

UBC Forestry

PFFAC Tip Sheet:

Improving Student Connectivity in an Online Learning Environment

1. Instructor tips

1.1. Technology

- Learners engage more with shorter videos, and the engagement time decreases as videos lengthen. Optimal video length is 6-7 minutes; hence, compartmentalize your lecture topics.
- In addition to videos, also provide a PDF (simple slide) version of your video lectures.
- Post videos in advance to provide time for students to stream or download.
- Provide both high- and low-resolution versions of the video lectures; this can be achieved in post-production by reducing the frames per second and pixel resolution.
- While PDF files are typically much smaller than videos, PDFs file size can also be reduced dramatically. If you have videos embedded in your Word or Power Point file, click on the **Options** button that appears after clicking **on Save as PDF**, and then uncheck the **Convert Multimedia** box.
- During online office hours and discussion group sessions, consider a call-in option. Most video call platforms (Zoom, Google Meet) have an option to phone in. Also, there is BlueJeans option for free long-distance calls.
- Consider the possibility of designing a course without videos and rely more on detailed instructions, text, still images, infographics, etc.

1.2. Concessions

- Survey your students and ask questions about connectivity (see Tip Sheet on Communications Protocol in Online Learning Environments). At the end of the survey, include tips for students to construct or modify a learning- conducive home environment (see comments below in section 2.2 on audio/visual stressors)
- Record synchronous sessions and post them later for students to review.
- Design the course, as best as possible, to minimize or be free of strict and time-sensitive online evaluations that can lead to fatal errors due to technological crashes. Consider open-book exams and

providing an option of students working on a hard-copy of an examination as a backup to online submission.

- In the event of substantial connectivity issue during an exam (or other assessed activity) that would prevent student(s) from completing an exam, make sure that you have a plan in place on how to mitigate this (e.g., allowing the student to retake the exam at another time, a make-up exam or assignment, an oral assessment in lieu of the exam). This information should not necessarily be communicated to the students until a catastrophic interruption occurs.
- Be available during exams via Zoom, Collaborate Ultra, or the tool of choice for students to report any issues live.
- See more tips in the [Assessment—Assignments, Exams, and Participation](#) module of the [Faculty of Forestry Online Teaching and Learning Resources](#) course.

2. Student tips

2.1. Technology

- Measure internet speed with [speedtest.net](#) or [fast.com](#) at different times of the day and locations in your space. Generally, a minimum 5.0 Mbps download and 1.0 Mbps upload speed will handle most UBC learning technologies.
- Be patient while downloading videos, and plan ahead of time. Download large files when bandwidth is under less pressure (this differs across locations, but an example of high peak is the evening when people are streaming videos).
- Internet connection speeds can be improved by closing the number of applications and browser windows or tabs you have open and turning off any video sharing.
- Clear your browser's cache. The ability to clear your cache should be located in your internet browser's Privacy/Security Settings.
- Seek out public Wi-Fi hotspots, since they can be useful for downloading large files.
- If sharing resources with other household members (family/friends), establish a household schedule to minimize stress.
- UBC's [Chapman Learning Commons](#) and [Keep Learning](#) sites provide UBC students with useful information about learning technologies and online learning, as well as online technical support.

2.2. Learning environment

- Noise can be a stressor and distraction. If noise is a concern, try investing in noise reduction devices (from cheap ear plugs to more expensive noise cancellation headphones).
- Visual distractions can equally detract from your learning. Try finding or constructing a 'learning space' in your dwelling where you remove sight and sound distractions and establish better 'personal connectivity' with your classes. This can improve your mental health, create better boundaries between home life and school-work, improve your ability to focus, and enhance your productivity.
- Do not panic if your computer crashes in the middle of an exam. If you have serious technical or connectivity difficulties, or even relatively minor ones, your instructors will understand. Immediately contact them – they will do their best to provide adequate concessions.

- If you think you are having increased difficulties learning as a result of the online environment, you may be eligible for academic concessions (see the [UBC Centre for Accessibility](#)). Alternatively, you can communicate with Student Services or your instructors, who will be sympathetic and discrete about your situation.
- If you are feeling distressed by any technical / connectivity issues and are having trouble coping, please reach out for help. Help exists in many ways, but a good place to start is with [UBC Student Services Support](#) and/or your Faculty of Forestry Student Services team.

3. External resources

[14 Tips For Helping Students With Limited Internet Have Distance Learning](#)