# MNGT 3340 Production Operations Management Section 001, Fall 2020 Syllabus



## **Basic Information**

Instructor: Heng (John) Xie, Ph.D. Class (Day/Time/Location)

Email: xie\_h@utpb.edu Tuesday & Thursday / 12:30PM - 1:45PM /

Office/phone: MB 2238, 552-2184 Library - Lecture Center 2

Office Hours: TBD

This course is conducted within Canvas at http://utpb.instructure.com

NOTE: The due dates and times for the activities will adhere to the Central Time Zone.

## Course Description

#### **Course Catalog Description:**

This course examines the planning, design, execution, and coordination of all activities that create goods or provide services. It addresses how upper level management can improve decision-making in both the manufacturing and service sectors. The course introduces productivity, competitiveness, and strategy; decision-making; quality management; product and service design; process selection and capacity planning; linear programming; facility layout; location planning and analysis; the transportation model; project management; design of work systems; and learning curves.

#### Measurable Learning Outcomes (LO):

The purpose of this course is to assist students in developing an understanding of the issues, principles, tools and decision processes involved in designing and effectively managing the operations of an enterprise. Upon successful completion of this course, students will have reliably demonstrated the ability to:

- LO 1: Recognize how operations management contributes to the achievement of an organization's strategic objectives in modern society
- LO 2: Develop the ability to design and deliver effective production and operations in organizations
- LO 3: Analyze various operations methods used in enterprises to improve production settings
- LO 4: Realize the importance of projects and project management in operations

#### **Prerequisites:**

**BUSI 2342 Principles of Statistics** 

#### **Materials**

#### **Required Materials:**

<u>Operations and Supply Chain Management</u> by Collier and Evans, 2nd edition, Cengage, 2021. Print ISBN: 978-0357131695 | eText ISBN: 978-0357708651

## Important Academic Dates

**UTPB Academic Calendar** 

## Course Overview

#### Quizzes:

The quizzes serve to prepare you for the exams. The quizzes will consist of a collection of multiple-choice questions graded by CANVAS. The quizzes are to be taken individually without the help of anyone else. There are 14 quizzes in the course. Two quiz scores (the two lowest scores) will be dropped. You have up to two attempts for each quiz. The higher of the two scores will be used. All quizzes will be submitted via CANVAS. You may use your notes as well as your textbook on the quiz.

#### **Exams:**

There are two exams in this course. The exams will evaluate your ability to apply the solution techniques discussed in this course. In addition, the exams will evaluate your general substantive understanding of the material including definitions and concepts. All exam scores will be counted toward your final grade. No make-up exams are given unless a written medical excuse is provided. You may use your notes as well as your textbook on the exam.

#### **Group Discussions:**

The group discussion questions will be accomplished in teams of size four or five, roughly. There are four group discussion questions. All group discussion problems will be submitted via CANVAS. Only one group member needs to submit the assignment on behalf of the group. All group discussion problems and due dates will be assigned per the schedule. It will be up to you and/or your group to make sure that everyone can work any and all of the group discussion problems covered in the course.

At the end of the course, peer evaluations of your individual contributions to the group discussion questions and its deliverables will be required and applied to your individual group discussion question grades. For example, your overall group discussion question grade could be 160, but your total individual discussion question grade could be a mere 60 because of the peer evaluations of your individual contribution.

#### **Grading:**

Course Activities	Points		
Mid-term Exam	240		
Final Exam	240		
Quizzes (12 x 30 pts)	360		
Group Discussions (4 x 40 pts)	160		
Total	1000		

Note: Unless otherwise stated, all materials, activities, and assessments are required and are not optional.

#### **Grading Scale:**

Grade Range	Letter Grade
900 and above	А
800 to 890	В
700 to 790	С
600 to 690	D
Less than 600	F

<sup>+/-</sup> may be assigned to the final letter grade at the instructor's discretion

#### **Time Management:**

A student should expect to spend three hours on preparation and learning assignments for every semester credit hour. If a class is a 3-semester credit hour class, it is expected that a student should spend at least 9 hours out of class on assignments in addition to 3 hours of in-class time for a total of about 12 hours per week. It is important to develop a Time Management Plan to be successful.

#### Policies and Procedures

#### **Grading and Feedback:**

You can check your grades by going to **Grades** on Canvas. If there is any discrepancy in the grade, you must contact me immediately via UTPB email. I may provide individual feedback or general feedback in the performance of course activities. All dates shown in Canvas are due dates unless otherwise stated. Failure to submit your work in proper form by the due date/time will result in "0" points for the assignment.

#### Make-Up/Late Submission Policy:

All course activities must be submitted before or on set due dates and times. NOTE: The due dates and times for the activities will adhere to the Central Time Zone. Late submissions will be 10% per calendar day or partial day deducted from the assignment value. DO NOT GET BEHIND ON YOUR ASSIGNMENTS.

#### **Academic Dishonesty/Plagiarism/Cheating:**

The academic community regards academic dishonesty as an extremely serious matter, with serious consequences. Any effort to gain an advantage not given to all students is dishonest whether or not the effort is successful. Any suspicion of academic dishonesty will be reported and investigated. A student who engages in scholastic dishonesty that includes, but is not limited to cheating, plagiarism, and collusion will receive an "F" for the course.

All persons involved in academic dishonesty will be disciplined in accordance with University regulations and procedures. For complete information on UTPB student conduct and discipline procedures consult the <u>University's Handbook: Scholastic Dishonesty</u>.

Academic dishonesty includes, but is not limited to cheating, plagiarism, collusion, falsifying academic records, misrepresenting facts, the submission for credit of any work or materials that are attributable in whole or in part to another person, taking an examination for another person, any act designed to give unfair advantage to a student such as, but not limited to, submission of essentially the same written assignment for two courses without the prior permission of the instructor, or the attempt to commit such acts.

**Plagiarism** includes, but is not limited to the appropriation of, buying, receiving as a gift, or obtaining by any means material that is attributable in whole or in part to another source, including words, ideas, illustrations, structure, computer code, other expression and media, and presenting that material as one's own academic work being offered for credit.

#### **Attendance and Class Participation:**

Regular and active participation is an essential, unmistakably important aspect of this course. All students are expected to do the work assigned, notify the instructor when emergencies arise.

#### Absenteeism:

All the course activities have set dates to be completed and submitted. After the due dates, the activities will not be available for the students. Contact instructor immediately in case of emergency medical situation.

#### Course Incomplete/Withdrawal/Grade Appeal:

All students are required to complete the course within the semester they are signed up. Incomplete grades for the course are rarely given, will only be granted if the student provides a valid, documented excuse for not being able to complete the course on time, and has contacted the instructor prior to the scheduled last class to request an extension. The student signs a contract that includes the incomplete course activities and the new due dates.

Find information and dates regarding drops and withdrawals consult the University Handbook: <u>Drops and Withdrawals</u> and <u>Appeal Process</u>.

#### Accommodation for Students with Disabilities

**Students with Disabilities:** The University of Texas Permian Basin in compliance with the Americans with Disabilities Act and Section 504 of the Rehabilitation Act provides "reasonable accommodations" to students with disabilities. Only those students, who an Instructor has received an official Letter of Accommodation (LOA) sent by the Office of ADA for Students, will be provided ADA academic accommodations

ADA Officer for Students: Mr. Paul Leverington

Address: Mesa Building 4242/4901 E. University, Odessa, Texas 79762

**Voice Telephone:** 432-552-4696

Email: ada@utpb.edu

For the accessibility and privacy statements of external tools used within courses, go to <u>Accessibility and</u> <u>Privacy Statements</u>.

## Computer Skills, Technical & Software Requirements

This course requires basic proficiency in the use of word processing, spreadsheet, presentation software to create and edit documents, and to save and submit files. All course assessment activity files that will be submitted to the instructor should be in MS Word with the .doc or .docx extension and/or MS Excel with the .xls or .xlsx extension. Additionally, MS Excel Solver (Excel add-in thus it is free) is needed for this course. Students also need basic proficiency in receiving, sending, and attaching files to email, and in the use of Internet search tools.

Students can use cloud version of Word, PowerPoint, and other Microsoft products through use of their UTPB Outlook 365 and UTPB email address. For more information refer to UTPB Office 365 Page.

#### **Computer Technical Requirements:**

See <u>Technical Requirements</u>.

## Preparation for Emergencies

#### **Computer Crash:**

Not having a working computer or a crashed computer during the semester will NOT be considered as an acceptable reason for not completing course activities at a scheduled time. NOTE: Identify a second computer before the semester begins, that you can use when/if your personal computer crashes.

#### **Complete Loss of Contact:**

If you lose contact with course connectivity completely (i.e. you cannot contact me via Canvas or email), you need to call instructor, and leave message regarding connectivity loss and contact information.

#### **Lost/Corrupt/Missing Files:**

You must keep/save a copy of every project/assignment on an external drive, UTPB Outlook 365 OneDrive, or personal computer. In the event of any kind of failure (e.g. virus infection, student's own computer crashes, loss of files in cyberspace, etc.) or any contradictions/problems, you may be required to resubmit the files.

# End-of-Course Evaluation & Instructor Evaluation

Every student is encouraged to complete an end of course evaluation survey provided by UTPB. During the last two weeks of class, there will be an announcement in Canvas, an email, and a button in your course navigation that will take you to any available surveys.

The survey is anonymous, and your responses are confidential. Your feedback is critical to us and to your instructor as we strive to improve our offerings, and our support of you, the students.

## **Student Support Services**

SERVICE	CONTACT		
ADA	Services for Students with Disabilities		
Accommodation/Support	(432) 552-4696		
Testing Services	Testing Services & Academic Accommodations Department		
	(432) 552-2630		
Advising	(432) 552-2661		
	UTPB Academic Advising Center		
Bookstore	UTPB Campus Bookstore		
	(432) 552-0220		
Email, Office 365,	Information Technology		
my.utpb.edu			
Financial Aid and Scholarship	UTPB Financial Aid		
	(432) 552-2620		
Library	The J. Conrad Dunagan Library Online at		
	(432) 552-2370		
Registrar	UTPB Registrar		
	(432) 552-2635		
Student Services	Student Services		
	(432) 552-2600		
Technical Support	Canvas		
	1-866-437-0867		
Tutoring & Learning	If you are taking courses through UTPB the following links provide		
Resources	services: Smarthinking Online Tutoring (provides tutoring services),		
	<u>SmarterMeasure</u> (measures learner readiness for online course).		

# Disclaimer & Rights

Information contained in this syllabus was to the best knowledge of the instructor considered correct and complete when distributed for use in the beginning of the semester. However, the instructor reserves the right, acting within the policies and procedures of UTPB to make changes in the course content or instructional techniques without notice or obligation. The students will be informed about the changes, if any.

## Copyright Statement

Many of the materials that are posted within UTPB courses are protected by copyright law. These materials are only for the use of students enrolled in the course and only for the purpose of the course. They may not be further retained or disseminated.

## Schedule

Note: This class schedule is tentative and is subject to change at the instructor's discretion. Any changes will be announced via email and/or Canvas.

Weeks	Topics	Readings	Assignments		
Module 1: Introduction to Operations, Operations Strategy and Design					
Week 1 – 8/25	Course Introduction & Operations Management and Value Chains	Course Syllabus & Chapter 1	Quiz #1		
Week 2 – 9/1	Measuring Performance in Operations and Value Chains	Chapter 2	Quiz #2		
Week 3 – 9/8	Operations Strategy	Chapter 3	Quiz #3		
Week 4 – 9/15	Goods and Service Design	Chapter 5	Quiz #4 & Discussion #1		
Module 2: Analysis of Processes, Facility Design, Capacity and Inventory Management					
Week 5 – 9/22	Process Selection, Design, and Improvement	Chapter 7	Quiz #5		
Week 6 – 9/29	Facility and Work Design	Chapter 8	Quiz #6		
Week 7 – 10/6	Capacity Management	Chapter 10	Quiz #7		
Week 8 – 10/13	Managing Inventories in Supply Chains	Chapter 12	Quiz #8 & Discussion #2		
Week 8 – 10/15	Mid-term Exam				
Module 3: Quality Management, Lean Operations and Project Management					
Week 9 – 10/20	Quality Management	Chapter 16	Quiz #9		
Week 10 – 10/27	Quality Control and SPC	Chapter 17	Quiz #10		
Week 11 – 11/3	Lean Operating Systems	Chapter 18	Quiz #11		
Week 12 – 11/10	Project Management	Chapter 19	Quiz #12 & Discussion #3		
Module 4: Linear Programming and Transportation Modeling					
Week 13 – 11/17	Linear Optimization	Ch. D	Quiz #13		
Week 14 – 11/24	Thanksgiving Holiday				
Week 15 – 12/1	Supply Chain Design (Transportation Modeling)	Ch. 6-5 and Ch. E	Quiz #14 & Discussion #4		
Week 16 – 12/8	Final Exam				