



# Production/Operations Management

OSCM 3321 June 8<sup>th</sup> – July 6<sup>th</sup>, 2020

**Instructor:** Dr. José Humberto Ablanedo-Rosas

**E-mail:** [jablanedorosas2@utep.edu](mailto:jablanedorosas2@utep.edu)

## Course description (*from Goldmine*)

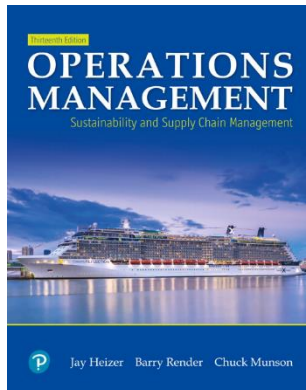
Production management and its relationship to marketing, finance, and accounting functions are described. Forecasting demand, aggregate planning, inventory planning and control, and scheduling provide the basis for linking strategic plans to the production plan. Other topics discussed include: quality control, product and process design, facility location and layout, productivity improvement and project management.

## Course objectives:

At the completion of this course students will be able to:

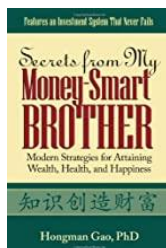
1. Identify the three major functional areas of organizations and describe how they interrelate.
2. Define competitiveness, strategy, productivity, and explain why these concepts are important.
3. Explain the strategic importance of product and service design.
4. Define reliability and perform simple reliability computations.
5. Discuss ways of measuring capacity and describe determinants of effective capacity.
6. Describe and use techniques that apply to decision making under uncertainty.
7. Explain the strategic importance of process selection.
8. Describe and use various quality tools.
9. Use and interpret quality control charts.
10. Explain the purpose of acceptance sampling.
11. Describe the master scheduling process and explain its importance.
12. Describe the inputs, outputs, and nature of MRP processing.
13. Explain the objectives of inventory management.
14. List each of the goals of a lean system and explain its importance.
15. Explain the importance of maintenance in production systems.
16. Discuss the key issues of supply chain management.
17. Explain what scheduling involves and the importance of good scheduling.

## Required materials:

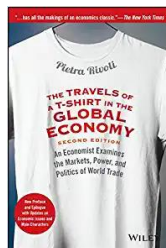


1) *MyLab Operations Management with Pearson eText -- Access Card -- for Operations Management: Sustainability and Supply Chain Management, 13<sup>th</sup> Edition* by Jay Heizer, Barry Render, and Chuck Munson. 2020. Pearson, ISBN-13: 9780135225899.

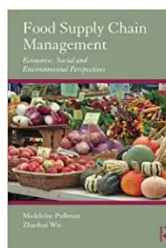
## Recommended books



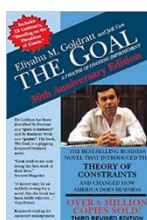
*Secrets from my Money-Smart Brother*, by Hongman Gao, Soar with Eagles, (ISBN: 978-0-9814756-8-4).



*The travels of a T-shirt in the global economy*, by Pietra Rivoli, Wiley, Second Edition (ISBN: 978-0-470-28716-3).



*Food Supply Chain Management*, by Madeleine Pullman and Zhaohui Wu, Routledge (ISBN: 978-0-415-88589-8).



*The Goal: A Process of Ongoing Improvement*, by Eliyahu M. Goldratt, North River Press (ISBN: 0-88427-061-0).

## Course Assignments and Grading Distribution:

100-90 = A    89-80 = B    79-70 = C    69-60 = D    59 and below = F

- 25 % Homework assignments
- 25 % First exam
- 25 % Second exam
- 25 % Third exam

**Lectures:** This is an online course. There is an **asynchronous lecture** every day. Important material from the textbook and some outside sources will be covered in class. **YOU MUST READ IN ADVANCE THE MATERIAL TO BE COVERED IN CLASS.** You should plan to take careful notes as not all material can be found in the text. You take full responsibility when you do not review the lecture session.

**Exams:** They are **real-time online exams**. Please review the calendar and reserve the dates and times for the exams. They cover the class materials and chapters in the textbook taught up to the date of the last class before the exam. The maximum completion time is 90 minutes. There is not make-up of any exam.

**Final Exam:** This is a **real-time online exam**. The final exam is comprehensive, it covers all the class lecture materials and chapters in the textbook taught during the semester. The maximum completion time is 120 minutes. This is an optional exam. If you take the final exam, the lowest score of the four exams will be dropped. No makeup comprehensive exam will be offered.

**MyOMLab simulations:** To deepen our understanding of the class topics, students will perform a simulation for the following chapters: forecasting, project management, quality, supply chain, and inventory management. The assignment score will be based on the percentage achievement of the simulation's stated goals. Students will have two attempts at each simulation and the highest score will be considered.

**MyOMLab assignments:** Nineteen chapters from the book will be covered in this course. Students have to complete at least one assignment after the discussion of each chapter. Students will perform their assignment in MyOMLab. Students have to study the material before planning to complete the assignments. However, MyOMLab offers practice problems and several level of hints to support assignments' completion.

**Attendance Policy:** This is an online course. It is expected that you complete the course activities as indicated in the course calendar. You should be available to complete them on time.

**Technology Requirements:** Course content is delivered via the Internet through the Blackboard learning management system (LMS). Ensure your UTEP e-mail account is working and that you have access to the Web. You may use any of the primary Web browsers—Explorer, Google Chrome, Firefox, Safari, etc. When having technical difficulties, try switching to another browser.

**If you encounter technical difficulties of any kind, contact the Help Desk (UTEP Library Room 300, TS.UTEP.EDU, 915-747-4357).**

**Late Work Policy:** You have three days for completing MyOMLab assignments and MyOMLab simulations. No late work will be accepted.

**Drop Policy:** To drop this class, please contact the Registrar's Office to initiate the drop process. If you cannot complete this course for whatever reason, please contact me. If you do not, you are at risk of receiving an "F" for the course.

**Accommodations Policy:** The University is committed to providing reasonable accommodations and auxiliary services to students, staff, faculty, job applicants, applicants for admissions, and other beneficiaries of University programs, services and activities with documented disabilities in order to provide them with equal opportunities to participate in programs, services, and activities in compliance with sections 503 and 504 of the Rehabilitation Act of 1973, as amended, and the Americans with Disabilities Act (ADA) of 1990 and the Americans with Disabilities Act Amendments Act (ADAAA) of 2008. Reasonable accommodations will be made unless it is determined that doing so would cause undue hardship on the University. Students requesting an accommodation based on a disability must register with the UTEP Center for Accommodations and Support Services.

**Scholastic Integrity:** Academic dishonesty is prohibited and is considered a violation of the UTEP Handbook of Operating Procedures. It includes, but is not limited to, cheating, plagiarism, and collusion. Cheating may involve copying from or providing information to another student, possessing unauthorized materials during a test, or falsifying research data on laboratory reports. Plagiarism occurs when someone intentionally or knowingly represents the words or ideas of another as one's own. Collusion involves collaborating with another person to commit any academically dishonest act. Any act of academic dishonesty attempted by a UTEP student is unacceptable and will not be tolerated. All suspected violations of academic integrity at The University of Texas at El Paso must be reported to the Office of Student Conduct and Conflict Resolution (OSCCR) for possible disciplinary action. To learn more HOOP: Student Conduct and Discipline.

## **Student Resources**

UTEP provides a variety of student services and support:

- UTEP Library: Access a wide range of resources including online, full-text access to thousands of journals and eBooks plus reference service and librarian assistance for enrolled students.
- Help Desk: Students experiencing technological challenges (email, Blackboard, software, etc.) can submit a ticket to the UTEP Helpdesk for assistance. Contact the Helpdesk via phone, email, chat, website, or in person if on campus.
- University Writing Center (UWC): Submit papers here for assistance with writing style and formatting, ask a tutor for help and explore other writing resources.

- Math Tutoring Center (MaRCS): Ask a tutor for help and explore other available math resources.
- Military Student Success Center: UTEP welcomes military-affiliated students to its degree programs, and the Military Student Success Center and its dedicated staff (many of whom are veterans and students themselves) are here to help personnel in any branch of service to reach their educational goals.
- RefWorks: A bibliographic citation tool; check out the RefWorks tutorial and Fact Sheet and Quick-Start Guide.



## Production/Operations Management

**OSCM 3321 June 8<sup>th</sup> – July 6<sup>th</sup>, 2020 Weekly Calendar (Subject to Change)**

**All homework assignments should be completed on MyOMLab. Pay attention to the due dates. No late work will be accepted.**



Day	Topic	Readings Due and Lecture topic	Assignments Due	Notes
<b>06/08</b>	<b>Online Orientation Session, Monday June 8 at 9 am, via Blackboard Collaborate Ultra.</b>			
<b>06/08</b>	Operations and Productivity (Ch. 1) Operations Strategy in a Global Environment (Ch. 2)	Review Syllabus Ch. 1 and Ch. 2	06/11 HW Ch. 1 06/11 HW Ch. 2	Assignments have to be completed on MyOMLab
<b>06/09</b>	Decision-Making Tools (Module A)	Module A	06/12 HW Module A	Assignments have to be completed on MyOMLab
<b>06/10</b>	Project Management (Ch. 3)	Ch. 3	06/13 HW Ch. 3 06/13 Simulation Ch. 3	Assignments have to be completed on MyOMLab
<b>06/11</b>	Forecasting (Ch. 4)	Ch. 4	06/14 HA Ch 4 06/14 HA Simulation Ch. 4	Assignments have to be completed on MyOMLab
<b>06/12</b>	Design of Goods and Services (Ch. 5) Sustainability in the Supply Chain (Supplement 5)	Ch. 5 and Supplement 5	06/15 HA Ch. 5 06/16 HA Supplement 5	Assignments have to be completed on MyOMLab
<b>06/15</b>	<b>FIRST PARTIAL EXAM</b>	Ch.1, Ch. 2, Ch. 3, Ch. 4, Ch. 5, Supp. 5, and Module A	The online exam is real-time at 9:00 am	The exam has a maximum duration of 90 minutes
<b>06/16</b>	Managing Quality (Ch. 6)	Ch. 6	06/19 HA Ch. 6 06/19 HA Simulation Ch. 6	Assignments have to be completed on MyOMLab
<b>06/17</b>	Statistical Process Control (Supplement 6)	Supplement 6	06/20 HA Supplement 6	Assignments have to be completed on MyOMLab

<b>06/18</b>	Process Strategy (Ch. 7) Capacity and Constraint Management (Supplement 7)	Ch. 7 Supplement 7	06/21 HA Ch. 7 06/21 HA Supplement 7	Assignments have to be completed on MyOMLab
<b>06/19</b>	Location Strategies (Ch. 8)	Ch. 8	06/22 HA Ch.8	Assignments have to be completed on MyOMLab
<b>06/22</b>	Layout Strategies (Ch. 9)	Ch. 9	06/25 HA Ch. 9	Assignments have to be completed on MyOMLab
<b>06/23</b>	<b>SECOND PARTIAL EXAM</b>	Ch.6, Ch. 7, Ch. 8, Ch. 9, Supp. 6, Supp. 7.	The online exam is real-time at 9:00 am	The exam has a maximum duration of 90 minutes
<b>06/24</b>	Supply Chain Management (Ch. 11) Supply Chain Management Analytics (Supplement 11)	Ch. 11 Supplement 11	06/27 HA Ch. 11 06/27 HA Simulation Ch. 11 06/27 HA Supplement 11	Assignments have to be completed on MyOMLab
<b>06/25</b>	Inventory Management (Ch. 12)	Ch. 12	06/28 HA Ch. 12 06/28 HA Simulation Ch. 12	Assignments have to be completed on MyOMLab
<b>06/26</b>	Aggregate Planning and S&OP (Ch. 13)	Ch. 13	06/29 HA Ch. 13	Assignments have to be completed on MyOMLab
<b>06/29</b>	Material Requirements Planning (MRP) and ERP (Ch. 14)	Ch. 14	07/02 HA Ch. 14	Assignments have to be completed on MyOMLab
<b>06/30</b>	Short-Term Scheduling (Ch. 15)	Ch. 15	07/03 HA Ch. 15	Assignments have to be completed on MyOMLab
<b>07/01</b>	JIT, TPS, and Lean Operations (Ch. 16)	Ch. 16	07/04 HA Ch.16	Assignments have to be completed on MyOMLab
<b>07/02</b>	<b>THIRD PARTIAL EXAM</b>	Ch.11, Ch. 12, Ch. 13, Ch. 14, Ch. 15, Ch. 16 and Supp. 11.	The online exam is real-time at 9:00 am	The exam has a maximum duration of 90 minutes
<b>07/06</b>	<b>FINAL EXAM</b>	Comprehensive	The online exam is real-time at 9:00 am	The exam has a maximum duration of 120 minutes

