# CSC324 Principle of Programming Languages

## University of Toronto

#### Fall 2025

## **Prerequisites**

The study of programming languages is unique in that it blends the practical skill of translating a problem into a solution that a computer can run, with theoretical underpinnings and formalism from the mathematics community. CSC263 or CSC265 is required for this course. Specifically, this translates to you needing to have:

- Familiarity with common data structures such as linked lists and trees;
- Competency in some prior programming language, such that you could implement one of the above data structures;
- Comfort with recursion, and understanding and writing proofs by induction.

In essence, if you're reasonably convinced that you could design a binary tree datatype and write a recursive function/method that traverses it, and explain in your own words why your solution is correct, you will be in good shape for this class.

## Course schedule

Instructor: Prof. Ningning Xie, BA3256 Office hour: Tue 11:30am-12:30pm

 $\bf LEC0101$  at UC 140, with tutorials TUT0101 at BA1210 and TUT0102 at WB130 on Thursday 10-11am  $\bf LEC0201$  at BA 1180, with tutorials TUT0201 at SF2202 and TUT0202 at BA1210 on Thursday 3-4pm

Course calendar: Subscribe to the course calendar.

### Quercus

All lecture slides, assignments, tutorial materials, official announcements, and other useful resources will be posted on Quercus (q.utoronto.ca). It is your own responsibility to check it at regular intervals, i.e. once per day.

It is strongly recommend to select "Notify immediately" for course announcements in your account notification settings. This will forward all announcements to your university email.

#### Piazza

Piazza is used for questions on the lectures and assignments. Do NOT email instructors or TAs for questions on materials. Rather, questions should be asked on Piazza, or during lectures, tutorial sessions, and office hours.

### MarkUs

All assignments will be submitted via MarkUs.

### Textbooks and class contents

We will be using the following two materials for references:

- Types and programming languages (Pierce)
- Learn you a Haskell

## Course requirements and grading scheme

		Due
Assignment 0	5%	Monday, Sep 8th, 11:59pm
Assignment 1	10%	Friday, Sep 19th, 11:59pm
Assignment 2	15%	Friday, Oct 10th, 11:59pm
Assignment 3	10%	Friday, Oct 24th, 11:59pm
Assignment 4	20%	Friday, Nov 21th, 11:59pm
Final	40%	TBD

Autofail: You must earn 20% of the final to pass the course.

## Assignment extensions:

- Extension with flex tokens: every student will receive ten flexible tokens, each of which can be extended a deadline by 12 hours. Multiple tokens may be used for one assignment. Grace tokens are automatically applied on MarkUs and no requests are needed.
- Special extension requests along with official documentation (a doctor's note etc) must be sent to the course email (csc324-2025-09@cs.toronto.edu) 12 hours before a deadline not counting grace tokens.

Max 3 days grace per assignment with grace tokens and accommodations combined. Late submissions without using proper flex tokens or getting special extensions approved will not be graded and automatically receive 0 marks.

## Cheating policy

Cheating is against "fair-play" and will not be tolerated under any circumstances. While the pressures of many classes, homeworks, work and/or extracurricular activities can be great, this is never an excuse for copying solutions from others. The University holds among its highest principles the notion of academic freedom and integrity. Cheaters will face the University's disciplinary committee as well as receive a failing grade in this course. If you think that there is an issue that influences your performance in the class then talk to the instructor.