Teaching Remotely

Introduction

This guide provides an introduction to teaching remotely and shares best practices, tips and links to resources for teaching in virtual or online classrooms. It is intended to provide the information you need to quickly transition to teaching remotely. The guide can be referenced prior to, and throughout the course design process.
Teaching Remotely: **Modality**

During the Spring and Summer of 2020 McMaster will offer two modality options for courses: The Virtual Classroom (V) and The Online Classroom (ON).

### The Virtual Classroom (V)

A Virtual Classroom is a shared online learning environment for students and instructors. Instructors lead a live lecture using video with questions and discussions with the class in a very similar way to the in-person classroom experience.

This synchronous experience does not preclude the instructor from recording and sharing the lecture to allow for the flexibility of asynchronous viewing and review and instructors are strongly encouraged to do so. The recorded lecture will be closed captioned automatically by the video recording tools.

If a class is designated as V, a day and time are scheduled for the class. Instructors should outline their expectations for the scheduled times in the course outline and should communicate whether the lecture is also recorded and shared and available at other times.

Students will need access to a device that allows them to access the lecture through video and/or audio.

### The Online Classroom (ON)

An Online Classroom is course that is designed for the online environment. Learning occurs in a self-paced manner with instructors guiding students through the learning.

In this asynchronous classroom experience, instructors pre-record lecture modules that may contain interactive elements including quizzing and activities. The pre-recorded lecture modules will be closed captioned by the video recording tools.

If a class is designated as ON, there may or may not be a specific day and time scheduled for the class. Instructors should communicate timelines and checkpoints to students in the course outline. The course outline should also include expectations for accessing the pre-recorded lecture modules.

Students will need access to a device that allows them to access the lecture through video and/or audio.

**NOTE:**

Virtual and Online approaches may be combined. A tutorial may be scheduled for a specific time through a virtual classroom even as core lecture is available through pre-recorded online modules. Instructors should encourage students to check the course outline for the course expectations on participation.
Teaching Remotely: **Modality**

Synchronous and Asynchronous Classrooms

One of the most significant factors to consider when preparing to teach remotely is whether you will be teaching in a virtual or online classroom. As noted, a virtual classroom is primarily synchronous, while an online classroom is generally asynchronous. At McMaster, virtual/online courses are typically conducted on Avenue to Learn. Avenue to Learn is McMaster’s Learning Management System (LMS). The following table offers a comparison of the two modalities.

<table>
<thead>
<tr>
<th>Benefits</th>
<th>Challenges</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Synchronous</strong></td>
<td>• Often technical difficulties with students simultaneously accessing tools, internet.</td>
</tr>
<tr>
<td>• Less preparation for the instructor.</td>
<td>• Often creates accessibility challenges or barriers to learning.</td>
</tr>
<tr>
<td>• Active learning environment.</td>
<td>• Everyone must adhere to set schedule.</td>
</tr>
<tr>
<td>• Immediate feedback for students.</td>
<td></td>
</tr>
<tr>
<td><strong>Asynchronous</strong></td>
<td>• Requires students to be more self-regulated or organized to meet deadlines.</td>
</tr>
<tr>
<td>• Students have more flexibility and can participate at their discretion.</td>
<td>• Students may feel isolated.</td>
</tr>
<tr>
<td>• Can be a more engaging learning experience.</td>
<td>• Instructors often underestimate the time required for students to complete all learning.</td>
</tr>
<tr>
<td>• Can better facilitate learning activities that are not possible in the synchronous environment.</td>
<td></td>
</tr>
</tbody>
</table>

While virtual synchronous classes may be the preferred option in some cases, the MacPherson Institute recommends using an asynchronous approach where possible.
Teaching Remotely: **Modality**

As you explore the differences in modality, you will also need to consider what tools will help you achieve your goals. One of the determining factors to consider is class size as not all tools can accommodate sessions with large groups of students. This comparison of the supported tools may help you determine the best tool for your purpose. See the [Additional Resources](https://mi.mcmaster.ca/instructional-continuity) section for more information about each tool.

<table>
<thead>
<tr>
<th>Main Purpose</th>
<th>WebEx Meetings</th>
<th>WebEx Training</th>
<th>Microsoft Teams</th>
<th>Zoom</th>
<th>Echo360</th>
<th>MacVideo</th>
</tr>
</thead>
<tbody>
<tr>
<td>Present information, share applications, and collaborate on projects in a centralized space</td>
<td>Deliver online training and eLearning</td>
<td>Digital communication, collaboration and learning spaces and tools</td>
<td>Online video conferencing, breakout rooms</td>
<td>Livestreaming and Creation/Streaming of Video/Media</td>
<td>Video/Media streaming</td>
<td></td>
</tr>
<tr>
<td>Maximum users/session</td>
<td>1000 (100 max video devices)</td>
<td>1000</td>
<td>250 in video meetings, 5000 in a team</td>
<td>300</td>
<td>No limit</td>
<td>N/A</td>
</tr>
<tr>
<td>Supports guests/anonymous users</td>
<td>Yes</td>
<td>Yes</td>
<td>Guests, yes</td>
<td>Yes</td>
<td>Share recordings by public link</td>
<td>No, but can share public links</td>
</tr>
<tr>
<td>Session recording</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Screen recording with personal capture app.</td>
</tr>
<tr>
<td>Share recording</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Live closed captioning</td>
<td>No, but can obtain transcripts automatically after recorded session is saved. Only in English</td>
<td>No</td>
<td>Yes. Can also edit transcriptions after video is saved in Microsoft Stream. Can share link with anyone. English only</td>
<td>No, but can obtain transcripts automatically after recorded session is saved in the cloud</td>
<td>No</td>
<td>No, automatic captioning upon upload</td>
</tr>
<tr>
<td>Edit video recordings</td>
<td>Yes, using WebEx editor (Windows only)</td>
<td>Yes, using WebEx editor (Windows only)</td>
<td>Yes</td>
<td>No</td>
<td>Yes, limited</td>
<td>Yes</td>
</tr>
<tr>
<td>Break out or virtual rooms</td>
<td>No</td>
<td>Yes</td>
<td>Yes Set up private channels (30/team possible)</td>
<td>Yes, up to 50 different sessions</td>
<td>Can set up Q&amp;A to be used as break-out rooms – not private</td>
<td>No</td>
</tr>
<tr>
<td>Send invites in Avenue</td>
<td>Yes</td>
<td>Yes</td>
<td>Users can schedule a call in Avenue, only those with access to the course can access the call</td>
<td>Yes</td>
<td>Fully integrated into Avenue to Learn</td>
<td>No, but integrated in Avenue to Learn</td>
</tr>
<tr>
<td>Other engagement features</td>
<td>Screen/application share/whiteboard/raise Hands</td>
<td>Screen/application share/whiteboard/raise hands/polling</td>
<td>Screen/application share, real-time collaborative work and text/video/audio conversation possible around any website or file shared</td>
<td>Screen/application share Polling Raise Hands</td>
<td>Online discussions, note taking, student engagement tool</td>
<td>Interactive features (in-video quiz, hot spots, picture in picture), analytics</td>
</tr>
</tbody>
</table>
Teaching Remotely: **Considerations**

When transitioning to teach remotely, it is important to consider yourself and your students as you shift to a new modality. It is also important to consider best practices for building community, communication and compliance when teaching remotely. This section explores each of these considerations.

**Consider Yourself and Your Students**

As you begin to teach remotely it is important to consider your capacity, time, and aptitude.

Try to keep course design flexible and accessible, and avoid adding complexity. Students will also have varied levels of comfort and experience learning remotely. They may have competing educational demands (e.g. balancing multiple courses, learning new tools/technologies) and personal responsibilities (e.g. care giving responsibilities, housing or food insecurity).

Prioritizing flexibility and accessibility in virtual or online teaching will translate to a better teaching and learning experience.

**Resources:**

- [Doing an OK Job at Teaching in Crisis by McMaster History Instructor Mary Chaktsiris](#)
- [Trauma-Informed Teaching and Learning Online: Principles and Practices During a Global Health Crisis](#)
- [How Universities Can Support Students’ Mental Health Amid Covid19 Crisis](#)
- [Tips for Managing Virtual Instruction During the COVID-19 Crisis](#)

**Building and Sustaining Community**

Building community is an important part of creating an engaging experience for both you and your students. At the beginning of your course, consider posting a short video or note and provide an introduction to yourself (and, if appropriate, members of the teaching team) and the course. This allows students to meet you virtually and to prepare accordingly.

You could also share how to access content in Avenue to Learn, your expectations about technology use, and how and when you will share announcements or important information about the course. You could ask students to introduce themselves by posting on discussion boards or sharing videos of their own.

Being present throughout the course (responding promptly, engaging with students, answering questions, comments, concerns) can help ensure students feel connected.

**Resources:**

- [Building Online Community e-Learning Kit](#)

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McMaster is committed to an inclusive and respectful community free of accessibility, inclusion, harassment, discrimination or sexual violence concerns. These principles and expectations extend to all virtual/online activities including electronic chat groups, video calls and other learning platforms.

Inquiry and support is available through the [Equity and Inclusion Office (EIO)](#).
Teaching Remotely: Considerations

Communication

Teaching remotely requires frequent communication. Whether it is through the Avenue course shell, videos or email, it is important to routinely communicate with students. You might post weekly announcements, host virtual group drop-ins or individual office hours, or encourage students to post questions about the course on discussion boards.

As you establish your routine, it is also important to consider communication barriers. Some students may be taking courses remotely in countries that engage in internet censorship or surveillance, including limitations to accessing content (YouTube), and violations of user rights. Ask that students contact you if they have any concerns about participating in online or virtual classrooms, accessing research, or completing assignments.

Instructors should be particularly aware that Gmail, the service used for all McMaster student email accounts, is blocked in some locations (e.g., Mainland China) by local firewalls. As a result, some students may not have access to McMaster email. Before students visit China they can set their Gmail to forward messages to another address that has local access or install McMaster’s Virtual Private Network (VPN).

If a student is already in China and does not have access to McMaster email, they can use Avenue Mail to communicate with instructors and TAs. Instructors should consider posting important information to their course homepage or other channel (e.g., Avenue Mail) in addition to sending messages to students’ McMaster email, and should monitor their Avenue Mail inboxes in case students are contacting them there.

Intellectual Property and Copyright Considerations

As you transition to teaching remotely please review McMaster’s intellectual property and copyright policies.

As you develop content for your course, it is important to note that according to “The University affirms that copyright of Instructional Materials belongs to the Author(s)...” Consult Copyright Ownership and a Policy Framework for Licensing Instructional Material for exceptions and further information.

McMaster’s Office of Legal Services has a detailed resource about copyright considerations when shifting to teaching remotely. In particular, the document notes that “most of the legal issues are the same whether the teaching is done in person or online (via a learning management system such as Avenue to Learn)” and that “if it was okay to do in class, it is often okay to do online – especially when your online access is limited to the same enrolled students (for example via a learning management system such as Avenue to Learn).” If you have questions about copyright or the material you would like to share does not fall within the Fair Dealing Policy, please email copyright@mcmaster.ca.

Students in your course may also create intellectual property (e.g., patents, copyright). McMaster’s Policy on Ownership of Student Work provides information about different protections for various types of student work.

Resources:

Faculty of Engineering Guidelines on Intellectual Property and Student Mentoring

McMaster Joint Intellectual Property Policy
Teaching Remotely: **Accessibility**

When teaching remotely there may be additional considerations to ensure your content and course are accessible to all. The more you understand about creating accessible content prior to developing your course and lecture content, the easier it will be to ensure you are developing an inclusive and equitable learning experience. In many cases the institutionally supported tools assist with compliance.

**McMaster's Accessibility Hub** is a central resource that shares how McMaster can support you in creating and distribute accessible content. It also includes resources and instruction for **Digital Media Accessibility** requirements.

If you are an instructor who is concerned about encountering barriers that may affect your ability to teach in a virtual or online classroom, please consult your Chair or Director. You may also contact the MacPherson Institute at our **support request page** or by **contacting your Faculty liaison**.

**Resources:**
- [Accessibility in eLearning](#)
- [Tips for Accessibility When Teaching Remotely](#)
- [McMaster's Workplace Accommodation Policy and Process](#)

Some important strategies to promote accessibility include:

- Create and/or share videos and web conferencing recordings with captions and transcripts (possible through MacVideo, WebEx, Zoom and Echo 360) - see Additional Resources.

- Use large fonts and avoid using font colour to convey information.

- Provide students with enough time to read and engage with your course content.

- Consider how you will plan for interruptions due to internet connectivity and how this will be reflected in online tests or quizzes.

- Make your course easy to navigate. You can section content into modules, use headings and labels to organize text, and explain the purpose of any linked content in-text so that it is accessible with a screen reader.
Teaching Remotely: Course Alignment

As you begin to teach remotely a good first step is to review your existing course and evaluate which components, if any, need to accommodate the shift in modality. Designing a course to be taught remotely is very similar to teaching in the classroom. It is important to ensure that there is alignment between your learning outcomes (course goals), your teaching and learning activities (discussions, case studies) and your assessment methods (quizzes/tests). This is also a good time to consider a universal design approach to the course to ensure it is designed with all students in mind.

Learning Outcomes, Assessments, and Activities

Learning Outcomes:
As you assess your learning outcomes to ensure they apply as you teach remotely you can think about them like planning a trip - start with the end in mind and determine how you will get there. You may need to consider a detour to get to your new destination. In the course context, clarify the main knowledge or skills that you want your students to know or be able to do by the end of the course/lesson and ensure the course provides the required learning to be successful.

As you consider and refine the learning outcomes, ensure they are achievable when teaching remotely. For example, a learning outcome that asks students to “describe the metaphors in Wide Sargasso Sea” can be achieved in a variety of ways, regardless of modality. However, in some cases where outcomes are tied to applied skills or physical infrastructure (e.g., working in a lab), you may need to consider how this may need to be adapted to better suit learning remotely (e.g. Virtual lab/simulator).

Teaching and Learning Activities:
Many institutionally-supported tools, such as Avenue to Learn, Microsoft Teams, Zoom, and WebEx, Echo360 and MacVideo enable students to engage in learning activities. In some cases, these tools can enhance the accessibility of the activities by providing different options for engagement. For example, if you run a discussion-based activity, you could offer students the option to participate in a synchronous video call with Microsoft Teams, Zoom, or WebEx or create a post on an Avenue discussion board for asynchronous interaction. Group work can be a particularly effective way to encourage active learning.

Resources:
Simple Techniques for Applying Active Learning
Facilitating online discussion
Strategies to Online Course Videos

For more information, visit:
BRIGHTER WORLD | https://mi.mcmaster.ca/instructional-continuity
Teaching Remotely: **Course Alignment**

**Assessment Methods:**

Remote teaching environments offer many options for online assessment. Avenue to Learn allows students to submit assignments in an Assignments Folder and to complete quizzes, tests or online exams using the Quiz tool.

It is important to remember that assessments should be equitable and accessible. Asynchronous assessment options enable students in different circumstances to complete the work to the best of their abilities.

**Resources:**

- [UDL Assessment resource](#)
- [Should I Move My Exam Online?](#)
- [Queen’s University Webinar on Remote Exams](#)
- [Humber College Assessment Decision Flowchart](#)

**Universal Design**

Universal design recognizes the diverse ways that students learn and provides a framework for instructors to purposefully incorporate learner variability into curricula from the outset. In practice, this means providing different options for engagement, expression, and representation, such as holding asynchronous tests or exams, offering flexible deadlines, giving students choice in assignment types, offering regular formative feedback, and creating accessible media. Embedding universal design strategies in each stage of course design can facilitate barrier-free learning for all students.

**Resources:**

- [McMaster’s Flex Forward Accessible Teaching and Learning Resource](#)
- [Universal Design for Learning Resources and Tips (CAST)](#)
- [Universal Design in Higher Education: Promising Practices (University of Washington)](#)
- [Universal Design - Best Practices for Online Learning](#)
Teaching Remotely: Developing Content

As you shift to teaching remotely you will need to consider your content and determine if you need to adapt it or add new content to meet the new modality.

Preparing to Teach Remotely

Teaching remotely offers different ways to share your subject matter expertise. Regardless of modality, using these strategies may improve the teaching and learning experience.

- Provide/Produce media content that is less than 10 minutes. Presenting information in smaller “chunks” makes it easier to process, remember, and apply.
- Begin each lecture segment with a question/hook to generate student interest and active engagement. End each segment with a question that students can use for self-assessment.
- Connect lecture content to participation opportunities and assignments. For example, you can encourage students to use Avenue discussion boards to share their thoughts about a topic or to ask questions about content.

Using PowerPoint:

A common way to share content is in the form of a presentation, typically using PowerPoint.

Tips for PowerPoint lectures:

- Minimize the amount of information on one slide and avoid including text or graphs that are not described.
- Use large, purposeful images and animations.
- Minimize the number of fonts.
- Keep colours consistent and comply with colour contrast standards.
- Ensure presentations comply with accessibility requirements.

In addition to creating slides with visuals and text, PowerPoint has many features that allow the content to be re-purposed for teaching remotely. To do this, record audio (e.g., your voice) in a presentation. You can use slide notes to create a script and capture audio as you click through slides by recording your lecture. Once you have finished, you can upload, caption, and share your content in your Avenue shell.

Resources:

- LinkedIn Learning: Recording PowerPoint
- Upload content to MacVideo
- Captioning content in MacVideo

The Campus Store provides content sourced and supplied that has obtained Digital Rights Managed (DRM), copyright, royalties and secure transaction processing (including content from a large number of Canadian Publishers) through their digital delivery platform.

Contact The Campus Store
Teaching Remotely: 
Developing Content

Recording Audio

One of the key components to a quality virtual/online learning experience is good audio. You can use the headphones, earbuds, and mic that came with your phone to get much better audio than the mic on your computer.

Ensuring students can hear and understand the content is essential for a positive learning experience.

Tips for recording audio:

• Record in a quiet room with soft features (e.g., avoid concrete walls and hard surfaces).
• Keep the mic close your mouth (approximately 6”).
• Turn off notifications, cell phones, and minimize distractions.
• Create a script (and stick to it).
• Speak at a natural, quick pace of approximately 150-160 words per minute.
• Check the quality and volume before recording.

Curate Existing Content

You may wish to supplement content that you regularly use in your teaching with other already-existing resources. Creating an engaging learning experience can be done by combining your materials (e.g., PowerPoint lectures) with existing texts, videos, podcasts, or other media to deliver instructional content. Consider browsing McMaster’s Open Educational Resources (OER) hub, and the OER by Discipline Guide that lists resources by subject area and discipline.

Resources:

https://libguides.mcmaster.ca/oer
https://ecampusontario.pressbooks.pub/mcmasteroerdiscipline/

Access to Equipment, Tools, and Resources

Depending on the type and complexity of the content you want to create, there may be considerations for required physical resources. Creating video of any type may require a newer desktop, laptop, or tablet with sufficient storage space, memory and processing power. Many of the computers purchased in the last several years are compatible with most software used to develop online content.

Resources:

Science - Hardware Recommendations for Teaching Remotely
Teaching Remotely: Delivering the course

Once you have all of your content in order, you will need to share it with students. To do this, McMaster University uses Avenue to Learn. The Learning Management System is a robust platform to manage and share your learning outcomes, activities, assessments and content.

Syllabus Information

The syllabus is an important document that communicates goals and expectations for your course. To review syllabus requirements please review Undergraduate Course Management Policies. Instructors should also check with their Chairs or Directors about Faculty-specific requirements.

When teaching remotely, it is important to clarify what type of equipment, software, or other technological requirements will be required. You may consider linking instructional resources that support the technology or create a discussion board section for students to ask questions or troubleshoot challenges. Your syllabus should also contain information about how students should proceed if they are unable to access the necessary resources or if they encounter challenges during timed assessments.

Using Avenue to Learn

Whether teaching face-to-face or remotely, Avenue provides a reliable, secure space to facilitate your course. We encourage instructors to request an Avenue course shell well before the course begins. When your shell is created, it will automatically enroll registered students. The shell will not be visible to students until you activate it by going to Course Admin > Course Offering Information and checking “Course is active.”

Organizing Content in Avenue

Learning modules, weeks or units of study, are sequenced collections of content and activities. These can be organized by time (week) or by content (topic, unit). Consistency in design can help learners better understand expectations. Here is an example of a typical module design organized by week:

- Week #: Title of the Module.
- Summary of previous module (if applicable).
- Introduction to the module: state learning outcomes and checklist/summary of content/activities in order of completion.
- Content Items (1-4 - videos, readings, case study with estimated time commitment and references).
- Activity (1-2 e.g., Asynchronous and synchronous discussions, independent/small group active learning).
- Assessment (Individual/Group Assignment, Weekly Quiz).
- Summary of module with key takeaways and prep for next week, and reminder of upcoming, ongoing, long-term assessments.

Resources:

MacPherson Institute Course design support
Teaching Remotely:
Delivering the course

Adding Video Content to Avenue to Learn

Content can come in a number of forms – videos, PowerPoint, Text, PDFs, or links to existing content. Depending on the type of content the process to add it to the course may vary slightly but the Avenue Wiki has instruction to assist.

Adding Video - often YouTube or recorded lectures/presentations:

- In your course shell, click Content.
- Below the Welcome heading is a blue button labeled “Upload/Create”.
- Click the button and choose “Video or Audio” from the list.
- If it is a YouTube or video from a website you can paste the link where it says “Enter URL or Embed Code”.
- Avoid uploading video directly into Avenue (not accessible), instead, use Macvideo.ca. Everyone with a MacId has access to MacVideo.
- All multimedia (audio/video) must have captions - See Additional Resources Section.

Importing Other Content and Existing Resources into Avenue

In addition to video you can easily add existing content – Word Docs, PDFs, websites, Open Educational Resources, PowerPoint files, etc. The process is similar to adding video:

- Below the Welcome heading is a blue button labeled “Upload/Create”.
- Click the button and choose “Upload files” from the list then Click “My Computer” and locate the file on your computer – you can either drop the file where it says “Drop files Here” or click below where it says “Upload”.
- When you see your file listed in blue, click the “Add” button. The content will be added to the course shell.

Once you have your content added to the course shell you can explore how Avenue to Learn makes teaching remotely easy.

Resources:

- Avenue communication tools (announcements, calendars, forums, email)
- Information about class lists
- Creating groups or sections
- Assessment tools
- Adding a grade book
- Online assignment submission and Turnitin
Teaching Remotely: **Additional Resources**

**Institutionally Supported Tools**

**Avenue to Learn**
McMaster University's Learning Management System (LMS). It is a secure online platform for instructors to share course content, administer quizzes, collect assignment submissions, and facilitate asynchronous discussions with and between students.

**PebblePed**
An online platform that provides the space and tools for students to create learning portfolios to demonstrate their learning achievements and abilities.

**WebEx**
A videoconferencing tool that allows users to connect using video and audio, a text-based ‘chat’, and screen-sharing.

**Echo360**
A video platform that allows users to record and stream accessible videos.

**Zoom**
Much like WebEx, Zoom is an online videoconferencing tool that allows users to communicate via audio, video, and text, and also allows users to set scheduled and repeated meetings in one-step.

**Microsoft Teams**
An online communication and collaborative work platform that allows users to engage in channel-based conversations, share and synchronously work on Word and other Microsoft-formatted files, and connect via videoconferencing.

**Mac Video**
McMaster’s own video portal similar to “YouTube”. It’s a tool that McMaster uses through our Kaltura media hosting license which allows you to make and upload video and other media available to anyone you choose online. MacVideo also provides automatic captioning and connects directly to Avenue to Learn with your MacId.

**Accessibility**

**Student Accessibility Services Q&A for Students**

**Student Accessibility Services Q&A for Educators**

**Accessibility in WebEx** (Meeting Centre only)

**Accessibility in Microsoft Teams**

**Accessibility in Zoom**

**Accessibility in Echo360**

**Accessibility in MacVideo (Kaltura)**

**Accessibility Check Resources**
Teaching Remotely: **Support**

While this guide is intended to get you started quickly, we understand more information may be required.

**The Instructional Continuity** page is a hub on the MacPherson Institute website which is regularly being updated to share new information, supports and services.

If you experience technical challenges with Avenue, you can submit a support request by visiting the Avenue Support web page. If you have pedagogical questions about Avenue features or require other support, please submit a request for MacPherson Institute Support.