COLLEGE OF CHEMISTRY COURSE GUIDE (../INDEX.HTML)

STAT 135 - CONCEPTS OF STATISTICS (4 UNITS)

COURSE OVERVIEW

SUMMARY

Stat 135 takes students through a variety of statistical concepts and methodology to provide a foundation for more advanced study in statistics, focusing on the mathematical basis of common statistical tools.

PREREQUISITES

Stat 134/140; Math 54 or equivalent linear algebra course

Recommended: Stat 133

TOPICS COVERED

- Parameter estimation
  - Method of moments, Maximum likelihood estimator
- Bootstrapping
  - Parametric/non-parametric
- Common distributions
- Hypothesis testing
- Linear Regression
- Bayesian Statistics

WORKLOAD

COURSEWORK

- 1 midterm, 1 final
- Biweekly quizzes in section
- Weekly homework

TIME COMMITMENT

3 hours of lecture per week; 2 hours of section per week. Approximately 2-3 hours for each homework (weekly).

CHOOSING THE COURSE

WHEN TO TAKE

Because this class is a key prerequisite for upper division Statistics electives, this should be taken around your sophomore or junior year if you plan to take those courses.

WHAT NEXT?

Stat 135 is a prerequisite to most of the upper division statistics electives, such as Linear Regression, Machine Learning, and Stochastic Processes.

ADDITIONAL COMMENTS AND TIPS

The pacing and work of this course may vary depend on the professor teaching it. While Stat 133 is not a formal prerequisite of this class, basic knowledge of R may be required to do some of the homework.

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COLLEGE OF CHEMISTRY PEER SERVICES

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