MSC 385 - 01 – Operations Analysis

Course Information

Contact

Instructor: Hieu Pham, PhD

Office: 368 Business Administration Building

Email Address: hieu.pham@uah.edu or Canvas

Phone Numbers: 256.824.2331

Availability/Office Hours: Monday 3:00-5:30 PM and by appointment

Details

Course Name: MSC 385 – Operations Analysis

Mode of Delivery: Online

Credit Hours: 3

Semester/Year: Spring 2025

Meeting day, time, and location: Online via Canvas

Prerequisites: MSC 287 and MSC 288

Overview

This course will cover various topics within the management of operations with specific emphasis on the analysis of processes generally found in business and production operations. Topics to be introduced and covered are concepts, processes and organizations involved with what is commonly called the ‘production’ functions of a company or firm. The basic quantitative tools used to manage and solve process issues and problems will be covered. These include product design and manufacturing, planning, forecasting, reliability, decision theory, quality, inventory management, supply chains and project management.

Objectives

The students will

∙ Identify the production and operations function and its importance in any manufacturing or service organization.

∙ Comprehend the use of innovative approaches in Operations Management to satisfy customer needs.

∙ Understand and use several significant concepts and techniques in the analysis, design and operation of production management systems especially as they are affected by emerging developments in quantitative analysis and computer technologies.

∙ Understand the importance of integrating the production and operations function with other business functions, such as marketing, product development, finance and human resources, within a global perspective.

∙ Integrate artificial intelligence tools to enhance decision making

Materials

Required

Stevenson, William J., Operations Management, 2021, 14th Edition. McGraw‐Hill (**ISBN 13 :** 9781260238891)

Technology Statement

This course will use UAH’s learning management system, Canvas, as well as other technology tools. Students will be expected to have access to a computer with internet capabilities to fully participate in this course.

Evaluation and Grading

The following grading scheme will apply in this course:

A = 90 <= grade

B = 80 <= grade < 90

C = 70 <= grade < 80

D = 60 <= grade < 70

F = grade < 60

Additionally, the instructor reserves the right to modify a student’s final grade, for the benefit of the student, if deemed necessary.

Evaluation and grading will be based upon weighted assignment groups.

Evaluation and grading will be based upon the following scale. The instructor will make every attempt possible to grade all assignments within 1 week.

|  |  |  |
| --- | --- | --- |
| **Assignment Groups** | **Percentage of Grade** | **Note** |
| Homework | 30% | Homework is assigned weekly and is an  opportunity for you to practice on your own. These assignments are designed for you  to apply the skills that are covered in the reading and in‐class  activities. This category also includes discussions and similar assignments |
| Quizzes | 10% | The quizzes are used to help assess the  knowledge that you  have acquired in the  particular topic that you have just  completed. Quizzes are helpful for me to  understand how well  you are grasping the content we’re covering. They are also a  tool for you to assess what content you  understand and  where you need to direct your study efforts. |
| Exams | 60% | There will be 3 exams (including the final)  scheduled throughout the course |

|  |  |  |
| --- | --- | --- |
|  |  | of the semester. The final exam will be  comprehensive. Lockdown browser will be used. |
| **TOTAL** | **100%** |  |

Missed Assignments/Make-Ups/Extra Credit

Homework assignments must be turned in for credit. A late homework will result in a reduction of homework grade, 20% of full grade per day. Any work turned in after the homework has been returned to the class, or after the solution has been posted will receive no credit. Homework may be graded immediately or after a few days. There is no guarantee that any late work will receive credit.

There are several exceptions for this policy:

● The late work for the any exam will not be accepted.

● Discussion postings after the due date will not be accepted.

If you miss an exam without my permission, you will receive no grade for the exam. To be eligible for makeup, you must contact me immediately. If you cannot take the exam during the given time window, you will receive an alternative version of the exam which may or may not be more difficult that the original exam.

Attendance Policy and Expectations

Students are only expect to come the first day of class and to the final poster session. Students will be expected to present themselves as professionals in a business environment as they may be meeting onsite at the target organization as required to frame the problem, collect data, model the analysis and present the findings and recommendations to organization executives. Students conduct, attendance and punctuality will be held to every aspect of professional business consultancy standards.

Communication & Instructional Continuity

Canvas and email will be used extensively for communication. You must ensure that you have an active Canvas account and UAH email address. Resources and assignments will be posted to Canvas and other online locations, as announced. You are responsible for checking your Canvas and UAH email accounts regularly. Monday through Friday I will attempt to respond within 24 hours. Saturday and Sunday emails will be answered within 48 hours.

If our regular scheduled class meeting is interrupted or the campus should unexpectedly close, students should immediately log onto Canvas and read any course announcements. Students are encouraged to continue the readings and other assignments as outlined on the course syllabus until otherwise advised. Any student who does not could fall behind in the course.

Course Conduct

All students must treat others with civility and respect and conduct themselves in a way that does not unreasonably interfere with the opportunity of other students to learn. All communication between student/instructor and between student/student should be respectful and professional.

Academic Honesty

Your written assignments and examinations must be your own work. Academic misconduct will not be tolerated. Examples of unacceptable behavior include plagiarism/use of prior work/use of Chegg and other online problem-solving sites/etc. To ensure that you are aware of what is considered academic misconduct, you should review carefully the definitions and examples provided in the Student Handbook. If you have questions in this regard, please contact me without delay.

Artificial Intelligence Statement

Allowance without Restriction - The use of artificial intelligence models for assistance in completion of work for this course shall be treated as collaborative work and should be properly documented and cited, regardless of the degree to which the models have been utilized.

Copyright Hieu Pham, 2024

All federal and state copyrights in my lectures and course materials are reserved by me. You are authorized to take notes in class for your own personal use and for no other purpose. You are not authorized to record my lectures or to make any commercial use of them or to provide them to anyone else other than students currently enrolled in this course, without my prior written permission. In addition to legal sanctions for violations of copyright law, students found in violation of these prohibitions may be subject to University disciplinary action under the Code of Student Conduct.

Discussion of Concerns

If you have difficulties or concerns related to this course, your first action should be to discuss them with your instructor. If such a discussion would be uncomfortable for you or fails to resolve your difficulties, you should contact the Dr. Wai Mok Department Chairperson. If you are still unsatisfied, you should contact Dr. Orman Associate Dean of the College of Business.

Class Schedule

|  |  |
| --- | --- |
| **Week/Date**  Week 1 | **Topic** |
| Course Introduction, Introduction to Operations Management |
| Week 2 | Competitiveness, Strategy and Productivity & Forecasting |
| Week 3 | Product and Service Design & Reliability |
| Week 4 | Strategic Capacity Planning |
| Week 5 | Exam |
| Week 6 | Process Selection and Facility Layout & Location Planning and Analysis |
| Week 7 | Quality Management & Quality Control |
| Week 8 | Inventory Management & MRP and ERP |
| Week 9 | Exam |

|  |  |
| --- | --- |
| Week 10 | Spring Break |
| Week 11 | JIT and Lean Operations & Supply Chain Management |
| Week 12 | Scheduling & Project Management |
| Week 13 | Management of Waiting Lines & Linear Programming |
| Week 14 | Study Days |
| Week 15 | Final Exam |

Teams will meet with project sponsors regularly in lieu of classroom meetings. Online teams must also meet with the project sponsors and team members online regularly. Note that these due dates are the latest you can complete each item.

University Information

Disability Statement

The University of Alabama in Huntsville will make reasonable accommodations for students with documented disabilities. If you need support or assistance due to a disability, you may be eligible for academic accommodations. Apply here or contact

Disability Support Services (256.824.1997 or Wilson Hall 128) as soon as possible to coordinate accommodations.

Pertinent UAH Policies

● UAH Student Handbook

● Academic Misconduct Policy

● Complete listing of UAH Policies and Procedures

Campus Resources

The University of Alabama in Huntsville offers a range of student services to enhance the experience of students.

● Academic Support Services—ASAP, Student Success Center, Tutoring, PASS, Academic Support Centers by College

● Student Support Services—Counseling Center, Disability Support Services, Student Health Services, Office of International Services, Multicultural Affairs, etc.

● UAlert—Sign up for UAH’s emergency notification system to receive urgent messages from the university

● Registrar’s Office—Academic Calendars, Course Registration, Student Records, Commencement

● M. Louis Salmon Library—Printed and Online Resources, Reference Services, Group Study Rooms, AV Resources, Printing

● Office of Diversity, Equity, and Inclusion—Anti-racism resources, LGBTQ resources, lactation rooms, name change requests, internet access assistance, Title IX

● Canvas Support—Call 844-219-5802 to report an issue with Canvas. ● OIT Help Desk—For technical support, contact the OIT Help Desk (helpdesk@uah.edu; 256.824.3333)

NOTE: When submitting a support ticket include your name, your class, the element/assignment being affected, and a detailed description of the issue. Providing a screenshot is often very helpful in diagnosing an issue.

Important Dates

Review the semester dates and deadlines and the academic calendar.

Subject to Change

Every effort is made to follow the guidelines in the syllabus; however, if needed, the syllabus will be amended. You will be notified if changes are made.