Welcome to ESC 180 – Introduction to Computer Programming! This course serves as an introduction to computer programming and computer science. We will introduce the Python programming language. We will use Python to solve a variety of problems, and practice problemsolving techniques that are applicable to computational problems. We will discuss good practices in software engineering (designing and building large software systems). We will analyze the efficiency of algorithms, and discuss designing efficient algorithms. Various research areas in computer science (AI, software engineering research, the theory of computation, etc.) will be introduced throughout the term. No previous knowledge of programming or computer science is assumed.

https://www.cs.toronto.edu/~guerzhoy/180/ Website:

https://piazza.com/utoronto.ca/fall2024/esc180190 Forum:

All course handouts will be posted on the course website. Students are responsible for reading all announcements on the course forum on Piazza.

Office Office Hours Instructor **Email** Michael Guerzhoy guerzhoy@cs.toronto.edu BA 2028 Tuesday 6pm

Grading Sosting Sosting Sosting

Catch-up sessions will be held Thursdays 6pm, location TBA, most weeks as announced, starting Week 2.

The grading scheme for the course is as follows.

	Worth	Date
Labs	10%	Weekly labs except as announced in class
Projects	15%	3 projects, tentatively due Sept. 27, Nov. 15, Dec. 2
Quizzes	3%	best 9 of 12 surprise quizzes throughout the term
Online exercises	2%	TBD
Midterm	30%	Oct. 24
Exam	40%	TBD

Unless specified otherwise, a lab needs to be completed every week. Labs must be completed in teams of two students. Teams that make their best effort toward completing the lab will be awarded full credit.

The following textbooks are not required, but you may find them useful as additional references.

- Allen B. Downey, Think Python 2e. Available for free at https://greenteapress.com/wp/ think-python-2e/
- Paul Gries, Jennifer Campbell, and Jason Montojo, Practical Programming (2nd ed.). https://pragprog.com/titles/gwpy2/practical-programming-2nd-edition/ (other editions are fine.)