td>
<td>10%</td>
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</tbody>
</table>

There are three Major Exams and a Comprehensive Final Exam. The Final Exam is Optional and will take the place of your lowest exam grade if you choose to take it.

**IMPORTANT:** Team Project and presentation will be given one grade: However, individual grades on team project are determined by a peer evaluation process and class attendance.

Participation/Absenteeism Absences greater than two are considered excessive. You start out with a 100 score on your attendance and get 5 points deducted for every absence. Participation will factor into your group project grade. Some of the class meeting times will be used to work on the group project; if you miss too many class days, this will reflect on your individual grade on the project. Excessive absences are reported to the Office of Financial Aid for federal funding purposes.

Angelo State University employs a letter grade system. Grades in this course are determined on a percentage scale:
A = 90 – 100 %
B = 80 – 89 %
C = 70 – 79 %
D = 60 – 69 %
F = 59 % and below.

**Missed/Late Work**
Any missed homework or exams will be given a zero. It is your responsibility to keep up with the due dates for homework and exams as per the syllabus.

**Final Exam**
The Final Exam is optional and will take the place of your lowest exam grade if you choose to take it.

**Course Policies**

*Facemask policy*

As a member of the Texas Tech University System, Angelo State University has adopted the mandatory [Facial Covering Policy](#) to ensure a safe and healthy classroom experience. Current research on the COVID-19 virus suggests there is a significant reduction in the potential for transmission of the virus from person to person by wearing a mask/facial covering that covers the nose and mouth areas. Therefore, in compliance with the university policy students in this class are required to wear a mask/facial covering before, during, and after class. Faculty members may also ask you to display your daily screening badge as a prerequisite to enter the classroom. You are also asked to maintain safe distancing practices to the best of your ability. For the safety of everyone, any student not appropriately wearing a mask/facial covering will be asked to leave the classroom immediately. The student will be responsible to make up any missed class content or work. Continued non-compliance with the Texas Tech University System Policy may result in disciplinary action through the Office of Student Conduct.

Students requesting an exemption may need to wear a clear plastic face shield instead of a face mask. Students needing this accommodation should register with [Student Disability Services](#) and provide the appropriate documentation supporting this request. No accommodation exists that would exempt a student from wearing a mask/facial covering at any university-sponsored activity or event.

For religious or any other exemption-related questions, students should contact the [Office of Student Affairs](#).

**Seating Chart**

Please refer to the seating chart for your assigned seat. If we have a student that has symptoms and is referred to testing, we need to be able to notify those setting immediately around that student to monitor their health and potentially quarantine should the student test positive. It will
also allow us to facilitate contact tracing. It cannot stressed enough how important seating charts will be to our ability to complete this semester. Assigned seating is something that is negatively viewed by many, but COVID-19 doesn’t care.

**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, which is in both print and web versions of the ASU Student Handbook.

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 no violate this trust. Violation of academic integrity will result in a failing grade for the course.

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.

**Code of Ethics**

Students, faculty, administrators and professional 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 the basic dignity of others by treating them as one would wish to be treated

**Courtesy and Respect**

Courtesy and respect are essential ingredients to this course. We respect each other's opinions and respect others points of view at all times while in our class sessions. The use of profanity and harassment of any form is strictly prohibited (Zero Tolerance), as are those remarks concerning one's ethnicity, lifestyle, religion, etc., violations of these rules will result in appropriate disciplinary actions.

**Accommodations for Disability**

ASU is committed to the principle that no qualified individual with a disability shall, on the basis of disability, be excluded from participation in or be denied the benefits of the
services, programs or activities of the university, or be subjected to discrimination by the university, as provided by the Americans with Disabilities Act of 1990 (ADA), the Americans with Disabilities Act Amendments of 2008 (ADAAA), and subsequent legislation.

Student Affairs 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 emailing studentservices@angelo.edu, or by contacting:

Mrs. Dallas Swafford  
Director of Student Development  
Office of Student Affairs  
University Center, Suite 112  
325-942-2047 Office  
325-942-2211 FAX  
Dallas.Swafford@angelo.edu

**Student absence for religious holidays**

As stated in the Angelo State University Operating Policy and Procedures (OP 10.19 Student Absence for Observance of Religious Holy Day), a student who intends to miss class 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 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/registrars_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. For undergraduates, 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 Procedures (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, has experienced
inequitable evaluation procedures, or inappropriate grading practices, 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 grade appeal 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

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<tr>
<th>Date</th>
<th>Topic</th>
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<tbody>
<tr>
<td>August 18</td>
<td>Introduction – Group 1</td>
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<tr>
<td>August 20</td>
<td>Introduction – Group 2</td>
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<tr>
<td>August 25</td>
<td>Chapter 1 - Elements of OSCM</td>
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<td>August 27</td>
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<td>September 1</td>
<td>Chapter 2 - Strategy &amp; Sustainability</td>
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<td>September 3</td>
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<td>September 8</td>
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<td>September 10</td>
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<td>September 15</td>
<td>Chapter 4 – Project Management</td>
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<td>September 17</td>
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<td>September 22</td>
<td>Exams</td>
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<td>September 24</td>
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<td>September 29</td>
<td>Chapter 11 – Process Design &amp; Analysis</td>
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<td>October 1</td>
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<td>October 6</td>
<td>Chapter 7 – Manufacturing Processes</td>
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<td>October 8</td>
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<td>October 13</td>
<td>Chapter 9 – Service Processes</td>
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<td>October 15</td>
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<td>October 20</td>
<td>Exams</td>
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<td>October 22</td>
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<td>October 27</td>
<td>Chapter 5 – Strategic Capacity Management</td>
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<td>October 29</td>
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<td>November 3</td>
<td>Chapter 12 – Six Sigma Quality (Due Date for Team Project)</td>
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<td>November 5</td>
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<td>November 10</td>
<td>Chapter 20 – Inventory Management</td>
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<td>November 12</td>
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<td>November 17</td>
<td>Exams</td>
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<td>November 19</td>
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<tr>
<td>November 21</td>
<td>Final Exam</td>
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<td>(Saturday)</td>
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