



Production/Operations Management

OSCM 3321 January 18th – May 5th, 2022

Instructor: Dr. José Humberto Ablanedo-Rosas

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Class Hours: Online course, you should be ready to work about 8 hours per week

In-person Office Hours: TR 10:30 am - 12:00 pm

Online Office Hours: T 6:00 – 8:00 pm (Link posted on Blackboard)

Course description (from Goldmine)

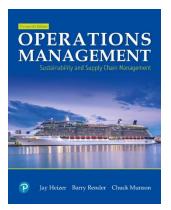
Production management and its relationship to marketing, finance, and accounting functions are described. Forecasting demand, aggregate planning, inventory planning and control, and scheduling provide the basis for linking strategic plans to the production plan. Other topics discussed include: quality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

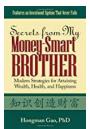
- 1. Identify the three major functional areas of organizations and describe how they interrelate.
- 2. Define competitiveness, strategy, productivity, and explain why these concepts are important.
- 3. Explain the strategic importance of product and service design.
- 4. Define reliability and perform 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, 13th 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 are a set of **asynchronous lectures** organized by week. Important material from the textbook and some outside sources will be covered in the online lectures. 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 textbook. You take full responsibility when you do not review the online lecture sessions.

Exams: They are **online exams with limited time for completion**. The exams are scheduled Thursdays and Fridays. Please review the calendar and reserve the dates and a convenient time and location 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 an **online exam with limited time for completion**. 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: 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: Eighteen 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 asynchronous 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.

You will need to have access to a computer/laptop with windows environment, a webcam, a microphone, and the UTEP virtual private network. Check that your computer hardware and software are up-to-date and able to access all parts of the course.

If you encounter technical difficulties of any kind, contact the Help Desk (UTEP Library Room 300, TS.UTEP.EDU, 915-747-4357). Please contact the UTEP Help Desk as they are trained specifically in assisting with technological needs of students. Please do not contact me for this type of assistance. The Help Desk is much better equipped than I am to assist you!

Course Communication

- Class Hours: There is not any synchronous session for this course. However, you do have weekly virtual sessions that you have to review and complete accordingly. All the course material is posted on Blackboard under the corresponding session folder.
- Office Hours: We will be able to meet either in-person or online for your questions and comments about the course. The link for the virtual office hours will be posted on Blackboard (left hand side menu). In-person office hours will be TR 10:30 am -12:00 om at COBA 201. Online office hours will be Tuesday from 6:00 to 8:00 PM, and by appointment any other day and time, email me to setup the meeting.
- Email: UTEP e-mail is the best way to contact me. I will make every attempt to respond to your e-mail within 24 hours of receipt. When e-mailing me, be sure to email from your UTEP student account and please put the course number in the subject line. In the body of your e-mail, clearly state your question. At the end of your e-mail, be sure to put your first and last name.
- **Discussion Board**: If you have a question that you believe other students may also have, please post it in the Course Question section inside of Blackboard (left hand side menu). Please respond to other students' questions if you have a helpful response.
- **Announcements**: Check the Blackboard announcements frequently for any updates, deadlines, or other important messages.

Netiquette

 Always consider audience. Remember that members of the class and the instructor will be reading any postings.

- Respect and courtesy must be provided to classmates and to instructor at all times. No harassment or inappropriate postings will be tolerated.
- When reacting to someone else's message, address the ideas, not the person. Post only what anyone would comfortably state in a F2F situation.
- O Blackboard is not a public internet venue; all postings to it should be considered private and confidential. Whatever is posted on in these online spaces is intended for classmates and professor only. Please do not copy documents and paste them to a publicly accessible website, blog, or other space. If students wish to do so, they have the ethical obligation to first request the permission of the writer(s).

Late Work Policy

• MyOMLab assignments and MyOMLab simulations will be due every Thursday in the week that follows the week where they are assigned. No late work will be accepted.

Drop Policy

To drop this class, please contact the <u>Registrar's Office</u> 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 <u>UTEP Center for Accommodations and Support Services.</u>

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 ones' 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:

- <u>UTEP Library</u>: 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.
- <u>Help Desk</u>: 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.
- <u>University Writing Center (UWC)</u>: Submit papers here for assistance with writing style and formatting, ask a tutor for help and explore other writing resources.
- <u>Math Tutoring Center (MaRCS)</u>: Ask a tutor for help and explore other available math resources.
- <u>Military Student Success Center</u>: 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 January 18th – May 5th, 2022 Weekly Calendar (Subject to Change)
All homework assignments must be completed on MyOMLab. Pay attention to the due dates. No late work will be accepted.

| Week | Торіс | Readings Due and Lecture topic | Assignments Due | Notes | | | |
|-------------|--|-----------------------------------|---|---|--|--|--|
| 01/18 | Online Orientation Session, Tuesday January 18 th at 6 pm, via Zoom (Link posted on Blackboard) | | | | | | |
| | Operations and Productivity (Ch. 1) Operations Strategy in a Global Environment (Ch. 2) | Ch. I | 01/27 HW Ch. 1 01/27 HW Ch. 2 | Assignments have to be completed on MyOMLab | | | |
| 01/24-01/28 | Decision-Making Tools (Module A) | Module A | 02/03 HW Module A | Assignments have to be completed on MyOMLab | | | |
| 01/31-02/04 | Project Management (Ch. 3) | Ch. 3 | 02/10 HW Ch. 3 02/10 Simulation Ch. 3 | Assignments have to be completed on MyOMLab | | | |
| 02/07-02/11 | Nictainability in the Silphly Chain | a 1 | 02/17 HA Ch. 5 02/17 HA Supplement 5 | Assignments have to be completed on MyOMLab | | | |
| 02/14-02/18 | Managing Quality (Ch. 6) | ICh. 6 | 02/24 HA Ch. 6 02/24 HA Simulation Ch. 6 | Assignments have to be completed on MyOMLab | | | |
| | FIRST PARTIAL EXAM | Ch. 5, Supp. 5, and | The online exam will be open from 02/17 at noon to 02/18 at noon. | The exam has a maximum duration of 90 minutes | | | |
| 02/21-02/25 | Statistical Process Control (Supplement 6) | Supplement 6 | 03/03 HA Supplement 6 | Assignments have to be completed on MyOMLab | | | |
| 02/28-03/04 | Process Strategy (Ch. 7) Capacity and Constraint Management (Supplement 7) | | 03/10 HA Ch. 7 03/10 HA Supplement 7 | Assignments have to be completed on MyOMLab | | | |

| 03/07-03/11 | Location Strategies (Ch. 8) | Ch. 8 | 03/24 HA Ch.8 | Assignments have to be completed on MyOMLab |
|-------------|---|--------------------|--|--|
| 03/14-03/17 | SPRING BREAK | | | |
| 03/21-03/25 | Layout Strategies (Ch. 9) | Ch. 9 | 03/31 HA Ch. 9 | Assignments have to be completed on MyOMLab |
| 03/28-04/01 | Supply Chain Management (Ch. 11) | Ch. 11 | 04/07 HA Ch. 11 04/07 HA Simulation Ch. 11 | Assignments have to be completed on MyOMLab |
| | SECOND PARTIAL EXAM | | The online exam will be open from 03/31 at noon to 04/01 at noon. | The exam has a maximum duration of 90 minutes |
| 04/04-04/08 | Supply Chain Management Analytics (Supplement 11) | Supplement 11 | 04/14 HA Supplement 11 | Assignments have to be completed on MyOMLab |
| | Inventory Management (Ch. 12) | Ch. 12 | 04/21 HA Ch. 12 04/21 HA Simulation Ch. 12 | The exam has a maximum duration of 90 minutes |
| 04/18-04/22 | Material Requirements Planning (MRP) and ERP (Ch. 14) | Ch. 14 | 04/28 HA Ch. 14 | Assignments have to be completed on MyOMLab |
| 04/25-04/29 | Short-Term Scheduling (Ch. 15) | Ch. 15 | 05/05 HA Ch. 15 | Assignments have to be completed on MyOMLab |
| 05/02-05/06 | JIT, TPS, and Lean Operations (Ch. 16) | Ch. 16 | 05/12 HA Ch.16 | Assignments have to be completed on MyOMLab |
| | THIRD PARTIAL EXAM | 14, Ch. 15, Ch. 16 | The online exam will be open from 05/04 at noon to 05/05 at noon. | The exam has a maximum duration of 90 minutes |
| 05/09-05/13 | FINAL EXAM | Comprehensive | The online exam will be open from 05/12 at 10 am to 05/13 at 2 pm. | The exam has a maximum duration of 120 minutes |