

# What is bimodal teaching?

Everyone participates in a single synchronous (live) class session: the professor and a portion of students participate inperson while the remainder of students participate remotely. This is what is referred to as a bimodal classroom because it allows faculty to make teaching and learning possible by combining two groups of learners. Students can attend class in-person when on campus, or they can attend virtually online via Zoom when located remotely.



# Possible flexible formats for bimodal

Beyond the typical on-campus class schedule, you may choose another schedule for your course. Here are some examples of course schedules you could adopt:

### **BIMODAL FORMATS-**



#### Variation A

Students participate in bimodal every other week, and in fully remote synchronous on the alternate weeks.



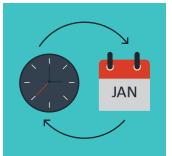
#### Variation B

Students participate in bimodal every other week, and work asynchronously on the alternate weeks.



#### Variation C

Students participate in bimodal for a portion of the class (I.e., 1.5 of 3-hour class) and work asynchronously for the remaining time of the class.



#### Variation D

Students participate in bimodal for a cluster of consecutive classes and then work asynchronously for a cluster of classes, alternating bimodal and asynchronous cycles.

Note: synchronous = live & scheduled / asynchronous = on their own time within a designated timeframe



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# What technology is available at Concordia for bimodal teaching?

Concordia's classrooms have been specially equipped with desktop computers, microphones, cameras and overhead projectors. Instructors can connect to Moodle, Zoom, YuJa and Office 365, including MS Teams, using the standard campus desktop login.

The four categories of classrooms are listed below with the technology that is included in each.

# CLASSROOMS -



**Basic Classroom**Desktop PC and overhead projector.



Classroom
Desktop PC, overhead projector, microphone and camera.

Web Conferencing



room
Desktop PC, overhead projector, and a microphone.

**Basic Plus Class-**



Kit
Students participate in
Desktop PC, microphone,
camera, and overhead
projector for use in any
classroom space as

required.

Mobile Classroom

# DIGITAL TOOLS \_

# Return to Campus Classroom

The Return to Campus Classroom QuickStart Video provides step-by-step instructions to guide instructors through the setup options and procedures for using the classroom technology.

# Zoom for synchronous teaching

By launching and connecting to a virtual Zoom session at the start of each synchronous class using the desktop PC, online students will be able to hear the lecture and see the desktop PC's content in the same way as inperson students. If the classroom is also equipped with a camera, online students will also be able to see their instructor lecturing at the front of the classroom as well as any content that the instructor adds to the board.

# Moodle for course resources & asynchronous academic activity

Using Moodle in the bimodal classroom is strongly suggested so that in-person and online students can access all learning activities during the synchronous class time, such as: links to the Zoom meetings, video lectures recordings and other class materials.

# YuJa for recording lectures (live or pre-recorded)

To ensure that all students have access to the same learning experience and to address the various needs of learners in the classroom, instructors should record their lectures using the YuJa lecture capture software available on all classroom desktops. The recorded class content, with integrated auto-captioning, can then be made available to students through Moodle. This is essential for students who are unable to attend the class either in-person or online at the scheduled time. In addition, various empirical research studies show that many students without hearing difficulties use closed captions primarily as a learning aid.

# Office 365 for collaborative activities & communication

The suite of tools available in Office 365 including Teams, Word, PowerPoint, and Excel can also be accessed online synchronously by both in-person and online students. This allows all students to work on course activities together as a collaborative effort regardless of their location.



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# Important considerations when choosing how to run a bimodal class

In order to reduce barriers and headaches, be sure to take the following into consideration as you plan your lessons in the bimodal classroom:

- Ensure an equitable learning experience for all students: It is important to use teaching methods & tools that integrate remote students in class activities and provide accommodations for students in different time zones.
- Provide training and support for your students: You should plan to explain, demo, and provide students with ample practice in a low stakes context to ensure they can use the technology (software/tools) with relative ease.
- Prepare for adaptability: You should be prepared to adjust your teaching approach & course activity to meet the needs of both groups of students and adjust expectations or requirements if needed.
- Minimize complexity of students' schedules: Be mindful of challenges students may face with multiple course delivery modes in play across their course schedules.
- Familiarize yourself with the IT infrastructure and support available to you: You can request help with planning how to use the technology in your classroom effectively or guidance on how to adapt your teaching & learning activities at teaching@concordia.ca.
- Aim for small gains: You should plan to start with small changes to your teaching approach and course activities that you can build on as the semester progresses.



# Adaptations for teaching and learning activities

Teaching in the bimodal classroom will require some adaptations to most teaching and learning activities. Below are some recommended modifications to the most common in-class activities





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## KNOWLEDGE CHECKS

Knowledge checks or formative assessments are used to help instructors measure and improve student learning. They are usually anonymous, optional, and not graded.

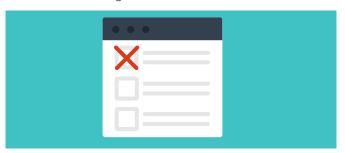
In a bimodal classroom, you can use one of the following strategies to help you ask quick questions to gauge student understanding of course concepts:



#### 1. Zoom Polls

If all in-person students have access to internet enabled devices and can join the same Zoom session, you may use **Zoom Polls** to ask multiple-choice type questions and elicit feedback from both groups of students.

**Note:** ensure that in-person students do NOT join the audio portion of the meeting or have them mute their microphones and turn down the volume to prevent audio feedback and background noise.



#### 2. Active Ouiz

If it is difficult to have your in-person students in the same Zoom session, create an **Active Quiz** activity in Moodle, in advance of class, to get students to answer the quiz questions during class time and see the results in real time. If there are grades associated with the quiz activity, make it clear to students this activity will not count towards their final grade. If you cannot guarantee all in-person students will have devices, ask students to divide into small groups to collaborate and post their answers as a group. You can also use a web-based polling tool like Socrative to make polls available to all students at the same time.



# 3. Feedback Activity

Another option is to ask all students to submit a one-minute paper using the **Feedback** activity in Moodle. For example, at the end of the class, give students one minute to post online the most important thing they learned in today's class.

**Note:** in-class students could also submit this on paper if they don't have access to a device.



# 4. Teacher-guided Questions

If your in-person students do not have access to Internetenabled devices, you can pose your questions orally, write them on the board or on your PPT slides.

Clarify how students will answer your questions. For example, in-person students can raise their hands and remote students can raise their virtual hand in Zoom, open their microphone and speak, or write their answers in the chat box on Zoom.

- **A.** Ask students one question at a time. For example, ask them to summarize key concepts or expand on a concept and add examples to what is being discussed in the moment.
- **B.** Pause to review the responses in the chat or call on one or two remote students to answer the question by mic.
- **C.** After hearing /reading the full answer(s), correct, confirm, or clarify responses.

You can also give students time to discuss answers together before being called on. In-person students can turn to their neighbor and remote students can use the chat box or be paired in Zoom Breakout rooms



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## -SMALL GROUP ACTIVITIES -

## 1. Spontaneous groups

These are randomly assigned groups of students that change from week to week. These kinds of groups are the easiest to set up.



Use Zoom Breakout rooms to put remote students into groups.

## 2. Persistent groups

Persistent groups consist of the same group members week to week. This may be the case for group projects, for example. In a bimodal class, it may be difficult to predict who will be in-person from one week to the next, so there may be a mix of in-person and online students in a group. To set up this kind of group:

Assign one in-person student from each group to bring a device with them to class in advance of the class.

Set up Breakout rooms in Zoom (use the self-select room type).

The assigned in-person student connects to the Zoom meeting and joins the appropriate Breakout room so that all remote and in-person students can hear each other and share a screen. \*

\*If groups are using another tool, such as Teams, to work on their project asynchronously, you may opt to have them meet in Teams during class time.

Some important tips for effective group work: provide clear instructions that students can easily refer back to while in-group, assign roles to each member (ie: discussion facilitator, note-taker, etc), identify work milestones, ensure equitable task division, and identify a clear final product or artefact that results from the work

Regardless of the type of group you use, it is also advisable to plan how students will report on or document their work (if necessary). Options include: have alternating group members summarize their work verbally or in an online document (in OneDrive, Google Docs or similar type of sharing document), or on the classroom / virtual whiteboard.

# -CLASS Q & A -

There are different ways students can ask questions during class time:

## 1. Posing questions during class

A. Posing questions by raising their hands

One easy way to invite questions is to ask students to raise their hands (both physically and virtually). You can alternate between answering question from inperson and remote students.

B. Posing questions in the chat box

Another easy approach is to invite students to post their questions to the chat box. It is advisable to begin class with the chat box disabled and ask students to note their questions as they arise. When you are ready for questions, you can enable the chat function. This helps avoid distracting side conversations between students

**Note:** This option requires in-person students to have access to a device connected to the web.

# 2. Posting questions online

A second option is to collect questions during the class from all students in the same way using an online tool where students post their questions. <u>Onlinequestions.</u> org, a free online tool (which does not require signup), is one good option that allows instructors to set up a place for students to post questions anonymously in real-time using a one-time event code. Both the instructor and students can see what questions have been asked, and students can "Like" or "up vote" questions. This provides useful data to the instructor on which topics students need the most help with. Instructors can also create a OneDrive or Google doc page where students can post questions.

# 3. Submitting questions in advance of class

You may decide to collect questions from students in advance of class in order to prepare. You can do this using the online method above or in Moodle by creating a Discussion Forum (Single Simple Discussion Forum type) and asking students to post their questions.



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## WHOLE CLASS DISCUSSIONS

Whole-class discussions are not recommended in the bimodal class for several reasons.

The primary challenge with whole-class discussions is the difficulties that arise with remote students not being able to see and/or hear in-person students and vice versa.

As an accessible approach, if you want to have all members of the class discuss a topic, whole-class asynchronous discussions in Moodle or small group synchronous discussions are recommended.

## -USING THIRD-PARTY TECHNOLOGIES -

If you plan to use technologies outside of those officially supported by the university, please review the Concordia University Educational Technology Guidelines for Faculty and Students before implementing any new technology into your course.

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