



# Production Planning & Control

OSCM 3333 Spring 2023

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

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**Class Hours:** TR 9:00 am -10:20 am BUSN 319

**Face-to-Face Office Hours:** T 10:30 am – 1:30 pm

**Online Office Hours:** T 6:00 – 7:30 pm (Link posted on Blackboard)

## Required Materials

1. **Access to the ERPsim Lab. You will receive an email from ERPsim Lab/HEC Montreal with instructions.**
2. **Textbookok: *Manufacturing Planning and Control for Supply Chain Management, the CPIM Reference*, by F. Robert Jacobs, William L. Berry, D. Clay Whybark, and Thomas E. Vollmann. McGraw Hill, Second Edition (ISBN 978-1-260-10838-5).**

**You can access the eBook in the following link (your computer has to be connected to the **UTEP VPN**):**

<https://www.accessengineeringlibrary.com/content/book/9781260108385>

## Reference Books:

***Production Planning and Control (SAP PP) with SAP ERP*, by Jawad Akhtar, 2nd Edition, SAP PRESS, 2016 (ISBN 978-1-4932-1431-0).**

***The SAP Materials Management Handbook*, by Ashfaque Ahmed, CRC Press Taylor & Francis Group (ISBN: 978-1-4665-8162-3).**

***Introduction to SAP and ERPsim: For HEC Montreal's ERPsim Distribution Game*, by Tim Rutherford, Independently published (ISBN-13: 979-8503905960).**

Welcome to Production Planning and Control, the official information for this course, including grades, will be posted on Blackboard. You are responsible for reading the “Announcements”, “Assignments”, and any other information concerning this course; check your Blackboard account daily.

### **Course description (*From Goldmine*)**

A study of the concepts, principles, problems, and procedures involved in managing inventories of raw materials, work-in-process, finished goods, and supplies. Some emphasis will be placed on the formulation and application of models for the analysis and replenishment of inventories. Implications for inventory management of material requirements planning and just in time systems will also be discussed.

### **Objectives:**

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

1. Identify the global trends and challenges facing manufacturing planning & control.
2. Define enterprise resource planning and material requirements planning
3. Explain the basic principles of JIT programs.
4. Describe how to manage capacity and utilization.
5. Explain the implementation issues associated with production activity control.
6. Define the key design issues associated with supply chain optimization.
7. Define the key factors that determine the appropriate choice of an inventory system.
8. Describe the operations planning and scheduling process.

### **Prerequisite**

OSCM 3321 with a minimum grade of D and QMB 3301 with a minimum grade of D.

### **Lectures**

This is an in person course. It is expected that you attend the sessions and complete the course activities as indicated in the course calendar. You should be available to complete them on time. Many problems will be solved using excel. You should be able to reply them and solve similar problems. **YOU NEED A COMPUTER RUNNING EXCEL FOR THIS CLASS.**

### **Partial Exam**

It covers the class materials and chapters in the textbook taught up to the date of the last class before the exam. There is not make-up of any partial exam.

## **Final Exam**

The final exam is comprehensive. It covers all the class lecture materials and chapters in the textbook taught during the semester.

## **Grading Policy:**

- 15 % First Partial Exam
- 15 % Second Partial Exam
- 15 % Third Partial Exam
- 15 % Final exam
- 15 % Homework
- 15 % Attendance
- 10 % SAP labs

## **Course Assignments and Grading Distribution:**

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

## **Technology Requirements**

This course uses Blackboard as 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. When having technical difficulties, try switching to another browser.

You will need to have access to a computer/laptop 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.

You can download EXCEL and other Microsoft Office programs (including Word, PowerPoint, Outlook and more) for free via UTEP's Microsoft Office Portal.

**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!

## **Late Work Policy**

Homework assignments will be due at midnight (11:59 PM). 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 (CASS). Contact the Center for Accommodations and Support Services at 915-747-5148, or email them at [cass@utep.edu](mailto:cass@utep.edu), or apply for accommodations online via the CASS portal.

## 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 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.
- [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.

## **COVID-19 Precautions**

If you have tested positive for COVID-19, you are encouraged to report your results to [covidaction@utep.edu](mailto:covidaction@utep.edu) , so that the Dean of Students Office can provide you with support and help with communication with your professors. It is important to follow all instructions that you receive as part of the diagnosis, including isolation and staying at home until a negative test is produced.

If you experience COVID-19 symptoms, please follow the isolation protocol by staying at home and getting tested as soon as possible. If the test is negative but you are still seeking accommodations, please contact the Dean of Students Office for guidance in a timely manner. Your instructor will work with the Dean of Students Office to determine the extent of any such accommodations.

We strongly encourage you to think and act proactively in all matters related to COVID-19 and your academic endeavors. The Center for Disease Control and Prevention recommends that people in areas of substantial or high COVID-19 transmission wear face masks when indoors in groups of people. The best way that Miners can take care of miners is to get the vaccine. If you still need the vaccine, it is widely available in the El Paso area, and will be available at no charge on campus during the first week of classes. For more information about the current rates, testing, and vaccinations, please visit [epstrong.org](http://epstrong.org).

# Production Planning & Control

OSCM 3333 Spring 2023

Class Hours: TR 9:00-10:20 am BUSN 319

## Course Outline:

Lecture	Class Discussion	After Class Assignment
1 (Jan 17)	Manufacturing Planning and Control (Ch 1)	
2 (Jan 19)	Enterprise Resource Planning (Ch 2)	
3 (Jan 24)	Demand Management (Ch 3)	
4 (Jan 26)	Forecasting (Ch 4)	# 1
5 (Jan 31)	Sales and Operations Planning (Ch 5)	# 2
6 (Feb 2)	Advanced Sales and Operations Planning (Ch 6)	
7 (Feb 7)	Master Production Scheduling (Ch 7)	
8 (Feb 9)	Master Production Scheduling (Ch 7)	# 3
9 (Feb 14)	<b>First Partial Exam</b>	
10 (Feb 16)	Material Requirements Planning (Ch 8)	
11 (Feb 21)	Material Requirements Planning (Ch 8)	
12 (Feb 23)	Material Requirements Planning (Ch 8)	# 4
13 (Feb 28)	Distribution Requirements Planning (Ch 14)	
14 (Mar 2)	Distribution Requirements Planning (Ch 14)	
15 (Mar 7)	Distribution Requirements Planning (Ch 14)	# 5
16 (Mar 9)	Capacity Planning and Management (Ch 10)	
17 (Mar 21)	Capacity Planning and Management (Ch 10)	# 6
18 (Mar 23)	<b>Second Partial Exam</b>	
19 (Mar 28)	Production Activity Control (Ch 11)	
20 (Mar 30)	Production Activity Control (Ch 11)	# 7
21 (Apr 4)	Capacity Management (Ch 12)	
22 (Apr 6)	Capacity Management (Ch 12)	# 8
23 (Apr 11)	Advanced MRP (Ch 9)	
24 (Apr 13)	Advanced MRP (Ch 9)	
25 (Apr 18)	Advanced MRP (Ch 9)	# 9
26 (Apr 20)	Just-in-Time (Ch 13)	
27 (Apr 25)	Just-in-Time (Ch 13)	# 10
28 (Apr 27)	<b>Third Partial Exam</b>	
29 (May 2)	Supply Chain Logistics (Ch 15)	
30 (May 4)	Supply Chain Logistics (Ch 15)	
(May 9)	<b>Final Examination (Comprehensive) 10:00 am-12:45 pm</b>	