

## Syllabus for IDS 371, BUSINESS STATISTICS II Spring 2007

<b>Instructor</b>	Yuliya Yurova University Hall (UH), Room 2450 <a href="mailto:yyurov2@uic.edu">yyurov2@uic.edu</a>
<b>Classroom Location</b>	Lecture Center Building E, Room E112 ( <i>both sections</i> )
<b>Class Meeting Time</b>	Tuesday, Thursday, 11:00 – 12:15 am call # 16724, 3 credit hours Tuesday, Thursday, 12:30 – 1:45 pm call # 16722, 3 credit hours
<b>Office hours</b>	Tuesday 10:00 – 11:00 am Thursday 10:00 – 11:00 am
<b>Classes</b>	January 16 – May 4, 2007
<b>Week of Finals</b>	May 7 – May 11, 2007
<b>Spring Break</b>	March 26 – March 30, 2007

### I. Course Description

This course continues introduction of statistical concepts and techniques for managerial decision making. It discusses in detail inference and hypothesis testing, statistics for quality control, simple and multiple regression, analysis of variance, and time-series techniques as well as their application in business analysis.

### II. Course Prerequisites

1. IDS 270 (Business Statistics I) or the equivalent. Note: Prerequisites for IDS 270 include IDS 100 (Intro to Business Computing) and MATH 160 (Finite Math for Business).
2. A minimum of three hours per week on reviewing class notes and completing assignments.

### III. Pedagogical Approach

We will rely on lectures, class discussions of statistical problems and exercises, as well as demonstrations of applied statistical analyses to achieve learning objectives of the course. The course outline specifying a tentative schedule for lectures, quizzes and examinations is given at the end of this document.

## Organization

The key to success in this course is to apply acquired knowledge through regular practice. Therefore, students are encouraged to work individually as well as in GROUPS. I require students to form groups during first week of classes. Once the group is formed it cannot be changed, therefore, no complaints will be accepted.

Team liaisons will turn in the lists of group members during class time, Wednesday, September 6<sup>th</sup>, during the second week of classes. If you unable to find a group, please, inform the instructor and I will assign you to a group.

## Homework

Homework assignments are designed to strengthen the knowledge of statistical concepts. Assignments will be posted on Blackboard. I strongly recommend working on homework assignments in groups as it will help you to improve your skill of communicating complex statistical concepts to your future business colleagues.

Homework assignments will NOT be collected and graded. Students are expected to do all the problems for practice. HOWEVER, during class sessions, I WILL randomly ask a GROUP to give a solution to a problem from the list of homework assignments.

## Case Studies

There will be two case studies designed to develop skills in application of statistical concepts learned in class. Each GROUP is required to submit 2 written analyses of case studies. When grading submitted reports, I will assign identical grades to group members. I will not impose regulations for the division of labor within group. Each group should self-regulate the division of labor to complete assignments. When preparing case reports, you should structure the list of deliverables as follows:

### Deliverables for Case Study Report

- A list of names of team members
- Case study title
- Research Question
- Data Used
- Method(s) Employed
- Analysis of Results
  - Estimated Model
  - Hypothesis Tested
  - Inferences
- Recommendations/ Conclusions

You can add more items to this list if you think that this is necessary. As for the length of your Case Study Report, it should not exceed 2 single-spaced pages, written with Times New Roman 12 points. Supplementary documentation such as graphs, tables, and appendices does not count toward this

number of pages. Consult the Course Outline section given at the end of this syllabus to see what cases have been reserved for written analyses.

### **Policy Regarding Late Submission of Case Study Reports**

Submissions made past due dates will be accepted with a penalty of 10% deduction for each day past the due date.

### **Quizzes**

Six GROUP quizzes will be given during the course. Quizzes are intended to prepare you for the examinations and to encourage you to work in groups. Each quiz will test the knowledge of one topic and will be based on homework assignments and examples discussed in class. All quizzes will be graded, therefore, you must put the name of all group members, who actually took the quiz. If you miss the quiz, you will NOT get the grade of your group and will get NO points.

### **Examinations**

There will be two examinations in this course: mid-term and final. The final examination is comprehensive and will cover all topics discussed in class during the semester. Both examinations will be open-book and open-notes. Both examinations are INDIVIDUAL, therefore, submit your own, not your group member, work. Please, bring your own calculators.

### **Policy Regarding Missed Exams**

Please reserve the dates for the exam. If you are unable to attend the exam, you must discuss this with your instructor well in advance. If you miss an examination, kindly provide a doctor's memo, stating that you were incapable of taking that exam must be presented. I will provide a make-up exam opportunity only if you present documented evidence of sickness conditions.

## **IV. Course Materials**

### **Required Textbook**

*The Practice of Business Statistics: Using Data for Decisions.* Moore, McCabe, Duckworth, Sclove. 2003. W. H. Freeman & Co., New York. Textbook website: [www.whfreeman.com/pbs](http://www.whfreeman.com/pbs). Datasets can be downloaded from there. Reading assignments will be posted on Blackboard.

In general, class notes will NOT be posted on blackboard. If you miss a class or are late, please, get the notes and announcements from other students.

### **Software**

We will use EXCEL<sup>®</sup> to describe and analyze data. Note, that EXCEL proficiency is NOT required for examinations. However, it might be crucial or at least helpful during your future job interview. EXCEL is available at UIC and CBA labs. We will use the EXCEL "Analysis Toolpak"

AddIn, which you might need to install. Useful EXCEL macros are available on the textbook website.

## **Blackboard Site**

Blackboard site for this course would provide accessibility to the syllabus and other course documents. Also, you will be able to monitor your performance via the View Your Grades feature. Visit <http://blackboard.uic.edu> regularly to learn about announcements and updates to course materials.

## **V. Grading**

Your total grade for this course will reflect performance for the following activities:

Quizzes (6 * 5% each)	30%
Participation in class	5%
Case Studies (2 * 5% each)	10%
Midterm	25%
Final	30%
TOTAL	100%

## **Grading Scale**

Letter grades will be assigned based on the following tentative grading scale:

900 and up	A
800 to 899	B
700 to 799	C
600 to 699	D
Below 600	F

I reserve the right to adjust this grading scale according to the relative performance of students in this class.

## **VI. Honor Code for the College of Business Administration**

College of Business Administration  
University of Illinois at Chicago

January 2003

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.

An abbreviated version of the Honor Code pledge may be printed on course syllabi, exam booklets, and other uses as deemed appropriate. The abbreviated version is as follows:

This course and its associated 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.

### **Honor Code Violations and Enforcement**

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.

(For a complete description of just causes for discipline, disciplinary procedures, and sanctions, see the pamphlet "Student Disciplinary Procedure of the Senate Committee on Student Discipline," available from the Office of the Dean of Students, SSB, Suite 3030, 1200 W. Harrison St., M/C 318.)

### **Honor Code Council**

The Honor Code Council shall be formed consisting of two faculty members elected by faculty vote and six student members (two graduate students and four undergraduate students) appointed by the Assistant Dean for Student Services through recommendation of the Dean's Advisory Council (DAC). Each member will serve a term of one academic year, beginning in August. The Council shall elect a chairperson and a secretary.

The duties of the Honor Code Council shall include:

- Recommend changes in the Honor Code.
- Inform all students, staff, and faculty of the Honor Code and the procedures to be followed for pursuing alleged Honor Code violations.

- Ensure that the Honor Code is prominently displayed within the College of Business Administration and on course syllabi and exam booklets.
- Ensure that the Honor Code and related information are accurately described in the Graduate and Undergraduate catalogs.
- Work with the Office of Student Services to include the Honor Code in its promotion of the University of Illinois at Chicago College of Business Administration to potential students.
- Work with college administration to ensure that the Honor Code statement is signed by all students prior to their enrollment in the college.
- Inform all UIC faculty, staff, and students of the Honor Code of the College of Business Administration, and encourage the adoption of its principles.

## **Course Policies**

- Be on time for the class and exams. Extra time will NOT be given during the exam if you were late. Continuing tardiness (especially that result in disruption of the class) must be explained to the instructor and could result in the student being asked to leave the room.
- Turn off cell phones, iPods, beepers, etc. at the beginning of the class, especially during the examinations. Students taking phone calls during the class will be asked to leave the room. In additions, these devices must be put away, i.e. no earphones in your ears or around the neck. Ignoring this will constitute academic dishonesty.
- Check your email and blackboard regularly. Announcements will be sent to your UIC account and/ or posted on Blackboard. Make arrangements to ensure that you remain up-to-date with what is going on with the class.
- If you have difficulty with the course and wish to drop the course, please do so by the drop date. Incompletes will only be given if there are special circumstances and **the student will retain the grades he or she has received for completed work.**
- Permissions must be requested from and given by the instructor before recording any meeting or class sessions.

## **Special Accommodations**

If you have a physical or learning disability, which will make it difficult for you to carry out the work or which require academic accommodations, please, notify the instructor during the first week of class. You can also contact the Office of Disability Services and we will strive to accommodate you.

## **VII. Course Outline**

This outline is to be used as a tentative plan for the course's content and activities. Note that some items in this outline may change as the course progresses. Check the Blackboard regularly for related announcements.

**IDS 371, Business Statistics II, SPRING 2007, T R 11:00-12:15pm (#16724), 12:30-1-45pm (#16722)**  
**Instructor: Yuliya Yurova**

<b>Week</b>	<b>Date</b>	<b>Topic</b>	<b>Activity</b>
1	T, 16 Jan R, 18 Jan	Introduction Review of Basics of Statistics and Probability Theory	
2	T, 23 Jan R, 25 Jan	Review of Basics of Statistics and Probability Theory Ch. 12, Stat for Quality Control & Capability	
3	T, 30 Jan R, 1 Feb	Ch. 12, Stat for Quality Control & Capability Ch. 12, Stat for Quality Control & Capability	Quiz on Ch. 12
4	T, 6 Feb R, 8 Feb	Ch. 10, Simple Linear Regression Ch. 10, Simple Linear Regression	
5	T, 13 Feb R, 15 Feb	Ch. 10, Simple Linear Regression Ch. 10, Simple Linear Regression	Quiz on Ch. 10
6	T, 20 Feb R, 22 Feb	Review <i>MIDTERM EXAM</i>	Includes Ch 10&12
7	T, 27 Feb R, 1 Mar	Ch. 11, Multiple Regression Ch. 11, Multiple Regression	
8	T, 6 Mar R, 8 Mar	Ch. 11, Multiple Regression Ch. 11, Multiple Regression	Quiz on Ch. 11
9	T, 13 Mar R, 15 Mar	Ch. 11, Multiple Regression Ch. 13, Time Series Forecasting	Case Study 1 Due
10	T, 20 Mar R, 22 Mar	Ch. 13, Time Series Forecasting Ch. 13, Time Series Forecasting	Quiz on Ch. 13
	T, 27 Mar R, 29 Mar	<i>Spring Break (No Classes)</i> <i>Spring Break (No Classes)</i>	
11	T, 3 Apr R, 5 Apr	Ch. 14, One-Way Analysis of Variance Ch. 14, One-Way Analysis of Variance	
12	T, 10 Apr R, 12 Apr	Ch. 14, One-Way Analysis of Variance Ch. 14, One-Way Analysis of Variance	Quiz on Ch. 14
13	T, 17 Apr R, 19 Apr	Ch. 15, Higher-Way Analysis of Variance Ch. 15, Higher-Way Analysis of Variance	
14	T, 24 Apr R, 26 Apr	Ch. 15, Higher-Way Analysis of Variance Ch. 15, Higher-Way Analysis of Variance	Quiz on Ch. 15
15	T, 1 May R, 3 May	Review Review	Case Study 2 Due