

# State University of New York Polytechnic Institute

## CS 100 : Introduction to Computing Seminar

Instructor: Dr. Chen-Fu Chiang  
Semester: Fall 2020  
Time: MWF 9:20 am - 10:30 am  
Location: SUNY Poly Blackboard  
Office Hours: (online) MW: 1:15 pm - 3:15 pm | F:10:30 am- 11:30 am | By appointment  
Office: Kunsela C225  
Email: [chiangc@sunypoly.edu](mailto:chiangc@sunypoly.edu) (best way to reach me)  
TA: Abhigna Vemula | Kanishka Kanapuram  
Office Hours: R: 2:00 pm - 3:00 pm  
Email: [vemulaa@sunypoly.edu](mailto:vemulaa@sunypoly.edu) | [kanapuk@sunypoly.edu](mailto:kanapuk@sunypoly.edu)  
Note: Office hours are online via Blackboard Collaborate Ultra

### Text and References

1. Optional: ISBN: 9780262529624. Introduction to Computation and Programming Using Python: With Application to Understanding Data, 2nd Edition by Guttag, John. MIT Press, 2016.
2. Optional: <https://docs.python.org/3/tutorial/index.html>

### Course Description

This course introduces programming and problem solving using a high-level programming language. It also introduces and discusses basic computing concepts.

### Student Learning Outcomes

- Demonstrate a basic understanding of introductory computing/programming concepts
- Demonstrate a basic ability to program in a high-level language

### Topics

- What is computation
- Input, Output and Variables
- String Manipulation, Approximations
- Decompositions, Functions
- Recursion, Dictionaries
- Testing, Debugging, Exceptions
- Files and Exceptions
- Lists and Tuples
- Python Classes and Inheritance
- Understanding Program Efficiency
- Searching and Sorting

## Grading (Tentative)

The lecture format will be the basic mechanism used in the course. Computer demonstrations in the classroom will be used whenever appropriate. Assessment of student performance will use a criterion-referenced model which will include written assignments, programming assignments and quizzes (50%), regular examinations (midterm(s) 25%), and a comprehensive final exam (25%). Unless otherwise specified, all the material must be submitted **via Blackboard**. Late homework will not be accepted unless you have made prior arrangements with me. The acceptable format of your solution will be specified in the assignment. All examinations are closed-book. A typical grading scale will be as follows:

Percent	Grade
97 - 100	A+
93 - 96	A
90 - 92	A-
87 - 89	B+
83 - 86	B
80 - 82	B-
77 - 79	C+
73 - 76	C
70 - 72	C-
65 - 69	D+
60 - 64	D
Below 60	F

Students are expected to produce professional quality programs adhering to the following criteria:

- The problem must be completely solved. The sophistication of the solution will be considered in determining the grade. The program must demonstrate mastery of the topics and techniques being covered at that point in the course even if there are better solutions using other techniques. All paths through the program must produce correct results (or the program is unacceptable). Assignments that are returned because they are unacceptable will be penalized per returned submission.
- The documentation must be complete and the program layout must be visually appealing. Each program and each function must contain a statement of purpose, name of author, date of creation, revision number (if any), date of last revision, language, compiler used and citation of sources. Intra-code commenting of obscure code is expected. Variable names must be rational. The use of correct grammar and spelling in user prompts is assumed; the penalty for sloppy English will be harsh.
- Programs must be crash-proof (commensurate with the level of sophistication of the assignment). User prompts (if any) must be clear, precise, grammatically correct, and correctly spelled. In the absence of warnings any user input is fair game. You should not expect the user to remember a complex series of instructions; programs should be user friendly. Programs should be able to recover from illegal data entry.
- Assignments should be submitted on-time; this will help students stay "up-to-date" with the course-work. Due dates may be adjusted if the lecture schedule falls behind. Programs will not be graded prior to the due date. It is in the student's best interest to submit problem set solutions on time.

## Attendance Policy

Attendance and active class participation are required. Be prepared to participate by asking and answering questions during class meetings. Please send me an email if you know you have to miss a class.

### **Academic Integrity/Policy**

Plagiarism and Cheating of any kind on an examination, quiz, or assignment will result at least in an F for that assignment (and may, depending on the severity of the case, lead to an F for the entire course). I will assume for this course that you will adhere to the academic creed of this University and will maintain the highest standards of academic integrity. In other words, do not cheat by giving answers to others or taking them from anyone else. The code of academic conduct is detailed on the SUNY Poly student handbook. Make-ups are only given under extreme circumstances. I will also adhere to the highest standards of academic integrity, so please do not ask me to change (or expect me to change) your grade illegitimately or to bend or break rules for one person that will not apply to everyone.

### **Plagiarism Warning**

The work you submit must be your own. You will not receive credit for work which is not your own. You may ask others (classmates/friends/instructors) for advice or help regarding the subject matter of a problem set. However, your answers and the actual design, coding, entry, and running of your programs must represent your own work. All sources of ideas that are used in any way (quoted, paraphrased, or summarized), including ideas taken from the text, must be acknowledged in problem set program documentation. Failure to provide proper attribution constitutes academic dishonesty, and it will result in a failing course grade. Substantially identical program submissions by multiple students, even with attribution, may result in a failing course grade to all who submit the same program. Submitting a program written by someone else, even with attribution, is strictly prohibited and will result in a failing course grade. Students are further reminded that it is their responsibility to take reasonable precautions to prevent copying of their work by other students and that there are now criminal penalties for computer trespass and computer tampering. Note: Selective enforcement of plagiarism does not constitute a valid defense.

### **Academic Adjustments for Students with Disabilities**

In compliance with the Americans with Disabilities Act of 1990 and Section 504 of the Rehabilitation Act, SUNY Polytechnic Institute is committed to ensuring comprehensive educational access and accommodations for all registered students seeking access to meet course requirements and fully participate in programs and activities. Students with documented disabilities or medical conditions are encouraged to request these services by registering with the Office of Disability Services.