

## REMOTE TEACHING AND LEARNING HANDBOOK



#### **Overview**

In light of the shift to remote teaching, this committee has been charged by the Vice -Chancellor to compile a report on current remote teaching pedagogies that might be useful to the faculty. This document is meant to function as a resource, and in its sub-sections we have tried to anticipate the different kinds of resources that might be helpful for specific teaching situations. There is necessarily some cross -over between teaching contexts, and, on occasion, resources may be repeated.<sup>1</sup>

#### **Resource Disclaimer**

Resources are provided for information purposes only, we do not endorse any of the products and encourage individual faculty to try out things that work best for them. When possible the utility of these tools was vetted, but a comprehensive audit of any security or privacy vulnerabilities was not performed. As with all digital tools, there is the possibility that the software does not handle the privacy of student data properly, is not accessible to all students, and/or can be maliciously exploited by bad actors. Please use caution when using any digital medium to transfer sensitive information such as student assessments.

#### Note on Versioning

This is a living document and will be updated from time to time. To see the most recent version, use the link below:

https://docs.google.com/document/d/1eOQZ4lYVVybyG4oYgqPltniedyguPjuuqKUSswvmb7Q/edit?usp= sharing

https://docs.google.com/spreadsheets/d/1VT9oiNYPyiEsGHBoDKlwLlWAsWP58sGV7A3oluEUG3k/htmlview?usp=sharing&urp=gm\_ail\_link

Created by: Manu Awasthi, Johannes Burgers, Anup Padmanabhan, Anisha Sharma, Gaurav Bhatnagar, Mahavir Jhawar, Srinath Raghavan and Swargajyoti Gohain Version 2.1 Last Update: 06/08/2020

<sup>&</sup>lt;sup>1</sup> This guide was compiled from an aggregated and growing master list of resources being shared by an informal consortium Centers of Excellence in Teaching and Learning available here:

#### Table of Contents

#### 1. <u>Getting Started</u>

- <u>Setting up your classroom space</u>
  - <u>Generic Background</u>
  - <u>Find a comfortable seat and position</u>
  - <u>Set up proper lighting</u>
  - Adjust Webcam Height
  - <u>Setting Up Proper Acoustics</u>
- <u>Remote Meeting Norms</u>
- 2. <u>Basic Classroom Management</u>

#### 3. Accessibility and Remote Learning

#### 4. <u>Teaching Modalities: Synchronous vs. Asynchronous Learning</u>

- <u>Synchronous and Asynchronous Online Pedagogies</u>
  - Overview: Defining Small, Medium, and Large Classrooms in an Online Environment
- <u>Synchronous Pedagogies</u>
  - Overview
  - <u>Small Classrooms (Participants < 25)</u>
    - 1. <u>Small Breakout Sessions</u>
    - 2. <u>Guided discussion using Share Screen or shared document</u>
    - 3. <u>Moderated discussion using chat</u>
    - 4. <u>Discussion based on snap polls</u>
    - 5. <u>Interactive Whiteboards</u>
  - Medium Classrooms (25 < Participants < 50)</p>
    - 1. <u>Medium breakout sessions</u>
    - Large Classrooms (50 < Participants)
      - 1. <u>Lectures with Interactive Quizzes</u>
- <u>Asynchronous Pedagogies</u>
  - Overview
  - Medium Classrooms (25 < Participants < 50)</p>
    - 1. <u>Pre-recorded materials by students</u>
  - <u>Large Classrooms (50 < Participants)</u>
    - 1. <u>Pre-Recorded Lectures</u>
    - 2. <u>Discussion Board</u>
    - 3. Annotated Slides
    - 4. Links to external sources

#### 5. Examination and Grading

- <u>Overview: Low Stakes and High Stakes Assignments</u>
  - Low Stakes Assignments
  - 1. <u>Automated Quizzes</u>
  - <u>High Stakes Assignments</u>
    - 1. <u>Exams</u>
      - Modified Take Home Exams
      - Take Home Exams and Academic Dishonesty
- 6. <u>Laboratory Courses</u>
- 7. Office Hours
- 8. <u>Academic Integrity</u>
- 9. Student Recommendations

## GETTING STARTED



#### Setting up your classroom space

#### **Generic Background**

It is important to set up a space that you feel will be uninterrupted for the duration of the class. Ideally, your webcam is pointed to a wall where there is little possibility of something happening in the background. If this is not possible, you can recreate this effect by hanging up a plain, thick white bedsheet. Limiting the space behind you will also help with the lighting auto-brightness.

#### Find a comfortable seat and position

You will be sitting for a long time, especially for multiple classes per day. It can be hard to concrete on teaching if you are uncomfortable. Get in a comfortable position first, and then set up the lighting, webcam and audio to accommodate you.

#### Set up proper lighting

Webcams can be remarkably unflattering, and a big part of appearing properly on camera is setting up the right lighting. Lighting from the back will darken your face. Lighting from only overhead lights tends to make you spectral. Inconsistent appear lighting, such as from a window, will cause the auto-brightness on vour webcam to fluctuate. Soft, indirect lighting from the front, as depicted in the image on the right, works best. If lighting is a problem, ring-lights are relatively



Figure 1: Ideal lighting for a webcam session. Soft, indirect lighting

inexpensive and can go a long way in creating a better image.

#### **Adjust Webcam Height**

Having the webcam at an odd angle can distort how you can come across on video. Place the camera at eye level at eye level or slightly higher. Avoid angling the camera up from below your eye level. Place the camera far enough away that you can frame yourself in the middle of the image. If you were to split up the screen into thirds, your eyes should intersect with or be slightly below the line for the top third. See the figures below for an example.



*Figure 2*. The webcam should be at eye level or slightly

*Figure 3*. Your face should take up roughly the middle third of the

#### **Setting Up Proper Acoustics**

Virtual meeting software like Google Meet and Zoom have integrated features that help eliminate background noise and eliminate volume levels. These features are not perfect, and you can do a lot to help the acoustics of your call.

The microphone will pick up sounds in the background that can cause distortion in the feed. Eliminating this as much as possible will help keep the audio clear. Depending on your particular situation, having multiple auditory focal points will amplify some noises and reduce your own voice. The sound of a fan or air conditioner running can cause consistent background noise.

Using headphones with an integrated microphone, can considerably improve the audio quality for you and your students.

#### **Remote Meeting Norms**

#### General

- All participants are encouraged to resolve technical issues before the meeting. Everyone should make sure that they have checked the video, microphone, and audio before joining the session. When possible, have a trial session with the technology before the first formal session.
- Be on time. Like an in-person meeting, showing up late can be distracting. Login to the meeting several minutes before it starts, in order to make sure you are there from the beginning.
- Please mute your microphone when you are not speaking. This keeps the background noise levels to a minimum, and helps every listener have a good experience.
  - Tip: To quickly mute your microphone use the keyboard shortcut: Google Meet Zoom

WindowsCtrl + dAlt + aMacCmd + dAlt + a

- You are encouraged to keep your video turned on. It is hard for speakers to address someone they cannot see, and having a visual response from the audience makes speaking in a virtual meeting easier for everyone. If you are having bandwidth issues, turning off the video will help.
- Remote learning emulates a classroom as much as possible. This is best achieved when all participants are present, focused, and contribute as if they were in an inclass meeting.
- Please remember that the chat is a group chat. Whatever you type in there will be visible to the instructor, as well as everyone else in the meeting. Note that making comments not directly related to the course content is distracting to other students.

#### **Asking questions**

Each instructor will establish a protocol for asking questions. Some of these include:

- Raising your hand
- Using a "reaction" button in meeting
- Writing in the chat box

Whatever the operational protocol, it is best for participants to wait until there is an acknowledgement by the instructor. Virtual meetings can be hard to follow when multiple people are speaking, and it is most efficient to contribute on a turn-based system.

#### Other

There is always a chance the technology fails or there is another issue with online instruction. Since time for the virtual meeting is very limited, it is best to address any issues outside of these hours

# BASIC CLASSROOM MANAGEMENT



#### Virtual Meeting Software

In the summer of 2020, Ashoka decided to standardize its remote learning offerings. Currently, there is robust support for Google Classroom and its virtual meeting software Google Meet. For most use cases, Google Meet suits the requirements for a virtual class session. There are a limited number of Zoom licenses available to faculty who prefer to conduct their classes over Zoom. Faculty are encouraged to use these pieces of software because there will be a substantial institutional knowledge base regarding their feature set and useability.

#### Attendance

Attendance is both simple and challenging to manage in a virtual classroom. There is software available to automatically document attendance, but it is harder to determine who is actually physically present and paying attention during the session. It is a given that various technical problems could arise.

The chrome extension <u>"Meet Attendance</u>" lets you take attendance during a live Google meet session.

#### **Closed Captioning and Transcription**

Google Meet allows any user in the session to turn on Closed Captioning for better intelligibility of the session. These captions are saved in the recording session, but not as a separate text file. If you would like to offer students the text transcript of the session this can be done through the Google Chrome extension: taqtic.io

It is a good practice to save the transcript of your sessions for extra accessibility for students who were not able to attend the session.

#### **Recording Sessions**

Recording class sessions so they are available to students who were not able to attend is highly recommended. However, there may be scenarios where recording class sessions is not desirable. For example, if the course discusses personally sensitive topics recording it might stifle conversation. The default is that students assume they are being recorded. If the session is not being recorded it might be useful to let them know in advance.

#### **Recording Storage and Security**

In synchronous sessions, if you record your live lectures using Google Meet then they are available in the "Meeting folder" in your Google drive. You can share these videos under the "classwork" tab in Classroom.

Any textual, auditory or visual material in which students are identifiable may not be shared outside of the classroom without the express permission of the students depicted. Likewise, students may not distribute classroom recordings to any third parties. Making courses accessible for students with disabilities and English Language Learner issues benefits all students. In this respect, accessible course design offers a good set of design principles for course design more generally, and is often included under the larger umbrella of <u>universal design for learning</u> because it considers all possible users.

#### Making course material accessible

Planning for accessibility doesn't automatically mean creating multiple versions or discarding activities, assignments, content up-front because it could be inaccessible for certain students. It means having thought through what you would do if a student for whom that activity was inaccessible registered for your class.<sup>2</sup>

The OLS recommends that the reading material be distributed in an accessible format such as Word or a Searchable PDF. Generally, accessible documents are first produced in Word, converted to PDF and then <u>checked for accessibility</u>. You may also refer to the more detailed presentation: <u>Building Accessibility into Online Teaching and Learning</u>.

#### Making online lectures accessible

Provide access to the lectures, synchronous or asynchronous, by using both the modalities – audio and visual. Invest in the technology that integrates both.

#### Audio to Visual

During lectures, the speech (audio) needs to be made available as a text to integrate the visual modality. Use technology tools that provide:

- Closed Captioning/ Subtitles
- Post-Production (recording) Transcription
- Live Transcription

Google Meet has built-in Closed Captioning software. Tactiq.io creates free transcripts of these files and saves them in your Google Drive.

➤ See: <u>https://tactiq.io</u>

For free/paid Live Transcription in Zoom classes

➤ See: <u>Otter.ai Live Notes for Zoom</u>

#### Visual to Audio

During lectures, the visuals, text and images, need to be made available as speech to integrate the audio modality. During the lecture, the text and images can be read aloud or explained and also shared with the students (with blindness) before class so that they can access them with their screen reader. Students with disabilities and English Language Learners have access to assistive technology resources on their own devices for the same.

Contact Office of Learning Support at <u>ols@ashoka.edu.in</u> for further details.

<sup>&</sup>lt;sup>2</sup> https://canvas.ucdavis.edu/courses/34528/pages/accessibility-for-online-courses

### **TEACHING MODALITIES:** SYNCHRONOUS VS. ASYNCHRONOUS LEARNING



#### Teaching Modalities: Synchronous vs. Asynchronous Learning<sup>3</sup>

There are two options for instructors to facilitate class sessions remotely:

- **Synchronous**: instructors and students gather at the same time and interact in "real time" with a very short or "near-real time" exchange between instructors and students.
- **Asynchronous**: instructors prepare course materials for students in advance of students' access. Students may access the course materials at a time of their choosing.

Instructors may choose to engage their students synchronously or asynchronously depending on the course content or material that needs to be taught. There are distinct advantages and disadvantages to asynchronous and synchronous teaching options.

|                   | Synchronous Teaching  | Asynchronous Teaching  |
|-------------------|---|--|
| Advantages        | <ul> <li>Immediate personal<br/>engagement between students<br/>and instructors, which may<br/>create greater feelings of<br/>community and reduce feelings<br/>of isolation.</li> <li>More responsive exchanges<br/>between students and<br/>instructors, which may prevent<br/>miscommunication or<br/>misunderstanding.</li> </ul> | <ul> <li>More scheduling flexibility,<br/>which may simultaneously<br/>make the learning experiences<br/>more accessible to different<br/>students.</li> <li>Creates an archive of past<br/>materials that can be<br/>redeployed in future iterations<br/>of the course.</li> <li>Students can control the pace<br/>of learning to a speed that is<br/>appropriate to them.</li> </ul> |
| Disadvanta<br>ges | <ul> <li>More challenging to schedule shared times for all students and instructors.</li> <li>Some students may not be fully comfortable using the technology, or be disadvantaged by the limitations of their digital affordances.</li> </ul>  | <ul> <li>Students may feel less<br/>personally invested, and less<br/>satisfied without the social<br/>interaction between their peers<br/>and instructors.</li> <li>Course material may be<br/>misunderstood or have the<br/>potential to be misconstrued<br/>without the real-time<br/>interaction.</li> </ul>   |

<sup>&</sup>lt;sup>3</sup> Teaching and Learning Center. "Faculty Resources for Remote Teaching and Learning." Rider University. Last access date: 03/04/2020. URL: <u>https://docs.google.com/document/d/1Nd-wnQuhQ6qqMI-</u>

R6QGNcZKw1cWOt1BBab9VcWECpEA/edit?ts=5e875798#heading=h.51dvbfupqxsh

### SYNCHRONOUS AND ASYNCHRONOUS ONLINE PEDAGOGIES



### **Overview: Defining Small, Medium, and Large Classrooms in an Online Environment**

In an online environment, class size is a significant determinant of the possible forms of classroom engagement. Generally, smaller classes tend to lend themselves to synchronous activities, while larger classes might be more manageable with asynchronous modalities. What constitutes a "small," "medium," or "large," classroom is to some extent framed by the limits of the technology.<sup>4</sup> The chart below provides a guide to possible activities based on classroom size. Though these will necessarily vary by discipline and specific course material.

| Туре   | Participants             | User Experience   | Classroom Activity  |
|--------|--------------------------|---|---|
| Small  | Participants <<br>25     | Depending on device<br>screen size and<br>resolution, it is generally<br>possible to see all<br>participants in a Meet<br>session simultaneously<br>on one screen.                              | Synchronous<br>Small breakout<br>session with Zoom<br>"rooms"<br>Guided discussion<br>using Share Screen or<br>shared document<br>Moderated chat<br>discussion<br>Snap polls<br>Interactive<br>Whiteboard                   |
| Medium | 25 <<br>Participants< 50 | It is not possible to see<br>all participants<br>simultaneously, or only<br>with a dual monitor<br>setup. Faculty will have<br>to actively look at who<br>may be participating in<br>the class. | Synchronous<br>Medium breakout<br>sessions with Zoom<br>"rooms"<br>Moderated chat<br>discussion<br>Snap polls<br>Asynchronous<br>Pre-recorded<br>materials by students<br>Short pre-recorded<br>videos by the<br>instructor |
| Large  | 50 < Participants        | Google Meet allows for<br>250 participants and<br>Zoom can handle 100,  | Synchronous<br>Snap polls<br>Interactive quizzes  |

<sup>&</sup>lt;sup>4</sup> The upper limits for the number of participants in Google Meet is 250 and Zoom is 100.

| but the majority will not<br>be visible throughout<br>the session.<br>The current cap on the<br>gallery size in Google<br>Meet is 16.<br>The Chrome extension<br><u>Grid View</u> , increases the | Asynchronous         Pre-recorded lectures         Discussion board         Integrated quizzes         Annotated slides         Links to external sources |
|---|---|
| <u>Grid View</u> , increases the number of visible  |   |
| participants to 100.  |   |

#### **Synchronous Pedagogies**

#### Overview

Due to some of the technical limitations of online sessions, synchronous sessions tend to work best with smaller classes. With some modification, many of these pedagogies could equally well be applied to larger classes.

#### Small Classrooms (Participants < 25)

#### **Small Breakout Sessions**

In Zoom it is possible to split the online class into "rooms." Zoom has the option to do this automatically through randomization, or by manually allocating specific students into specific groups. Once created, it is possible for the instructor to "float" between rooms and check in on the discussion. This model allows faculty to check in with students on a more personal basis.

- ➤ See: <u>Zoom Managing Video Breakout Rooms</u>.
- Google Meet does not have this capability yet, but there are multiple plugins. One workaround can be found <u>here</u>, but it requires some planning and cannot be done "on the fly."

#### Guided discussion using Share Screen or shared document

Provide readings for a class beforehand, assign one or two students as lead discussants for the paper/reading. The leads are meant to lead the discussion on the reading, possibly by preparing a minimal set of slides, if that works for the course/material. The instructor can then supplement the presentation at key points, and engage the rest of the class by asking pertinent questions.

► See: <u>Zoom Share Screen</u> <u>Google Meet Share Screen</u>

#### Moderated discussion using chat

D

Not every student may be able to participate in a virtual classroom setting due to either technological or dispositional factors. In such cases, it is still possible for them to participate through the chat features of both Zoom and Google Meet.

- □ Possibility 1: Instructor posts question in the chat or shares it on the screen. Students respond to the question in their chat box, and this prompts further discussion.
- □ Possibility 2: Instructor designates one student to moderate the discussion. Students who cannot actively participate in the video chat can still listen and respond and interact through the chat.

See: Zoom In-Meeting Chat Google Meet In-Meeting Chat

#### **Discussion based on snap polls**

Snap polls are a quick way to gauge students' surface-level understanding of a core concept. Ranging from true/false to multiple-choice, questions can be deployed directly during a Zoom session. A discrepancy in answers can solicit a point of clarification.

➤ See <u>Pollings for Meetings</u>

Google Meet does not have native polling abilities, but there are various add-ons that achieve a similar effect.

➤ See: <u>Polls for Google Hangouts Chat</u>

Other options:

➤ See: <u>Poll Everywhere</u> <u>Polls</u>

#### Interactive Whiteboards

Interactive whiteboards allow students to post into one collective space in real time. There are multiple ways of doing this, but the basic point is that students can brainstorm ideas and suggestions.

| Name      | Website               | Tool                 | Cost          | Features                      |
|-----------|-----------------------|----------------------|---------------|-------------------------------|
| Wakelet   | www.wakelet.com       | Allows students to   | Basic is free |                               |
|           |                       | share materials to a |               |                               |
|           |                       | board in real time   |               |                               |
| Google    | https://www.google.c  | Lets students        | Free          | Can see who does what on      |
| Docs/Shee | <u>om/docs/about/</u> | collaborate in real  |               | collaborative projects, never |
| ts/Slides |                       | time on a shared     |               | lose work (auto saves and can |
|           |                       | document             |               | see earlier drafts), can      |
|           |                       |                      |               | hyperlink all needed          |
|           |                       |                      |               | resources on one set of       |
|           |                       |                      |               | slides/document               |

One of the challenges with interactive whiteboards is that the standard input device for a computer is a mouse or trackpad. These are very difficult to work with for any length of time. For more sustained usage of an interactive whiteboard there are a number of devices available.

#### Recommended:

- WACOM One by CTL-672/Ko-CX Medium 8.5-inch x 5.3-inch Graphic Tablet
- A stylus and pad input device that works with multiple pieces of software. Price around ₹8,000
- IT is currently looking into requisitioning some devices for special cases. Please check to see if they are available.

Other tablet devices that are compatible with a stylus also work, but these are more expensive and the setup is more involved.

#### Working with Interactive Whiteboarding Google Meet

#### Whiteboard support (Non-collaborative)

- 1. Use <u>https://canvas.apps.chrome/</u> for whiteboard support.
- 2. Present the tab (where the Canvas is open) in the Google meet to students.

#### Whiteboard Support (Collaborative)

- 1. Use <u>https://jamboard.google.com/</u> for whiteboard support.
- 2. Present the tab (where the jamboard is open) in the Google meet to students.
- 3. Also create a shareable link of the Jamboard and paste it on the Chat window of Google meet
- 4. Both you and students can write and see the same Jamboard

#### Working with Interactive Whiteboarding Zoom

See: <u>Using annotation tools on a shared screen or whiteboard</u>

#### Setting up a Whiteboard session without a dedicated input device

The instructor can join the Google/Zoom Meeting from two devices, simultaneously, say a laptop and a tablet. The latter has to (1) be capable of screen sharing, and (2) support a stylus (e.g. Apple Pencil) that allows the instructor to write on the tablet. The instructor can share the tablet's screen, which doubles up as the whiteboard. The other device (laptop) can be used for sharing the instructor's video, and/or monitoring chat messages with student queries.

#### Medium Classrooms (25 < Participants < 50)

#### Medium breakout sessions

Medium breakout sessions with Zoom "rooms". Here the same principle as the "small" breakout session applies. The difference is that the groups might grow to become inordinately large. A possible solution is to deputize a more advanced student to lead the discussion, and report out upon the completion of the specified task.

➤ See Zoom Managing Video Breakout Rooms.

#### Large Classrooms (50 < Participants)

#### Lectures with Interactive Quizzes

It is possible to create slideshows and other lecture materials that incorporate interactive quizzes. In some cases, these can be deployed live, in other modalities they can be used for pre-recorded material. The quizzes are a way to assess real-time understanding of the covered materials.

In Google Meet quizzes can be deployed using Google Forms. The score on the quiz is automatically imported into the Classroom Gradebook.

➤ Instructional video: Coming Soon

Interactive quizzes can also be created with Camtasia. This process is substantially more involved and the grades will not export to Google Classroom automatically. The advantage is that the video and the quiz can be deployed in an asynchronous environment.

#### **Asynchronous Pedagogies**

#### Overview

Not all learning needs to happen within the confines of the allotted meeting slots, and it may be more beneficial for the instructor and the student to re-think the structure of the course in a remote learning environment. These pedagogies are particularly useful when managing a large class.

#### Medium Classrooms (25 < Participants < 50)

#### Pre-recorded materials by students

Students can "teach" a particular component of the class by preparing a video presentation in advance of the lecture. Given the constraints of synchronous online communication, this might be a good way to circumvent bandwidth requirements for large classes. There are several collaborative software options available for students to put together the video. The most straightforward way is to encourage students to schedule a Zoom or a Meet session and then record themselves.

 See: <u>Zoom</u> Meet <u>Quicktime</u> (Mac only)

#### Large Classrooms (50 < Participants)

#### **Pre-Recorded Lectures**

For large classes, discussion may not be an option. There are several ways in which lectures can be pre-recorded and sent to students. It may not be necessary to create one lecture in its entirety, which can be both time consuming and not very engaging for students. Instead, breaking up long lectures into several shorter topic-based sections may be a more optimal option.

If you are creating a pre-recorded lecture in a short time frame, consider a few simple tips.<sup>5</sup>

- □ Provide an explicit roadmap at the beginning.
- □ Break down the lecture into shorter segments. A long pre-recorded lecture can be deadly boring to watch.
- □ Intersperse the lecture clips with reflection questions for the students to consider. Try to make the learning experience "inductive" rather than entirely didactic.
- □ Speak to the student, not to the camera.
- □ Insert yourself a personal story, humor, or editorial commentary into the lecture.

You don't need to pre-record the entire lecture. Instead, you can pre-record certain segments of your lecture, such as material you want the students to reflect on before class, and leave the rest to the in-class session. Pre-recording and live needn't be substitutes; they can serve as powerful complements too.

Accessibility tips when recording videos:6

- □ Enable Closed Captioning in Google Meet for videos.
- □ Keep recordings under 10 minutes.
- □ Verbally describe any images or props you show in the video or include textual descriptions below the video.

Adding Interactivity

It is possible to integrate quizzes in a video lecture using Camtasia. This process is time consuming on the front end, but once created the video and questions can be reused in subsequent semesters.

Another option is to upload lecture videos to YouTube and then embed those videos in a Google Quiz. Students watch part of the lecture, and subsequently answer questions. Although visually clunkier, this has the added advantage of directly exporting the quiz score to Google Classroom.

See: <u>Creating interactive quizzes with Google Forms</u>

Suggested Tools:

➤ See: <u>Camtasia</u>

How to Record your Lecture with PowerPoint in Zoom Google Meet

<sup>&</sup>lt;sup>5</sup> "Best Practices: Online Pedagogy," accessed April 4, 2020, <u>https://teachremotely.harvard.edu/best-practices</u>.

<sup>&</sup>lt;sup>6</sup> Cornell Resource Library. "Getting Started with Panopto." Cornell University, accessed: 03/04/2020. URL: <u>https://canvas.cornell.edu/courses/1848/pages/getting-started-in-panopto</u>

#### **Discussion Board**<sup>7</sup>

To remove technical hurdles and to ensure that students are able to engage with peers and each other in a discussion-based class, you might choose to move student discussion to an asynchronous format. Create a discussion forum to facilitate communication, encourage students to interact, ask questions and respond to discussion prompts.

Pedagogical recommendations:

- Craft discussion questions to be as clear and as specific as possible so that students can build off of the question for a sustained response.
  - See <u>Stanford TeachingCommons' "Designing Effective Discussion</u> <u>Questions"</u>
  - See <u>"Conversation Starters: Orchestrating Asynchronous Discussion to</u> <u>Build Academic Community among First-Year Writers" by Dan Seward</u>
- ➤ Assign roles to students so that they understand when and how they might respond to you or their peers. For example, students might "role play" as particular kinds of respondents or you might ask them to do particular tasks (e.g. be a summarizer, a respondent, a connector with outside resources).

Google Classroom will allow you to create discussion questions for students, and moderate the discussion in various ways. Responses to the discussion questions can also be graded and automatically recorded in Classroom's gradebook.

➤ See: <u>Create a discussion question in Google Classroom</u>

#### **Annotated Slides**

Pre-recording lectures can be very labor intensive. To simplify matters, one can also send the slide deck with notes. This "low-tech" solution is actually beneficial to students who have bandwidth issues and cannot watch the lectures in real-time or as a recording. For some students this is actually an easier way to learn than listening.

#### Links to external sources

Although never a replacement for your own teaching, there is a wealth of learning material available online. Some core concepts in your discipline may have been covered by other educators. It does not always make sense to reinvent the wheel, especially when faced with a time crunch.

➤ See: <u>Jove</u> <u>ibiology</u>

<sup>&</sup>lt;sup>7</sup> Cohn, Jenae and Beth Seltzer, "Teaching Effectively During Times of Disruption," Google Docs, accessed April 5, 2020, https://docs.google.com/document/d/1ccsudB2vwZ\_GJYoKIFzGbtnmftGcXwClwxzf-jkkoCU/preview?usp=embed\_facebook.

## EXAMINATION AND GRADING



#### **Overview: Low Stakes and High Stakes Assignments**

In *Engaging Ideas*, John Bean broadly defines two types of assessment in the classroom: low-stakes and high-stakes.<sup>8</sup> Low-stakes are weighted lower percentage-wise, but are more frequent and informal, high-stakes assignments are weighted higher but more infrequent. Both types of assignments are valuable measures of student engagement and learning. In a remote setting, there may be a need for more frequent "low-stakes" assignments to encourage student engagement. Meanwhile, "high-stakes" assignments are a valuable way to assess student mastery of content, but, given the online setting, are more susceptible to academic dishonesty.

#### Low Stakes Assignments

#### **Entry Slips/Exit Slips**

Before the start of class students come up with a critical question about the material they were meant to prepare for that day. At the end of the session they make clear what they learned and how they would answer the question they posed. A very simple grading scheme of check+, check, check-, or 3, 2, 1 can make grading these relatively quick, while at the same time gauging student participation.

#### **Automated Quizzes**

This could be done through mechanisms like the Quiz feature of Google Classrooms. The instructors can prepare quizzes based on the material covered every week. There are a range of possible quiz question types, including: short answer, long answer, multiple choice, multiple select, and more complex question types.

#### **High Stakes Assignments**

#### Exams

Generally proctoring exams in an online environment is very challenging. The level of student surveillance required to make sure there is no academic dishonesty during synchronous exams, also enhances the chances of technical problems for students. Even with a high level of surveillance, it is not possible to guarantee that students will not engage in academic dishonesty. If there is no other way to do the assessment for a course special arrangements can be made with IT for online synchronous proctoring.

#### **Modified Take Home Exams**

Depending on the course being offered, instructors can decide to offer take home exams, which could be "open book" and "open internet." The idea is to create a set of questions that help students provide logical arguments, or design choices for the possibly openended set of questions being posed to them. The exam can be posted on Google Classroom and made available at a specific date and time. The various question types available in the

<sup>&</sup>lt;sup>8</sup> Bean, John C. *Engaging Ideas: The Professor's Guide to Integrating Writing, Critical Thinking, and Active Learning in the Classroom.* The Jossey-Bass Higher and Adult Education Series. 2nd ed. San Francisco: Jossey-Bass, 2011.

Google Classroom Quiz feature, should be able to cover most exam types. Otherwise, students can also submit a file as their response.

#### Take Home Exams and Academic Dishonesty

The possibility of illicit or collaborative exploitation of intellectual resources is particularly high with regard to take-home exams. There is no way to guarantee that a student does not consult unsanctioned resources. There are several ways to mitigate the possibility or make it less desirable:

**Fixed time window:** Deploying and receiving the exam in a specific window of time prevents the possibility of collaboration and other forms of academic dishonesty. Google Classroom will allow you to regulate when the exam is posted and lock when the exam can be received. Note that students have expressed that this method can be quite stressful, because if there is a power outage or another technical issue it could prevent them from turning in the exam on time.

**Similarity check:** Google Classroom now has an integrated similarity check that can be used for exams. Alternatively, exams can be passed through Turnitin to check whether students directly copied answers.

See: <u>Best Practices for Online Exam Design - Pepperdine University</u>

# LABORATORY COURSES

Unlike theory-based courses, practical courses are generally of longer durations and require specialized infrastructure support. In addition to this, moving practical courses online results in students taking more time to become familiar with the learning material, internalize how(s) and why(s) of each step in the practical and critically analyse the concepts presented. Their peer-learning ecosystem is also disrupted. Therefore online teaching/learning of such courses may not provide the desired result and learning experience. However, some of the suggestions below may be helpful, to a certain extent, in learning the subject matter and building relevant and useful skill(s)-set :

### 1. Re-organizing of the order of courses between monsoon and spring semester.

➤ Lab courses scheduled in monsoon 2020 may be shifted (postponed) to spring 2021, and replacement theory based courses scheduled in spring 2021 may be brought forward to be taught in the monsoon 2020 semester.

### 2. In case reorganization of courses as mentioned in #1 (above) is not possible, the course coordinators may consider,

a. **Re-evaluate learning objectives and outcomes** by re-designing the course curriculum to incorporate *in-silico* experiments/demonstrations and/or analysis of data obtained from these experiments/demonstrations..

### b. Livestream / Recorded demonstrations of the laboratory experiments

The course coordinators and/or instructional support staff may demonstrate the experiments in the lab and choose to stream the experiment demonstration live (synchronous) or record pictures/videos of different parts of the experiments (asynchronous). The gathered data could be shared with the students to analyse and make observations. If possible, the students may be allowed to perform these experiments upon their return to the campus.

#### c. Virtual Labs

There are a number of ways (listed below) that allow students to approximate laboratory experience through active participation rather than passive observation, virtually. Most of the virtual labs listed in the link below are extremely discipline specific and there is a significant range in quality, but might offer a temporary stopgap, until the students return to the campus:

https://docs.google.com/spreadsheets/d/18iVSIeOqKjj58xcR8dYJS5r YvzZ4X1UGLWhl3brRzCM/htmlview

# OFFICE HOURS



#### **Office Hours**

Meeting students outside of class hours can be a challenge. Although it is possible to schedule a running Google Meet for office hours and propagate it in the course calendar, there is no way to anticipate who will show up, or to establish a queue for students. One efficient way to schedule office hours is through the scheduling software <u>Calendly</u>. You can create meeting slots for your students who can then sign up. If a student signs up, it will place that meeting on your Google calendar, and block the slot for other students. You can also change your availability on the calendar, so you never need to inform students of when your office hours are, just give them the link.

➤ See: <u>Connect Calendly to Zoom</u>

# ACADEMIC INTEGRITY



#### **Academic Integrity**

The remote learning environment brings with it a different set of challenges with regard to academic integrity. Fortunately, many of the core principles that help prevent academic dishonesty in an in-person classroom also apply to a virtual classroom. In general, it is better to prevent academic dishonesty through assignment design and deployment than through punitive means after the fact.<sup>9</sup>

- 1. Ask open-ended critical questions that require unique answers.
- 2. Scaffold large assignments into smaller parts that help you track student progress, and reduce the chance of plagiarism.
- 3. Students are more likely to commit academic dishonesty on a singular high-stakes assignment than several low-stakes assignments cumulatively worth the same weight. Spreading assignments out over the course of the semester can lower student anxiety, and reduce the need to resort to getting non-sanctioned support for an assignment.
- 4. Academic dishonesty is not the same in every course or even for every assignment. Be explicit as to what resources students can use to complete their assignment. May they consult old exams? Work with fellow students on a paper? Work with material they wrote for a previous class? Clarifying what constitutes academic dishonesty for a specific assignment can prevent misunderstandings.
- 5. Students are less likely to cheat when the scope and requirements for an assignment are clear.
- 6. Explicitly stating that you use plagiarism prevention software, and demonstrating the software can act as a strong deterrent.
- 7. Reminding students of the Academic Integrity policy and the consequences of committing a violation has been shown to reduce cheating.
- 8. Allowing students to signal in their paper when they are uncertain about how to use a source can create a productive learning moment.

<sup>&</sup>lt;sup>9</sup> Some of the language here has been adapted from the site on Remote Learning and Academic Integrity created by the Library and Technology services department at Lehigh University. "Remote Learning and Academic Integrity | Library & Technology Services." Accessed August 4, 2020. https://lts.lehigh.edu/remote-learning-and-academic-integrity.

### **STUDENT** RECOMMENDATIONS



#### **Student Recommendations**

The recommendations below have been collated by the student representatives from all departments. They offer an overview of the most pressing concerns for students, and practices they have found successfully address those concerns.

#### Attendance Policy for Synchronous Learning

#### **Issues:**

(i) Students might have varied household conditions, and may not be able to adhere to attendance requirements.

- (ii) Technical issues can also be an obstacle for class attendance.
- (iii) International students might not be able to join synchronous classes.

#### Solution:

(i) Owing to difficult circumstances, students found it really helpful when professors clearly delineated what constituted an excused and an unexcused absence, and the number allowed for each course.

(ii) One particularly productive way in which one professor dealt with students not being able to attend synchronous sessions was by creating optional assignments that counted towards attendance.

#### High Stakes and Low Stakes Assignments

#### **Issues:**

(i) It is more difficult to properly schedule time for doing assignments at home. Both because students may have household commitments to attend to, and because they may get too much screen time in one day. Scheduling becomes even more challenging when high stakes and low stakes assignments are not properly defined at the beginning of the semester.

(ii) For courses following a Midterm-Final paper/exam format, the lack of low-stakes assignments adds more pressure on students who may not be able to perform evenly on exams/final papers due to personal or technical reasons.

(iii) It becomes challenging for students to complete high-stakes assignments without access to the required resources, such as books, scholarly articles, and other research materials.

(iv) Since almost all of the course content is now digital, it has become more difficult for students to keep up with the readings due to screen fatigue.

#### Solution:

(i) Students are better able to organize their time when the high and low stake assignments are clearly defined at the start of the semester for every course.
(ii) For courses following a Midterm-Final paper/exam format, more low-stakes assignments provide more opportunities for students to properly showcase their knowledge than a high pressure situation like an exam of final paper.

(iii) All resources for high-stakes assignments should be provided beforehand, for example, in a shared google drive folder for the class. For assignments where this is not

possible, grading curves should be cognizant of any uneven resource distribution among students.

(iv) Students found it more effective to do several short readings, as opposed to one very long reading that causes screen fatigue.

#### **Procedure for Remote Examinations**

#### **Issues:**

(i) Households do not provide the same composed and undisturbed setup as classrooms in terms of taking examinations, leading to an inability to focus.

(ii) Unexpected technical issues or power cuts might further hinder exam performance and submission.

#### Solution:

(i) An example that worked really well for students was allotting extra time for remote exams in anticipation of technical difficulties and/or interruptions in the test taker's location.

(ii) Students found it really beneficial when there were multiple quizzes/exams, and only the best scores were taken into consideration to provide more buffer for students who may underperform due to technical or circumstantial issues.

#### Assessing Class Participation for Synchronous and Asynchronous Classes.

#### **Issues:**

(i) Remote learning makes it difficult for students to participate in all class activities.

(ii) Larger class sizes and technical difficulties also impact class participation.

#### Solution:

(i) An example that really worked for students was when the professor assessed class participation only on the basis of the quality of participation shown in the classes the student was able to partake in.

(ii) Students found that weekly discussion posts on online platforms (such as Canvas and Piazza) were able to engage with the class better when they were the primary criteria to grade them for class participation.

#### **Recorded Lectures for Asynchronous Classes**

#### **Issues:**

(i) In an asynchronous setting, students might find it difficult to continuously engage in recorded lectures.

(ii) A lack of student-teacher interaction might further disengage students from the recorded lecture format and hinder the Q/A or feedback process.

#### Solution:

(i) Students found it easiest to follow lectures that were broken down into smaller sections and that covered discrete topics.

(ii) Some of the best lectures were those where the instructor's face was visible, because it was easier to engage with the material.

(iii) Students felt more engaged and involved when instructors occasionally held synchronous meetings to discuss the lecture material with students.

(iv) Students found one-on-one short feedback sessions conducted by instructors to be the most effective for clearing queries and concerns about the course or materials.



Plot No. 2, Rajiv Gandhi Education City, National Capital Region P.O.Rai, Sonepat Haryana-131029 (India) +91-130-2300000 info@ashoka.edu.in