2014

STAT 210 Statistics for Business I

Emily Saracusa

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STAT 210: Statistics for Business 1  
Fall 2014

Time and Place: Section 04: TTh 2:30- 3:45p; Smith Hall G28  
Section 05: TTh 4:00- 5:15pm; Smith Hall G28

Instructor: Emily Saracusa  
Office: Hinkle Hall 122  
Phone: 513-745-2048  
email: saracusae@xavier.edu  
Office Hours: TR 11:30am-12:30pm; W 10:00am - 12:00pm. Also by appointment.

Math Tutoring Lab: Conaton Learning Commons 419; M-Th 10am-8pm; Fri 10am-2pm; Sun 2-8pm

Course Objectives: This course is an introduction to the ideas and practice of statistics, one of the more powerful and pervasive tools of our current scientifically-based society. It presents methods for turning data into information. These methods are vitally important in business; this generation of future business managers will need to process relevant data, recognize and implement correct statistical methods, and most important, interpret the results and incorporate them into larger business decisions, thus turning data into information.

This course fulfills core curriculum requirements.

The student who successfully completes this course will be able to:

- Identify the forms and characteristics of data.
- Manipulate data in appropriate ways; by organizing it in tabular form, producing illuminating graphical displays, and calculating appropriate informative statistics to summarize sets of data values.
- Recognize and explain relevant features of data distributions using proper statistical measures.
- Demonstrate familiarity with elementary probability theory by accurately computing probabilities of a variety of random events from clear descriptions of their underlying contexts.
- Recognize standard probability distributions and use them to solve a range of problems to control situations of uncertainty.
- Use simulation techniques to study the probabilities of more complex situations with random outcomes.
- Operate with simple random variables and determine from probability models governing them their mean values and standard deviations.
- Apply sampling distributions models to estimate proportions and means of populations of data via the statistical methodology of confidence intervals.
- Apply sampling distributions models to test hypothesized values or proportions and means of populations via statistical methodology of tests of significance.
- Interpret and effectively communicate the results of their statistical analyses.

The most successful students will be able to explain why their statistical problem solving steps work, and will be able to assess which methods and techniques are appropriate to the scenarios presented.

Technology:

- **McGraw-Hill Connect Plus** is required for this course. Directions to register will be provided in Canvas. Homework assignments are distributed online through Connect and responses are entered into the same system.

- This course makes use of Microsoft Excel as a computing tool. It will be used in the classroom and it is expected that it will be used for homework assignments. Connect provides a direct link to Excel. As with any unfamiliar piece of technology, you may experience an initial period of difficulty using Excel for statistics, but a bit of practice will suffice to reduce these periods so that you can concentrate not on the software but on the concepts you will be asked to master.

- Calculators are permitted on all exams. But be aware that this is not a course in Excel or in calculator usage. You are expected to have basic calculator and computer literacy. A cell phone can not be used as a calculator.

Grading: The course requirements are weighted as follows:

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Weight</th>
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<tbody>
<tr>
<td>Online Homework</td>
<td>20%</td>
</tr>
<tr>
<td>Quizzes/In-class Activities</td>
<td>20%</td>
</tr>
<tr>
<td>Exams</td>
<td>60%</td>
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</tbody>
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The semester grade will be calculated using the following scale:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage</th>
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</thead>
<tbody>
<tr>
<td>A</td>
<td>94-100%</td>
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<tr>
<td>A-</td>
<td>90-93%</td>
</tr>
<tr>
<td>B+</td>
<td>87-89%</td>
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<tr>
<td>B</td>
<td>84-86%</td>
</tr>
<tr>
<td>B-</td>
<td>80-83%</td>
</tr>
<tr>
<td>C+</td>
<td>77-79%</td>
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<tr>
<td>C</td>
<td>74-76%</td>
</tr>
<tr>
<td>C-</td>
<td>70-73%</td>
</tr>
<tr>
<td>D+</td>
<td>67-69%</td>
</tr>
<tr>
<td>D</td>
<td>64-66%</td>
</tr>
<tr>
<td>D-</td>
<td>60-63%</td>
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<tr>
<td>F</td>
<td>below 60%</td>
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</tbody>
</table>

Note that extra credit work will not be assigned.


**Online Homework:** Online homework assignments will be made available through Connect and each will be due on the date indicated (normally Fridays by 11:59pm). Whatever you have completed as of the due date/time will be automatically submitted. **Late online assignments will not be accepted.**

Read the textbook! You’ll be surprised how much more useful class time is if you read what will be covered in class ahead of time. There are very useful chapter summaries (called Conceptual Reviews) at the ends of the chapters to help you identify the main concepts and clarify the most important terminology.

**Quizzes/In-class Activities:** There will be quizzes and/or in-class activities throughout the semester. Quizzes will be completed individually whereas in-class activities will be completed in pairs. **No make-ups will be given for missed quizzes/in-class activities.** Instead, the lowest score will be dropped. If you miss a class during one of these activities, this will be treated as your “dropped” score.

**Exams:** There will be 2 exams and a final exam. Exam 1 will cover Chapters 1-3, Exam 2 will cover Chapters 4-6, and the Final Exam will cover Chapters 7-9. No exam will be excused without prior approval from the instructor.
Tentative Exam Schedule:
Exam 1  Thursday, September 25th
Exam 2  Thursday, November 6th

Final Exam Dates:
Section 04: Tuesday, December 16, 1:00-2:50pm
Section 05: Tuesday, December 16, 4:00-5:50pm

LearnSmart Modules: Through the McGraw-Hill Connect website you can find LearnSmart modules prepared for each chapter of the textbook; these are "flash cards" that test your working knowledge of the concepts. While these modules do not contribute to your course grade, I urge you to take advantage of this very effective resource. Indeed, it is impossible to learn mathematical ideas without regularly and persistently doing a fair number of problems and devoting thought to exploring the underlying concepts.

Canvas: All course information will be on Canvas. You are required to check Canvas daily for course announcements, updates, corrections, and new assignments. Any modifications to the schedule, homework assignments, or otherwise will be discussed in class and can be found here.

Participation/Attendance: Students are expected to attend all scheduled lectures. Please practice good classroom etiquette: come to class on time, turn off cell phones, refrain from disruptive behavior, and be respectful of your fellow classmates.

Group Work: I encourage you strongly to study and to do homework with your classmates. Working in a group is beneficial, as long as you make sure that everyone is making contributions and that no one is left out. However, after discussing the homework, everybody should produce their own write-up, as this will be good preparation for the exams.

Important Dates:
September 1: Labor Day
October 9 & 10: Fall Break
November 24: Final date for undergraduate students to withdraw from Fall full-term courses
November 26, 27, & 28 Thanksgiving Break