I. Course Information

Course section: 23633
Period: August 19th to December 9th 2013.
Meeting time: 9 am to 10:15 am Mondays & Wednesday
Location: CA 239

II. Contact Information

E-mail: bagborba@iupui.edu
Office Hours: 8:00 am to 9:00 am and 1:00 pm to 3:00 pm Mondays and Wednesdays
Location: 313 Cavanaugh Hall or by appointment

III. Course Materials


IV. Course Description and Requirements

General objective: The overall objective of the Introduction to Statistics course is to introduce students to the basic concepts and methods of statistics and their applications in business and economics problems.
Specific Objectives: The course familiarizes students to concepts and methods in;
- Numerical Descriptive Statistics,
- Probability and probability distributions,
- Sampling and sampling distributions,
- Statistical estimation of points and intervals for one and two populations,
- Hypothesis testing, experimental design
- Analysis of variance,
- Simple linear regressions, and
- Forecasting.

Expected outcomes: It is expected that at the end of this course, students should acquire working knowledge of the concepts outlined in the specific objectives in a way that enhances their ability to:
- Recognize the appropriate statistical techniques and/or tests that are applicable to particular economics or business problems,
- Perform the techniques or tests in solving economic and business problems, and
- Draw intuitive conclusions from the estimated results.

Course Requirements: The course will not focus on rigorous mathematical derivations. Rather, it will focus on intuitive manipulation of statistical formulas to address applied business and economics problems. You are required to have completed math118 (finite Math) before taking this course. As a result, we are going to spend little or no time on basic concepts in descriptive statistics and probability theory concepts. This means that you should have the basic math background to be able to be able to keep-up with the required course activities.
V. Course policies

**Academic Honesty:** The University (IUPUI) is committed to academic integrity in all its practices including intellectual integrity and a high standard of academic conduct. Activities that violate academic integrity undermine the quality and diminish the value of educational achievement. Cheating on assignments and tests or other academic works is a violation of university policy. Any behavior that is construed, as cheating or academic dishonesty will not be tolerated in Econ270. This includes but not limited to, plagiarism, cheating on exams, acquisition of tests or other academic materials, as well as aiding and abetting others in violating academic integrity stipulations.

**Attendance:** Regular and timely attendance of all class sessions is required in this course. The course is designed in such a way that you have to turn in weekly take-home quizzes that account for a substantial proportion of your final grade.

All the quizzes must be submitted in class and you are required to be present in class for the quizzes to be accepted.

- I will not accept any late quizzes and there is no provision for make-up-exams. All course activities are expected to be completed on their scheduled dates. There is no exception to this requirement.

- If you are irregular in attendance, you may be asked to drop the course.
  - If you miss up to 5 classes, no matter the excuses and no matter how well you are performing in the course, the maximum grade you can earn in the course is a B grade.
  - If you miss up to 8 classes, no matter the excuses and no matter how well you are performing in the course, the maximum grade you can earn in the course is a C grade.

I will collect roll every day in-class to make sure that the attendance policy is enforced.

**Examination Notes:** You are permitted to bring in two 5X8 sheets on which you can hand write or type notes on both sides. The two-2 sided 5X8 sheet should only contain formulas that are covered in class and nothing else. You are also allowed to come to the exams with a calculator if you need one.

VI. Assessment and Evaluation

Good performance in the Econ270 course will require practice. The assessment activities are designed to emphasize important concepts through reinforcing activities. Accordingly, your grade will be based on the following assessments:
Applied Business Statistics Econ 270
Fall 2013 Syllabus
Department of Economics Indiana University-Purdue University @ Indianapolis (IUPUI)
Lecturer: Baiyee-Mbi Agbor-Baiyee, PhD.

Homework: You are going to have 7 take-home quizzes. Quiz1 accounts for 5% while each of the remaining 6 quizzes account for 4%. This means that the take-home quizzes account for 29% of your course grade.

In-class mid-term Exams: You are going to take three one hour mid-term exams. Each of the exams will account for 9% of your grade for a total of 27% of your grade.
- First mid-term exam will cover materials in quizzes 2 & 3.
- Second mid-term exam will cover materials in quizzes 4 & 5
- Third mid-term exam will cover materials in quizzes 6 & 7.

In-Class Final Exam: You are going to take an In-class final exam. The final exam will account for 20% of your grade.

Common Exam: You will take a common exam, which is an exam that is set by the economics department to be taken by students in all the sections of econ 270. I will prepare you well and I am confident that you will do well in the common exam. The Common Exam will account for 24% of your final grade.

Participation Points: Participation points are based on attendance, class discussions, and timely submission of all assignments. The points allotted for participation adds to your cumulative percentage score as bonus points. A maximum of 3% bonus points can be earned by students who participate fully in all course activities. REMEMBER THAT THE 3% POINTS ARE BONUS POINTS THAT YOU WILL HAVE TO EARN.

VII. Grade Distribution

<table>
<thead>
<tr>
<th>Grade Distribution</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Common Exam 25.0%</td>
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<tr>
<td>Final exam 20.5%</td>
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<tr>
<td>3 Mid-term exams @ 9.5 % each 28.5%</td>
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<tr>
<td>9 Quizzes @ 3.0% each 27.0%</td>
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<tr>
<td>Potential Course Score 100%</td>
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<tr>
<td>Class attendance &amp; Participation 3.0%</td>
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</tbody>
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Grade Distribution
- 95% and above +A
- 90% - 94.5% A
- 85% - 89.5% −A
- 80% - 84.9% +B
- 75% - 79.9% B
- 70% - 74.9% −B
- 65% - 69.9% +C
- 60% - 64.9% −C
- 55% - 59.9% +D
- 50% - 54.9% D
- 45% - 49.9% −D
- 44.9% and below F
If the overall class performance is poor, the final grades will be curved using the Z-score statistical procedure. As you will learn in this course, the Z-score standardizes the class score on the basis of each student's score relative to the class average and standard deviation. Accordingly, your grades will be distributed as follows:

- More than 2 standard deviations above class average +A
- Between 1.5 and 2.0 standard deviations above class average A
- Between 1.0 to 1.5 standard deviations above class average −A
- Around 1.0 standard deviation above class average +B
- Between 0.5 to 1.0 standard deviations above class average B
- Between 0 and 0.5 standard deviations above class average −B
- Around 0 standard deviation (class average) +C
- Between 0.5 to 0 standard deviations below class average −C
- Between 0.5 to 1.0 standard deviation below class average +D
- Between 1.0 to 1.5 standard deviations below class average D
- Between 1.5 to 2.0 standard deviations below class average −D
- more than 2 standard deviations below class average F

VIII. Course Outline

- **Week1-Chapters 1 to 4**: Brief coverage of Descriptive Statistics and probability theory
- **Week2-Chapters 5 & 6**: Brief coverage of Discrete and continuous probability distributions.
- **Week3-Chapter7**: Sampling and Sampling Distribution.
- **Week4-Chapter8**: Interval Estimation
  - **Week5-First Mid-Term Exam**
- **Week6-Chapter9**: Hypothesis Testing
- **Week7-Chapter13**: Experimental Design and Analysis of Variance
  - **Week8-Second Mid-Term Exam**
- **Week9-Chapter14**: Simple Linear Regression
- **Week10-Chapter18**: Time Series Analysis and Forecasting
  - **Week11-Third Mid-Term Exam**
- **Week12-Review In Class In-Class Final Exam**
- **Week 13-Review Common Exam**

IX. COMMON EXAM DATE

**Thursday December 12th 2013 from 8am to 10 am in lecture Hall** (The specific room number and additional information about the exam will be provided as they become available)