

Course Syllabus

Course Information

Semester: Spring 2019
Course Number: OPRE 3310.003
Course Title: Operations Management
Course Schedule: T, R 4:00 p.m. - 5:15 p.m.
Meeting Room: JSOM 1.102

Instructor Contact Information

Name: Ching-Chung Kuo
Email Address: ching-chung.kuo@utdallas.edu
Office Location: JSOM 13.217
Office Phone: (972) 883-5095
Office Hours: M, F 4:00 p.m. - 5:00 p.m.; T, W, R 11:00 a.m. - 12:00 p.m.

About the Instructor

Ching-Chung Kuo is a Clinical Professor and the Director of the Undergraduate Supply Chain Management Program in the Operations Management Area of the Jindal School of Management at the University of Texas at Dallas. He received his Ph.D. in Industrial Engineering and Management Sciences from Northwestern University.

Teaching Assistant Contact Information

Name: Goutham Takasi
Email Address: vgt170000@utdallas.edu
Office Location: JSOM 14.211
Office Hours: T 1:00 p.m. - 3:00 p.m.; W 1:30 p.m. - 3:30 p.m.

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

Prerequisite: MATH 1325 or MATH 2413 or MATH 2417
Prerequisite or Co-requisite: STAT 3600 or OPRE 3360

Course Description

“OPRE 3310 Operations Management (3 semester credit hours) This course discusses applications of operations research methods to production problems and processes in the business firm with emphasis on forecasting, production planning, and production control techniques. Prerequisite: MATH 1325 or MATH 2413 or MATH 2417. Co-requisite: STAT 3600 or OPRE 3360. (3-0) S”

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 that operations management plays in business processes. Upon completion of this course, students will be able to:

1. Quantitatively analyze and interpret operations information;
 2. Solve typical operations management problems;
 3. Document and report operations performance; and
 4. Recognize and address ethical issues that arise when managing operations;
-

Required Textbooks and Materials

Required Textbook:

None

Required Course Materials:

Lecture notes available online

Recommended Textbook:

Stevenson, W. J. (2018). *Operations management* (13th ed.). New York, NY: McGraw-Hill Education. (ISBN-10: 1259667472; ISBN-13: 9781259667473)

Assignments and Academic Calendar

01/15/19	Syllabus Review
01/17/19	Chapter 1: Introduction to Operations Management
01/22/19	Chapter 2: Competitiveness, Strategy, and Productivity Reading 1: Hueter, J., & Swart, W. An integrated labor-management system for Taco Bell. <i>Interfaces</i> , 1998, January-February, 75-91 (abstract).
01/24/19	Chapter 3: Forecasting Reading 2: Blank, D. Meal shortfalls still gnaw at some airlines. <i>USA Today</i> , 2000, February 22, 5B (abstract).
01/29/19	Chapter 3: Forecasting Reading 3: Andrews, B. H., & Cunningham, S. M. L. L. Bean improves call-center forecasting. <i>Interfaces</i> , 1995, November-December, 1-13 (abstract).
01/31/19	Chapter 3: Forecasting
02/05/19	Chapter 3: Forecasting

02/07/19	Chapter 6: Process Selection and Facilities Layout Reading 4: Anonymity. Making malls (gasp!) convenient. <i>The Wall Street Journal</i> , 2000, February 8, B1, B4 (abstract).
02/12/19	Chapter 6: Process Selection and Facilities Layout Reading 5: Kapstein J., & Hoerr, J. Volvo's radical new plant: 'The death of the assembly line'? <i>Business Week</i> , 1989, August 28, 92-93 (abstract).
02/14/19	Examination I (in-class, 4:00 p.m. - 5:15 p.m.)
02/19/19	Chapter 6: Process Selection and Facilities Layout
02/21/19	Chapter 10: Quality Control Reading 6: Maki, R. G., & Milota, M. R. Statistical quality control applied to lumber drying. <i>Quality Progress</i> , 1993, December, 75-79 (abstract).
02/26/19	Chapter 10: Quality Control Reading 7: Kumar, S., & Gupta, Y. P. Statistical process control at Motorola's Austin assembly plant. <i>Interfaces</i> , 1993, March-April, 84-92 (abstract).
02/28/19	Chapter 10: Quality Control
03/05/19	Chapter 10: Quality Control
03/07/19	Chapter 13: Inventory Management Reading 8: Little, D. 3M: Glued to the web. <i>Business Week E.Biz</i> , 2000, November 20, EB63-EB70 (abstract).
03/12/19	Examination II (in-class, 4:00 p.m. - 5:15 p.m.)
03/14/19	Chapter 13: Inventory Management Reading 9: Reid, R. The ABC method in hospital inventory management: A practical approach. <i>Production and Inventory Management Journal</i> , 1987, 28(4), 67-70 (abstract).
03/19/19	Spring Break (no class)
03/21/19	Spring Break (no class)
03/26/19	Chapter 13: Inventory Management
03/28/19	Chapter 13: Inventory Management
04/02/19	Chapter 12: MRP and ERP Reading 10: Todd, F. Plastics company injects efficiency. <i>APICS—The Performance Age</i> , 1994, September, 37-39 (abstract).
04/04/19	Chapter 12: MRP and ERP

Reading 11: Goddard, W. Getting a grip on customer service. *Modern Materials Handling*, 1992, September, 41 (abstract).

04/09/19 **Examination III (in class, 4:00 p.m. - 5:15 p.m.)**

04/11/19 Chapter 16: Scheduling

Reading 12: Jung, R., Mulherin, C., & Riggles, T. Finite capacity scheduling helps SMC improve delivery, control costs. *APICS—The Performance Advantage*, 1993, February, 24-27 (abstract).

04/16/19 Chapter 16: Scheduling

Reading 13: Parker, K. Dynamism and decision support. *Manufacturing Systems*, 1995, April, 12-24 (abstract).

04/18/19 Chapter 16 Scheduling

04/23/19 Chapter 16 Scheduling

04/25/19 Chapter 17: Project Management

Reading 14: O’Keeffe, S. W. T. Chrysler and Artemis: Striking back with the Viper. *Industrial Engineering*, 1994, December, 15, 17 (abstract).

04/30/19 Chapter 17: Project Management

Reading 15: Wood, L. Perfect harmony. *Informationweek*, 1995, May 8, 42-54 (abstract).

Distribution of blank peer evaluation forms

05/02/19 Chapter 17: Project Management

Collection of completed peer evaluation forms

05/??/19 **Examination IV (in-class, date and time to be announced by the Office of Registrar)**

Grading Policy

Grading Criteria:

Homework Assignments	15%
Examination I	20%
Examination II	20%
Examination III	20%
Examination IV	25%

Grading Scale:

98.00 or above	A ⁺
90.00 - 97.99	A
88.00 - 89.99	A ⁻
86.00 - 87.99	B ⁺
80.00 - 85.99	B
78.00 - 79.99	B ⁻
76.00 - 77.99	C ⁺
70.00 - 75.99	C
68.00 - 69.99	C ⁻
66.00 - 67.99	D ⁺
60.00 - 65.99	D
58.00 - 59.99	D ⁻
Below 58.00	F

Course and Instructor Policies

Homework Assignments:

Five to seven students will form a team in the first class meeting and they are collectively responsible for 10 homework assignments during the semester. However, only the best 9 scores will count towards the course grade. Each team has to submit a hard copy of the homework solutions at the beginning of the class on the due date of each assignment. No late submissions will be accepted.

All homework solutions must be typewritten in a regular font of your choice of size 10 - 12 points on 8 ½ x 11 white paper. Computer outputs should be properly pasted at the appropriate places. All charts plotted manually should be prepared with a ruler on graph paper and they should be attached at the end. Moreover, the course number, the course title, the homework number, the team number, and the names of the team members must be clearly indicated on the cover page. Finally, no collaborations with other teams are allowed. Points will be deducted for any deviations from these guidelines.

A student's grade on homework will be subject to peer evaluations at the end of the semester. Suppose, for example, that your team's average score on the assignments submitted is 95% and you receive an average evaluation of 96% from your teammates and yourself. Then your overall score for the homework assignments will be $95\% \times 96\% = 91.2\%$. Please refer to Page 7 for a sample completed peer evaluation form.

In case a member does not perform to the team's expectation in homework assignments by constantly missing group meetings, failing to provide requested information in a timely fashion, contributing work that is poorly done, or exhibiting other unprofessional behaviors, the other members may decide to drop him/her from the group. However, in the interest of fairness, the five-step procedure outlined below must be closely followed:

- (1) There needs to be a unanimous agreement among all other team members that the student's performance is unsatisfactory.
- (2) The concern must be conveyed to the person in writing and discussed with him/her in person. The written notice must be signed and dated by the rest of the group.
- (3) A copy of the above-mentioned notice has to be submitted to the instructor at the same time.
- (4) The student has two weeks of class time to improve his/her performance.
- (5) If no unsatisfactory improvement is made over the two-week period, then a final written notice of dropping the person as a member of the team will be signed and dated by the other members and given to him/her. In the meanwhile, a copy of the document must be forwarded to the instructor.

If a student is dropped from a team and not accepted by another, then he/she must complete the remaining assignments on an individual basis or loses the homework points. Notice that no team members can be dropped after Examination I.

Examinations:

There will be three noncumulative, closed-book, closed-notes, and open-cheat sheet examinations given in class during the semester. The types of questions to be asked in the test include multiple-choice, fill-in-the-blank, short-answer, analytical, and computational.

No make-up examination will be given unless prior arrangements have been made with the instructor or there is documented evidence of an extreme circumstance causing the delay or absence (e.g., verifiable medical or family emergencies) and it is provided to the instructor at the earliest possible time. Only pencils (NOT pens), erasers, rulers, calculators of any kind, and an 8 ½ x 11 cheat sheet are allowed during the examination. No sharing of those items between students is permitted, nor is the use of any cell phone or laptop.

Course-related Materials:

Lecture notes, homework assignments, homework solutions, as well as other relevant information will be posted online to help students learn throughout the semester. However, the PowerPoint slides used by the instructor in class will not be made available. It is the student's responsibility to log into the eLearning course website on a regular basis to keep abreast of the latest developments in the class.

Class Attendance:

Attending class regularly is extremely important and strongly recommended. However, attendance will be taken when a guest speaker visits our class. Whether present or not, each student will be held responsible for any material discussed or announcement made in class. The information will not be repeated by the instructor or the TA during the office hours.

Acceptable Student Behaviors:

Student exhibiting behaviors that interfere with the instructor's ability to conduct the class or other students' opportunity to learn are unacceptable and will not be tolerated. They will be directed to leave the classroom and the instructor may refer them to the Dean of Students Office for consideration of violation of the student code of conduct. Texting or using a cell phone is prohibited during the lecture, so are taking unauthorized pictures and video/audio recording of the lectures without the explicit permission of the instructor.

Others:

- (1) Any form of academic dishonesty will not be tolerated.
- (2) Students enrolled in this section are not permitted to attend any class of OPRE 3310.501.
- (3) The completed peer evaluation turned in at the end of the semester cannot be changed.
- (4) No additional work for extra credit is possible in this class.
- (5) The course grade can be changed only when there is a computational error.

Comet Creed

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

UT Dallas Syllabus Policies and Procedures

The information contained in the following link constitutes the University's policies and procedures segment of the syllabus: <http://go.utdallas.edu/syllabus-policies>.

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

**OPRE 3310.003 Operations Management
Sample Peer Evaluation Form for Group Homework**

Instructions: The information submitted is final and cannot be changed. So please rate each of your fellow team members with respect to the criteria listed in the table below. Be honest, reasonable, and fair.

Group number: 20

	Amy Becker	Chris Drake	Eileen Flay	Gene Hanks	Irene Jacob
Meeting attendance (15%)	13%	15%	15%	14%	15%
Punctuality of work (15%)	13%	15%	14%	15%	13%
Fair share of work (30%)	28%	30%	26%	27%	29%
Quality of work (40%)	34%	40%	40%	35%	36%
Total (100%)	88%	100%	95%	91%	93%

Name: _____

Signature: _____

Date: _____

Comments: _____

