

Fall 2020

CS 106-101: Roadmap to Computing for Engineers

Jun Wu

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New Jersey Institute of Technology
Ying Wu College of Computing
Department of Computer Science

CS 106 Roadmap to Computing for Engineers
Course Syllabus, Fall 2020
Instructor: Dr. Jun Wu
Email: jw65@njit.edu
Class Time Monday 6:00 – 8:40 PM Online
Office Hours Friday 5:00 – 5:50 PM Online

I. COURSE DESCRIPTION:

An introduction to programming and problem-solving skills for engineering majors using Python programming languages. Topics include basic strategies for problem solving, constructs that control the flow execution of a program and the use of high level data types such as lists, strings, and dictionaries in problem representation. The course also presents an overview of selected "big idea" topics in computing.

II. INSTRUCTIONAL MATERIALS:

Required Web Based Textbook Zybooks.com: Programming in Python 3 with zyLabs
Instruction to subscribe:

1. Sign in or create an account at learn.zybooks.com
2. Enter code: **NJITCS106WuFall2020**

III. METHODS OF INSTRUCTION

Lectures, labs, projects, exams are used.

IV. Grading:

Midterm	20%
Final	20%
Assignments	25%
Lab Activities	25%
Final Project	10%
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TOTAL	100%

Assignments and Lab Activities are from Zybooks.com
Final project is a report (around 1000 words) about an application of computing in engineering.

V. CLASS SCHEDULE

Week 1 & 2: Introduction to Python
Week 3 & 4: Variables / Assignments
Week 5 & 6: Types
Week 7 & 8: Branches
Week 9: Midterm
Week 9, 10 & 11: Loops
Week 12, 13 & 14: Functions
Week 15: Final

VI. Academic Integrity Policy

All course work, including exams, assignments, labs, projects must be done by student themselves. Sharing materials with classmate, especially programming work including logic, and/or modifying the materials to fabricate and reproduce other versions is very seriously treated based on the NJIT University Policy on Academic Integrity

VII. Consent

Students who participate in this class with their camera on or use a profile image are agreeing to have their video or image recorded solely for the purpose of creating a record for students enrolled in the class to refer to, including those enrolled students who are unable to attend live. If you are unwilling to consent to have your profile or video image recorded, be sure to keep your camera off and do not use a profile image. Likewise, students who un-mute during class and participate orally are agreeing to have their voices recorded. If you are not willing to consent to have your voice recorded during class, you will need to keep your mute button activated and communicate exclusively using the "chat" feature, which allows students to type questions and comments live.