



Concepts of Production Management



OSCM 5308 August 24th – December 3rd, 2020 MBA

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Course description

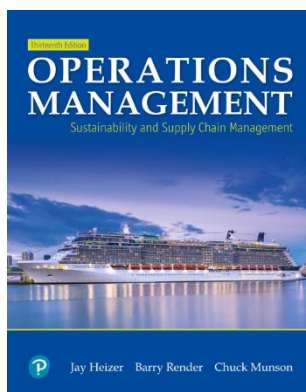
The production or operations function is concerned with the planning and decision-making activities of managers directly responsible for the conversion of resources into products and services. The operations manager plans production, schedules work and controls inventories. This course is a study of the issues underlying the management of operations, and introduces the student to a variety of tools and techniques used by operations managers exploring alternative means of implementing decisions.

Course objectives:

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

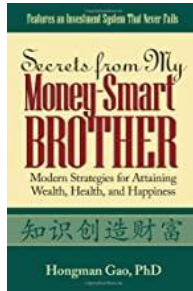
1. Identify the global trends and challenges facing operations management.
2. Define process reengineering and process improvement.
3. Explain the basic principles of TQM and Six Sigma programs.
4. Describe how to manage constraints in an assembly line.
5. Explain the implementation issues associated with the application of lean systems.
6. Define the key design issues associated with supply chain processes.
7. Identify the major causes of dynamics in a supply chain.
8. Define the key factors that determine the appropriate choice of an inventory system.
9. Describe the operations planning and scheduling process.

Required materials:

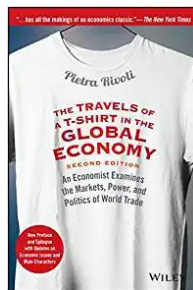


1) MyLab Operations Management with Pearson eText -- Access Card -- for Operations Management: Sustainability and Supply Chain Management, 13th Edition by Jay Heizer, Barry Render, and Chuck Munson. 2020. Pearson, ISBN-13: 9780135225899.

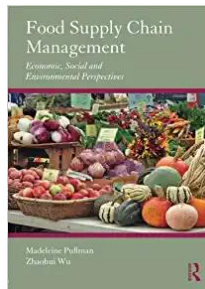
Recommended books



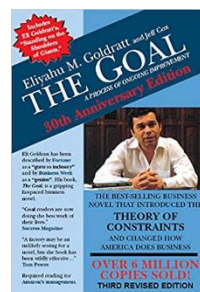
Secrets from my Money-Smart Brother, by Hongman Gao, Soar with Eagles, (ISBN: 978-0-9814756-8-4).



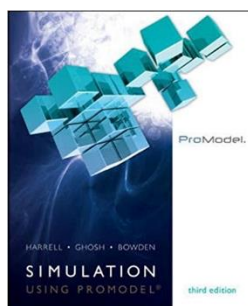
The travels of a T-shirt in the global economy, by Pietra Rivoli, Wiley, Second Edition (ISBN: 978-0-470-28716-3).



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).



Simulation Using Promodel, by Harrell Charles, Ghosh Biman K., and Bowden Royce O. Jr., McGraw Hill, Third Edition (ISBN: 978-0-07-340130-0).

Course Assignments and Grading Distribution:

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

- 10 points MyOMLab simulations
- 20 points MyOMLab assignments
- 40 points Data envelopment analysis paper
- 15 points Promodel project
- 15 points Participation

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. Each MyOMLab simulation has a two-point value. The assignment of points 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: Twenty chapters from the book will be covered in this course. Students have to complete an assignment after each chapter discussion. 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 levels of help/hints to support assignments' completion.

Data envelopment analysis paper: The productivity concept from the first chapter will be extended to a general production function. Students will learn how to analyze the comprehensive production function by means of data envelopment analysis (DEA). Students will identify a real scenario where to apply the new production function. The scenario will be innovative and should contribute to enhance the current state of managerial decision-making. The DEA paper will be submitted to a peer-reviewed outlet, either a conference or journal of interest for practitioners.

Promodel project: To strengthen our understanding of operations management and develop decision making skills, students will develop a simulation model with Promodel. The simulation model is particular for each student and it should model a real scenario. The simulation model must be accompanied with a sensitivity analysis for understanding the tradeoffs among key parameters. The report will include the recommendation for decision makers. The simulation model has a fifteen-point value.

Participation: For this online course, students will be required to participate in some discussion boards –both an initial post and responses to your peers. The initial post will be the solution for a mini-case where the material studied in the corresponding chapter is applied. The responses should correspond to a critical analysis of the proposed solution. Five chapters will be analyzed in the discussion boards. One point corresponds to the initial solution and two points correspond to the responses to your peers. Each of these activities will be given point values that add up to the total fifteen-point participation grade. These points cannot be made up.

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) and MyOMLab. 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. However, Google Chrome or Firefox are recommended. 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).

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.
- 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 on Wednesdays at midnight (11:59 PM). No late work will be accepted.
- The initial discussion board posts will be due on Thursdays at midnight (11:59 PM). The replies to the initial posts will be due on Saturdays at midnight (11:50 PM). No late work will be accepted.
- Final DEA paper will be due on Friday October 30th at midnight. No late submission will be accepted.
- Promodel simulation model will be due on Wednesday December 9th at midnight. No late submission 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.



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OSCM 5308 August 24th – December 3rd, 2020 Weekly Calendar (Subject to Change)



The due date for MyOMLab assignments and simulations is ALWAYS Wednesday at midnight (11:59 PM). No late work will be accepted.

The due date for the initial post in the discussion board is ALWAYS Thursday at midnight (11:59 PM). The due date for the second posts (reply to at least two initial posts) is ALWAYS Saturday at midnight (11:59 PM). No late work will be accepted.

HA = Homework assignments in MyOMLab **SIM** = Simulations in MyOMLab **DB** = Discussion board **BB**=Blackboard.

Week	Topic	Readings Due	Assignments Due	Notes
08/24	Online Orientation Session, Monday August 24 at 10 am, via Blackboard Collaborate Ultra			
08/23-08/29	Operations and Productivity (Ch. 1) Operations Strategy in a Global Environment (Ch. 2)	Syllabus Ch. 1 & Ch. 2 eBook		
08/30-09/05	Decision-Making Tools (Module A) Data Envelopment Analysis I	Module A eBook	09/03 DB I 09/02 HA Ch. 1 09/02 HA Ch. 2	DB → BB HAs → MyOMLab
09/06-09/12	Project Management (Ch. 3) Data Envelopment Analysis II	Ch. 3 eBook	09/09 HA Module A 09/11 DEA Data Set I	HAs → MyOMLab DEA project → BB
09/13-09/19	Forecasting (Ch. 4) Data Envelopment Analysis III	Ch. 4 eBook	09/16 HA Ch. 3 09/16 SIM I Ch. 3 09/18 DEA Data Set II	HAs → MyOMLab SIM → MyOMLab DEA project → BB
09/20-09/26	Design of Goods and Services (Ch. 5) Sustainability in the Supply Chain (Supplement 5) Data Envelopment Analysis IV	Ch.5 & Supp. 5 eBook	09/24 DB II 09/23 HA Ch. 4 09/23 SIM II Ch. 4 09/25 DEA Analysis I	DB → BB HAs → MyOMLab SIM → MyOMLab DEA project → BB

09/27-10/03	Managing Quality (Ch. 6) JIT, TPS, and Lean Operations (Ch. 16) Data Envelopment Analysis V	Ch.6 & Ch. 16 eBook	09/30 HA Ch. 5 09/30 HA Supp. 5 10/02 DEA Analysis II	HAs → MyOMLab DEA project → BB
10/04-10/10	Statistical Process Control (Supplement 6)	Supp. 6 eBook	10/07 HA Ch. 6 10/07 SIM III Ch. 6 10/07 HA Ch. 16 10/09 DEA Lit Review I	HAs → MyOMLab SIM → MyOMLab DEA project → BB
10/11-10/17	Process Strategy (Ch. 7) Capacity and Constraint Mgmt. (Supplement 7) Promodel I	Ch. 7 & Supp. 7 eBook	10/15 DB III 10/14 HA Supp. 6 10/16 DEA Lit Review II	DB → BB HAs → MyOMLab DEA project → BB
10/18-10/24	Location Strategies (Ch. 8) Promodel II	Ch. 8 eBook	10/21 HA Ch. 7 10/21 HA Supp. 7 10/23 DEA Introduction and methodology sections	HAs → MyOMLab DEA project → BB
10/25-10/31	Layout Strategies (Ch. 9) Promodel III	Ch. 9 eBook	10/28 HA Ch. 8 10/30 DEA Final Paper	HAs → MyOMLab DEA project → BB
11/01-11/07	Supply Chain Management (Ch. 11) Supply Chain Mgmt. Analytics (Supplement 11) Promodel IV	Ch. 11 & Supp. 11 eBook	11/05 DB IV 11/04 HA Ch. 9	DB → BB HAs → MyOMLab
11/08-11/14	Inventory Management (Ch. 12) Promodel V	Ch. 12 eBook	11/11 HA Ch. 11 11/11 SIM IV Ch. 11 11/11 HA Supp. 11 11/13 Promodel Scenario	HAs → MyOMLab SIM → MyOMLab Promodel → BB
11/15-11/21	Aggregate Planning and S&OP (Ch. 13) Promodel VI	Ch. 13 eBook	11/19 DB V 11/18 HA Ch. 12 11/18 SIM V Ch. 12 11/20 Promodel Data	DB → BB HAs → MyOMLab SIM → MyOMLab Promodel → BB

11/22- 11/28	Material Requirements Planning (MRP) and ERP (Ch. 14) Promodel VII	Ch. 14 eBook	11/25 HA Ch. 13 11/25 Promodel Model I	HAs → MyOMLab Promodel → BB
11/29- 12/05	Short-Term Scheduling (Ch. 15) Promodel VIII	Ch. 15 eBook	12/02 HA Ch. 14 12/04 Promodel Model II	HAs → MyOMLab Promodel → BB
12/06- 12/12			12/09 HA Ch. 15 12/09 Promodel Report	HAs → MyOMLab Promodel → BB