Preparing to Teach a Flipped Course

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Introduction

To ensure a healthy and safe return to campus, face-to-face courses will be subject to a number of social-distancing guidelines, which will, in many cases, necessitate significant changes to a course's structure and format, including reduced class sizes, staggered schedules, and modified physical spaces. These changes have many implications and will likely require instructors to broadly reimagine teaching and learning in their courses and to ultimately identify novel methods or adapt and repurpose existing ones. One such method - and the focus of this guide - is flipped learning.

Our objective with this guide is to provide guidance about how you might leverage flipped learning and its underlying principles to teach effectively in socially-distanced classrooms. We have attempted to answer some of the important questions that may arise as you attempt to implement flipped learning in this unique context. Note that this document focuses primarily on pedagogical issues, but we have included technical guidance and supplementary links in the appendix.

What is flipped learning?

At the heart of flipped learning is a simple question: *what is the most effective use of in-class time*? This thinking often leads to an inversion of the traditional lesson sequence, with exposure to new content occurring at home (via, for example, recorded lectures) and class time focusing on collaborative activities that require application, analysis, and creation.

With more self-directed student learning, the traditional role of the educator is shifted. The teacher becomes a guide in the learning process, choosing content, designing and scaffolding in-class tasks, and carrying out a robust formative-assessment cycle. In consequence, flipped learning usually involves an initial investment of time to prepare online content and shift assessments or activities to the in-class environment in advance.

For students, preparation and engagement with pre-class materials is essential to inform in-class instruction and application. Therefore, students need to take on a much more active role as they self-regulate their learning and participate in tasks that stimulate higher-order thinking.

To prepare students for these new roles and mode of instruction, it is important to start an open, ongoing discussion with students early in the course about the expectations and purpose of flipped learning. This discussion may address common student concerns and perhaps even integrate research. The following table and guide provide a more in-depth analysis and examples of flipped learning as a model for teaching and learning.

Examples of Learning Experiences in a Flipped Course

	Pre-class, online asynchronous content	In-class activities	Online asynchronous activities
Lab	Guiding questions, demonstrative videos, protocols, or other lab preparation materials.	Lab exercises, instructor demonstrations, and student use of specialized equipment.	Self-assessment quizzes, lab reports, or problem-based assignments.
Writing	Reading texts, cases, podcasts. Preparation for in-class activities using discussion boards.	Peer-editing or review of written work. Small or large group discussions. Debates or case studies.	Reflective or comparative activities, text analyses, or summaries.
Projects	Assigned reading, development of multiple project ideas, gathering of data.	Interim exhibit and project updates. Use of specialized equipment. Field-work or site-visits.	Reflective blogging, documentation, and other products to record their progress.
Problems	Concept videos, review of real-world case studies, initial practicing of concept problems.	Collaboratively solve problem-sets, instructor clarification of core topics, and discussion.	Continuation of problem-based quizzes and review of content.
Research	Performing a literature review, gathering data, finding data-sets, and initial data analysis.	Use of specialized equipment or software. Discussing methods, ethics, findings, or relevant literature.	Weekly summaries of research progress, updates to an annotated bibliography.

How can we use flipped learning to reduce the density of students on campus?

The importance of *flipped thinking* will only increase as you begin to tackle the pedagogical challenges that lie ahead. There are a few ways you can use flipped learning approaches to help reduce the number of students in your classroom. Courses that leverage flipped approaches would utilize the online environment as the primary instructional medium and have fewer students in a face-to-face classroom to accommodate social-distancing measures. Some example approaches are shared below to help foster ideas in the context of your course; the approach you ultimately choose will depend on a number of factors, including classroom size, enrollment, course content, and pedagogical priorities.

Students attend in-class sessions once a week: A flipped learning approach in the socially distanced classroom may follow more what we traditionally understand as the blended or *reduced seat time* model (Parsad et al., 2008), with groups of students each attending class in person only once per week, while completing the majority of course activities asynchronously. For example, for a Tuesday and Thursday class schedule, a student in 'Group A' may only attend class on Tuesday, while a student in 'Group B' would only attend on Thursday. Students are not required to attend other class sessions remotely through live conferencing. From the perspective of a student, weekly face-to-face time will have decreased, while faculty would continue to attend both the Tuesday and Thursday class. Contact hours would shift and students would need to engage in additional course activities online usually completed in class. Faculty may repeat each hands-on session for each group while they're in class each week.

Students engage in pre-class activities and attend live sessions: For courses that have already adopted a flipped mode of instruction, you may continue to have students engage in pre-class and content materials online, and yet still attend live classes remotely. This may be necessary for large cohorts that meet already only once a week. A third of the class would attend an in-person classroom session, while two-thirds of the class attend via live video conferencing. Hands-on activities usually applied within the class will potentially require an online alternative for remote students.

Students attend online and in-class synchronous sessions: You may wish to continue synchronous sessions online one week and rotate groups who attend in-class another week. For instance, you may have students attend in-class sessions on an assigned day during Weeks 1, 3, 5, 7, 9, 11, and all other weeks to meet students synchronously using a virtual conferencing tool. Pre-class materials and activities will still primarily take place online.

Students attend in-class sessions on strategic dates: For more project and research-based courses that involve extensive independent learning processes and creative outputs, you may wish to structure in-class days around key milestones, such as student presentations, exhibits, and midterm and final reviews. Pre-class materials and activities will primarily take place online, and students would still synchronously attend a scheduled class time but online, through a video conferencing platform. Groups of students would attend in-class sessions on an assigned day, potentially on a monthly basis.

What is the difference between a *flipped* and *hybrid* socially-distanced course?

Ultimately, hybrid and flipped learning both refer to educational methods that combine the online and in-class environment for learning and teaching. However, the terms *flipped* and *hybrid* have very different meanings in the context of a socially-distanced course. A hybrid socially-distanced

course focuses on mixing in-person classroom teaching with live video conferencing, with rotating groups of students attending in-person. A flipped socially distanced-course differs in that the main focus of in-class time is the active application of course materials, typically with no requirement for video-conferencing with remote students. The following table outlines the key differences and overlapping approaches.

Comparison Between Flipped and Hybrid Socially-Distanced Course

	Flipped Socially-Distanced Course	**Flipped (and Hybrid) Socially-Distanced Course**	**Hybrid Socially-Distanced Course**
Frequency of students attending class	In-class once per week on an assigned day and engage with resources asynchronously in place of other class meetings.	In-class on one day per week and participating remotely during other class sessions.	In-class on one day per week and participating remotely during other class sessions.
Frequency of faculty attending class	Each session. Same content for each group.	Every session, different content each time.	Every session, different content each time.
In-class teaching and learning methods	Student application of course concepts.	A mix of lecture-based content and student application of course concepts.	Lectures, discussion, polling, some interactive components, and assessments.
Online teaching and learning methods	Student engagement with online course lectures, materials, and activities online.	Student engagement with online course lectures, materials, and activities online.	Lecture slides for review, supplemental materials, most homework, and activities assigned online.
Course preparation for students	The expectation to complete pre-class readings and assignments before the in-class application.	The expectation to complete pre-class readings and assignments before the in-class application.	The expectation to complete homework and activities before attending online/in-class.
Course preparation for faculty	Advanced organization of pre-class content to connect with in-class and online activities.	Some organization of pre-class content to connect with in-class and online activities.	Organization of student groups, live-conferencing equipment, and recording.
Recommended equipment	Bring laptops to class for group collaborative activities.	Bring laptops to class for group collaborative activities.	Bring laptops to class for activities with remote students.

Live video conferencing with remote students	Only if a student needs to join remotely due to illness, accessibility needs or enrolled as an online student.	Remote students will attend class via live video conferencing for activities.	Remote students will attend class via live video conferencing during class time.

What should I do first to prepare my flipped socially-distanced course?

Course planning and setup is always important, but even more so now, given the complexity of the current teaching context and the significant adaptations, it is likely to require.

- First and foremost, decide how you will utilize your face-to-face time and then what content and activities will be moved online. Again, it all starts by considering what the best use of your classroom time is. Generally, the flipped method reserves class time for active learning - that is, discussions, presentations, problem-solving, role-playing, etc. In this particular context, you may also want to consider using some portion of face-to-face time for assessments or for a review session, where students can ask questions, get help with assignments and projects, and receive the kind of rich feedback which is hard to replicate online.
- If you do not plan to flip your entire course, choose which content to flip. It may help to prioritize by identifying flippable moments - that is, areas that are particularly important, difficult, or perceived as boring (Honeycutt, 2013). For example, if there is an area of your course which students tend to struggle with, they may benefit from the extra and more complex engagement with content that flipped learning affords.
- Given that a significant portion of your course will likely take place online, and that some students might never come to class (because of health considerations, etc.), it is important that you organize content consistently and intuitively and make it easily accessible. Though there are a number of options for doing this, you might try Blackboard first, as it includes a plethora of features for creating, hosting, and organizing course content. To chunk your content into modules, for example, you can use Blackboard's content folders.
- Establishing consistent routines of course activities can help to set student expectations and support their ability to self regulate (Broadbent & Poon, 2015). In this way, students know what to expect each week and can thus manage their time and learning more effectively. One way to do this is through the use of infographics, tables, or overviews.
- While there are many tools available for students to use remotely if students use their own devices to engage with online content or specialized software, consider that some students may be at a disadvantage if they do not have access to a powerful machine or high-speed internet access. Sharing technical specifications, resources, or hosting practice sessions using software with students can quickly help identify who may need

further technical support. Virtual labs allow students to access statistical packages through a virtual environment, while some remote computer labs are available to support students who need to connect to a physical computer on campus and access all discipline-specific software.

What are my options for creating and preparing content?

In flipped lessons, students are typically introduced to new concepts outside of class. This can happen in a variety of ways.

- You can create your own videos, and this can take a variety of forms. You could, for example, use your cell phone to record yourself delivering more or less the same lecture you would deliver on campus, or, if you use PowerPoint, you could narrate your slides Alternatively, you might try screencast videos, using Kaltura Capture, which is particularly useful in disciplines which require handwriting (e.g., math). These are just a few of the many options; if you would like to see what else is possible, check out Michael Wesch's YouTube channel. Regardless of the approach you choose, try to keep the videos short (generally less than 10 minutes) and consistent in format.
- Though students tend to find videos created by their instructor or institution more useful, this process can be time-consuming and therefore is not always a viable option (Giannakos et al., 2016). One possible alternative is to leverage existing resources. As a University of Miami faculty member, you have access to numerous online video databases, including Academic Videos Online, the Journal of Visualized Experiments, and LinkedIn Learning, all of which contain videos that can be added to course modules to introduce new concepts. The UM Libraries can also help find, recommend, and link to online materials for you in your BlackBoard course. For more information review, the Online Teaching: Library Resources Research Guide.
- Although flipped learning is sometimes considered synonymous with recorded lectures, this is not the case, and some good alternatives to video exist, including texts, audio, podcasts, and simulations. For example, you could introduce new content by having students read and collectively annotate digital texts using free (non-UM supported) social-annotation software like Perusall or Hypothesis or listen to podcasts or narrated slide-shows created with VoiceThread (Talbert, 2017).

How do I promote engagement with online activities and materials?

In flipped courses, completion of out-of-class work is essential, as in-class activities build on the new concepts introduced there, and the importance of this work only increases as a larger proportion of course activities are moved online. Therefore, it is important to consider how we can design online content and activities with an eye toward increased engagement and accountability.

- It is important to set clear expectations about the structure of flipped lessons and, in particular, the importance of pre-class work (O'Flaherty & Phillips, 2015). You can accomplish this with something as simple as a syllabus statement; or, if you're looking for something more participatory, you can facilitate a first-day discussion (online or in-class) about flipped learning and active learning more generally, which builds on students' prior learning experiences and perceptions. The end result might be a co-constructed list of guidelines for participating in flipped courses.
- If your course content is primarily text-based, think about how you can integrate other modalities, such as video, audio, and images. One possibility is to use video to introduce new concepts (see What are my options for creating and preparing content?), but video can also be used as the basis of activities and assignments, to give feedback, and to address students' content questions. For example, if you have writing-based assignments in your course, and a significant proportion of your writing feedback is asynchronous, you might try using screencasting software (e.g., Kaltura) to give feedback (Martinez, 2016). For additional examples of some of these use cases, see Michael Wesch's YouTube Channel.
- Another way to encourage engagement is to invite collaboration around your online content and activities. For example, using platforms like Hypothesis and NowComment (non-UM supported tools) or Google Drive, which allows collaborative annotation of texts, you could have your students discuss, ask, and answer questions about new concepts as they read assigned texts.
- Finally, problem-solving activities and adaptive quizzing, which are often included with textbook courseware packages, are additional ways to engage students as they work through asynchronous content, particularly in STEM courses. One example is MacMillan's LaunchPad with its LearningCurve tool; this software allows students to practice new content via adaptive quizzing which organizes and matches content according to students' current level.

What's the best way to start in-person sessions?

If you adopt flipped learning approaches for your class, you may need to provide further guideposts in your instruction due to potential physical barriers and social-distance guidelines.

- Pre-class assigned content usually prepares students for the application of content for in-person sessions. However, ensure you post reminders using Blackboard

Announcements for additional materials, technologies, or equipment students will need to bring to class.

- As you may need to arrive early before class, consider being deliberate in speaking to students as they enter the classroom, asking how they are doing, any updates they would like to share, and talking with students about their progress and their priorities for the session (Bali, 2020). Classes equipped with microphones will also allow instructors to share updates clearly with students.
- With limited in-class time, being more intentional and clear with students about key goals for the session can help students organize their thoughts and any notes they wish to take during the session. At the start of class, consider sharing an outline of the agenda on the board visible to students and continue to remind students of these class goals (Lang, 2016). One option may be to ask students what topics they would like to focus on more during the session and co-create the agenda with your students.
- Seating within the University of Miami classrooms will have already been arranged in the optimal default setup, but some adjustments - which still meet social distancing guidelines - may be necessary. For discussion-based activities, for example, you might need to ask your students to sit facing each other, or sit in locations to simulate a "round-table."

How do I support in-person and online discussions?

Facilitating discussions in the classroom may arrive with some challenges and considerations. With reduced class sizes and potentially physical barriers preventing clear communication, it's important to acknowledge students, and involve them in the classroom experience.

- Mandatory masks, physical distancing, etc. will no doubt change the dynamics of classroom discussions, and thus it may be worth starting an open dialogue with your students early on in the course about the changes and how they will affect (and, later, are affecting) instruction. This feedback will likely prove valuable as you plan for socially-distanced discussions and tweak these plans over the course of the semester.
- When introducing discussion-based activities, you can invite students to co-create ground rules for contributing to the discussion in-class (Brookfield & Preskill 2005). Students can also build upon sample online ground-rules you may share. For example, raising hands to indicate that they want to speak may help prevent students from inadvertently talking over each other (made more complex with face masks). Another approach may involve reassuring students that it is acceptable to ask the instructor and their peers to repeat discussion points, and creating opportunities to clarify spoken discussions.
- In a large classroom, with fixed auditorium seating, students may have to engage in peer and group discussions mediated through conferencing tools, like Zoom, Blackboard Collaborate Ultra, or Microsoft Teams. Using headphones, students start a live conferencing session and share resources through the chat or share their screens.

- Since flipped instruction often involves structuring in-class discussion around student engagement with pre-class coursework, you may need to remind students to bring to class materials prepared for discussion, in a format available to them (e.g. physical or digital), or submit their discussion topics through Blackboard Assignments.
- Ultimately, if the restrictions to in-class discussions essentially work against your student learning outcomes for your course, consider moving discussions to online environments through synchronous video conferencing or using Blackboard Discussion boards. Preparing guidance about using these tools, discussion tips, and sharing criteria for online discussions can help structure students' conversations around course material.

How do I facilitate collaboration and group work?

At the center of flipped learning is the facilitation of collaborative learning opportunities to apply course materials during in-class sessions. In consideration that students may crave social engagement, the classroom can become a social space and place for students to meet. However, thinking about how you manage social interactions may require further thought, for instance, group-based assignments and projects that bring students in close proximity to each other may, therefore, need to be revised or moved online.

- An integral part of on-campus experiences and programs involves students engaging in various informal collaborative learning experiences, including study groups, 'water cooler' discussions, after-class meetings, and community-based events across disciplines. As these experiences are potentially reduced, you may need to become more intentional in connecting students to spaces and opportunities to engage with each other. Options include sharing virtual events led by departments, encouraging students to use messaging apps like Microsoft Teams, or third-party tools like WhatsApp or Discord. You may help form study groups for assessments or create Q&A spaces using Blackboard Discussion Boards, or Piazza (non-UM supported tool). Finally, transparent discussions with students about this shift may help brainstorm more ways students can engage and learn from each other.
- During in-person sessions, students will need to avoid sharing electronic devices, books, pens, and other learning aids (CDC, 2020), therefore you may need to set logistical guidelines for small group activities. Students may share work digitally or collaboratively take notes, for instance using Google Docs, Google Slides, or using Padlet (non-UM supported tool) to work on together and add comments. With that, some technical training may be necessary through pre-class online instruction. For handwritten exercises or problem-solving, students may need to bring small portable whiteboards or markers to show their solutions from a distance (Bruff, 2020).
- Since you may be limited in walking around the class, you may have to be more intentional in how students share their group work with you in-class and allow time for this. You may request that students post their resources in a Google Doc or Form,

Blackboard Assignment or share a link you can easily access in-class on your computer and present on the screen during in-class sessions.

- When creating assignment groups, consider the logistics of either grouping together students who are in the same in-class session or deliberately mixing students from different sessions. For example, one in-person session group of 10 students could be split into two project groups of 5 students each.
- Students who are not in the same in-person sessions *can* work together, and this is a good way to promote a learning community among all the students in your class (and break down the barriers between the session groups). Students can use Blackboard or Google Docs to work asynchronously (not at the same time), or their own Zoom rooms to hold live meetings outside of class time.
- For assessments that previously required students to engage in hands-on activities in groups, such as the development of physical prototypes, shifting to individual-based projects may be necessary. Group-work may transform into peer feedback assignments, where students individually work on projects but are still part of a 'feedback group' that critiques, shares guidance, answers questions, and potentially peer assess individual contributions.
- If group-based projects are continued, building group dynamics can prepare your students to undertake a group project, activity, or task. In addition to team-building activities, students can use Google Docs to build a group-work statement including how they will record group decisions, schedule meetings, communicate, and share progress. Where possible, shift group-work online, mediated through backchannel applications like Microsoft Teams, can help students 'chat' and share files over the course of a semester.
- During synchronous video conferencing sessions, breakout groups can be used to foster student-student interaction through discussion, group projects, or review sessions. You can drop in at any point to monitor progress or provide guidance to each group.

How can I still be "present" for my students with reduced face-to-face time?

Establishing instructor presence and a general sense of caring is important, and, in fact, has been shown to lead to stronger academic performance (Jaggars & Xu, 2016). However, this can be challenging in courses with a substantial online component.

- It is important to take full advantage of any face-to-face time you do have; try to focus on activities that maximize your contact with students and help to build rapport. For example, you might use a portion of this time as a Q&A session using polling tools or a study session, where you can answer student questions and give personalized feedback.

- In the online environment, a good way to establish a strong sense of instructor presence is through frequent and meaningful multimodal (video, audio, etc.) communication. This can take a variety of forms:
    - Weekly announcements outlining course updates and previewing upcoming modules
    - Feedback on student assignments and assessments which is frequent, timely, and, perhaps, multimodal (using screencasting software like Kaltura or Loom(non-UM supported tool) for example)
    - Assign and actively participate in online discussion activities using, for example, Blackboard forums, Padlet, or Flipgrid(non-UM supported tool).

  It might be helpful to think about how and when you will communicate with your students as you devise your course routine (discussed in an earlier question).

How do I manage student presentations?

Many instructors use presentations as a way for students to demonstrate their learning and hone their communication skills. While they have many well-documented benefits, presentations tend to be time-consuming, so it may be worth considering alternative formats in the current context of reduced face-to-face time.

- Rather than have students present live in class with PowerPoint, Prezi, Google Slides, etc., you could have them create a presentation in an asynchronous format. Platform options abound, but a few worth noting are
    - VoiceThread: a digital storytelling platform, which integrates with Blackboard and allows users to narrate and comment on slideshows of various media, including images, text, slides, and video.
    - Flipgrid (non-UM supported tool): a platform that allows instructors to create class spaces ("grids") where students can share and comment on videos.
    - PowerPoint: If you're looking to stick to familiar technologies, you can have students narrate a recorded slideshow and upload it to Blackboard - perhaps to a discussion thread in order to encourage commenting and feedback.
- Another option is to have students present via a web-conferencing platform like Zoom or Collaborate Ultra. This allows students to work with a familiar presentation format (i.e., the narration of a slide deck) and provides for significant flexibility for both the instructor and students. For example, students could present in Zoom with no attendees, record the session, and post the recording to Blackboard, thereby producing an asynchronous format similar to those discussed above. Alternatively, the instructor could give students the option to attend (and interact with) these Zoom presentations live or watch (and, again, interact with) the session recording on Blackboard.
- As you adapt presentation assignments (in particular, to asynchronous formats), it's important to consider how to ensure students are viewing and engaging with each other's work. For asynchronous presentations, for example, you could have students

perform a sort of scavenger hunt where they have to watch all or some portion of other students' presentations and listen for and interact with specific information. Another option is to have each presenter create their own activity to engage the audience. Most platforms, including all of those mentioned above, offer a range of tools that facilitate these sorts of interactions.

- If you would like to explore additional options, the University of Miami Libraries' Creative Studio can help you and your students design a range of multimodal projects and presentations.

What about my hands-on experiences, like labs?

Flipped learning inherently involves the application, of course, materials through hands-on experiences during in-person sessions, like labs and studio-based courses. Since these are experiences that you'll want all of your students to have, this will necessitate some clever timing and adjustments.

- To make use of class-time effectively, students will engage with related materials online before and after class, including reviewing instructions, pre-reading, data analysis, or watching video demonstrations. Setting expectations early can help students use in-class time to participate in the hands-on session, and perform necessary preparation outside of class. During the session, you may also ask students with mobile devices to record each other and submit this as evidence, and gather further feedback online.
- Other approaches to hands-on experiences may include outdoor, active strategies leveraging the campus environment (Hrach, 2020). Before or during class, you may assign small groups of students to collect primary data from spaces on campus, generate field notes, or address a specific discussion question and report back to the whole class, following safety protocols when they return. Reviews and exhibits of student work may also take place in outside spaces and low-traffic areas.
- If students are engaging with physical, digital, or fabrication equipment as part of a course, discussing options with the lab manager you primarily engage with can help prepare for your course needs before the semester begins. As the use of equipment usually increases during assessment periods, this may bring more students to campus and impact social-distancing guidelines. For instance, booking of equipment in advance or curb-side services may be implemented due to cleaning and quarantine measures.
- For software, or computer-based training that require the use of computer labs or specific software in-class, measures are being taken to ensure the safe use of these spaces. Teaching practices such as helping troubleshoot issues may need to be mediated through screen sharing using the classroom podium system, or conferencing tools like Zoom. Speaking with support staff for specific computer labs can also help you prepare.
- To supplement your own teaching, or video instruction, you may wish to create a playlist leveraging existing videos on specific resources or software used in the lab or studio

settings. A common approach includes requesting students to share their 'completion certificate' or project output to indicate they engaged with these resources.
- There are many more possibilities for replacing, replicating, or simulating hands-on activities that will heavily depend on the course subject and objectives. If you'd like to discuss your course and some options, please contact Academic Technologies (academictechnologies@miami.edu).

What other ways can I use flipped learning to design and prepare my course?

As you introduce online course materials and activities that promote student-student and instructor-to-student interaction (Owsten and York, 2017), face-to-face time in class may be positioned as a time for clarifying and scaffolding course assessments. While students can start course assignments online, in-class exercises allow students to use the time to clarify challenges, share assignment updates, and gather further feedback from you and their peers.

- Process-driven activities (McGee & Reis, 2012) like reading/listening/watching (articles, news, video lectures, podcasts), problem-solving (calculations, technical problems, scenarios) or document analysis (data, rhetorical or case analysis) transition well in the online environment. For example, students could listen to a podcast, watch a video clip or read a case study online, while in class, students could take on a role, or problem and apply their knowledge to a new set of scenarios. Tools like Google Drive allow students to mark-up documents collaboratively, while Adobe Scan allows students to digitize handwritten notes and submit them through Blackboard.
- If students have to complete assignments like performances, artwork, essays, case briefs, or media-related outputs that are 'products' of their learning, you may wish to introduce scaffolding activities or 'assessment tasks' (Carless, 2015), that they can complete online and gather feedback in class. Outside of class, students may brainstorm research questions for an essay, create concept maps, prepare drawings, or produce storyboards using Adobe Spark, while in class gather class feedback during peer-activities or pin-up gallery walks. These in-class activities can also easily transition online with group blogs, discussion boards, or file exchange on Blackboard.
- Project-oriented activities (McGee & Reis, 2012) like individual or group reports, reflective blogs, or portfolios involve ongoing step-by-step milestones that are cumulative. Outside of class, students may perform research, collect and analyze data, engage in interviews, and take part in skills development (e.g. software training) aligned with their project idea. In-class activities may support group meetings for collaborative projects, sharing and organizing project plans, holding interim and final presentations for receiving feedback.
- Since students meet once a week and different days, you may need to consider staggering deadlines for course activities based on class schedules. For example,

students attending a ‘Monday’ class will receive access to online activities the Monday before, for students to practice and apply course content in preparation for class. While you may have items due in-class, for online students, deadlines may be moved to the end of the day in consideration of timezones. For example:

Example Assignments and Activities

ASSIGNMENTS AND ACTIVITIES	DUE BY
Online: Readings (podcast, video lecture, articles). Review and prepare rhetorical analysis and questions for classroom discussion.	Complete for your assigned in-class day.
Online: Group online discussion board. Submit a rhetorical analysis paper introduction.	Submit by the end of the week.
In-class: Large classroom discussion about rhetorical analysis. Small group work where each student tackles a topic and drafts key points in groups. Instructor feedback and a reminder about upcoming assignments.	Participate in an in-class session on your assigned day.

How can I manage my office hours?

With reduced class-time, adopting a flipped learning approach invites us to rethink how office hours can frame existing course activities and support student-teacher interaction. A good solution is to consider how to leverage both the in-class time and the online learning environment to advise and mentor students.

- The idea of a student sticking around after class to ask clarifying questions is suddenly a little more complex when managing social distancing on campus. You may have to set guidelines with students about how to address questions related to the course, for instance in a discussion board in Blackboard Learn.
- One approach is to leverage in-class time for whole class feedback, like a paper or exam review session. Asking students to submit questions anonymously related to a topic or assessment online before a class using a Blackboard Survey can allow you to take time in-class to address all questions.
- Another direction may include hosting “virtual” office hours where any student can meet with you remotely outside of class time. Consider using the same video conferencing platform (Zoom, Blackboard Collaborate Ultra) that you intend to introduce or may use with your students.
- For group or synchronous online video conferencing sessions, you may also encourage students to submit private questions during the Zoom or Blackboard Collaborate Ultra chat, only to you.

- Some faculty members may want to keep a set schedule for office hours. An open meeting allows all students to join, which could lead to productive discussions about similar issues. Or, using a waiting room feature (like that in Zoom) will allow you to manage who you meet with at a given time.
- Other faculty members might prefer to schedule individual appointments with their students. Scheduling tools like Calendly(non-UM supported tool), which integrates with Microsoft Outlook, are a good option for giving students opportunities to schedule meetings with you.
- To foster student-teacher interaction, you can engage with students about their progress in the course by assigning a one-to-one or small group virtual conference, instead of an in-class session.
- However you plan to introduce your office hours, consider sharing in advance through your syllabus or in an orientation module as part of your course on Blackboard.

How do I accommodate students with disabilities?

Some students may require accommodations to tests or other aspects of their remote learning experience because of a documented disability, such as extended time on tests and quizzes.

- If you have any students who require accommodations in your flipped you are encouraged to work with the Office of Disability Services (disabilityservices@miami.edu) in the Camner Center to ensure that they are engaging in equitable learning opportunities.
- Disability Services has issued specific guidance to the University of Miami faculty members regarding the accommodation request process, the types of accommodations, and engaging in communicating with students regarding their accommodations.
- As you prepare or create more online content for students to engage with, consider alternative and additional resources you may need to make available to students, like transcriptions to video lectures. Guides like EDUCAUSE's ADA Compliance for Online Course Design, or CAST's Universal Design for Learning share principles and practices to ensure inclusive and equitable course design.
- To share transcripts on recorded video or audio lectures, Zoom Cloud Recordings and Kaltura Capture (Blackboard Learn) provide machine-generated audio transcripts or closed captioning on a video or audio recording. Google Slides and PowerPoint presentations also have real-time captioning features you may use in a screencast or synchronous video lecture.
- For more guidance on ensuring an accessible and equitable course, Blackboard Ally is a feature in Blackboard that evaluates ways to ensure your course is accessible to all learners. Ally creates alternative files, from the original documents in your course, within your Blackboard Course that are easier to use by all students. Alternative files include readable text for screen readers, pictures with captions, and easy-to-navigate content. Contact the learningplatforms@miami.edu to enable Blackboard Ally in your course.

How do I support fully online students in my flipped socially-distanced course?

For the fall semester of 2020, the University of Miami has offered students the option to attend all of their classes remotely to accommodate those who are unable to come to campus. Students who have opted for a fully online semester will be enrolled in a separate section of your course.

- Submit a request to the Learning Platforms Team to merge your flipped section with your online section so that all of your students will have access to the same materials (without the need for you to upload twice)
- Make the expectations for participation clear for your remote students, such as informing them that they will be required to attend remotely via Zoom.
- Consider recording your class sessions for your remote students.
- Give thought to which activities (lab work, hands-on activities, discussion activities projects, group work, research, quizzes, exams, etc.) can be done with no modifications for fully online students, with some modifications, or those for which alternatives will have to be determined.
- For class activities that can't be done effectively online, consider equivalent ways to achieve the same learning objectives, similar to what you would do if a student were absent or trying to fulfill requirements to convert an "incomplete" grade to a letter grade.
- Remember that students electing to take the semester fully online cannot be penalized for this option and should be able to engage in an equivalent learning experience to that of your in-person students as possible.
- For unplanned in-class absences due to self-quarantine, illness, or personal emergencies, you may need to consider workarounds so students can engage with in-classroom activities synchronously, or at a later date.
- If you'd like to discuss options for your fully online students, please contact Academic Technologies (academictechnologies@miami.edu).

How do I (and my students) find additional support?

For additional guidance relating to teaching flipped classes, feel free to reach out to Learning Innovation and Faculty Engagement at academictechnologies@miami.edu. The team is ready to help you create an effective and engaging learning experience for your students.

For additional support, these teams are ready to help you or your students:

- The Learning Platforms Team (LPT) supports faculty with the use of Blackboard, Collaborate Ultra, and a variety of teaching-related technologies.

- University of Miami Information Technology (UMIT) faculty with the use of Zoom and any hardware that is used in the classroom to support teaching and learning.
- Student Technology Help Desk (STHD) supports student technology needs.
- The University of Miami Libraries provides support by increasing and navigating access to online resources for classroom use, and guidance on aspects of the research process.
- The Camner Center for Academic Resources provides online tutoring support to students' academic achievement.
- The Writing Center provides online help to students working on papers for a course, theses and dissertations, personal statements, business letters and resumes, grant proposals, articles for publication, and personal writing projects.
- The Math Lab provides specialized online math tutoring to any student enrolled in an undergraduate math course.
- The Modern Languages Lab supports undergraduate students with online help for assignments and essay projects from courses in Spanish, French, Portuguese, Arabic, and Chinese.

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Appendix: Technical Guides

This appendix includes some helpful technical guides to accompany the teaching advice provided in the previous sections.

Blackboard Learn

Blackboard Learn, available at courses.miami.edu is the University of Miami's Learning Management System. In short, it is the quickest and easiest way to create course websites. In addition to the help desk, the Learning Platforms Team can provide training and support on Blackboard.

- University of Miami's Learning Platforms Team has a YouTube channel and a wiki with multiple quick guides and sessions on Blackboard Learn.
- Blackboard's Announcements**:** Send class-wide notifications.
- Blackboard Discussion Boards: Assign (non)graded discussion forums.
- Blackboard Users and Groups: View the course roster in Blackboard.
- Blackboard Groups: Create multiple groups at once.
- Kaltura Capture: Upload or screen-share presentations, audio or videos and share with your students.
- VoiceThread: Collect feedback such as voice, text, audio, or video comments.
- Blackboard Assignment: Collect assignments online.
- Blackboard Blogs: Assign (non)graded reflected individual, course, or group blogs.
- Blackboard Group Discussion Boards: Create a special group discussion board available only to the members of a course group.
- Blackboard Group File Exchange: Students can share files with members of their group.
- Blackboard Survey: Create an anonymous survey.
- Blackboard Ally: Ally provides guidance and tips for lasting improvements to your content accessibility. Contact the learningplatforms@miami.edu to enable Blackboard Ally in your course.

Video Conferencing

University of Miami faculty members have access to two desktop videoconferencing platforms that can be used in flipped classes or virtual office hours: Zoom and Blackboard Collaborate Ultra. Both tools provide features for screen sharing, chat, breakout rooms, annotate, file sharing, and more.

Zoom

To activate your Zoom account, sign in to zoom.miami.edu using your CaneID and password. You will also need to download the Zoom Desktop client onto your device by visiting zoom.us/download.

- Getting Started with Zoom
- Learning Platforms Team: Zoom
- Learn How to Use Zoom in Blackboard
- Zoombombing Resources

Blackboard Collaborate Ultra

Blackboard Collaborate Ultra is already available to faculty through their Blackboard course site. For easy access, click on *Course Tools* on the left side of the Course Menu and expand it so that the option *Blackboard Collaborate Ultra* appears. You can click on it and add it to your Blackboard course's menu bar.

- Get Started with Collaborate Ultra
- Learning Platforms Team: Collaborate Ultra
- Blackboard Collaborate Ultra LPT Wiki

Google Drive

Google Drive is a cloud-based data storage and file sharing solution that students and instructors can access via a web browser or mobile application with their UM account.

- Google Drive UMIT Help Page
- Google Drive Cheat Sheet
- Google Drive Training and Help
- Google Forms Help
- Google Docs Help
- Google Slides Help
- Google Sheets Help
- Google for Education: Teacher Center

Virtual Office Hours

This guide shares strategies and examples of how to implement virtual office hours within your teaching practice.

- Create a Signup Sheet Using Google Sheets
- Learn Training from Microsoft Bookings

- Schedule Appointments with Calendly (Calendly is a freemium tool you can use to create a calendar, but not a UMIT supported tool).

Microsoft Teams

Microsoft Teams, a UM supported, a chat-centered platform in Microsoft 365, brings people, conversations, files, and tools into one place so everyone has instant access to everything they need.

- Microsoft Teams UMIT Help Page
- Connecting with Microsoft Teams as a student
- Microsoft Teams for Education

Adobe Scan

Adobe Scan is a document-scanning mobile app, you can download from your app store and login with your UM email address.

- Take photos of a page and merge it into a single PDF document.
- Access your document cloud account where you can download to your computer.
- Adobe Scan FAQ

Other Web-Based Technologies

The following tools are free, web-based technologies you can use in your teaching, but are not technically supported by UMIT, and potentially require separate logins.

Hypothesis

You and your students can use Hypothesis to annotate course readings collaboratively.

- Get started with Hypothesis.
- Hypothesis for Education
- Examples of Classroom Use

NowComment

NowComment is a sophisticated group collaboration app for the discussion and annotation of online documents.

- Now Comment Help

Padlet

Padlet is an online 'bulletin' board that students can add text, images and videos to.

- What is Padlet?

- Padlet Help Center

Flipgrid

Flipgrid is a free video discussion platform from Microsoft where educators post discussion prompts and students respond with short videos, whether they are learning in class or at home.

- Getting Started with FlipGrid

Loom

Loom is free screencasting software available via Chrome extension or a desktop app.

- What is Loom?

Piazza

Piazza is a wiki-based Q&A platform that allows students to ask questions in a forum type format. Instructors are able to moderate the discussion, along with endorsing accurate answers.

- Piazza Support Center

Recommended Technologies for Hybrid Sessions

To learn more about the webcam, technical logistics, and considerations involved, please review the Preparing to Teach a Hybrid Course guide.

Notes and License

This document is based on Allan Gyorke's 2006 *Faculty Guide to Teaching Through Videoconferencing* and the *Preparing to Teach a Hybrid-Course Guide*. Tremendous thanks are owed to the many University of Miami faculty members who provided input and insight toward the refinement of this document (Germane Barnes, Ines Basalo, Christine F. Delgado, Christopher Meyer, Ramon B. Montero, Nicholas Petersen, Carmen R. Presti and Daniel Wang)

Flipped Socially-Distanced Course Checklist

Planning a Flipped Course

- ❏ Choose which flipped approach you will use to reduce classroom density.
- ❏ If you don't plan to flip your entire course, identify *flippable objectives* (i.e., those that tend to be particularly challenging, important, or boring).
- ❏ Decide which content and activities will be done asynchronously and which will be done in class.
- ❏ Organize online content into meaningful chunks using, for example, Blackboard's content folders.
- ❏ Establish a routine of course activities using, for example, an infographic or table.
- ❏ Share technical specifications for required software with students and consider hosting a practice session to identify who may need further technical support.
- ❏ Prepare plans for students taking your course in a fully online modality.

Developing Flipped Lessons

- ❏ Decide how you will expose students to new content (e.g., record a video, search for existing videos or texts, etc.).
- ❏ Determine how you will encourage engagement with and accountability for asynchronous work.
- ❏ Choose your in-class instructional activities (e.g., case studies, debates, peer instruction, etc.).
- ❏ Develop assessments and decide whether students will complete them asynchronously or in-class.

Teaching Flipped Lessons

- ❏ Remind the class of which assigned group will be in attendance before each class.
- ❏ Facilitate activity on the first day of class to orient students to the flipped method and social-distancing related course modifications.
- ❏ Review students' responses to pre-class work where relevant.
- ❏ During class, debrief out-of-class work and address any questions or concerns.
- ❏ Decide whether it makes sense to record and post a given day's session.
- ❏ Determine how you will set up discussions and other forms of group work, including how you will gather and share students' responses.
- ❏ Periodically check-in with students both in-class or online to address any questions, contributions, or technical issues.