SYLLABUS (Fall 2011)
ISDS 513: Statistical Analysis

The objective of this course is to introduce students to the following concepts:
Descriptive Statistics (Graphics Displays, Measures of Central Location and Variability);
Probability (Basic Probability Rules, Random variables, Binomial, Normal
Distributions); Estimation (Confidence Intervals, Hypothesis Testing); and Prediction
(Simple and Multiple Linear Regression Models). Students will also learn how the
various techniques and approaches above can be applied to a variety of business areas
that warrant the use of statistics. We also point out how statistical concepts can
sometimes be misused to distort the truth and hence raising ethical issues.

Text Book: Gerald Keller, Statistics for Management and
Economics, (Custom Edition for ISDS 361 A/B) Cengage
Learning. 9th edition.

Computer Software: MS Excel

Reading Materials: such as power point notes, Excel
examples and so on are posted on
Blackboard.

Instructor
Dawit Zerom, Ph.D.
Professor of Business Statistics
Office: SGMH 4139
Phone: (657) 278-3635
E-mail: dzerom@fullerton.edu

Important: In all your emails addressed to me, write your
name, class code, and class time in the subject line. If this
is not provided, I will simply ignore the email.

Prerequisites: ISDS 265 and Math 135.

Office Hours
Monday 5:30 – 6:30 PM

I can usually provide only short responses to questions via email. See
me in office hours for more detailed help. You can also arrange an
appointment if you like to visit me outside my office hours.
My Teaching Philosophy

- Learning: I make sure everybody gets it.
- Interactive: I make sure students develop genuine interest in the subject I am teaching via participation.
- Fairness: I make sure that my assessments (evaluations) such as home works are fair to every one of you.
- Relevance: I make sure that we spend more time on things that matter.

*The goal of this course is not to make you a statistician – but to make you be able to think statistically!*

Weekly Feedback

*Are we all on the same boat? Or are we completely disconnected?*

- At the end of each week, *send me a one-minute email* specifying:

  1) The one thing you learned and found interesting; and

  2) The one thing you do not understand and need more discussion.

Grading and Related Issues

<table>
<thead>
<tr>
<th>Description</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Quizzes 10%</td>
</tr>
<tr>
<td>2</td>
<td>Exam #1 25%</td>
</tr>
<tr>
<td>3</td>
<td>Exam #2 33%</td>
</tr>
<tr>
<td>4</td>
<td>Exam #3 32%</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
</tr>
</tbody>
</table>
Extra credit opportunities

- I may include extra credit questions in one or more of the Exams.

Exams

- There will be 3 exams. The following are the tentative\(^1\) dates for exams:

<table>
<thead>
<tr>
<th>Exam #1:</th>
<th>Exam #2:</th>
<th>Exam #3 (Final):</th>
</tr>
</thead>
<tbody>
<tr>
<td>October 3</td>
<td>November 7</td>
<td>December 12 (7.30 – 9.20 PM)</td>
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</tbody>
</table>

- All exams require use of EXCEL.

- There will be NO MAKE-UP EXAM except under extreme circumstances such as illness that require doctor’s visit. Student is required to submit verifiable documentation supporting the make-up request. Please be aware that a letter stating that a student visited a doctor on exam day does not qualify for a valid document.

- If you have questions regarding your exams grade, you must inquire about them within one week after marked exams/in-class quizzes are returned to the class.

Quizzes

- There will be 2 (I may increase this to 3 if I find it necessary) in-class quizzes.

- I will assign an exercise to be completed and submitted in class.

- A student will receive a 0% if he/she is not in attendance during test. The only way to get credit for an in-class quiz is by being in class.

- I will let you know in advance when will be the next in-class quiz. It could be a week in advance or sometimes 2 days in advance.

- An in-class quiz can be held at the beginning, at the middle or at the end of a class meeting. If a student comes to a class meeting late after an in-class quiz is finished, he/she will receive no credit.

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\(^1\) I deserve the right to change the dates of Exam #1 and Exam #2 if I find it necessary. But, the schedule of the Final Exam cannot be changed.
Final grade

Your final grade will be based upon your total accumulated points in 3 exams and quizzes. A scale will be established to determine your final letter grade at the end of the semester. The following scale will be used.

\[ \begin{align*}
\geq 90 & \quad A: \quad 77 - 89 \\
70 - 76 & \quad B: \quad 58 - 69 \\
58 - 69 & \quad C: \quad < 58 
\end{align*} \]

- Plus/minus grades will not be assigned.
- NO CURVE is used to determine grades. Grades are based on fixed scales!!

Academic dishonesty

Academic dishonesty includes such things as cheating, inventing false information or citations, plagiarism and helping someone else commit an act of academic dishonesty. It usually involves an attempt by a student to show possession of a level of knowledge or skill which he or she does not possess. Academic dishonesty, when detected, will result in a grade of F for the course plus additional university level disciplinary actions set forth in the University catalog.

Assigned exercises from the text book

I will assign homework exercises from the text book corresponding to the topics covered in class. These homework exercises are not graded. I will provide answers to assigned exercises on blackboard.

Disabled Student Services

For information about student’s right to accommodations for documented special needs, contact Disabled Student Service Office, UH 101, (657) 278-3117 or visit www.fullerton.edu/disabledservices.

Assessment Statement

The main purpose of the degree program at the Mihaylo College of Business & Economics (College) at Cal State Fullerton is to provide you with the knowledge and skills that prepare you for a successful career in business. In order to assist us in achieving this goal, we will use a number of assessment tools to track your progress throughout the College curriculum. Please expect to participate in College assessment activities in several of your courses while at CSU, Fullerton. As you do so, you will assist us in identifying our program’s strengths and weaknesses as well as areas of potential improvement. In other words, you are making an important investment in the value of your degree.
Emergency Policy (in case of earthquake, fire, etc)

Please consult this link:
http://www.fullerton.edu/emergencypreparedness/ep_students.html

Class Conduct

- If you decide to attend a particular lecture, please be in (or on) time for the class. If, for some reason, you expect to be late, let me know in advance (at least 1 hour ahead) by email.

- It is not allowed to walk-in and walk-out of class while lecture is in progress. Furthermore, you are responsible for any class you miss. It is your role to ask your class mates what you have missed and take appropriate action.

- If you plan to leave a particular class before it ends, do notify me in advance and also select a seat where you can leave the class without distraction.

- During lecture, students are not allowed to use their laptops and/or cell phones.
Tentative Weekly Course Outline

Please note that this weekly schedule is tentative. For any updates made to this plan, please consult the course blackboard.

<table>
<thead>
<tr>
<th>WEEK</th>
<th>TOPICS / REMINDER</th>
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<tbody>
<tr>
<td>AUG 22</td>
<td>Chapter 1: Basics of Statistics</td>
</tr>
<tr>
<td></td>
<td>Chapter 2/3: Graphical Descriptive Statistics</td>
</tr>
<tr>
<td>AUG 29</td>
<td>Chapter 4: Numerical Descriptive Statistics</td>
</tr>
<tr>
<td>SEP  5</td>
<td>NO CLASS</td>
</tr>
<tr>
<td>SEP 12</td>
<td>Chapter 4: continued...</td>
</tr>
<tr>
<td></td>
<td>Chapter 6: Probability</td>
</tr>
<tr>
<td>SEP 19</td>
<td>Chapter 6: continued...</td>
</tr>
<tr>
<td></td>
<td>Chapter 7: Random variables and discrete probability distribution</td>
</tr>
<tr>
<td>SEP 26</td>
<td>Chapter 7: continued...</td>
</tr>
<tr>
<td></td>
<td>Chapter 8: Continuous probability distribution</td>
</tr>
<tr>
<td>OCT  3</td>
<td>EXAM #1</td>
</tr>
<tr>
<td></td>
<td>EXAM #1</td>
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</tbody>
</table>
OCT 10  
Chapter 8: continued...
Chapter 9: Sampling distributions

OCT 17  
Chapter 9: continued...
Chapters 10/12: Confidence interval estimation

OCT 24  
Confidence Intervals: continued...
Chapter 11/12: Hypothesis testing

OCT 31  
Hypothesis testing continued...

NOV 7  
EXAM #2  EXAM #2

NOV 14  
Chapter 16: Simple linear regression

NOV 21  
NO CLASS  NO CLASS

NOV 28  
Chapter 17: Multiple linear Regression

DEC 5  
Chapter 17: continued...

DEC 12  
EXAM #3  EXAM #3