

1 Basic Information

Instructor Information

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| Instructor | Caleb Moxley |
| Email | ccmoxley@bsc.edu |
| Office | Olin 112 |
| Office Hours | TBA via email |
| LaunchPad: | www.macmillanhighered.com/launchpad/ips8e |

Course Information

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| Time and Location | MW 11:00AM-12:20PM (C), Olin 104 |
| Resources | <i>Introduction to the Practice of Statistics</i> , 8th Edition, Moore, et al. Hard copy optional |
| LaunchPad | Website access required |
| Minitab 16 | Available on lab computers |

Communication I will post important course information on Moodle, and I will occasionally send emails to the class. It is your responsibility to check the website and your BSC email regularly.

Help! Drop-in peer tutoring is available Sundays-Thursdays from 5-9PM in Olin 103 at the mathLab beginning early in the term. The statLab will be open weekly (nights TBA) in Olin 201.

2 Description of the course

Course description: An investigation of four fundamental topics in statistics: displaying data, producing data, probability, and statistical inference.

Quantitative Analysis (QA) objectives:

- Frame a problem quantitatively by transferring information or data into a mathematical model or formal notation;
- Solve problems using mathematical concepts and strategies, with the aid of technology where appropriate;
- Interpret the results in the context of the original problem;
- Clearly communicate mathematical findings.

Specific course objectives: By the end of the course you should be able to

- Correctly produce and interpret methods for displaying data including pie charts, bar graphs, histograms, and stemplots;
- Measure the center of a set of numbers using mean or median;
- Measure the spread of a set of numbers using quartiles or standard deviation;
- Choose the appropriate measure of center and spread for a given set of numbers;
- Understand when and how to use the standard normal distribution;
- Understand how to produce good data using sampling or experiments, and understand the limitations of each method;
- Understand basic principles of probability;
- Construct and interpret confidence intervals;
- Apply and interpret basic tests for significance;
- Use Minitab as a problem-solving tool;
- Effectively communicate statistical arguments orally and in writing.

3 Assignments and Assessment

Homework Homework will be assigned regularly. The assignments are available on LaunchPad. You will submit your answers electronically via the LaunchPad assignment page. You will be given as many attempts as you like to submit each homework. I hope you get 100% on every homework set. You may collaborate on the homework problems with your classmates, but it is an Honor Code violation to copy answers from a classmate without engaging in a meaningful discussion about the content of the problem. You must be able to justify any answer that you provide. All homework assignments will be due at 10PM on the class day immediately following the conclusion of the section. You will be allowed **exactly one** homework deadline extension, and you do not need to provide any documentation for this extension request. Extensions must be requested within 24 hours of the deadline.

Quizzes Quizzes and reading quizzes will be regularly assigned via LaunchPad. Please work independently on these assignments. You will be given two attempts on all quizzes — the highest score will be recorded. Quizzes are due at 10:30PM on the days they are assigned. Reading quizzes are due at 10PM on the day they are assigned. You will be allowed **exactly one** quiz deadline extension and **exactly one** reading quiz deadline extension. You do not need to provide any documentation for

these extensions. Extensions must be requested within 24 hours of the deadline.

Exams Exams will be in class and are tentatively scheduled for: **September 23, October 28, and November 23**. Make-up exams will not be given. If you miss an exam, your grade on the final will replace your grade on the exam. The final exam is scheduled for **Friday, 4 December 1:00PM**

Professionalism Although this is not an explicit component of your final grade, I will assess your behavior daily to help decide borderline cases at the end of the term. Professionalism includes, but is not limited to, attendance, promptness, attentiveness, politeness, respectfulness, participation, and effort.

Grades Your final grade will be computed based on the following weights:

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| 12 Homeworks | 10pts each |
| 12 Quizzes | 8pts each |
| 12 Reading Quizzes | 7pts each |
| 3 Midterm Exams | 150pts each |
| Final Exam | 250pts |

Letter grade cutoffs will be no higher than A: 93, A-: 90 B+: 87, B: 83, B-: 80, C+: 77, C: 73, C-: 70, D+: 67, D: 60.

Honor Code The honor code is in effect at all times. Copying (including rephrasing) solutions from **ANY** source is an honor code violation. From the *Student Handbook*:

When you use someone else's words, ideas, or data derived through experimentation or investigation without giving that person credit, you are plagiarizing. This is contrary to academic integrity and to the BSC Honor Code.

Plagiarism is a serious offense. It is also an unnecessary one. Protection against it is easy: simply cite the source of your material. . . Check with your professor for the precise form of documentation you should be using for a particular course.

Academic Accommodations If you are registered for academic accommodations, please make an appointment with me as soon as possible to discuss accommodations that may be necessary. If you have a disability but have not contacted the Director of Counseling & Health Services, please call (205) 226-4717 or visit Counseling & Health Services in the Norton Campus Center.