

# Syllabus: ST 210 Statistical Reasoning and Applications

## Bulletin description:

An introduction to modern statistics designed to provide the student with a solid foundation in statistical concepts, reasoning and applications. Emphasis is given to problem identification, methodology selection, and interpretation of results. Data analysis accomplished by the use of statistical software. Credit for only one of ST 210 and ST 315 is allowed.

Pre-requisite: High school algebra is recommended.

## Text:

**Introductory Statistics**, 7<sup>th</sup> edition, by Prem S. Mann, Published by Wiley (2010), ISBN-13: 978-0-470-55683-4.

## Learning Objectives:

The emphasis of this course is to understand statistical terminology, procedures and interpretation of results. Skill with formulas, graphs and tables, interpretation of numeric results and use of software are all needed for success in this course. A detailed set of course objectives is available at

<http://www.southalabama.edu/mathstat/info/schedules/courseessyllabi/st200level/>.

- Differentiate between sample and population data
- Organize, display and summarize data
- Compute probabilities for discrete and continuous random variables
- Understand inferential statistics including confidence intervals and hypothesis testing.

## COVERAGE: Chapters 1 – 10

Chapters	Time allotment
Chapters 1, 2, 3	3 weeks
Chapter 4	1 week
Chapter 5	1 week (omit 5.7 and 5.8)
Chapter 6	1 week
Chapter 7	1 week
Chapter 8	2 weeks
Chapter 9	2 weeks
Chapter 10	2 weeks

Time allotments are approximate and do not include exams.