ECON 2100: Business Statistics
Seattle University
Winter 2015
Tuesday and Thursday 3:45 PM - 5:50 PM
Pigott 200
Last Revised January 5, 2015

Instructor: Paul Torelli
E-mail: torellip@seattleu.edu
Office Hours: Thursday 2:00 - 3:45 PM (and by appointment)
Office: Pigott 509

Overview
Econ 2100 introduces students to basic statistical concepts and methods used in the business world. The course covers descriptive statistics, basic probability theory, discrete and continuous probability distributions, sampling distributions, interval estimation, hypothesis testing, and linear regression.

Objectives
This course should enhance a student’s ability:
• to interpret and communicate quantitative information;
• to understand and interpret descriptive statistics;
• to understand probability theory and interpret probabilities;
• to understand and interpret interval estimation and hypothesis testing;
• to understand and interpret simple linear regression analysis;
• to use computers for statistical analysis.

Required Materials


Case Studies: You must purchase these 3 case studies from Harvard Business Review web site.
• "Staffing Wal-Mart Stores, Inc. (A)" which costs $8.95
  Available at https://hbr.org/product/staffing-wal-mart-stores-inc-a/904C06-PDF-ENG
• "Staffing Wal-Mart Stores, Inc. (B)" which costs $5.00
  Available at https://hbr.org/product/staffing-wal-mart-stores-inc-b/an/904C07-PDF-ENG
• "Reyem Affiar" which costs $8.95
  Available at https://hbr.org/product/reyem-affiar/an/895009-PDF-ENG
Don't worry about the data set - I will put that up on Canvas at a later date!
Prerequisites

MATH 1130/130, 1331/132, 1334/134, or equivalent; 30 credits.

Problem Sets

There will be two problems sets. These are graded homework problems that you will turn in. Your grade on the problem sets will affect your final grade for this course.

Homework

Assignments include recommended problems for each chapter; two problem sets; class discussions of case studies, newspaper articles, and other issues; and two written case studies. Recommended homework problems are mentioned in class. Solutions to homework problems will be put up on Canvas at a later date. The two written case studies involve determining which results are relevant; generating these results with Microsoft Excel; and communicating and interpreting the results. Cases are due at the beginning of class on the scheduled dates; late cases will not be accepted.

Quizzes

There will be two quizzes. The quiz problems will be similar to homework problems. They will help you prepare for the exams. Please let me know in advance if you will not be in class for a quiz.

Exams

The course includes two required exams: a midterm and a final. If you cannot take an exam during the scheduled time because of a work conflict or an emergency, please let me know in advance so that we can reschedule the exam as soon as possible. If you miss an exam, you will receive no credit for that exam.

Academic Honesty

In keeping with the mission of the school and university, students are expected and required to conform to the norms of academic honesty. Academic misconduct will be dealt with harshly. Academic misconduct includes (but is not limited to) using written or electronic materials on a test or exam, copying another student’s exam or allowing another student to copy yours, and passing off someone else’s writing or ideas as your own in writing assignments. Possible consequences for academic misconduct range from zero credit on an assignment to failing the class.

Special Accommodations

If you have, or think you may have, a disability (including an ‘invisible disability’ such as a learning disability, a chronic health problem, or a mental health condition) that interferes with your performance as a student in this class, you are encouraged to arrange support services and/or accommodations through Disabilities Services staff in the Learning Center. Disability-based
Group Presentations: Statistics in the Real World

Each student will prepare a class presentation on a real world topic in statistics. This will be done in groups of 3 or 4 students. Each student has a chance to present material for about 10-15 minutes. It is up to the members of the group to make sure everyone contributes equally. It is best to put together a Powerpoint with slides; each student would be responsible for about 10 slides. We will all have a chance to ask questions during the presentation or at the end.

The goal is to educate the class! We want to learn about how statistics and data are used in the real world. Present a topic that you find interesting and would like to learn more about. It is helpful to choose a topic relevant to current events. You can find many useful articles and resources online; see the Topics folder on Canvas for some examples. Each group will present on a similar topic (for example the use of statistics in professional sports), although there is a significant amount of leeway that each individual has in choosing a sub-topic (such as how a particular team or organization has used statistics). Use as much data and statistics as you feel is necessary to explain your topic.

It is okay to have an opinion. For example, if you are discussing raising the minimum wage, you can explain why you think this is a good/bad idea. However, you should present both sides of the argument, and don’t forget to present empirical (statistical) evidence underling each viewpoint!

In presenting a topic, please do the following:

• Explain your topic
• Explain how statistics and data come into play
• Relate your topic to things we have learned in class
• Educate us on its relevance to the economy and current events
• Tell us what the debate is about
• Give us examples and tell us stories
• Explain current trends and what to look out for in the future

You should begin meeting with team members at least three weeks in advance of the presentation. Particularly if you are struggling with content, you can email me (torellip@seattleu.edu) with questions or ask for feedback, suggestions, and comments on your ideas for the presentation.

Attendance & Class Participation

You must show up for class. Class participation is part of your grade! Please make efforts to volunteer answers to problems in class and to ask questions. It is okay if your answer is wrong! Statistics is a hard subject and participating in class will help you learn.

Grading

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attendance &amp; Class Participation</td>
<td>7.5%</td>
</tr>
<tr>
<td>Group Presentation</td>
<td>15%</td>
</tr>
<tr>
<td>Midterm</td>
<td>20%</td>
</tr>
<tr>
<td>Final</td>
<td>25%</td>
</tr>
<tr>
<td>Case Studies (2):</td>
<td>12.5%</td>
</tr>
<tr>
<td>Quizzes (2):</td>
<td>10%</td>
</tr>
<tr>
<td>Problem Sets (2):</td>
<td>10%</td>
</tr>
</tbody>
</table>