

*College of Business Administration  
California State University, Sacramento*

**READ THE SYLLABUS**

**ANY QUESTIONS THAT CAN BE ANSWERED IN THE SYLLABUS  
WILL RESULT IN MY TELLING YOU TO READ THE SYLLABUS**

**OPM 101  
Operations Management  
Spring 2008**

Instructor: Serge M. Karalli, Ph.D.  
Telephone (o): (916) 278-6722  
do not leave messages in this number's voice mailbox as I only sporadically check this phone  
Telephone (c): (916) 549-5526  
leave messages in this number's voice-mail for faster response  
E-mail: Use the provided course email for electronic correspondence  
Office: Tahoe 2010  
Office Hours\*: Tuesday and Thursday 8:00 AM - 8:50 AM \*\*  
Tuesday 5:00 AM - 5:50 PM \*\*  
Cell Phone hours: 9:00 AM – 8:00 PM

**I. Course Description**

Operations Management deals with the part of an enterprise that creates value for its customers. It involves the integration and coordination of all the activities and processes associated with the design, production and distribution of goods and services. As global competition in both goods and service sectors increases, a firm's survival and success depend upon how well it integrates the operations function into its enterprise planning and strategy. Thus, it is essential for business managers at all levels and from all business functions to acquire an understanding and appreciation of operations. This course is designed to address key operations issues in manufacturing and service organizations that have strategic as well as tactical implications. The specific objectives include:

- Understanding the role of operations management in the overall business strategy of a firm.
- Understanding the interdependence of the operating system with other key functional areas, like marketing, finance, accounting, human resource, etc.
- Identifying and evaluating key factors and the interdependence of these factors in the design and control of effective operating systems.

---

\* Mandatory faculty meetings might be scheduled during office hours. I will notify you if that happens.

\*\* TENTATIVE

- Learning how to use a range of concepts and analytical tools to solve common operational problems such as demand forecasting, capacity planning, quality control, production planning, material planning and inventory control, etc.

## II. What book and materials are required?

**1. REQUIRED:**

OPM 101 package, ISBN 053642201x  
(custom text and iclicker rebate card)

**2. REQUIRED:**

Littlefield Technologies access codes

**3. REQUIRED:**

iClicker

## III. How will my grade be computed?

1	Littlefield Simulation Exercise	20%
2	iClicker Quizzes	20%
3	Midterm 1	20%
4	Midterm 2	20%
5	Final Exam	20%

## **TEAMS:**

*Students will be divided into teams. You can form your own group, or you may choose to be randomly assigned to a group. Team members will work together throughout the semester.*

### **1. TWO Littlefield Simulation exercises and reports (20%)**

During the semester, there will be 2 factory simulations in which teams of two or three will compete against the other teams in the class.

Each simulation run will be evaluated as follows:

- (i) Write-up/analysis (70%)
  - An executive summary (see guidelines below) will be required after each simulation study. An appendix is essential to show calculations and or explain you strategy in greater detail.
  - I will evaluate your reports according to the simulation write-up/analysis rubric on your course page. I urge you to review this evaluation so that you can improve your report-writing skill on your next writing assignment.
  - Next, I will rank-order the reports, and assign grades on a strict normal distribution.
- (ii) Performance (20%)
  - Your performance ranking will determine this portion of your grade. You can expect 0, 10, or 20 points, depending on the tier in which you fall.
  - Groups in the top tier will be required to present their strategy to the whole class.
- (iii) Team-member evaluations (10%)
  - Your peer review rating will determine this portion of your grade. Your peers will evaluate your contribution to the team effort.

Top-ranked groups will be required to present their strategy to the whole class.

### **2. Online/In-Class Quizzes (20%)**

#### **Online Quizzes**

Throughout the semester, there will be approximately 7-10 online self-study quizzes. Most self-study quizzes take 15 to 20 minutes and covers material from the **reading assignments**.

Some self-study quizzes are intended to help the student master topics covered in class. These are usually due during or by the end of the coverage of a course topic. These may take 15-20 minutes. The purpose of these self-study quizzes is to keep students up-to-date. You may use your **text book** and **notes that you prepare** to complete the self-study quiz.

You will typically be allowed three attempts for each quiz, and your highest grade will be recorded in the WebCT grade book. The quiz will only be available for a few days. The

availability (time the quiz starts and the time that the quiz ends) will be posted explicitly on WebCT.

I encourage you to **prepare** in groups if the suits your learning style. However, you are expected to complete these quizzes **on your own**. Each quiz will be a set of questions drawn from a large set. Each do-over will be a different quiz covering the same topics.

**Missed quizzes cannot be made up. Missed quizzes will represent a loss of opportunity to earn points towards your final grade.**

### **In-Class Quizzes**

Quizzes will also be administered in class. You will need your clickers to participate and earn points. They are similar in nature and intent as the online quizzes. Exceptions, of course, include: no do-overs and required attendance.

### **4. Exams #1 & #2 (20% each)**

### **6. Final (20%)**

Each exam will be **closed book**. **B.Y.O.Calculators—sharing calculators during exams will NOT be allowed.** Failure to bring a calculator can be disastrous to your exam performance.

You will be allowed to prepare two 8 ½ × 11 pages of notes and use them on the exams. You may fill both sides as you see fit. Throughout the semester we will discuss useful ways to fill these “cheat-sheets”. Additional materials, such as probability tables, will be provided for you.

The best way to prepare for these exams is to:

- (a) come to class and participate as described above
- (b) do **all** the assigned homework problems

## **IV. How will my letter grade be assigned?**

<b>Percentile Ranking</b>	<b>Letter Grade</b>
90 <sup>th</sup> percentile and above	A
80 <sup>th</sup> to 89 <sup>th</sup> percentile	B
70 <sup>th</sup> to 79 <sup>th</sup> percentile	C
60 <sup>th</sup> to 69 <sup>th</sup> percentile	D
59 <sup>th</sup> percentile and below	F

Note that there are no minuses and plusses assigned to your grade. Also note that any grade below an 89.99 precludes you from an “A”. I encourage you to see this policy as an incentive to work harder (and therefore learn more operations management!) to make sure

you do not miss the letter grade that you strive to get. As such, post-course attempts at grade negotiations to a higher letter grade because "I came so close" are fruitless.

Regarding the level of achievement required to get a particular grade, read the **CSUS official grading policy webpage**: <http://www.csus.edu/admbus/umanual/UMG05150.htm>.

Note the following from the CSUS official grading policy webpage:

### Grading Policy

#### DEFINITION OF GRADE SYMBOLS

- A Exemplary achievement of the course objectives. In addition to being clearly and significantly above the requirements, work exhibited is of an independent, creative, contributory nature.
- B Superior achievement of the course objectives. The performance is clearly and significantly above the satisfactory fulfillment of course requirements.
- C Satisfactory achievement of the course objectives. The student is now prepared for advanced work or study.

This policy is official and will be enforced! Upon perusing the above, you will notice that many students consider "B" and "C" level work to be an "A". In fact, the description of a "B" grade makes earning a "B" very challenging. Therefore only a handful of students can expect to earn an "A".

#### **THE NEW AND OFFICIAL OPM 101 DEFINITION OF GRADE SYMBOLS**

- A When applying for a job using OPM 101 course requirement skills, the student was the hiring authority's first pick.
- B When applying for a job using OPM 101 course requirement skills, the student was the hiring authority's second pick.
- C When applying for a job using OPM 101 course requirement skills, the student was generally rated as very competent by the hiring authority, but would not be offered the job.

These are to be regarded as fully compatible with the university definitions and just worded differently for a business college audience.

Read the policy on [incompletes](#) carefully as it will be enforced as well.

## **V. What is expected of me in this course?**

This course is intended to prepare you to

- (i) learn the basics of operations management **and**
- (ii) conduct yourselves professionally in the workplace

To meet objectives (i) and (ii), I expect the following:

### **1. Class Preparation**

To succeed in this course you are expected to spend two or more hours per class meeting preparing for the lecture, reviewing the lecture, practicing exercises and completing online assessments. Some of you may require more time. **To be realistic, you should plan on**

**three hours per class meeting.** As such your schedule needs to be flexible so that you can schedule six, nine, or more hours for this course on any given week.

- (a) **Use the course Website.** Check the course page frequently (several times a week—daily is optimal) for announcements, assignments, documents, templates, and grades. If recurrent questions come to me by email, I will address them so that every student can view the answers.
- (b) **Use WebCT.** All correspondence will take place via WebCT only. Check the course page frequently (several times a week—daily is optimal) for quizzes.

Homework exercises will be handed out approximately every week. It is essential for you to do each of the problems carefully. The homework will help you understand and grasp the subjects. **Homework exercises are also intended to prepare you for the exams.**

- (c) Although you are not required to turn in your homework, your best strategy is to complete assigned problems by the next lecture or two. Doing so will
  - o reinforce what you learned in class
  - o enable you to seek feedback from the instructor
  - o prepare you fully for the exams
  - o provide you with a comprehensive review for the exams
  - o meet the stated learning objectives for each course topic

If you approach the lectures and homework assignments as one long exam-prep, you will be ready for the exams.

## **1. Class Participation**

You are required to come to **all** classes and to participate actively in the learning process. To do so, you need to **carefully read** the assigned materials (book chapters or cases) **before** each class and to **contribute to class discussion/exercises**. You will be assigned online self-study quizzes (either on WebCT or eGrade) to test your preparation. You will be required to complete the quiz before the class on which the preparation is due.

- (a) **Bring Your Calculator to class.** Central to your participation in this course is the use of **calculators** and other materials (to be specified by the instructor) during class. Students are required to bring a calculator to class and use it when instructed to do so. Students are also required to know how to operate their calculators. The use of the calculator feature on your cell phones is **not allowed** during exams and quizzes. I therefore strongly recommend you don't use your the calculator feature on your cell phones during in-class exercises. **Use the calculator that you plan to use during exams and quizzes.**
- (b) **Course as a Team Sport.** We will approach this course as a team sport. No athlete goes to practice expecting to sit back and watch the coach put on a slide show, thinking 'I'll look over my notes during the week and figure out how I'll be playing during the game'. This would never work for the Patriots or the Red Sox,

and it will not work for you in MGMT180. Each class will be a workout! We will run drill sessions, practicing for the big games—the midterm and the exam. You will practice and coordinate your moves in class using your calculators. You will learn from the exercises as you practice them. And you will also learn from each other.

## 1. Professional Demeanor<sup>1</sup>

You are also required to maintain a professional demeanor toward and display proper respect for one another and faculty members at all times. Although a relaxed atmosphere that is conducive to learning is sought, you may not mistake that for a license to behave in a manner that is not businesslike. Misbehavior of any kind in classroom will not be tolerated, and will be punished severely, at least by a low grade or an F. **A typical consequence of misbehavior is to take five points off your final grade.**

The following list of examples of professional conduct is by no means complete. The onus is on you to make ongoing efforts to hone your manners.

### (1) Before Class

***Come to class on time***, except for the rare and unavoidable occasion.

***If you must come to class late***, take precaution to avoid being disruptive:

- DO enter the room quietly,
- DO take a seat on the edges of the classroom, and
- DO NOT walk in front of the professor or other students

### (2) During Class

#### a. *Basics*

- ***Do not*** leave class once the lecture has begun.  
***Instead***, Plan your environmental breaks and interview schedules accordingly. On the rare occasion where you must leave class, do so with utmost discretion.
- ***Do not*** take calls in class or leave class to return calls.  
***Unless*** you are expecting an emergency call; do let me know in advance.
- Turn off the sound on pagers and cell-phones when entering class.

#### b. *Your learning environment*

In order to provide a suitable learning environment for you, I will not tolerate the behaviors that disrupt you during the lecture.

- ***Do not*** carry on personal conversations, pass notes, make faces, giggle, or otherwise interacting inappropriately with neighboring class members during class time  
***You may*** assist your neighbors during in-class exercises (except quizzes)
- ***Do not*** sleep, read the newspaper, or surf the web on your laptop

---

<sup>1</sup> "demeanor." *Dictionary.com Unabridged (v 1.1)*. Random House, Inc. 19 Jun. 2007. <Dictionary.com <http://dictionary.reference.com/browse/demeanor>>.

**Instead**, use the class time to learn the material, assist your neighbors during exercises, use the laptop to take class-notes and follow online tutorials.

c. *Misbehavior*

Examples of **misbehavior** that tend to occur when I ask tough questions and set high expectations include:

- [derisive](#)<sup>2</sup> remarks to lecture content – whether you make them to the entire class or to your neighbors
- [saucy](#)<sup>3</sup> conversational styles during classroom discussion
- temper [tantrums](#)<sup>4</sup> or [hissy fits](#)<sup>5</sup>

You may alternatively engage in the following **constructive behaviors**:

- request clarification – as often as necessary – when difficult material is presented
- ask for help on proceeding with difficult assignments
- graciously and professionally admit not having an answer and express willingness to provide one next time we meet

(3) At the End of Class

- **Do not** begin putting your books away until the lecture is completed
- **Do not** sit on the edge of your seat or partially stand from your seat at the end of the lecture
- **Instead** you may politely inform me that I just ran past the scheduled end-of-class time

(4) Outside of Class & at all times

- **Do not** use vulgar language
- **Do not** be rude to **any** faculty member
- **Do not** be loud – walking or talking – on floors with faculty offices
- **DO** address your faculty as “Professor Smith”, “Dr. Jones”, or “Dean Varshney” as appropriate
- **Avoid** “Mr. Collins”, “Miss Johnson”, or “Ms. Stevens” with full-time faculty unless they instruct you otherwise. When *formally* addressing another person, you need to use a title along with the person’s last name. As such, “Erickson, how are you doing” is improper.

---

<sup>2</sup> "derisive." *Dictionary.com Unabridged (v 1.1)*. Random House, Inc. 19 Jun. 2007. <Dictionary.com <http://dictionary.reference.com/browse/derisive>>.

<sup>3</sup> "saucy." *Dictionary.com Unabridged (v 1.1)*. Random House, Inc. 19 Jun. 2007. <Dictionary.com <http://dictionary.reference.com/browse/saucy>>.

<sup>4</sup> "tantrum." *Dictionary.com Unabridged (v 1.1)*. Random House, Inc. 19 Jun. 2007. <Dictionary.com <http://dictionary.reference.com/browse/tantrum>>.

<sup>5</sup> "hissy." *Dictionary.com Unabridged (v 1.1)*. Random House, Inc. 19 Jun. 2007. <Dictionary.com <http://dictionary.reference.com/browse/hissy>>.

#### IV. What are the course policies?

1. Cheating in any form will be reported both to the College of Business and to the University, and will automatically result in an F in this course. Read the information about academic dishonesty on the following website carefully as the rules will be enforced. <http://www.csus.edu/admbus/umannual/UMA00150.htm>
2. Misbehavior of any kind in classroom will not be tolerated, and will be punished severely, at least by a low grade or an F. A typical consequence of misbehavior is to change your most recent quiz grade to a zero. I also reserve the option to administer a quiz on the spot.
3. In case of an emergency, which will prevent you from taking an examination, I must be notified **in advance** in order for you to be eligible for a makeup. However, a makeup exam will cover **much more** material and will be **much harder** than the original one. Unexcused or unnotified absence means a "zero" grade for the test and will not be made up later. **Documentation must be provided to the instructor by the end of the following class meeting in order for an absence to be excused.**
4. Re-grading of quizzes and examinations will not be accommodated unless there are **exceptional** reasons to do so. Grades will not be subject to renegotiations.
5. Requests to complete **additional** assignments to boost your final grade will **NOT** be accommodated. Your opportunity to maximize your course grade is only by excelling in the graded assessments presented in this syllabus.

## VI. Course Outline

<u>Topic</u>	<u>Topic Description</u>	<u>Reading Assignment</u>
<b>1.</b>	<b>Introduction, Strategy, and competitiveness</b>	
	Introduction to Operations Management	<b>Chapter 1</b>
	Operations Strategy and Competitiveness	<b>Chapter 2</b>
<b>2.</b>	<b>Capacity Planning and Facility Location</b>	<b>Chapter 9</b>
	The Transportation Problem	<b>Supplement B</b>
<b>3.</b>	<b>Forecasting</b>	<b>Chapter 8</b>
<b>EXAM #1: To Be Scheduled</b>		
<b>4.</b>	<b>Waiting Lines</b>	<b>Supplement D</b>
<b>5.</b>	<b>Independent Demand Inventory Management</b>	<b>Chapter 12</b>
<b>EXAM #2: To Be Scheduled</b>		
<b>6.</b>	<b>Project Management</b>	<b>Chapter 16</b>
<b>5.</b>	<b>Quality</b>	
	Total Quality Management	<b>Chapter 5</b>
	Statistical Quality Control	<b>Chapter 6</b>
<b>8.</b>	<b>Aggregate Planning</b>	<b>Chapter 13</b>
<b>9.</b>	<b>Enterprise Resource Planning</b>	<b>Chapter 14</b>
<b>10.</b>	<b>Just-in-Time and Lean Systems</b>	<b>Chapter 7</b>
<b>FINAL EXAM: As scheduled by the university.</b>		

## **VII. Learning Objectives by Topic**

Common learning objectives for selected topics are given below. These are common learning objectives across all sections of MGMT180 in the CBA. Detailed learning objective by topic for this course (including additional learning objectives for the topics listed below) are provided in the study guides posted on WebCT.

**1. Forecasting:**

Explain the different types of forecasting techniques, compute a forecast and forecast error, and interpret and analyze the results.

**2. Inventory:**

Explain the basic concepts of inventory management, select appropriate models for managing inventory, and analyze the results from applying inventory models.

**3. Quality:**

Summarize the concepts of quality management, relate them to operations management, and evaluate and interpret data using quality tools in order to make recommendations for quality improvements.

**4. Project Management:**

Construct work breakdown structures, project networks, and Gantt charts; identify the critical path and compute path completion times.