

ONLINE TEACHING AND LEARNING BEST PRACTICES – UBC FACULTY OF FORESTRY

Prepared by the Planning for Fall *Adhoc* Committee

June 15, 2020

Janette Bulkan, Simon Ellis, Feng Jiang, Robert Kozak, Maja Krzic, James Langston,
Suzie Lavallee, Vincent Leung, Greg Paradis, Jeanine Rhemtulla, Andres Varhola



THE UNIVERSITY OF BRITISH COLUMBIA

Faculty of Forestry

PREAMBLE

In May 2020, the Planning for Fall *Adhoc* Committee (PFFAC) was struck to provide strategic oversight of and recommendations for the Faculty of Forestry in its transition to online teaching and learning. One of the PFFAC's first mandates was to develop a set of guidelines – specific to the Faculty of Forestry – to help instructors achieve coherent online teaching and learning strategies for fall 2020 courses.

In preparing this document, the PFFAC were guided by the following principles:

- The Faculty of Forestry should strive for excellence in its online course offerings as expectations (from students) will be high
- The development and provision of high-quality online offerings require a good deal of time, effort, and resources
- Materials developed for online offerings should be preserved for future use (online or face-to-face teaching)
- It is incumbent on instructors to come up with the best means of online teaching and the most meaningful modes of assessment for their specific courses – student preferences should not drive pedagogy
- The Faculty of Forestry should approach teaching in this online environment with empathy and care, using considered and thoughtful design in our courses to foster meaningful connections amongst students
- Above all, the Faculty of Forestry will strive for equitable experiences, both for students and instructors (faculty and TAs)

The resultant “Online Teaching and Learning Best Practices – UBC Faculty of Forestry” document is meant to provide ‘hands-on’ guidelines for developing and delivering online courses, providing alignment to our faculty approach to teaching for this fall. The document comprises four themes, each discussed in turn:

1. Equity
2. Online Course Delivery
3. Assessments – Assignments, Exams, and Participation
4. Technology

Prior to embarking on this document, the PFFAC conducted a survey of instructors (May 21 – 26, 2020) to inform this process and to benchmark where the Faculty of Forestry was currently situated with respect to online teaching preparedness (see Appendix A for breakdown of results). A total of 52 responses were received, spread across all units of the faculty and across the range of teaching experience. Most instructors (30) were still in the reflection stage of their preparations. The majority (33) had ‘better than novice’ experience with Canvas.

Previous forays into online teaching (including the spring pivot) relied on Canvas (all aspects of online course delivery), PowerPoint (live and recorded lectures, and student presentations), Collaborate Ultra (live lectures and discussions), Zoom (live lectures and discussions), and Camtasia (recorded lectures). The consensus was that these platforms were generally successful.

A consistent theme that emerged from the survey was a desire for future workshops / training with clear learning outcomes that targeted particular needs (of which there was a range) and were aimed at varying levels of expertise. The most common needs concerning teaching technologies were understanding the pedagogical rationales for the selection of particular technologies, as well understanding differences between available platforms, how they are applied, and how they best interact with each other. Where workshops are concerned, introductory-level training was the most-identified need, but intermediate and expert training were also desired by more than one-quarter of the respondents.

The preferred modes of delivery for training and support were individual consulting opportunities with experts and online workshops. However, two-thirds of the respondents were also interested in joining relevant communities of practice (COPs) – these could help to facilitate the smaller, more flexible discussion group formats that were preferred by some instructors for the delivery of training.

A number of non-technology needs were also identified. In particular, respondents wanted help in developing greater social connectivity in online classes. Understanding the balance between synchronous / asynchronous activities and the development of appropriate assessments were the next highest cited needs. Other support needs identified by several respondents included access to FSC offices and sample collections, computer and other technology upgrades, technical support and TA/GAA support. Last, but certainly not least, concerns regarding several equity considerations were identified by more than half of the respondents.

In addition to concerns about instructor resources and training, surveyed faculty expressed an overwhelming concern for stress levels in their students and a strong desire to foster community and peer-to-peer connections within their courses. The PFFAC committee also identified with a need for meaningful student input. With this information and goal in mind, a series of student focus groups and surveys have been designed and deployed. Aggregate results will be made available as soon as possible.

1. EQUITY

We shall strive for equitable experiences, both for students and teachers. We acknowledge the concerns of students and teachers and the very different social, political, economic, and linguistic contexts for learners and teachers in the COVID-19 era. There are potential equity issues on both the learning and teaching sides in the transition to synchronous/asynchronous learning modes. With this in mind, we promote a situation where both students and teachers perceive and receive fairness in the demands and attention required of them.

For students, equity involves hearing their voices and respecting their perspectives. We seek to provide a respectful and healthy online learning environment, a fundamental step being equal access to technologies and course resources. We suggest ways to ensure that conflict and inequitable power dynamics are minimized in the online learning environment. Virtual interactions can magnify misunderstandings and enable social conflict that is deleterious to learning and public good. The shift to online learning provides a window of opportunity for teaching better social intelligence and behaviour during virtual learning and online social interactions, a societal good in the era of ubiquitous social media. Additional virtual learning governance is promoted. We strive to provide a learning environment where students at each end of the spectrum (the ones who seamlessly adjust and the ones who are struggling) do not end up feeling dissatisfied.

For instructors, the transition to online teaching may exacerbate inequities in the academy. Courses that are harder to transition on-line (e.g., experiential, project-based, or lab courses; large courses with students in multiple time-zones) will require greater effort to redesign. Instructors who take to heart the directive to create 'excellence in teaching' will need to fully rethink their courses, akin to designing new course offerings. Much of this work will have to be done over the summer. This increased workload will be especially challenging for those with significant care-giving responsibilities (which will magnify gender inequities), with insecure contractual arrangements, and/or with inadequate home office set-ups. Early career academics and pre-tenure instructors are especially vulnerable as increased time devoted to teaching will take away from research and publishing productivity, thereby potentially impacting long-term career trajectories and salaries. These individuals are also less likely to request additional support.

To reduce these inequities for students and instructors, reduce and redistribute workloads, and fairly compensate instructors for increased workloads, the following guidelines are recommended:

A. Managing equity in the online classroom:

- A.1. Instructors are encouraged to conduct a Qualtrics survey at the start of the course to assess the equity issues particular to each course (e.g., the number and distribution of students across time-zones), in order to gauge their approach for their specific student audience. The PFFAC is currently developing a starter survey / Canvas quiz that can be deployed at the start of term for information gathering.
- A.2. Consider rotating availability through augmented evening hours so that students in all time-zones can benefit from synchronous activities (i.e., instructor is available during evening hours, with TA or other support potentially filling the alternating time periods). Augmented evening

hours should not be relegated to TAs. For equity reasons, all students should have synchronous access to instructors, possibly on a weekly basis with scheduled hours.

- A.3. Encourage slow and engaging communication/speaking styles, with attention to cadence, clarity, and simplicity in vocabulary. These approaches will compensate, to some degree, for students not being able to lip-read or observe general body language. This point is especially critical for those students for whom English is an additional language.
- A.4. Consult recommendations for accommodating students with disabilities through the [Centre for Accessibility](#), including [exam accommodations for the online environment](#). Note that significant changes have been made to [Policy 73](#) (Disability Accommodation Policy) for UBC, with [FAQs on Policy 73 available here](#).
- A.5. Use interactive software and pedagogical tools that promote participation and dialogue, both student-to-student, and student-to-teacher.
- A.6. Chat-rooms available to students during lectures (e.g. Zoom, Collaborate Ultra) should be monitored by instructors. This task can be delegated to added teaching capacity (i.e., TAs). Instructors should intervene if chat rooms become chaotic, off-topic, or discriminatory.
- A.7. Support students who have different learning needs (e.g., English as an additional language; exposure to different pedagogical styles). To ease students into active learning modes, suggest ice-breaking sessions with break-out rooms (e.g., think-pair-share and other interpersonal/group activities).
- A.8. Instructors may wish to provide optional asynchronous learning materials for students who have greater interest in a topic and are capable (e.g., extra readings). However, such materials should be clearly delineated from the required information for the course.
- A.9. Syllabi considerations:
 - Instructors should review course syllabi – realistically, with online learning, teachers might have to revise how much of their content they can deliver. Everything will likely be slower-paced, with more time dedicated to walking students through scenarios, problem-solving, etc.
 - Clear [guidelines for respectful online conduct](#) should be included in course syllabi, encouraging students to be mindful of the impact of communications and how to practice good ‘netiquette’
 - Instructors should provide conflict/dispute resolution guidance and relevant institutional links to respond to any dissonances in intercultural communication, including UBC [Wellbeing](#) and [Early Alert](#) links
 - Instructors should consider additional diversity and inclusion statements in syllabi for what is expected for specific courses (beyond UBC policy). See wording and information from the [UBC Equity and Inclusion website](#), especially the [UBC Statement on Respectful Environment for Students, Faculty, and Staff](#)

B. Support for student wellbeing:

- B.1. Like face-to-face teaching, online classes should be structured to [promote student wellbeing](#) and to [foster identity and belonging](#) in the classroom.
- B.2. Instructors should [promote mental health literacy in students](#), either through course design (e.g. encouraging help-seeking behaviours) or through intentional activities (e.g. workshop on mental health skills).
- B.3. Provide links to students that include: the Faculty of Forestry [Student Resources website](#), the [UBC Health and Wellbeing website](#), and the [Student Resources during the COVID-19 Outbreak website](#).
- B.4. If the teaching team or other students express a concern about the wellbeing of a student in their class, use the [Early Alert](#) system and/or reach out to [Forestry Student Services](#) to register that information in the system.
- B.5. Support mechanisms for graduate students tend to fall on supervisors who may already be spread thin. Supervisors need to provide clear guidelines to graduate students regarding how much work is expected during the pandemic or other trying or stressful times. It is recommended that a formal set of guidelines and principles on this matter be adopted and enacted by the Faculty of Forestry.

C. Wellbeing for instructors:

- C.1. Maintain practices that will allow for sustainable and engaged work, as well as caring for ourselves. UBC Human Resources has [online workshops on self care](#) for faculty and staff.
- C.2. Clearly outline teaching availability and email response times to students (including on syllabi) to avoid student expectations that instructors will make themselves available 24/7.
- C.3. Make use of additional resources to address teaching needs, such as graduate academic assistants (GAAs) and teaching assistants (TAs).
- C.4. Communicate clearly with department heads regarding what resources are needed to meet the unique demands of teaching online and identify when those demands cannot be met. Where no satisfactory resolution can be found, engage with the Faculty of Forestry Equity, Diversity, and Inclusion Council and/or Associate Dean, Diversity and Inclusion to act as an independent third-party.
- C.5. Be comfortable proposing alternative teaching approaches, as needed. For example, instructors who would like, but do not have, the flexibility to make use of augmented evening hours could request being paired with another instructor to team-teach, to allow for students in all time-zones to have access to synchronous teaching sessions with instructors.

D. Engaging with teaching assistants:

- D.1. Be aware of potential workload issues for teaching assistants, who are balancing changing research demands along with their teaching, supervisor relationships, and family dynamics.

Encourage graduate teaching assistants to track their hours, so they can be fairly compensated for additional efforts.

- D.2. Allowable TA hours are between 7:30 am and 8:00 pm. TAs can work outside of these times, but only if they explicitly agree to do so.
- D.3. Ensure that TAs do not bear a disproportionate burden of the shift online. For example, TAs should not be asked to take on responsibility for all evening teaching sessions.
- D.4. Work with TAs to identify their resource needs for teaching (e.g. computer and webcam requirements), and how to address any deficits
- D.5. Ensure that TAs are conversant in online technology for the course (e.g. Canvas, Collaborate Ultra, Zoom) and [seek training for effective online teaching](#), where necessary.
- D.6. Develop a clear communication plan for the course teaching team, ensuring that appropriate (i.e. FERPA-compliant) means of communications are used for all course activities and materials, including protocols that guard against unauthorized 'Zoom-bombing' or hijacking of teaching sessions.

E. Considerations for senior leadership:

- E.1. Strive to create equity in teaching loads, for example, by reassigning courses or reducing service loads for those with high teaching loads (or more complex offerings like lab-intensive courses) and encouraging team teaching where appropriate and beneficial. Instructors whose normal teaching load is lower could be asked to increase their loads this year in exchange for teaching release in the future.
- E.2. Proactively contact vulnerable individuals (e.g., early career scholars, racialized individuals, women, those with high care-giving responsibilities) to offer additional support and create a plan to reduce teaching loads.
- E.3. Proactively contact non-tenure track instructors (e.g., sessionals, lecturers) to assess how they are coping with the increased demands, and increasing compensation to fairly reflect the additional hours required to develop online courses.
- E.4. Provide additional resources (e.g., TA allocation, funds for home office equipment) to all instructors (including sessionals) to reduce workloads and facilitate working from home.
- E.5. Place greater consideration on teaching contributions (and the fact that productivity in other areas may be compromised) in determining merit and PSA during this period. Annual reporting should include a qualitative section asking all instructors to describe their approaches and efforts to adapting courses for online delivery.

2. ONLINE COURSE DELIVERY

Online teaching requires a significant shift of teaching approaches and course organization that will require investment by instructors and teaching assistants, both prior to and throughout the term. Demands of the transition on both students and teaching resources should be managed according to basic principles of equity. An intentional approach to virtual classroom structure and course delivery can help foster a sense of community and engage learners, adding depth to their online learning outcomes, building a respectful learning environment, and empowering students in their learning. Instructors can use the principles of designing and organizing course materials online, facilitating discourse within the class, and direct instruction of students in course content to create a successful learning environment. Further resources can be found in Box 1 (page 11).

The following are recommended for instructors developing and delivering online courses:

A. Provision of information:

In addition to the [mandated content for course syllabi at UBC](#), we strongly advise instructors to provide information specific to online learning resources on their Canvas site, including, but not limited to:

- keeplearning.ubc.ca for assistance with online learning technology and requirements
- Location of [resources on Canvas](#) and use of [additional learning tools](#)
- Online textbook sources
- [UBC Library online resources](#) useful to the course and the use of EZProxy for access
- [Academic integrity information](#) and pledge
- Agreement to a 'social contract' for online peer-to-peer interactions, including [etiquette for online classrooms](#)
- Software and hardware requirements specific to the course (i.e., beyond fundamental [recommendations by UBC](#) or UBC Forestry)
- Statement of expectations for class attendance for different session types (see below), course module completion, and online participation evaluation
- Providing students with a clearly stated plan of action in the event of technological failure on the instructor or the student side, including how long students should wait online if the instructor has not yet logged on or who students should contact if they are unable to log in

B. Blend of synchronous/asynchronous teaching:

While the modality of course delivery will change to online, the main forms of instruction should remain as instructor-generated activities and materials. Courses may include a blend of synchronous and asynchronous contact with students. The mix between synchronous and asynchronous delivery will depend on course-specific factors and the intentional design of instructors for the learning environment.

Synchronous sessions may build for greater community and peer-to-peer interactions within the virtual classroom, while asynchronous sessions may build for greater flexibility and equity among students in different learning environments. [Attentiveness to bandwidth required and immediacy of interactions](#) may be helpful in deciding which tools to use. The following guidelines are recommended:

- B.1. Hold at least one live, instructor-led contact session (i.e., synchronous teaching) per week, as lecture, tutorial, or discussion group activity, in addition to one-on-one interactions (i.e., office hours)
- B.2. Synchronous office hours should be held each week, either with instructors or TAs, and where possible, offer one synchronous office hour at an offset time (e.g., augmented evening hours) for students in different time zones
- B.3. For synchronous sessions, consider the following guidelines:
 - Synchronous delivery of courses should use Collaborate Ultra in Canvas to ensure FIPPA compliance, but Zoom is also an acceptable alternative platform for larger classes, if [guidance on protection of privacy](#) is provided to students
 - Synchronous sessions can be recorded, to provide students with the opportunity to review at a later time if technological failures occur (e.g., wifi disruption)
 - Live recording links should be provided as soon as possible after the end of the live session following the same guidelines for embedding asynchronous videos into Canvas (below). See the [UBC IT recommendations](#) for more information
- B.4. For asynchronous sessions, consider the following guidelines:
 - Embedding videos directly into your Canvas site is not advisable, since there are limits to course storage. UBC IT recommends that you use Camtasia to record lectures (saving them to your computer) and then Kaltura to store and stream video to your students. For detailed information on how to record and link videos in Canvas, see the [‘Keep Teaching - Lectures’ page](#) (bottom). Note that other video recording and storage/streaming services are available, but this may result in a decrease of video quality and do not fully integrate with Canvas
 - Where possible, videos should be limited to 10-minute segments, for file size management and maximizing attentiveness of the audience
 - The asynchronous sessions may be designed in a way that students’ progress and completeness can be monitored (e.g., use popup quizzes via ‘hotspots’ in Kaltura that divert to a course poll or quiz). Note that, for surveying students, [Qualtrics is the recommended, FIPPA compliant platform](#)
 - Instructors may want to provide student checklists for completion in Canvas or enable [adaptive release of materials](#) (e.g., automatic release of modules upon completion of tasks or benchmarks) to encourage and monitor student progress in the course. If taking these approaches, be mindful of changes to overall evaluation structuring (e.g., creating pass/fail tasks) and potential micromanagement of students’ time

C. Enabling communications and fostering connections:

C.1. Enable communications between instruction team (instructors and teaching assistants) and students in a clearly-stated plan that includes, but is not limited to:

- Making a pre-recorded greeting of students to the class, outlining expectations and overall course structure
- Providing opportunities for a [synchronous meeting in a one-on-one format](#) (e.g., live office hours) every week, with designated accommodations for students in other time zones
- [Using discussion boards within Canvas](#) for asynchronous information exchange, which may also include student-generated threads, upvoting of posts, and student-led postings
- Employing classroom approaches that empower the full diversity of students in the classroom to have their voices heard and perspectives known
- Embracing different listening capabilities of students (e.g., speaking slowly and articulating carefully)
- Employing feedback mechanisms to ensure communication styles promote equal learning opportunities (e.g., pauses in synchronous sessions, anonymous polling of students) and incorporating feedback into teaching approaches

C.2. Foster community and peer-to-peer connections to form within scheduled class times in a structured plan that may include:

- Development of and agreement to social contract terms for peer-to-peer engagement (e.g., respect and inclusion)
- Providing facilitated discussions and enable peer-to-peer exchange using small breakout rooms during synchronous sessions (e.g., Collaborate Ultra groups of 2 – 4 people)
- [Using groups within Canvas](#) to enable file sharing and meeting platforms for students
- Employing tools such as [Piazza](#) and [ComPAIR](#) (available in Canvas) for semi-structured exchange
- Polls for immediate feedback/participation (e.g. Qualtrics and embedded Zoom polls)
- Chatroom use (e.g., free-form 'check-ins' with students, question and response sessions)
- Use of shared spaces available via Canvas (e.g., Collaborate Ultra)

D. Time asked of students:

Extra attention should be paid to the amount of time being asked of students for:

- Watching videos that are required content for your course
- Attending group meetings required for projects and sharing files among group members (both are possible in Collaborate Ultra via Canvas)
- Training and practice sessions required for students to use new learning technologies
- Ending synchronous sessions on time and/or ensuring asynchronous videos are of appropriate length
- Using technologies with [different levels of bandwidth and immediacy](#)

E. Software compliance:

Software and learning technologies that are used in the course should [conform with BC's privacy law \(FIPPA\)](#) and have passed [UBC's Privacy Impact Assessment \(PIA\)](#). Additional considerations for new technology include:

- Usefulness to a significant portion of the course
- Significant gain of learning objective 'levels', *sensu* [Bloom's taxonomy of learning](#)
- Consistency with program-level requirements for curriculum
- Minimum expectations for student ownership/access to computer and online technology, as stated in the Technology section
- Access to some learning tools and video services (e.g., YouTube) may not be globally accessible. Where international students are experiencing difficulties, alternate sources and platforms may be required. High-level advice on this matter will be posted as it becomes available.

F. Applied labs and tutorials:

Where courses include instructor-designed work in an applied setting (e.g., labs and tutorials), there may be additional resources and course infrastructure that need to be built to meet applied learning objectives.

F.1. For each course that includes applied elements, instructors should clearly identify and map the following:

- Learning objectives, including [Bloom's taxonomy 'verbs'](#) attached to each
- Topics that are covered in this learning objective
- Resources *normally* used to present or teach these topics in face-to-face teaching
- Alternate activities or new resources that are available that may achieve the same objectives (e.g., [3D models](#), virtual environments, [Labster](#), etc.)
- Clear identification of learning objectives that are likely to be deficient and cannot be met using alternate resources (e.g., [kinesthetic learning/psychomotor domain learning](#))

F.2. Deployment of teaching in applied settings (e.g., labs) should include similar considerations to those of the classroom, including but not limited to:

- Synchronous teaching by TAs or instructors during regularly-scheduled time and augmented evening schedule times, made available by recording and posting for later review
- Asynchronous teaching by TAs or instructors via posting materials (e.g., videos, assignment descriptions, etc.)
- Clear delineation of expectations regarding attendance of synchronous activities and optional participation, where applicable
- Providing regular opportunities for synchronous assistance, specifically for lab-based activities

BOX 1 – Additional resources with practical suggestions for online teaching:

[UBC Keep Teaching](#)

[How to be a Better Online Teacher \(article\)](#)

[10 Simple Rules for Online Learning \(article\)](#)

[University of California \(Davis\) Canvas resources page](#)

[UBC Accessibility Handout – for online teaching](#)

[UBC Faculty of Education – Educational Technology Support](#)

3. ASSESSMENTS – ASSIGNMENTS, EXAMS, and PARTICIPATION

An important component of university-level teaching is the assessment of student achievement of learning objectives. The transition to online learning in the fall requires a shift in the approach to this assessment process. The frequency, size, and grading of weekly assignments, participation, and labs throughout the term will likely need to be adjusted, and may require the use of online technologies. Midterm and final exams will also need to be modified for online delivery. As much as possible, instructors are encouraged to share ideas, suggestions, and examples of online assignments and exams with other instructors.

A. General considerations for online assignments:

Instructors should consider re-designing assessments, even very slightly, instead of using the same types of assessments used in 'normal' face-to-face teaching modalities.

- A.1. Consider using frequent lower-stake assessments rather than end-of-term type high-stakes assessments, while keeping in mind workload for both students and instructors. Consider preparing pools of various types of questions (multiple choice, multiple answers, matching, numerical answers, etc.).
- A.2. Consider making the final exam worth not more than 30% of the final grade.
- A.3. Always keep in mind the demands of students mastering material, learning skills, and dealing with multiple learning technologies in the context of a full course load.
- A.4. When designing assessments, keep in mind overall issues of accessibility (time zones, internet access, bandwidth, webcam/microphone quality, and privacy/security/freedom in some countries).
- A.5. More attention should be paid to student progress in the online teaching environment. Hence, incorporate more personal outreach to students focused on assignment work and performance. For example, UBC's pilot of the [OnTask](#) system may provide a useful mechanism.

B. General considerations for online exam invigilation:

- B.1. Instructors may wish to revisit their methods of examination in their courses, by using exam types and alternatives that are easier to facilitate in the online environment, and less conducive to cheating. Some key considerations, alternative assessment types, and examples are provided here: [CTLT pamphlet on Alternatives to In-Person Exams.](#)
- B.2. Prior to the exam, consider the following:
 - Early in the course, define misconduct and explain the importance of academic integrity. Prepare a plan to minimize academic misconduct
 - Prepare an honesty pledge (e.g. [UBC Okanagan Integrity pledge](#) and Box 2, page 14), and require students to go through and agree to it prior to the exam (e.g., as a bonus assignment or as part of a practice exam)

- Make sure that students registered with Access & Diversity are allocated their extra time allowances (such exams will likely be administered through the Centre for Accessibility)
- Create a practice exam to allow students to become familiar with exam styles and requirements. Give students opportunities to practice writing exams (and test the stability of their internet service) using webcams and other hardware
- Provide students and teaching assistants with an emergency plan in the event of a technological failure during the exam. Specifically, let students know who they should they contact and how

B.3. During the exam, consider the following:

- Use online proctoring software for exams or consider different kinds of online assessments (e.g., open book exams, oral exams, etc., see Box 3, page 15)
- Make sure that instructors and/or TAs are present online to address problems that might occur during exams
- Try to use synchronous exams and set tight time limits, although this may be a challenge for students in different time zones (in which case, alternative approaches should be considered)
- If it makes sense for your class, display only one question at a time, in randomized order from a pool of questions
- Ensure that settings for your online exams or quizzes do not inadvertently allow for the release of answers or correct results until all students have completed the exam

C. General considerations for evaluating online participation:

Evaluating participation in an online classroom can be particularly challenging, especially for larger classes. There are many elements that can be considered to be ‘participation’, but it generally refers to behaviours that contribute to the learning environment of the classroom.

- C.1. In your syllabus, provide a clear statement of how participation will be evaluated, including all components and any adjudication by the teaching team as a whole.
- C.2. Ensure that your evaluation of participation encompasses several different aspects of potential student interactions, for example: attendance of synchronous sessions, viewing of an asynchronous content, completion of quizzes, polls, and surveys (both in synchronous and asynchronous settings), and peer-to-peer interactions. For additional information, please refer to [Harvard University’s Assessing Online Participation](#).
- C.3. If discussion boards in Canvas are used to evaluate participation, students could be required to contribute a certain number of meaningful posts (provide a rubric to clarify the required number, and quality or standard expected for such posts). Students could also be evaluated on ‘upvoting’ of posts by peers, to identify higher-quality responses.
- C.4. When break-out discussion groups are employed, groups can provide reports on their discussions to document member participation.

- C.5. Consider using [peer evaluation](#) to assess participation or to adjust grading for group assignments. Some tools, such as [iPeer](#) and [ComPAIR](#), are built into Canvas and are also relatively easy to implement.
- C.6. [Self-evaluation](#) is also a highly effective tool to assess participation, and helps to build professional-level behaviours in students.

BOX 2 – Some examples of Honesty Pledges:

Example 1:

I hereby pledge that I have read and will abide by the rules, regulations, and expectations set out in the UBC Academic Calendar, with particular attention paid to the following:

1. Student Declaration
(<http://www.calendar.ubc.ca/vancouver/index.cfm?tree=3,285,0,0>)
2. Academic Honesty and Standards
<http://www.calendar.ubc.ca/vancouver/index.cfm?tree=3,286,0,0>
3. Student Conduct During Examinations
<http://www.calendar.ubc.ca/vancouver/index.cfm?tree=3,41,90,0>
4. Any special rules for conduct as set out by the examiner.

I affirm that I will not give or receive any unauthorized help on this examination, that all work will be my own, and that I will abide by any special rules for conduct set out by the examiner.

Example 2:

We are taking this exam in an online environment under unusual circumstances. We're all in this together. It is important that this exam is fair to all students, and that no student has an unfair advantage.

With that in mind, please affirm the following:

I affirm that I will neither give assistance to, nor receive assistance from, another student during this exam.

- True / False

BOX 3 – Some examples of online exam systems / alternatives:

Proctorio:

- Automatic proctoring, instructors can choose to see results when complete
- Already available to instructors
- Requires a webcam, good internet connection
- Provides ability to track screen, student movement, internet traffic etc.
- Requires VPN in China

Lockdown browser:

- No recording/proctoring function
- Students can only open the exam web browser on their computers

Video proctoring using Collaborate Ultra:

- Supervised by the instructor/TAs themselves
- Limits on the number of students that can be invigilated at any one time

Open-book exams:

No exam:

- Opt for final presentation or oral exam, final assignment, project, paper, etc.

4. TECHNOLOGY

Online teaching and learning require suitable technology. This may be a challenge for some students who may not be able to meet the technology requirements for seamless online learning. That said, the university will make available student [bursaries](#) for computer upgrades and purchases. The following considers computing requirements, and compiles guidelines to help instructors to proactively take steps in their course designs to minimize the occurrence of technological ‘breakdowns’ while teaching in an online modality. See Box 4 (page 17) for further specifics.

A. General recommendations for technology to deliver online courses:

- A.1. Departments must ensure that instructors have adequate computing power to teach from home.
- A.2. Instructors should use Canvas as the online learning management system for all of their courses. The Canvas site should, at minimum, provide the following: a) course outline/syllabi; b) Canvas calendar; c) information on academic integrity; d) grades dispersal/display; and e) feedback on assignments.
- A.3. A list of course-specific IT requirements (hardware and software) required for specific courses should be included in syllabi and made available to students prior to classes beginning (see Box 5 on page 18 for generic list of minimum requirements).
- A.4. Small course materials/files should be provided on Canvas, while larger files can be transferred using FIPPA-compliant software (like the Forestry Microsoft 365 account that comes with OneDrive for Business).
- A.5. The newly appointed Teaching Resources person and designated undergraduate Rovers (to be determined) can provide guidance on the use of Canvas in order to keep your course within the size limits.
- A.6. Instructors, GAAs, and TAs are encouraged to explore technologies in the creation of high-quality online materials. Forestry has purchased a one-button video-capture studio where lectures and presentations can be very simply recorded and processed and a number of available technologies can be used to ‘emulate’ experiential learning where applicable (e.g., 360-degree cameras, virtual reality, 3D Modeling, etc.).

BOX 4 – Guidelines for the use of online materials/activities (e.g., videos, visuals, links):

Most common applications:

- Canvas
 - UBC's primary learning platform for delivering online course content
- Collaborate Ultra under Canvas
 - An application for moderating classes, meetings, or other group collaborations where participants can share whiteboards and screens, chat by voice or text, and engage in other ways like taking polls and answering questions
- Kaltura under Canvas
 - A video platform for instructors and students to record and share video content

A limitation built into UBC's Canvas framework is that it caps an individual course at 4GB. In order to keep your course within the limit, the following are recommended:

- Provide size-optimized PDFs (no more than 10 to 15 MB each)
- Lock PDFs to everything but 'viewing/printing'
- Share videos in Kaltura
- Info in Office documents can be copied to the Canvas HTML editor directly, but do not directly copy and paste from Office documents (instead copy to notepad to remove Office's hidden formatting, paste from notepad and re-format)
- Remove all the animations in PowerPoint and optimize pictures size
- Remove any external linking and macros (unless part of the course) on Excel files

More tools are available at [UBC LT Hub](#).

BOX 5 – IT requirements for students and instructors:

Minimum setup (for both PC and Mac):

- i5, quad, 2+ GHz
- 8 GB ram
- 250 GB free disk space
- 14" screen size
- Webcam (720p) and with microphone
- ISP service 5 Mbps upload/download speed
- Free cloud storage

Optimal setup (for both PC and Mac):

- Windows PC
- i7, quad, 3 GHz
- 16 GB ram
- 512 GB or better free disk space
- 15" or better screen
- Webcam (720p) with microphone
- Separate monitor, 24"
- Separate keyboard and mouse
- ISP service 100 Mbps upload/download speed
- Paid cloud storage of 50 GB or better

APPENDIX A:

SURVEY OF FACULTY OF FORESTRY TEACHING COMMUNITY REGARDING TRAINING AND SUPPORT NEEDS FOR ONLINE TEACHING IN SEPTEMBER 2020 (52 RESPONSES), MAY 26, 2020

In which unit are you?

3	Dean's Office
14	Forest and Conservation Sciences
22	Forest Resources Management
13	Wood Science

How many years experience teaching in post-secondary institutions do you have?

12	0-5
9	6-10
6	11-15
25	16+

How would you describe your present stage of preparedness regarding the teaching of your fall course(s) fully online?

5	Unprepared: I'm absolutely nowhere
30	Reflection: I am reflecting on what I learned during the online pivot (if applicable) and am thinking about some online pedagogy.
13	Re-Design: I have started drafting a redesign of my course(s), including teaching activities, assessments, etc.
3	Implementation: I am making good progress already in building my course(s) for the fall

Which of the following best describes your experience with Canvas?

4	I've never used Canvas
15	I've used a handful of the basic features of canvassed brackets (e.g., for course announcements, posting materials)
22	I've used and am familiar with some of the interactive features of Canvas
11	I've used and am familiar with many of the more sophisticated interactive features of Canvas

How much of your time this summer do you anticipate you will need to devote to developing your online course(s)?

10%	2	60%	8	
20%	6	70%	8	
30%	6	80%	5	
40%	6	90%	1	
50%	8	100%	2	Average = 52%

Are you aware that the UBC Centre for Teaching, Learning and Technology (CTLT) has been offering several different workshops, repeating many of them, over the last few weeks to help instructors prepare for online teaching?

50 Yes
2 No

Have you taken any workshops over the last few weeks offered by the CTLT?

27 Yes
25 No

IF NO – Please indicate why you have not taken one of these workshops

0 I was not aware of these workshops
19 It was not convenient to take them
5 They did not seem to meet what I think my needs are
5 The workshop was full when I tried to register
2 I have not been impressed with previous CTLT offerings
1 I had heard from others that the workshops were not that useful
12 Other – write in

IF YES, Please indicate how many such workshops you have taken since the end of March

1 7
2 4
3 3
4 4
5 2
6+ 4

If you can remember which workshops you have attended, please rank how useful you found each of the workshops. (1 – not very useful, 5 – extremely useful).

WORKSHOP	1	2	3	4	5	Av
The Land You Live On: Native-Land Digital				1		4.00
Blended Learning Through a Different Lens		3	5	5		3.15
Sample Canvas Course Template(s) for Remote Teaching	1	4	7	2	1	2.87
Teaching with Collaborate Ultra		2	4	2	1	3.22
Course Examples of Moving from F2F to Remote Teaching	1	2	2	4		3.00
Supporting Student Well-being in an Online Learning Environment			3	2		3.40
Teaching Online with Canvas		2	6	4		3.17
Getting Started with Proctorio			2	1		3.33
Facilitating Active Peer-to-Peer Engagement in Online Spaces		1	2	1		3.00
Facilitating Effective Asynchronous Online Discussions in Canvas			2	1		3.33
Building Online Assessments to Minimize Academic Misconduct			1	2		3.67
Using UBC Wiki to Enhance Student Learning Through Open Assignments		1	1	1		3.00
Exploring Zoom			2	2		3.50
Other – write in	1	1	3	2	1	3.13

Have you previously developed online teaching material – either during the pivot to online teaching at the end of last term or in any previous courses?

38 Yes
14 No

What technology tools have you used and for what type of online teaching activities? (Please tick all combinations which apply).

Technology	Live lectures	Recorded lectures	Labs/ tutorials	Discussions	Student presentations	Office hours	Quizzes/ exams
Canvas	14	16	21	19	7	8	25
Collaborate Ultra	17	6	4	11	8	8	3
Zoom	11	5	6	9	6	7	1
Skype	7	2	1	5	2	5	
Camtasia	2	14	7	1	1	1	1
Kaltura		2	2				
PowerPoint	23	18	7	5	9	1	3
Proctorio							4
Slack			1	3		1	
Notability				1			
Google Hangouts	1	0	0				
Other	0	5	6	5	3	2	4

What delivery modes of training or support would you find most useful as you prepare your online courses?

DELIVERY MODE	Rank 1	Rank 2	Rank 3	Score
Expert-driven, online workshops hosted on Collaborate Ultra	14	10	8	70
More flexible forum for discussions/brainstorming on Zoom	6	7	6	38
Small groups focussed on more narrow issues (Zoom)	4	10	8	40
Individual consulting opportunity with educational technology experts	15	13	3	74
Asynchronous, pre-recorded training (likely from non-UBC, external sources)	8	7	9	47
Other – write in			3	3

What particular aspects regarding the technology to be used in developing your online courses do you think you need the most help with?

NEEDS	Rank 1	Rank 2	Rank 3	Score
Becoming aware of the range of technology platforms available and how which ones work well with each other	12	10	4	60
Understanding some of the pedagogical basis in which to ground my choice of technologies and how they are applied	19	7	3	74
Introductions to particular technology platforms	5	8	2	33
Intermediate training on particular technology platforms	2	6	6	24
Expert training on particular technology platforms	3	5	6	25
How possible student technology limitations/restrictions may limit my options (e.g. bandwidth, internet stability, firewalls)	6	6	9	39
Other – write in		2	2	6

What particular aspects not related to technology do you think you need the most help with?

ISSUES	Rank 1	Rank 2	Rank 3	Total
Ways to develop greater social connectivity in my online courses	20	10	2	82
Approaches to discourage academic misconduct	3	3	3	18
Development of appropriate assessments for online teaching	7	7	5	40
Choosing a balance between synchronous (live) and asynchronous (recorded) media	9	5	3	40
How to manage communications with students		9	8	26
Time management strategies – for instructors and for students	3	3	3	18
How to manage group work in online courses	3	4	8	25
How to best deploy Graduate Teaching Assistants in online courses	2	4	7	21
Other – write in		1	1	3

Would you be interested in joining relevant communities of practices where groups could come together weekly to discuss courses and plans, brainstorm ideas and help each other?

34 Yes
17 No

The current circumstances and shift online teaching have the potential to create or magnify existing inequities resulting from contractual status, career stage and or personal circumstances. Which of the following circumstances do you currently face? (Please check all that apply).

10 Uncertain contractual status (e.g., sessional lecturers)
8 Pre-tenure
13 Caregiving responsibilities (children or others]
17 Lack of good home office arrangement
36 Teaching courses which will require significant modification for online delivery
7 Other