

CS 215: Data Analysis and Interpretation

Fall 2024

Slot 3

TAs

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Materials & Resources

- Introduction to Probability and Statistics for Engineers and Scientists by Sheldon M. Ross. **[Main textbook]**
- Probability, Random Variables and Stochastic processes by Papoulis and Pillai, 4th Edition, Tata McGraw Hill. An Introduction to Probability Theory and Its Applications, Vol. 1, William Feller, 3rd edition, Wiley International

[Professor Milind's Sohoni's notes](#)

Assessment

Approximate credit structure

- 15% In-class Quizzes
- 25% Mid-semester exam
- 35% End semester exam
- 25% Programming and written homeworks: in teams (about 5 assignments)

Attendance mandatory. Students with less than 80% may get a DX.



Course Contents

The role of statistics. Graphical and numerical methods for describing and summarising data. Probability. Population distributions. Sampling variability and sampling distributions. Estimation using a single sample. Hypothesis testing a single sample. Comparing two populations or treatments. Simple linear regression and correlation. Case studies

Please refer to Moodle for a detailed time-table, link to course material, assignment schedule, etc.