

ELEX 2117 Course Information

Note: The course format and evaluation methods are subject to change due to the evolving public health situation.

Instructor

Ed Casas. You can reach me by e-mail at ecasas@bcit.ca¹, by phone at +1 604 432 8936 or by posting a question on the course website.

Getting Help

Most questions can be answered on the course discussion forum or by e-mail. Formulating the question should get you closer to an answer.

Please post questions about the course, lecture, or lab material on the course website under Activities → Discussions. You may post anonymously.

Use e-mail for questions on personal matters, such as your marks or absences.

In some cases you may need to show an instructor what's happening on your computer. This is only practical by sharing your desktop in a Learning Hub Virtual Classroom or Zoom session. Contact the instructor to arrange a mutually convenient time. If you're on campus you may be able to use a PC in the lab.

Course Website

Lecture notes, lab instructions, quizzes, exams, and solutions will be available on the course website: <https://learn.bcit.ca/d21/home/778741>.

The website also contains an updated schedule of lectures, labs, quizzes, exams, and the course withdrawal deadline.

You can be sent text or email notifications of updates to Learning Hub courses by selecting Notifications from the drop-down menu next to your name at the top right of any Learning Hub page. I recommend subscribing to News - new item available and optionally to Discussions - new post

¹Do not send links in your e-mail.

Evaluation

Component	Weight
Labs (8)	30%
Quizzes (3)	20%
Mid-Term Exams (2)	25%
Final Exam (1)	25%

ELEX 2117 is a two-component course as defined in section 3.4 of [BCIT Policy 5103-PR1](#). This means you must pass both the practical (lab) and theory (quizzes and exams) portions of the course to pass the course. If you pass one but not the other you will receive a mark of U; this counts as a failure.

Labs

Lab instructions will be posted on the course website beginning the second week of the course.

Your mark for each lab will be based on a pre-lab report, a final lab report and a demonstration. You may demonstrate the lab in person or submit a video.

The submission deadline for the final lab report, and video if necessary, will be no sooner than one week after the last session for that lab. All lab sets will have the same deadline for submitting pre-lab and final lab reports. This deadline will be shown in each Assignment folder on the course website.

Quizzes

Quizzes will be held during the scheduled lecture times on the dates shown in the course schedule.

Exams

Two ELEX 2117 midterm exams will be held on the dates shown on the course schedule. These may be two hours long and may be scheduled outside of the normal lecture time slots.

A three-hour final exam will be scheduled during the final exam week.

Marking

The marking scheme for each lab will be published on the course website under “Course Information” after the submission deadline for each lab.

A coded description of which items were marked incorrect will be shown in the Grades page on the course website. Not all items in each report will be marked.

The final lab and quiz marks will be computed as the mean after omitting the best and worst marks.

Students can retrieve details of their marks from the **marks** document found under Content → Course Information. The password required is available in the Password row in the Grades page of the course website.

Attendance and Absences

Do not come to campus if you feel unwell. You do not need to attend lectures or labs. A Learning Hub Virtual Classroom will run simultaneously with the in-person lectures and recordings of the lectures will be available. Students will also be able to complete and submit all labs from home.

You do not have to attend your lab session but you must submit the required documentation for a lab to get credit for completing it.

If you were unable to complete a quiz, lab or exam because of illness please notify the program administrator, [Gundi Minato](#), who will notify all affected instructors.

Poor weather, transportation failures, communication and power network outages, family crises, etc. may cause you to miss a lab, quiz or exam for reasons beyond your control. It’s impractical for me to make up another quiz or exam or allow you to write the same one later. However, missing one quiz or one lab, by itself, will not affect your final mark. By omitting outliers your final grade should more accurately reflect your abilities.

Lecture Notes and Other Resources

There is no textbook for this course. Instead, lecture notes will be provided for each topic.

These notes may include exercises that will be completed during the lecture. The answers will be

made available on the course website, but you should try to work out the exercises on your own.

The course website contains other resources including two textbook chapters, datasheets, software and links to online materials.

Previous versions of this course are archived at <http://people.ece.ubc.ca/edc>.

Lab Sessions

Do not come to campus if you feel unwell. You will be able to complete all labs using only the lab parts kit and the Analog Discovery 2. You will be able to get help remotely if you’re working on your lab at home.

Follow these rules when attending labs in person:

- wear a mask at all times
- try to maintain a 2-meter distance from the instructor and other students.
- do not talk with the other students
- use the chat feature and share your screen if you need help from the instructor
- move away from your bench if the instructor asks to check your work

Lab Reports and Other Files

Report and Video Formats

The course website has a document detailing the requirements for lab reports and video submissions under Content → Course Information. Follow those instructions.

File Formats and Folders

Submit documents in PDF format unless otherwise specified.



If you submit a lab report in the wrong file format or to the wrong folder you will receive a mark of zero for that submission. The website can’t warn you about these mistakes.

Creating PDF Files

Word processors (recent versions of Microsoft Word and the free [LibreOffice](#)) will export to PDF files. Please rotate, crop and scale any images appropriately. Most operating systems also allow you to “print” to a PDF file from their print dialogs.

Submission

Files must be submitted to the correct folder in the Activities → Assignments section on the course website.

You may use any file name for your document. Don’t add comments when submitting your documents – I won’t see them. Note that submitting file(s) requires two steps:  and then . You should receive an e-mail confirmation; save it.

After uploading your submission, double-check that you’ve used the correct submission folder and then view your file in a browser to make sure you’ve submitted the correct file and that it can be viewed.

Submissions may be collected any time after the submission deadline. You’ll receive a mark of zero for that submission if you have not submitted your file(s) to the correct folder when they’re collected.

You’ll be able to update your submissions until they’re collected. So if you’re not finished by the deadline I recommend submitting the incomplete version and updating it later if you get a chance.



Important Notes

- 1. If you submit a file in the wrong format it will not be read and you will receive a mark of zero for that submission.**
- 2. You must submit the document *in PDF format* unless another file format is specified.**

The website will not warn you if you submit the wrong file, submit it to the wrong folder, if the file is in the wrong format or if it’s unreadable. These

happen every year. However, no allowances will be made for these types of mistakes.

This policy will seem harsh when you get no credit for something on which you’ve spent much effort. Unfortunately, it’s necessary to run the course efficiently and equitably.

Lab Hardware

Parts kits for the labs will be available from the BCIT bookstore starting in late July for \$31.95. These are available only to students registered in the course – you will need to ask for the “ELEX 2117 Parts Kit” at the front counter and show ID. You will also need some components from your Level 1 parts kit (some space on your breadboard, Dupont/Berg jumper wires, and the USB-Blaster). You will also need an Analog Discovery 2 for two of the labs. If you are doing these labs at BCIT you will need to bring your AD2 to the lab on those days.

Software

We will use [Quartus Prime](#) Lite Edition for logic synthesis and the associated version of ModelSim-Intel FPGA Edition for simulation. The course website has links to, and information about, this software. You can install the software locally² or use it via [AppsAnywhere](#).

Academic Integrity

This course has a zero-tolerance policy on Academic Misconduct. Verifiable offences will result in the final mark being capped at 50% (the maximum penalty the course instructor can impose). A report will also be filed with the Student Life Office. The penalty for a second instance of Academic Misconduct is determined by the Associate Dean but is typically a failure in the course where the second offence occurred.

This policy applies to all graded activities (labs, quizzes, and exams). There are no exceptions.

Labs and exams in this course must be done *individually*. Students are encouraged to seek help from classmates but copying is not allowed. Instances of

²The installer files are available in the ELEX 2117 ShareOut folder.

plagiarism will be dealt with according to BCIT policy 5104.

Here are some guidelines for this course:

Don't:

- divide up the work or together on solutions
- 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 someone else arrive at their own solution by asking them leading questions
- 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

Briefly, if a classmate asks for help, help them to find their own solution, do not show them yours. Instead, explain where to find the information they're lacking so they can find the answer themselves.

The reason for this distinction is that you want to help your fellow students learn and to do this they need to go through the learning process themselves.

When copying is detected I can't tell who copied from whom and all students involved will be penalized.

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

Please ask if any of this is not clear. The penalties for Academic Misconduct are severe, and misunderstanding the course policies will not be accepted as an excuse.

Aside from the risk of penalties, academic misconduct is unfair to your peers and to yourself. Don't try

to justify it by arguing that "everyone does it" (they don't).

Distributing Course Materials

Lecture recordings are for students in the course and may not be redistributed.

Please ask before distributing other materials I've posted. I typically give permission under a CC BY-NC-ND [Creative Commons](#) license for my own work but this is not possible when the materials are owned by others, such as BCIT.

Quiz

Are the following true or false?

- I can submit documents prepared using Microsoft Word.
- I can submit .docx files.
- I must pass the lab portion of the course to pass the course.
- If I missed a midterm exam because I was sick so I should e-mail the instructor a medical certificate.
- The instructor prefers that I ask questions by e-mail.
- Missing a quiz will affect my final mark.