

ELEX 4560 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: <https://learn.bcit.ca/d21/home/494916>.

Office Hours

My office is in SW1-3061, accessed through SW1-3059. Office hours are:

Day	Time
Monday	11:30 AM — 1:20 PM
Friday	10:30 AM — 12:20 PM
	12:30 PM — 12:20 PM
	2:30 PM — 3:20 PM

It's a good idea to let me know if you intend to come by as I may be away from my office.

Relationship to COMM 2443

The course COMM 2443, “*Technical Communication 2 for Electrical and Computer Engineering*” must be taken concurrently with this course.

Some COMM 2443 writing assignments will be based on your project work. However, the evaluations for the two courses are largely independent with the following exceptions.

Your project must be demonstrated at the COMM 2443 presentations that will be held on November 28 starting at 2:30.

Your project mentor, course instructor, and possibly the sponsor will read the Description, Recommendations, and Appendices in your COMM 2443 final report in order to award the “achievement” and “report” components of your mark (see below). Of course, your writing must be clear for you to get a mark. The final reports are due December 3.

Marking

The marking scheme for the course is:

milestones	20 %
achievement	50 %
report	10 %
project management	20 %
total	100 %

The purpose of the “milestones” component is to encourage you to work consistently. Your mentor will award marks each week based on your team having met its scheduled milestone(s) for that week.

You are encouraged to adjust your project plan and schedule over the course of the project in order to keep it current. However, changes must be submitted to your mentor and course instructor at least one week before the dates of any milestones that are affected. In other words, you can't change a deadline the night before it's due.

Your project sponsor, mentor and the course instructor(s) will meet shortly after you submit your project scope statement and will decide on a marking scheme for the “achievement” portion of your mark. It will include various objectives and a mark for each objective based on its difficulty. Simple objectives will be given less weight than more difficult ones. The number of people in the group will also be taken into account. This is intended to encourage equity between project groups. You will be given a copy of your group's marking scheme.

At the end of the course your achievement mark will be calculated based on the objectives your group has met and their weights.

All members of a group will receive the same mark for the “milestones” and “achievement” components.

The “report” mark will be determined by the technical content of your final report. It should demonstrate a good understanding of your project and include enough detail for your work to be reproduced by other students.

The project planning mark will be based on the result of quizzes and project planning documents you submit during the lecture portion of the course (see below).

Project

Groups

You may form your own groups of two or three students¹. Although you may think you want to work with your friends, keep in mind that working together can strain friendships.

It may be useful for your group to prepare a “team charter” to align expectations between group members. It can cover individuals’ roles, expectations about time commitments, where and when you will work and decision-making methods. Your COMM 2443 instructor can provide examples and more details.

For example, you might want to ask potential team members where they fall between “I want to put as much effort into the project as I can” and “I just want to do enough to pass.” A team charter is not required in this course but you may find it helpful to discuss these issues before finalizing your groups.

Each group may allocate tasks as it sees fit. For example, you may want to choose one person to take on the project management role for the whole project or you may take turns. However, you are each expected to understand the project in enough detail to be able to independently prepare the project management documents, proposal and reports.

Project Sponsors and Mentors

Each group will have a project sponsor. This is the individual or company that proposes the project. It could be a student (possibly from your group), an external (industry) sponsor, a faculty member, or perhaps a family member. They will be your “client” and the primary “stakeholder.” You will negotiate the project objectives, scope and schedule with them. Your mark will be determined, in large part, by how well you meet your sponsor’s expectations as set out in the project scope document. Certain sponsors may be able to provide additional resources such as funding, equipment, or technical advice.

Your group will also be assigned a faculty member to act as your mentor. This person will meet with you weekly. They will mark your progress against your milestones and provide advice on resolving any technical roadblocks you encounter.

¹A student may work independently if necessary.

Project Lab

You will have keycard-controlled access to the B.Tech. project lab located in SW3-3730. You may work on and store your project hardware there.

You may only use the three benches in the half of the project lab nearest the door. The other half of the lab is reserved for B.Tech. student projects and a B.Tech. instructor.

Note that this instructor’s desk is in this lab. This is his personal office space. Please respect his space and privacy. Do not use his desk, his phone or the colour printer on his desk.

Failure to follow these rules will result in being denied access to the lab.

Each bench has a computer, oscilloscope, function generator, voltmeter, and power supply. There are two Ethernet ports on the wall behind each bench.

As with other BCIT lab computers, the original contents of the C: drive are restored each time the computer reboots. It’s best to store your files on a network drive or USB flash drive. You may be able to install some (“portable”) software on the D: drive.

There is a Lexmark laser printer in this lab that you can use.

Lab Schedule

Although there are four hours of labs on your timetable, your group may schedule your project work as you see fit. Your use of the project lab will not be supervised².

Demonstration

You should plan to demonstrate your project as part of your oral presentation for COMM 2443.

Document Repository

Many groups find it useful to set up a document repository that all members, and possibly your mentor, can access. Examples include LearningHub, GitLab, GitHub, Bitbucket, Dropbox, and Google Docs. Most are free for academic use or if your code will be released as open-source. If your project will include a significant software component you should consider using a repository that supports revision control.

²This assumes you will not be using voltages above 40 V. If you will, please inform the course instructor.

Publishing

In accordance with BCIT Policy 5101-PR1, [Implementation of Student Regulations](#), your final report will be submitted as “digital copies of student work to the BCIT Institutional Repository at the BCIT Library.” To allow this you must fill out form [LIB-73](#) and submit it along with your final report. This form grants the BCIT Library permission to distribute these documents under a [CC-BY-NC-ND Creative Commons](#) license.

To allow your report to be published, it may *not* include personal information such as your BCIT ID, e-mail address, etc.; confidential information; or copyrighted material except as permitted under “fair use” exemptions.

Project Management

Textbook

Students in this course are unlikely to be given management responsibilities at the start of their careers. In addition, the dozen or so hours available for us to study project management is not enough to cover the typical project management curriculum specified in Project Management Institute’s *Project Management Body of Knowledge* or “PMBOK” [1].

We’ll use the book *Project Management for the Unofficial Project Manager* [2] as a text. It is targeted at those in the situation new graduates are most likely to encounter: helping guide a small team through a short project. This book is also relatively short, easy to read and the electronic version is freely accessible through the [BCIT library](#) at:

<https://ezw.lib.bcit.ca/login?url=https://proquestcombo.safaribooksonline.com/9781941631119>

Lecture Format

Students will be required to read a section of the text before each lecture. At the start of each lecture students will either be given a quiz or be asked to hand in a project document. This will be followed by a discussion of the topic(s) and how the lessons of that chapter could be, or could have been, applied to your project.

Reading Schedule

Date	Chapter and Deliverable
Sept. 14	1: Project Management - Quiz
Sept. 21	2: The Five Process Groups - Quiz
Sept. 28	3: Initiate - Stakeholder Interviews and Project Scope
Oct. 5	4: Plan - Risk Matrix and Management Plan, WBS
Oct. 12	4: Plan - Gantt Chart
Oct. 19	5: Execute - Quiz
Oct. 26	6: Monitor - Change Request (optional)
Nov. 2	7: Close - Quiz

Unfortunately, the readings, your project work and your COMM 2443 deliverables will likely be unsynchronized.

However, the mark for this course will not be based on your COMM proposal and as you learn about project management your reaction will hopefully be “*Oh, that’s how I should have done it!*”

Project Management Documents

Although you will prepare a formal written proposal and report for your COMM 2443 instructor, the documents you submit for the lectures should be the simple forms shown in the textbook.

Software

You will not need project management software for this course. You will use relatively simple spreadsheets to document your project’s PERT analysis and create Gantt charts.

References

- [1] P. M. Institute, *A Guide to the Project Management Body of Knowledge: PMBOK Guide*. Project Management Institute, 2013.
- [2] K. Kogon, J. Wood, and S. Blakemore, *Project Management for the Unofficial Project Manager*. BenBella Books, 2015.