

ELEX 4653 Course Information

Instructor

Ed Casas. You can reach me by e-mail at ecasas@bcit.ca, by phone at +1 604 432 8936 or by posting a question to the course web site (see below).

Office hours are Mondays and Tuesdays at 12:30 in SW01-3061 and by appointment following those times.

Course Web Site

Lecture notes, labs and solutions will be made available on the course web site (<https://learn.bcit.ca/d2l/home/1003245>).

You can also ask and answer questions using the web site's "Discussions" feature found under "Activities".

Lecture, Lab and Exam Schedule

A schedule of the lectures, labs, project presentations and exams is available on the course website.

Lectures are in SW3-1710 Mondays at 11:30 and Wednesdays at 10:30.

The first lab session will be used for a lecture.

Any changes to the course schedule will be posted on the course web site.

Evaluation

Component	Weight
Labs (3)	15%
Quizzes (2)	30%
Project	15%
Final Exam	40%

Labs

Labs and quizzes will require that you complete and submit a "notebook" file containing the solutions to a set of problems described in that notebook. The notebook will also contain code to check your work.

These notebooks will be posted on the course web site. The completed notebooks will be submitted using Assignment folders on the course web site.

The instructor will check the output of your code to verify that it meets the requirements. Parts of your solution may be checked by code included in the notebook.

Copying others' solutions is not allowed and will be dealt with as described below.

Submitting a notebook that has been modified to indicate successful completion of the lab will result in a mark of zero for *all* labs.

The due dates for each lab are shown on the Assignment folders. You will have at least one week after your lab to submit your solution. Notebooks not submitted when the reports are collected will receive a mark of zero.

Quizzes

The quiz format will be the same as the labs but the quizzes must be completed during the lab session and you may only access the BCIT Learning Hub web site.

During the quizzes you may not access other web sites or communicate with anyone else. Your use of the lab computer will be monitored and internet access will be recorded.

Project and Presentation

Each student will need to come up with and complete an original Python programming project. Your project topic will have to be approved by the lab instructor. During the second-last lab session of the course you will be given about 5 minutes to explain and demonstrate your project.

Exam

There will be a 2-hour final exam during the last week of the course. The format will be similar to the quizzes; you will need to complete the notebook during the lab session and you will not be able to get help or access other internet sites.

Resources

I will be using the Jupyter notebooks in [A Whirlwind Tour of Python](#) for the lectures but there is no assigned textbook for this course. However, there is no shortage of documentation on Python.

Two good books are: [Think Python \(second edition\)](#) and [Dive Into Python 3](#).

You should learn to look up answers in the official [Python documentation](#) which is typically installed along with Python. The course web site has links to some useful tutorials and e-books if you'd like more information on specific topics.

Previous versions of this course, including previous labs, exams, and solutions are archived at the instructor's [course archive page](#).

Submission

All lab and exams are to be submitted to the "Assignment" folders on the course web site.

You may use any file name but the notebook file must use the correct file name suffix (`.ipynb`).

Don't add comments when submitting your documents – I won't see them. You must click "Submit" after uploading your file. Check that your document can be downloaded and is readable. You should receive an e-mail confirmation; save it.

For practical reasons, no marks can be given for reports or assignments submitted to the wrong drop-box.



Important Note

If you do not submit a lab to the right Assignment Folder, in the required format and with the correct file name extension (typically `.ipynb`) you will receive a mark of zero for that submission.

Unfortunately this policy is necessary in order to run the course efficiently and fairly.

Marking

Your encrypted marks will be published on the course web site under "Course Information." Each student will have a different password they can use to view their own marks. This password can be retrieved using the "Grades" link on the course web site.

Software

You should become familiar with using Jupyter Notebook as available [AppsAnywhere](#) because you will need to use it for the labs, quizzes, and exam.

You can also use [Anaconda](#) or [miniconda](#) to install Python (version 3.10 or later), Jupyter notebook and many other packages on your own computer (PC, Mac or Linux). They include tools to deal with version conflicts that are not included if you install Python from [python.org](#).

ChatGPT

Natural language interfaces to generative AI models such as OpenAI's ChatGPT, Google's Gemini, Microsoft's Bing Copilot, and many others, are essential tools for programmers. They provide efficient access to the knowledge gained from the code examples on GitHub, the answers to programming questions on StackOverflow, and much more.

But... you will not be able to use these tools for the quizzes and exam. Therefore, please **DO NOT use ChatGPT to create solutions for the lab exercises.**

I *do* recommend using ChatGPT¹ to:

- answer questions about the Python language and libraries
- find and errors in your solutions and suggest corrections and improvements
- add comments to your code
- create additional examples and exercises

Make your prompts as specific and detailed as possible. It may help to start by asking for an outline of

¹The free versions of [ChatGPT](#) and [Perplexity](#) do not require you to authenticate and are sufficient for this course.

a solution or stating your level of expertise when asking a question. Give examples. It's not unusual for a good prompt to be as long as the solution.

Academic Integrity

In this course, labs, quizzes, and exams are to be done individually by the student. Students are encouraged to seek help from others but copying is not allowed. The course instructor has a “zero tolerance” policy for violations of the policy on Academic Integrity. Violations will be dealt with according to BCIT policy [5104](#).

Here are some guidelines for this course:

Don't:

- work together on labs
- submit a modified copy of someone else's solution
- ask to look at someone else's solution or show someone else your solution, not even in rough form
- write out a solution for someone else, not even on a white board

Do:

- help interpret error messages
- explain your interpretation of the question (but not the solution)
- explain material found in the lecture notes or other references
- share books, papers or links to useful reference material – unless finding this material is part of the assignment
- help someone else arrive at their own solution by asking them leading questions

Briefly, if a classmate asks for help, help them find their own solution, do not show them yours. When copying is detected I can't tell who copied from whom and all students involved will be penalized.

Labs and exams may be set up in a way that allows plagiarism to be detected. This may not be obvious to you.

Note that plagiarism includes submitting a solution that was not written by you, regardless of the source. This includes copying material from online sources such as StackOverflow and ChatGPT. While I encourage use of such resources, they may not be used to obtain a solution to a lab or exam question.

How to Do Well

You can't learn programming by reading about it. You have to practice. Spend as much time as possible working on exercises and challenging yourself to improve your solutions.