

OPRE 3310 Course Syllabus

Course Information

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| Course Prefix, Number, Section | OPRE 3310.501 |
| Course Title | Operations Management |
| Term | Spring 2022 |
| Days & Times | Tuesday 7pm-9:45pm in JSOM 12.222 (Jan 18 – Feb 1 on MS Teams) |

Professor Contact Information

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| Professor | Prof. Ashwin Venkataraman |
| Office Phone | 972-883-5944 |
| Email Address | axv190029@utdallas.edu |
| Office Hours | Tuesday 4-6pm in JSOM 3.221/MS Teams (or by appointment) |
| Other Information | TA: Qiuxia Chen, OM PhD student TA e-mail: qiuxia.chen@utdallas.edu TA office hours: Wed 4-6 pm on MS Teams |

COVID-19 Guidelines and Resources

The information contained in the following link lists the University's COVID-19 resources for students and instructors of record.

Please see <http://go.utdallas.edu/syllabus-policies>.

Course Pre-requisites, Co-requisites, and/or Other Restrictions

- MATH 1326 or MATH 2414 or MATH 2419
- MATH 2333 or MATH 2418 or CS 2305 or OPRE 3333.
- STAT 3360 or OPRE 3360.

Course Description

This course teaches concepts useful in efficiently managing the transformation of materials, labor, and capital into products or services. Topics covered include: the role of operations management in overall competitive strategy, key performance measures, and tools for improving operations performance. The level of discussion varies from long-term strategic planning to daily control of business processes.

Student Learning Objectives/Outcomes

Students will understand the role operations management plays in business processes. Upon completion of the course, students will also be able to:

- Quantitatively analyze and interpret operations information

- Solve typical operations management problems
- Document and report operations performance
- Recognize and address ethical issues that arise when managing operations

Required Textbooks and Materials

There are no required textbooks for the course. Lecture slides uploaded on e-learning will be sufficient to learn the material.

Suggested Course Materials

If students would like to read a textbook, the following two are recommended:

- William J. Stevenson. "Introduction to Operations Management," 14th ed.
- Cachon, G., and Terwiesch, C. "Matching Supply with Demand: An Introduction to Operations Management," 3rd ed.

Assignments & Academic Calendar

| Week | Date | Topic | Deliverables |
|------|--------|--|---|
| 1 | 18-Jan | Introduction to Operations Management Process Analysis I | |
| 2 | 25-Jan | Process Analysis II | HW1 Assigned |
| 3 | 1-Feb | Waiting Time Analysis | HW1 Due (11:59 pm CT, 31-Jan) |
| 4 | 8-Feb | Project Management | HW2 Assigned |
| 5 | 15-Feb | Linear Programming | |
| 6 | 22-Feb | Exam 1 Review | HW2 Due (11:59 pm CT, 21-Feb) |
| 7 | 1-Mar | No Class | Exam 1 (Process Analysis, Waiting Time Analysis, Project Management) |
| 8 | 8-Mar | Inventory Management I | HW3 Assigned |
| 9 | 15-Mar | Spring Break (No Class) | |
| 10 | 22-Mar | Inventory Management II Newsvendor Game | HW3 Due (11:59 pm CT, 21-Mar) |
| 11 | 29-Mar | Supply Chain Contracts Assessment Quiz Review | |
| 12 | 05-Apr | Assessment Quiz (EOQ, Safety Stock, EPQ) Forecasting | HW4 Assigned |
| 13 | 12-Apr | Beer Game, Bullwhip Effect and Supply Chain Coordination | HW4 Due (11:59 pm CT, 11-Apr) |
| 14 | 19-Apr | Revenue Management | HW5 Assigned |
| 15 | 26-Apr | Exam 2 Review | HW5 Due (11:59 pm CT, 25-Apr) |

| Week | Date | Topic | Deliverables |
|------|--------|----------|---|
| 16 | 03-May | No Class | Exam 2 (Linear Programming, Newsvendor Model, Supply Chain Contracts and Coordination, Revenue Management) |

Grading Policy

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| Homework Assignments | 25% |
| Exam 1 | 30% |
| Exam 2 | 35% |
| Assessment Quiz | 10% |

Letter Grade

Your final letter grade will be assigned based on your relative standing in the class, and is based solely upon the instructor's discretion and evaluation of the overall performance of the students in the class.

Course Policies

Make-up exams

No make-up exams will be offered except in case of medical emergency.

Extra Credit

One of the goals of this course is to help students learn more about the *Bachelor of Science in Supply Chain Management (BS SCM)* degree program. Students have the opportunity to earn bonus points if they complete any one (or more) of the following activities during the course of the semester:

- Attendance and participation in one of the program meetings (Teams or in-person) listed on the calendar here: [Calendar of BS SCM Program](#)
- Participation in the Out of the Box Case competition (dates mentioned in the calendar link)
- Attendance to a one-to-one meeting with Dr. Monica Brussolo or Cynthia Lara to learn more about the SCM program (contact details in the calendar link)

Late Work

Please upload your assignments on e-learning before the assigned due date. **Late work will not be accepted.**

Exams

There will be two exams, both held in the Testing Center. More details will be provided on the first day of class.

Homework Assignments

Five assignments will be posted under the "Assignments" folder on the course homepage. On homework problems requiring calculations, show how you arrived at the calculation. You may discuss homework problems with others, but you must write it up by yourself with full understanding of what you write. Identical assignments will be in

violation of university regulations, will receive no credit, and may be subject to disciplinary proceedings.

Assessment Quiz

The assessment quiz covers the topic of inventory management. The format and exact location/timing will be shared by the instructor closer to the date of the quiz.

OPRE 3310 is considered a core course and as such certain measurement instruments are implemented to ensure a uniformity of learning across all sections. These measurements are provided to university accreditation associations during their periodic audits. The quiz is prepared by an academic committee and will be taken by all OPRE 3310 sections each semester.

The grading of the assessment quiz is controlled through a standard grading scheme called a Rubric. The Rubric measures three important elements of learning: 1) understanding, 2) writing, and 3) correct answers. Therefore, students are encouraged to express their understanding of the problems in a clear and concise written format such as writing any formulas completely and correctly.

Class Attendance

Students are expected to attend each lecture and actively participate in the class meetings.

Classroom Citizenship

For the remote sessions, students are encouraged to turn on their webcams during the class lecture. You are expected to actively participate and ask questions in the chat or by unmuting yourself. Please refrain from using your cellphone and other activities such as e-mail, web browsing, games, etc. during the lecture.

Comet Creed

This creed was voted on by the UT Dallas student body in 2014. It is a standard that Comets choose to live by and encourage others to do the same:

“As a Comet, I pledge honesty, integrity, and service in all that I do.”

Academic Support Resources

The information contained in the following link lists the University’s academic support resources for all students.

Please see <http://go.utdallas.edu/academic-support-resources>.

UT Dallas Syllabus Policies and Procedures

The information contained in the following link constitutes the University’s policies and procedures segment of the course syllabus.

Please go to <http://go.utdallas.edu/syllabus-policies> for these policies.

The descriptions and timelines contained in this syllabus are subject to change at the discretion of the Professor.