I. Course Information
Course section: 10603
Period: August 22nd to December 10th, 2012.
Meeting time: 9 am to 10:15 am Mondays & Wednesday
Location: BS-4087

Contact Information
E-mail: bagborba@iupui.edu
Office Hours: 8:00 am to 9:00 am and 10am to 12 pm Mondays and Wednesdays
Location: 313 Cavanaugh Hall or by appointment

II. Course Materials

III. 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.

IV. 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 Eon270. 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 written or typed notes on both sides. The two-2 sided 5X8 sheet should only
contain only formulas that are covered in class and nothing else. You are also
allowed to come to the exams with calculators.

V. 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:
Homework: You are going to have assignments that contain about 25 Multiple-choice questions for each of the 11 chapters that will be completed. Each of the 10 assignments will account for 2% of the course grade accounting for a total of 22% of your grade.

In-class mid-term Exams: You are going to take three one hour mid-term exams. Each of the exams will account for 9.5% of your grade for a total of 28.5% of your grade.

- First mid-term exam will cover materials in quizzes 1, 2, & 3.
- Second mid-term exam will cover materials in quizzes 4, 5, 6, & 7.
- Third mid-term exam will cover materials in quizzes 8, 9, 10, & 11.

Practice Final Exam: You are going to a practice final exam, which will be graded. The practice common exam will account for 5% of your final grade.

In-Class Final Exam: You are going to take an In-class final exam. The final exam will account for 20.5% 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 201. I will prepare you well and I am confident that you will do well in the common exam. The Common Exam will account for 25% 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 THE 3% POINTS ARE BONUS POINTS.

VI. Grade Distribution

- Common Exam 25.0%
- Final exam 20.5%
- Practice Final Exam 5.0%
- 3 Mid-term exams@ 9 % each 28.5%
- 11 Quizzes @ 2.0% each 22.0%
- Potential Course Score 100%
- Class attendance & Participation 3.0%

Grade Distribution

- A+ 95% and above
- A 90% - 94.5%
- A– 85% - 89.5%
- B+ 80% - 84.9%
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:

- **A** +: 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
- **B** +: 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
- **C** +: Around 0 standard deviation (class average)
- **C** #: Between 0.5 to 0 standard deviations below class average
- **D** +: 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
- **F**: more than 2 standard deviations below class average

### VII. Course Outline

- **Week 1-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.
  - First Mid-Term Exam
- **Week4- Chapter8**: Interval Estimation
- **Week5-Chapter9**: Hypothesis Testing
- **Week6-Chapter11**: Inferences about Means and Proportions with Two Populations.
- **Week7- Chapter11**: Inferences about Population Variances
  - Second Mid-Term Exam
- **Week8-Chapter12**: Test of Goodness of Fit and Independence
- **Week9-Chapter13**: Experimental Design and Analysis of Variance
- **Week10-Chapter14**: Simple Linear Regression
- **Week11- Chapter18**: Time Series Analysis and Forecasting
  - Third Mid-Term Exam
Common Exam Date
Thursday December 13th 2012 from 8am to 10am Lecture Hall (The specific room and other additional information will be provided as they become available.)