

CS 201

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The course is designed to follow CS 101. The students are expected to have a basic knowledge of Python (see CS 101 topics). CS 101 refresher will be provided in the beginning of the course.

By taking the course, the students are expected to complete regular homework assignments.

Tentative schedule of the course topics is below.

- CS 101 refresher
- Object oriented programming, advanced
- Classes and inheritance
- Code optimization, debugging and exceptions
- Programming graphics and user interface
- Numerical and scientific Python (NumPy and SciPy)
- Working with data in Python (pandas)
- Machine learning 101
- Clustering, classification, neural networks
- Machine learning in Python (scikit-learn)
- Introduction to Artificial Intelligence
- Web development, Part II