### **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).

#### **Course Web Site**

Lecture notes, labs and solutions will be made available on the course web site (https://learn.bcit.ca/d21/home/814282).

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

## **Lecture, Lab and Exam Schedule**

Lectures will be held in SW3-1710 Mondays at 11:30 and Wednesdays at 10:30.

The first lab will be a combined lecture/lab session. Any changes to the course schedule will be posted on the course web site.

#### **Evaluation**

Component	Weight
Labs	60%
Presentation	20%
Final Exam	20%

#### Labs

Labs 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.

The lab 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.

### **Presentation**

During the second-last lab session of the course you will be given about 10 minutes to teach your lab section about a Python package of your choice. If the package is very large (e.g. SciPy) you may present on a submodule (e.g. signal processing). The presentation should describe the package and give examples of how it's used. The purpose of this exercise is to give you practice learning and using packages on your own.

You will need to work in pairs with someone in your lab set and sign up for specific package beforehand (first come, first served).

### **Exam**

There will be a 2-hour open-book final exam during the last week of the course. The format will be similar to the labs except that: (1) you will need to complete the notebook during the lab session, (2) you will not be able to get help and (3) you will not be able to access other internet sites.

#### Resources

There is no set 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.

#### **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).

The web site will not warn you if you submit a file in the wrong format.

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 dropbox.



#### **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 given 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.

## **Equipment**

You can install the (free) Jupyter notebook software we will be using in this course (PC, Mac or Linux) if you want to complete the labs at home.

#### **Software**

The course web site has links to the software (Anaconda or miniconda) that you can use to install Python, Jupyter notebook and many other packages on your own computer.

### **Academic Integrity**

In this course labs and exams are to be done individually. Students are encouraged to seek help from classmates 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.

# **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.