Spears School **OF BUSINESS**

OPERATIONS MANAGEMENT
MSIS 3223.503
SPRING 2016
On-Line Course

Instructor:

Dr. Tim C. Ireland, Professor of Management Science and Information Systems

Contact Information:

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<u>Office Hours</u>: MWF 8:30-9:15 and MW 2:30-4:00 and by appointment
<u>Course Site</u>: Desire2Learn (Online Classroom): http://oc.okstate.edu
<u>Distance Learning Support</u>:   Twitter: @spearsdistance
Email: spearsdistance@okstate.edu   Phone: 405-744-4048

Course Description

An introduction to the operations management process, and an examination of decision-making techniques applicable in the management of production or service oriented organizations.

Course Objectives	**Program Learning Goal**
1. To enable students to understand and be knowledgeable of the field of Operations Management—that part of the organization which creates goods or provides services.	Business Knowledge & Competency
2. To enable students to formulate and analyze decision situations.	Business Knowledge & Competency Critical Thinking
3. To enable students to utilize a number of mathematical and statistical techniques available for the solution of OM decision situations.	Critical Thinking Technological Competence

Textbook

Operations Management (11th edition) by William J. Stevenson (McGraw-Hill Irwin)
custom soft cover—ISBN-13: 978-1-308-47859-3

Grading Policy

The course point allocations are as follows:

Exam 1	100 pts.
Exam 2	100 pts.
Exam 3	100 pts.
Exam 4 (Final)	100 pts.
Homework Assignments	80 pts.
Total Points	480 pts.

Letter grades will be assigned according to the following scale:

422-480 pts.	= A
364-421 pts.	= B
307-363 pts.	= C
249-306 pts.	= D
Below 249 pts.	= F

Course Guidelines

1. The course prerequisites are Calculus (Math 2103 or equivalent), Basic Statistics (Stat 2023 or equivalent), and Computer Concepts (MSIS 2103 or equivalent). Student competence in math and statistics is expected and necessary to survive in today's business world!

2. Course materials (PowerPoints, videos, homework assignments, bonus opportunities, etc.) can be found at the Desire2Learn (D2L) website.

3. Exams are scheduled in the following manner: if you are in Stillwater (OSU-Stillwater student) then I provide you the option of using a testing center or taking it with me at a time and room noted below. If you are NOT a Stillwater student then you will need to locate a testing center in your area. Exams may be taken up to 24 hours (1 workday) before the official test dates if you prefer.   Remember, this is an online course not a correspondence course. Students do not have additional flexibility in taking exams or completing the course.

Official Exam Dates and locations where Stillwater students may take the exams under my supervision:

Exam#1: Friday, February 5   ---   3:30-5:00 p.m., Morrill 101
Exam#2: Friday, March 4   ---   3:30-5:00 p.m., Morrill 101
Exam#3: Friday, April 8   ---   3:30-5:00 p.m., Morrill 101
Exam#4: Thursday, May 5   ---   6:00-7:50 p.m., Morrill 101

If you are not an OSU-Stillwater student you will need to locate a testing center in your area. To help you in this endeavor, please read the information and complete the proctor form at this website:

http://spears.okstate.edu/distance/guide/policies

The completed Proctor Form should be faxed to the Spears School Distance Learning office at (405) 744-1891 during the **first week** of class.

4. There are four proctored exams, each worth 100 points. Exam 4, the final exam, is not comprehensive. Each exam will allow 90 minutes for its completion with the exception of Exam 4 which will allow 110 minutes. Calculators and rulers are allowed during the exams, but no books or notes may be used. Exams may include sections of true-false, multiple-choice, and pure problem questions. Multiple choice questions will pertain to both conceptual/theory issues as well as problem calculations. Certain formulas and tables (noted in the content section of Desire2Learn (D2L) under "Exam Formulas Provided") are provided for your use on each exam. (In general, I provide the formulas that are more involved or difficult. I do not provide simple ratio formulas or things that you should know as business majors.) These formulas and tables that I provide will be located on the last pages of your exam. Both conceptual/theory questions and quantitative/problem questions will appear on each test. Both areas are considered important and the percentage composition will be roughly 50/50 on each exam. The author of our textbook provides a number of wonderful study aids (outlines, PowerPoints, quizzes, etc.) for our exams at his website. I strongly recommend the usage of this material in your test preparation along with studying our class lecture materials, practicing the quantitative techniques, and reading the textbook.

http://mhhe.com/stevenson12e

5. Graded homework problems will be assigned for many of the chapters. The assignments can be found in the content section of D2L. Specifically, there are eight assignments that are to be turned in by specific dates (noted below) to the D2L dropbox for grading. This graded homework is worth 80 points or approximately 16.67% of your final grade. Homework is an important component to the course as it not only contributes significantly to your final grade but also gives you practice and review for the quantitative

items that might appear on exams. (Please note that the assigned problems are only a sampling of the techniques that we will discuss during the course. Make sure that you give yourself adequate practice and replication of all of the techniques we discuss by working additional problems found at the end of each chapter. Solutions for many of the chapter problems can be found at the back of the textbook.) On the day that an assignment is due, the D2L dropbox will accept assignments up until 11:59 p.m. Late homework assignments will not be accepted as solutions will be posted soon after their collection.

Deadlines for homework are posted in D2L and noted below along with their point value:

    Homework 1 -- due 11:59 p.m., Wednesday, January 27   (13 points)
    Homework 2 -- due 11:59 p.m., Wednesday, February 3   (7 points)
    Homework 3 -- due 11:59 p.m., Wednesday, February 17   (12 points)
    Homework 4 -- due 11:59 p.m., Wednesday, March 2   (8 points)
    Homework 5 -- due 11:59 p.m., Wednesday, March 23   (8 points)
    Homework 6 -- due 11:59 p.m., Wednesday, April 6   (12 points)
    Homework 7 -- due 11:59 p.m., Friday, April 22   (12 points)
    Homework 8 -- due 11:59 p.m., Friday, April 29   (8 points)

6. Two bonus opportunities using the EXCEL spreadsheet are also provided. Each is worth 8 points and involves an instructional video that provides a similar example of the bonus problems' solution using the spreadsheet. It is optional on your part but it is a way of supplementing your total points in the course, and it does provide some exposure to spreadsheet solution which is also illustrated in the textbook. Bonus assignments, the videos, and their due date can all be found on D2L.

7. Final grades are assigned according to the criteria described under the "Grading Policy" category listed previously. An 88-76-64-52 grading scale will be used which implicitly builds in an automatic curve (compared to the standard 90-80-70-60 scale.) In general, incomplete grades are not awarded in this course.

8. Instructor Response -- The instructor will try to respond to student inquiries within 48 hours during Monday-Friday business hours. In general, it is often hard to adequately answer long quantitative inquiries via email. Coming by my office during office hours or phoning may be better avenues for these issues. Students can expect grades for assignments and tests to be posted to the Gradebook in D2L within one week of their receipt.

9. <u>Make-up Policy</u> -- Students are expected to take each exam on the date given and submit each assignment when due. Late homework assignments as previously mentioned <u>will not be accepted</u>. They can always be turned in early and are assigned well in advance of the due date. Only under rare circumstances would a makeup exam be given. Such exceptions must be approved by me and student notification of a conflict should occur well in advance of the exam.

University Policy

<u>Drop Policy</u>
Information about university drop policy and dates is at this website:
http://registrar.okstate.edu/
See "academic calendar" on the left side of the page and go to "Spring 2016 Term(Details)."
To drop this course, contact the Registrar's office, (405) 744-6876, or drop through SIS (Student Information Services).

<u>Academic Integrity</u>
Oklahoma State University is committed to the maintenance of the highest standards of integrity and ethical conduct of its members. This level of ethical behavior and integrity will be maintained in this course. Participating in a behavior that violates academic integrity (e.g., unauthorized collaboration, plagiarism, multiple submissions, cheating on examinations, fabricating information, helping another person cheat, unauthorized advance access to examinations, altering or destroying the work of others, and fraudulently altering academic records) will result in your being sanctioned. Violations may subject you to disciplinary action including the following: receiving a failing grade on an assignment, examination or course, receiving a notation of a violation of academic integrity on your transcript (F!), and being suspended from the University. You have the right to appeal the charge. Contact the Office of Academic Affairs, 101 Whitehurst, 405-744-5627,
http://academicintegrity.okstate.edu/.

<u>Accessibility</u>
Any student in this course who has a disability that may prevent him or her from fully demonstrating his or her abilities should contact the instructor as soon as possible, so we can discuss accommodations necessary to ensure full participation and facilitate your educational opportunity. For more information about OSU Student Disability Services, please go to: http://sds.okstate.edu.

COURSE OUTLINE

TOPICS	READINGS
I. Introduction	Chpt. 1&2, pp. 2-64
II. Decision Theory	Chpt. 5s, pp. 212-226
	(omit sensitivity pp. 220-221)
III. Linear Programming	Chpt. 19, pp. 832-848
IV. Forecasting	Chpt. 3, pp. 72-120
	(omit pp. 89-97)

EXAM 1

V. Product & Service Design/	Chpt. 4/4s, pp. 132-178
Reliability	(omit availability pp.175-176)
VI. Capacity Planning	Chpt. 5, pp. 182-207
VII. Process Selection	Chpt. 6, pp. 234-248
VIII. Facility Layout	Chpt. 6, pp. 248-276

EXAM 2

IX. Design of Work Systems	Chpt. 7, pp. 284-315
X. Location Planning & Analysis	Chpt. 8/8s, pp. 332-367
XI. Quality Management	Chpt. 9, pp. 370-411
XII. Quality Control	Chpt. 10/10s, pp. 418-470

EXAM 3

XIII. Inventory Management	Chpt. 13, pp. 554-600
	(omit shortages pp. 582-585)
	(omit single-period pp. 588-592)
XIV. Material Requirements Planning (MRP) & ERP	Chpt. 12, pp. 508-542
XV. Project Management	Chpt. 17, pp. 740-781

EXAM 4 (FINAL)

Also: Stevenson's online learning center has many excellent study aids.
www.mhhe.com/stevenson12e