**MOUNT IDA COLLEGE**

School of Business

|  |  |
| --- | --- |
| **Course Title** | BUSINESS STATISTICS |
| **Course #** | BA225 |
| **Credit Hours** | A 3-credit-hour class requires 3 hours of classroom instructional time and at least 6 hours of student work per week outside of classroom time for a  15-week course. |
| **Semester** | Fall 2015 |
| **Prerequisites** | MA121 |
| **Class Meetings** | Tuesday and Thursday  9:30AM-10:45AM  ATC304 |

**INSTRUCTOR INFORMATION**

|  |  |
| --- | --- |
| **Instructor** | Professor Philip Rubin-Streit |
| **Office Location** | ATC305 |
| **Office Hours** | MWF 9:00-9:50AM |
| **Phone Number(s)** | (617) 928-7368 |
| **E-Mail Address** | prubinstreit@mountida.edu |

**COURSE DESCRIPTION AND LEARNING OUTCOMES**

|  |  |
| --- | --- |
| **Course Description** | This course covers the concepts and techniques concerning exploratory data analysis, frequency distributions, central tendency and variation, probability, sampling, inference, regression, and correlation. Students will be exposed to these topics and how each applies to and can be used in the business environment. Students will master problem solving using both manual computations and Excel statistical functions. |
| **Student Learning Outcomes and Assessment Methods** | **In order to successfully complete this course, you must demonstrate that you possess the following learning outcomes as determined by your performance on the corresponding assessments:**  1) Solve introductory statistics problems involving the display of descriptive statistics  ACC Outcomes: critical thinking, quantitative reasoning, technology competency  Assessments: Graded Homework and Exam  Answer Key  2) Calculate solutions to descriptive statistics problems in the context of a business problem  ACC Outcomes: critical thinking, quantitative reasoning, technology competency  Assessments: Graded Homework and Exam  Answer Key  3) Solve real-world problems involving both discrete and continuous probability distributions  ACC Outcomes: critical thinking, quantitative reasoning, technology competency  Assessments: Graded Homework and Exam  Answer Key  4) Demonstrate the ability to work with sampling and sampling distributions  ACC Outcomes: critical thinking, quantitative reasoning, technology competency  Assessments: Graded Homework and Exam  Answer Key  5) Demonstrate competency in solving basic confidence interval problems  ACC Outcomes: critical thinking, quantitative reasoning, technology competency  Assessments: Graded Homework and Exam  Answer Key  6) Demonstrate competency in solving business-related hypothesis testing for a single population and two populations (with population standard deviation known)  ACC Outcomes: critical thinking, quantitative reasoning, technology competency  Assessments: Graded Homework and Exam  Answer Key  7) Solve real-world problems involving Pearson’s correlation coefficient  ACC Outcomes: critical thinking, quantitative reasoning, technology competency  Assessments: Graded Homework and Exam  Answer Key  8) Demonstrate competency in utilizing excel to calculate area under Gaussian distribution curve  ACC Outcomes: critical thinking, quantitative reasoning, technology competency  Assessments: Graded Homework and Exam  Answer Key |
| **Description of Assessment Methods** | There will be three (3) tests (including the final exam) in class. These tests are serious examinations of the student’s understanding of the concepts and practice of the course. They will be fill-in-the-blank and multiple choice. In addition, you will demonstrate your thought process by turning in your exam work.   |  |  |  | | --- | --- | --- | | **Assessment Method** | **Point Value** | **Proportion of Final Grade** | | Exam 1 – Oct 15 | 100 Points | 20% | | Exam 2 – Nov 19 | 100 Points | 20% | | MYMATHLAB Homework | 100 Points | 30% | | Attendance/Class Participation | 100 Points | 10% | | Final Exam | 100 Points | 20% | |

**COURSE REQUIREMENTS**

|  |  |
| --- | --- |
| **Instructional Methods** | This course is a hybrid. There will be use of instructor presentations as well as in class projects. However, this course involves a terrific amount of technological involvement. The textbook and course software are all to be accessed via computers. MYMATHLAB Software will be the portal for ALL work. The textbook can be accessed directly through the MYMATHLAB website via the link Multimedia Library. |
| **Grade Points** | Please see the Mount Ida College catalog for details. |

**COURSE MATERIALS**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Author** | **Title (Edition)** | **Pub. Year** | **Publisher or Website** | **Where to buy/log on** |
| **Book** | Donnelly | Business Statistics (2e) |  | Pearson | Included in Fees for MyMathLab |
| **Other Course Materials** |  | mymathlab.com |  | Pearson | Included in Fees for MyMathLab |
| **Webpage** |  |  |  |  |  |

**COURSE CALENDAR AND SCHEDULE**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Week** | **Date** | **DAY** | **Class** | **Topic Covered** |
| 1 | 9/8/15 | TUES | 1 | **Introduction and Course Overview** |
|  | 9/10/15 | THURS | 2 | **Chapter 1 Introduction to Statistics** |
| 2 | 9/15/15 | TUES | 3 | **Chapter 2 Displaying Descriptive Statistics** |
|  | 9/17/15 | THURS | 4 | **Chapter 2 -Drop/Add Ends (9/16)** |
| 3 | 9/22/15 | TUES | 5 | **Chapter 3** |
|  | 9/24/15 | THURS | 6 | **Chapter 3 Calculating Descriptive Statistics** |
| 4 | 9/29/15 | TUES | 7 | **Chapter 4** |
|  | 10/1/15 | THURS | 8 | **Chapter 4 Intro to Probabilities** |
| 5 | 10/6/15 | TUES | 9 | **Chapter 5 Discrete Probability Distributions** |
|  | 10/8/15 | THURS | 10 | **Chapter 6 Continuous Probability Distributions** |
| 6 | 10/13/15 | TUES | 11 | **Chapter 6** |
|  | 10/15/15 | THURS | 12 | **EXAM 1** |
| 7 | 10/20/15 | TUES | 13 | **REVIEW EXAM** |
|  | 10/22/15 | THURS | 14 | **Chapter 7 Sampling and Sampling Distributions** |
| 8 | 10/27/15 | TUES | 15 | **Chapter 7** |
|  | 10/29/15 | THURS | 16 | **Chapter 8 Confidence Intervals** |
| 9 | 11/3/15 | TUES | 17 | **Chapter 8** |
|  | 11/5/15 | THURS | 18 | **Chapter 8** |
| 10 | 11/10/15 | TUES | 19 | **Chapter 9 Hypothesis Testing for a Single Population** |
|  | 11/12/15 | THURS | 20 | **Chapter 9** |
| 11 | 11/17/15 | TUES | 21 | **Chapter 9** |
|  | 11/19/15 | THURS | 22 | **EXAM 2** |
| 12 | 11/24/15 | TUES | 23 | **REVIEW EXAM (Last Day for Course Withdrawal)** |
|  | 11/26/15 | THURS |  | **THANKSGIVING DAY NO CLASS** |
| 13 | 12/1/15 | TUES | 24 | **Chapter 10 Hypothesis Tests Comparing 2 Pops** |
|  | 12/3/15 | THURS | 25 | **Chapter 10 Hypothesis Tests Comparing 2 Pops** |
| 14 | 12/8/15 | TUES | 26 | **Chapter 14 Correlation and Simple Regression** |
|  | 12/10/15 | THURS | 27 | **REVIEW FOR FINAL EXAM** |

**COURSE POLICIES**

|  |  |
| --- | --- |
| **Attendance and Class Participation** | Attendance is counted from the 1st day. I expect that you will arrive punctually to class. A tardiness of 10 minutes or more is an absence. Students are expected to attend every class, to arrive on time and remain the full period. There are no excused absences without the instructor’s approval. Attendance and success in the class are tremendously correlated. This is why you are permitted four (4) unexcused absences.  **After four absences, your grade DROPS incrementally with each unexcused absence.** Therefore, you must give notice and documentation for every excused absence. If you cannot fulfill the obligation that is attending and working seriously in class, then you should drop NOW. Also, this class contains mini-lectures. They are far less painful than traditional lectures. I, therefore, expect you to participate fully. This benefits you greatly. |
| **Homework** | Completion of homework is an integral part of success in the course. If you do not give the appropriate attention to the homework, then you will be unable to master the mathematics to successfully complete the course.  **There will be homework EVERYDAY. You should DROP now if you cannot commit. Check MYMATHLAB daily to determine what work is due and when.** |
| **Late Work** | See me individually. Late or missed assignments may not be accepted, or you may be penalized points for lateness. |
| **Missed Assignments** | See me individually. Late or missed assignments may not be accepted, or you may be penalized points for lateness. |
| **Laptops** | Computers are essential to success in this course, so you will be provided laptops during class-time. However, these laptops are NOT to be used for personal matters (facebook, youtube, etc). |
| **Resources** | This course has an abundance of resources available for your growth. Please do not hesitate to use any of these below (when appropriate):  **MYMATHLAB (examples, videos, textbook), Khan Academy, Wolfram Alpha, Office Hours, Math Lab, Tutoring, Email** |
| **Code of**  **Academic**  **Honesty** | Mount Ida College views the principle of academic integrity as a fundamental institutional value and the responsibility of the entire campus community to uphold. Students are expected to meet the College’s high academic standards through honest endeavor; therefore, academic dishonesty in any form is not tolerated. For more information on the Code of Academic Honesty, and the consequences for Code violations, please go to www.mountida.edu/campus-life/community-standards.  If you have questions about how to avoid plagiarism or how to properly cite sources, please speak with your instructor or contact the Writing Center at 617-928-7322. |
| **Reasonable Accommodations** | If you are a student with a disability, have questions about disability services, and/or want to initiate a request for reasonable accommodations, please contact the Office for Disability Services (ODS) at 617-928-4648 or [accessibility@mountida.edu](mailto:accessibility@mountida.edu). Please note that students are responsible for notifying the Office of Disability Services (ODS) of a need for reasonable accommodations in a timely fashion (i.e., preferably within the first two weeks of the semester, and at least two weeks before accommodations are needed in a course). For office hours, location, and general Disability Services information, please go to [www.mountida.edu/disability](http://www.mountida.edu/disability).  Mount Ida College complies with federal legislation for individuals with disabilities (Section 504 of the Rehabilitation Act of 1973 and the Americans With Disabilities Act of 1990 and the ADAA of 2009) and offers reasonable accommodations to qualified students with disabilities. |
| **Academic and Other Support Services** | If you are interested in academic support or other support services during the academic year, please refer to the *Academic and Other Support Services* document which is posted in Canvas. This document is updated each semester. |

|  |  |  |
| --- | --- | --- |
| **The schedule and material in this syllabus may be updated or changed upon the instructional needs of students in the course and any changes in College schedules.** | | |
| **Created by:** | Professor Rubin-Streit |  |
| **Last updated:** | August 5, 2015 |  |
| **Maintained by:** | Professor Rubin-Streit |  |