# IDS 355 Introduction to Operations Management Fall 2012

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#### TAS/INSTRUCTORS FOR LAB SECTIONS:

TA/Instructor: TBD

E-mail:

Office Hours:

TA/Instructor: TBD

E-mail:

Office Hours:

**TA/Instructor:** TBD

E-mail:

Office Hours:

Call #	Day	Time	Room	TA	e-mail
14004	Monday	8:00 – 8:50am	TBD	TBD	
14005	Wednesday	3:00 – 3:50pm	TBD	TBD	
14006	Friday	9:00 – 9:50am	TBD	TBD	
14007	Tuesday	2:30 – 3:20pm	TBD	TBD	
14008	Thursday	4:30 – 5:20pm	TBD	TBD	
14009	Friday	3:00 – 3:50pm	TBD	TBD	
14010	Tuesday	8:00 – 8:50am	TBD	TBD	
14011	Monday	5:00 – 5:50pm	TBD	TBD	
30295	Wednesday	9:00 – 9:50am	TBD	TBD	
30296	Thursday	9:30 – 10:20am	TBD	TBD	
30297	Thursday	5:00 – 5:50pm	TBD	TBD	
30298	Thursday	3:30 – 4:20pm	TBD	TBD	

# 1. General Information

Operations Management is the management of systems or processes that create goods and/or provide services. It is about how efficiently a company can produce goods and /or provide services. As companies are increasingly competing on the basis of time, cost and service, managing operations becomes critical for the competitiveness of any business. Studying operations management gives you important knowledge concerning how they do this.

Since operations are a key part of the existence of a company, everyone in business deals with them directly or indirectly. If you are involved in making a decision concerning marketing or accounting or finance or human resources or information systems, you should be concerned about operations. In this course, you will learn about the operations manager's view of the company and will learn about the techniques and procedures of making good decisions in managing operations. Activities in the lab will show you how you can use analytical tools to assist in decisions affecting operations.

# **1.1 Course Components**

**Lectures:** Lectures will follow the course outline, although minor adjustments may occur during the semester. Most of the lecture time will be devoted to reviewing and applying reading from the book. Videos may be shown in class to illustrate some of the concepts explained throughout the lectures. We may also cover technical issues related to lab exercises and homework. Students are expected to read the relevant textbook chapters and PowerPoint slides prior to lecture.

**Laboratory (Discussion) Sections:** There will be 10 lab sessions during the semester. In these sessions you will work on problems related to the topics discussed in the lecture classes using Excel, TreePlan, and MS Project. The problems assigned for homework assignments will be similar to the problems discussed in the lab sessions. Attendance will be taken in the lab sessions.

A brief outline of topics that will be covered in this course and the schedule of classes and lab sessions are provided at the end of this document.

#### 1.2 Course Materials

#### **Textbooks**

- Operations Management (portions of Operations Management by Stevenson, 11<sup>th</sup> edition, and Service Management, 7<sup>th</sup> edition, by Fitzsimmons & Fitzsimmons). Available as an e-book download from McGraw-Hill.
- A. Ouksel and D. Lundquist, IDS 355 Lab Manual, 3<sup>rd</sup> edition. This will be on sale in the bookstore.

#### **Software**

All software needed for this course is available in the UIC computer labs. Students who wish to use their own computers will, of course, need to acquire their own copies of the software. This course uses:

- Microsoft Excel
- Microsoft Project
- TreePlan add-in for Excel (available as a free demo at www.treeplan.com)

#### 1.3 Blackboard Sites

We will be using the Blackboard facility for this course. If you are enrolled in this course, you will also be enrolled on two Blackboard sites. Everyone taking IDS 355 this semester will be enrolled on the main IDS 355 site. This site will give most of the information concerning this course as well as PowerPoint slides for lectures. You will also be enrolled in another Blackboard site for your lab/discussion section. You will use the lab site to post homework assignments and to check your lab grades. To access these sites, point your browser to http://blackboard.uic.edu. Your Blackboard login name is your UIC NetID (lower case!). This is the part before the @ in your UIC e-mail address; your password is your usual UIC password (the

one you use to access UIC computers). If you have any problems using Blackboard, contact your TA. Be sure to give the TA your name, NetID, and lab section.

All major announcements about the course will be posted on the main Blackboard course site. Important notices will generally be forwarded to your e-mail address. However, you are ultimately responsible for checking Blackboard to keep informed regarding any course updates.

#### 1.4 E-Mail Communication

Professors and teaching assistants will generally respond to your e-mails within 48 hours. However, the large number of students can generate large volumes of e-mail and sometimes we overlook a message. If you do not receive a response within 72 hours, please resend it. In all cases, **do not e-mail us questions about an assignment two hours before the deadline and expect an immediate response!** 

When e-mailing the professors or your TA, please include the following in your subject line: IDS 355, Lab Section, TA Name. For example, if you are in the Monday 2pm lab section, and your TA is named Smith, please have your subject line read: **IDS 355, M 2pm, Smith**. This will help us process your request faster. Also, when using Blackboard's e-mail tools, please send e-mail **only** to the intended recipient, not one of the group options, which may cause your e-mails to be marked as spam.

- **Homework and Labs:** Questions about homework assignments (like assistance and grading) or labs should be sent to your TA (see e-mail addresses on the first page).
- **Lectures and Exams**: Questions regarding lecture material, content to be covered on exams, or exam grading should be sent to Prof. Ouksel (aris@uic.edu) or Prof. Lundquist (dlundq1@uic.edu).

Once again, please make sure to follow the outlined policies regarding course communication. It is in your best interest to contact the right person so your issue can be resolved as soon as possible.

# 1.5 Attendance Policy

It is important for you to attend lectures and labs. As a courtesy to your instructors and fellow students, please arrive on time and, if you must leave during lecture, do so quietly. In lecture, major concepts and definitions will be presented and discussed. Your best information about exam content will come from lectures, lab sessions, and homework. If you miss class, you can find out what was covered from an updated course syllabus (available on Blackboard) or from consulting with fellow students.

Valid Excuse: Although it is not possible to list every possible valid excuse for missing class, good examples are medical emergencies (either your own or a dependent's), participation in UIC athletic events, military obligations, and court dates. As a general rule, if you have scheduled the reason yourself, it is not a valid excuse for absence!

If you miss a midterm without a valid excuse, you will receive a zero for it. If you miss a final exam without a valid excuse, you will receive an incomplete for the course; to pass the course, you will need to take the final exam in a future semester. You may only be excused from the regularly scheduled times for the midterms and final under the two following circumstances (in either case, proof of your excuse will be required):

- 1. If you provide a note from a doctor concerning your unavoidable absence.
- 2. If you provide the instructor with a valid reason for your absence in advance.

If you miss an exam with valid cause, you should notify your instructor as soon as possible to schedule your make-up exam. If you miss a lab session, please inform your TA. Should you be absent for an extended period of time, you should notify your instructors, TA, and your college advising office; for most students, this will be the undergraduate office of the College of Business Administration.

#### 1.6 In-Class Behavior

During class, please help create a good learning environment by remaining reasonably quiet and keeping your cell phone silent. As our class has over three hundred students, students talking can make it very difficult for anyone to hear. If you must communicate with your fellow students, please use silent options like texting or writing notes or, better yet, wait until after class. Students who cannot comply with these basic tenets of courtesy, will be publicly shamed by one or more of the following:

- Being requested to stand up and introduce themselves to the class
- Being asked what is so urgent that it cannot wait until the end of lecture
- · Being asked to leave for the remainder of the lecture or lab

#### 1.7 Students with Disabilities

The University of Illinois at Chicago is committed to maintaining a barrier-free environment so that individuals with disabilities can fully access programs, courses, services, and activities at UIC. Students with disabilities who require accommodations for full access and participation in UIC Programs must be registered with the Disability Resource Center (DRC). Please contact DRC at (312) 413-2183 (voice) or (312) 413-0123 (TDD).

# 2. Grading

You will be responsible for reading the textbook, learning material presented in lectures and labs, and doing homework assignments using Excel, TreePlan and MS Project. You will be evaluated on lab attendance, homework, two midterms, and a final exam. Also, quizzes may be given during lectures without advance notice announcements. Lecture quizzes will be given as extra credit worth 10pts (or 1% toward your course grade) and **may** total up to 50 points of bonus points (an extra 5%). **No additional extra credit opportunities will be offered.** Excluding quizzes, the breakdown of points is as follows:

| Homework (5 assignments @ 40pts) | 200 | Lab Attendance (10 labs @ 5pts) | 50 | Midterm (2 exams @ 200pts) | 400 | Final | 350 | Total: | 1000 |

# 2.1 Grading Scale

Grades at the end of the semester will be based on the total points that you accumulate. The minimum point total required to earn a grade may be adjusted downward but will not be adjusted upward. The tentative grading scale is:

900 and up	Α
800 to 899	В
700 to 799	С
600 to 699	D
Below 600	F

#### 2.2 Exams

There will be two midterm exams worth 200 points each, and a final exam worth 350 points. For each exam, an FAQ file will be posted on Blackboard. The final exam will be comprehensive but will emphasize material covered after the second midterm; specific details will be given in the week before the final. The midterms and final will be scheduled as per the course outline on the last page of this syllabus. Exams are multiple-choice and given on scantrons; bring pencils. For all exams, students are allowed to use calculators and a single 3"x5" "cheat card" with any notes or formulas you choose to put on it.

### 2.3 Homework Assignments

There are 5 graded homework assignments worth 40 points each. They will be posted on the Blackboard lab site at one week prior to the due date. Your solutions and answers must be submitted through the Blackboard site for your specific lab section by the due date and time for you to receive full credit. **Please do not submit your homework via e-mail or the Digital Dropbox on Blackboard!** The homework should be submitted using the same link from where it can be downloaded from Blackboard. Note that it is not possible to alter or resubmit an assignment once it has been uploaded.

Please name your homework files as [NetID]hw#. For example, if your netID is csmith2, the file for your third homework assignment should be named csmith2hw3.

If you ask your TA at least two days in advance, you may receive up to three-day deadline extension without penalty if you provide a valid excuse (see above). Otherwise, late submissions will have 10pts automatically deducted for each late day, and will not be accepted after the corresponding solutions are posted (usually no more than 3 days after the deadline). You are urged to submit your homework long before the deadline, as the system may not be up at the deadline time. It is your responsibility to make sure that the homework is uploaded on time.

#### 2.4 Lab Attendance

Attendance will be taken at the start of each lab session. Attending each lab session from start to finish will earn full credit (5pts). **Two points will be deducted for arriving late.** If you are more than twenty minutes late for the lab, you will receive no attendance credit. Students who must leave lab early will receive pro-rated attendance credit, approximately one point per ten minutes spent in lab.

# 3. Course Administration

This course and its coursework are being administered under the policies of the University of Illinois at Chicago (UIC) College of Business Administration Honor Code. All students are expected to respect and uphold this code. Violations of the Honor Code are just causes for discipline under the University of Illinois at Chicago Student Disciplinary Procedure, and all allegations of Honor Code violations shall be handled pursuant to that Procedure.

# 3.1 Honor Code for the College of Business Administration

As an academic community the College of Business Administration at the University of Illinois at Chicago is committed to providing an environment in which teaching, learning, research, and scholarship can flourish and in which all endeavors are guided by academic and professional integrity. All members of the college community – students, faculty, staff, and administrators – share the responsibility of insuring that high standards of integrity are upheld so that such an environment exists.

In pursuit of these high ideas and standards of academic life, as a student I hereby commit myself to respect and uphold the University of Illinois at Chicago (UIC) College of Business Administration Honor Code during my entire matriculation at UIC. I agree to maintain the highest moral and ethical standards in all academic and business endeavors and to conduct myself honorably as a responsible member of the college academic community. This includes the following:

- Not to seek unfair advantage over other students, including, but not limited to giving or receiving unauthorized aid during completion of academic requirements;
- To represent fact and self truthfully at all times;
- To respect the property and personal rights of all members of the academic community.

#### 3.2 Plagiarism and Inappropriate Use of Others' Work

The University standards on originality of submitted work apply in this course: don't copy from other students or turn in other students' work as your own. If there is clear evidence of copying another student's work on a quiz, test, exam or homework, the involved students will receive zeroes for that grade and formal disciplinary action may be undertaken.

**Homework assignments:** Talking to other students about homework assignments is a good way to enrich your understanding of the material. However, each student must write up the assignment on his or her own. To avoid misuse of your work, you should not share your papers or files with others.

COPYING WILL RESULT IN YOUR RECEIVING A ZERO SCORE FOR THE WHOLE ASSIGNMENT, EVEN IF COPYING IS LIMITED TO A SINGLE QUESTION. Each student must independently create an Excel file and enter the data and formulas in their own spreadsheet. You may not submit another student's file, and groups of students may not submit copies of the same file. Cutting and pasting from another student's file is also not allowed. If the same file is submitted by more than one student, all involved students will receive a grade of zero for that assignment. If it is obvious that the information was cut and pasted from another student's file, all involved students will also receive a grade of zero for that assignment. Repeated incidents will result in failing the course.

**Exams and quizzes:** There is to be no copying or collusion during exams and quizzes. Submitting exams or in-class quizzes for other students will be regarded as cheating. To inhibit cheating, multiple versions of exams will be provided.

# IDS 355 Fall 2012: Course Outline

This outline is for planning purposes only. The actual schedule may vary as the course proceeds.

Week	Topic	Reading	Lab	Lab Topic	Homework
Week 1	Introduction to Operations	pp. 2 – 38	No Lab		
August 27	Management				
Week 2 September 3	The Nature of Services	pp. 39 – 56	No Lab		
Week 3 September 10	Service Strategy	pp. 57 – 81	Lab 1	Exercise 1: Efficient Use of Excel	
Week 4 September 17	Forecasting	pp. 82 – 141	Lab 2	Exercise 2: Data Tables and Graphs	Homework 1 Posted
Week 5 September 24	Strategic Capacity Planning for Products and Services	pp. 142 – 171	Lab 3	Exercise 3: Forecasting Methods for Stationary Series	Homework 1 Due
Week 6 October 1	Midterm 1 (Monday) Competitiveness, Strategy, and Productivity	pp. 172 - 204	Lab 4	Exercise 4: Forecasting Methods for Non- Stationary Series	Homework 2 Posted
Week 7 October 8	Decision Theory	pp. 206 – 226	No Lab		Homework 2 Due
Week 8 October 15	Service Facility Location	pp. 227 – 253	Lab 5	Exercise 5: Decision Theory Problems	
Week 9 October 22	Inventory Management	pp. 354 – 417	Lab 6	Exercise 7: Location Assignment Problems Exercise 8: Data Sorting	Homework 3 Posted
Week 10 October 29	Inventory Management (continued) Supply Chain Management	pp. 354 – 417 pp. 254 – 290	Lab 7	Exercise 9: Inventory Management	Homework 3 Due
Week 11 November 5	Quality Control  Midterm 2 (Friday)	pp. 310 – 353	Lab 8	Exercise 10: Monte Carlo Simulations	Homework 4 Posted
Week 12 November 12	Project Management	pp. 484 – 535	Lab 9	Exercise 11: Simulations for Inventory Decisions	Homework 4 Due
Week 13 November 19	Technology in Services	pp. 291 – 308	Lab 10	Exercise 12: Project Planning with Microsoft Project	Homework 5 Posted
Week 14 November 26	Managing Capacity and Demand	pp. 455 – 483	No Lab		Homework 5 Due
Week 15 December 3	JIT and Lean Operations	pp. 418 – 454	No Lab		
Week 16 December 10	FINAL EXAM	LOCATION TBA			

NOTE: The midterms are given during lecture time. It is your responsibility to arrive on time for them. If you are late, you will have correspondingly less time for your exam.