Design Template: Lecture

FORMAT: LECTURE

Lecture material may be either pre-recorded and posted online or delivered live.

For LIVE lectures

- Plan opportunities for student engagement – for instance by using breakout groups or polls
- Structure the lecture carefully; use frequent signposts and take breaks
- Record for students unable to attend; remind students that the lecture may not be distributed or shared

For PRE-RECORDED lectures

- Break lecture into discrete (20-30 minutes) segments or chunks; watching a 50 or 80-minute video is challenging
- Pre-recorded (or “flipped”) lectures should maintain the existing total instructional time previously devoted to lecture meetings (usually a minimum of two hours a week), but should note in the Schedule of Classes that these lectures are now meeting asynchronously, which frees up the time slot for students to take other classes
- Decide when, where, and for how long to post the lecture; posting the lecture for a defined period of time to Blackboard or Canvas will give additional structure to your course
- Explore different modes of delivery, such as narrating slides or narrating illustrations
- Remind students that the lecture video may not be distributed or shared

ESSENTIAL CONSIDERATIONS

Ensure that asynchronous lectures are connected to interactive course elements. In a course with two hours of flipped lecture each week, the accompanying synchronous course elements should meet for a minimum of one hour. Lecture-only courses should offer a minimum of one hour of office hours each week.

Identify course goals and objectives. Start by thinking about your essential course goals. Focusing on the most important elements of what you want your students to learn and learn how to do will help concentrate your efforts and make clear decisions about how to adapt your course.

Design your curriculum in modules. Rather than a single arc across the semester, segment your course into modules, allowing for change and adaptation at points during the semester.

Consider adding a practicum. A practicum component is appropriate for interactive, hands-on work that students schedule on their own with partners or small groups. A practicum can be a useful way to ensure that students in the course interact with each other in structured, guided activities that promote engagement and motivation (McGraw staff are happy to provide guidance on this option).

Plan instruction for engagement and interaction to foster community and motivation.
Allow students to exercise creativity and agency, which will increase motivation and commitment.

Prepare students for learning online. Despite our frequent assertions that students are “digital natives,” online learning may be entirely new to them. Explain your expectations, and provide guidance on how to meet them (for instance, explain how you expect students to participate in class, or share your grading rubric with students).

Provide guidance to and meet regularly with your AIs or teaching team. Teaching online is also new to them.

Anticipate issues of access and inclusion. Consider sending a short questionnaire in advance of the first class that asks students to share concerns they have about engaging the course, including technology and access. See also the guidance provided by the Office of Disabilities Services.

DESIGN FOR ENGAGEMENT AND INTERACTIVITY

Get to know your students; you might:

- Send a welcome email or post a short video introducing yourself and the course
- Invite students to attend pre-semester office hours with you or your AIs
- Ask students to submit short paragraphs about their goals for the course to you or your AIs
- Use students’ names whenever possible

Create out-of-class opportunities for participation; ideas include:

- Post your lecture slides on a shared drive, and ask students to annotate them with questions or comments
- Ask students to post questions on the discussion board of your LMS

Plan active learning exercises during class; ideas include:

- Ask small groups of students to wrestle with a defined problem or puzzle
- Assign small groups of students to complete one part of a larger task and report back
- Ask students to contribute to a shared document (a glossary, for example)

Use “classroom assessment techniques”; ideas include:

- Ask students to submit an unanswered question at the end of each lecture
- Conduct an informal mid-semester evaluation

ASSESS YOUR STUDENTS’ LEARNING

Assign frequent assignments, with opportunities for regular feedback from you or your AIs.

Assign group projects. These may be low- or high-stakes; ideas include:

- Ask students to collaboratively write and edit a document
- Ask students to engage in a collaborative research project
- Ask students to build or contribute to a website
Address academic integrity explicitly.
- Develop assignments that require students to make their thinking visible, which will minimize the risks of academic dishonesty
- Create an exam in either Blackboard or Canvas that generates questions randomly from an item bank you and your AIs have created
- Give students clear, written guidance about any online or web-based resources outside of the course that they are (and are not) permitted to consult
- For courses that are organized around quantitative problem-solving, require students to periodically meet with the faculty member, preceptor, or UCA to discuss their questions. Students will be more likely to consult course resources (rather than off-limits forms of assistance) if talking with instructional staff is framed as an expectation of the course

PREPARE STUDENTS FOR LEARNING

Encourage metacognitive thinking and self-assessment. Many of the specific suggestions which follow aim to enhance students’ metacognition, including assessment of their own understanding.
- Be explicit about your expectations for students’ preparation for lecture
- Direct students to review relevant sections of your syllabus so that they come to lecture prepared to engage
- Encourage students, in order to make the most of lecture, to review earlier notes or slides. Consider providing or asking for a brief recap
- Provide an overview of the lecture at its start; alert students if some content is particularly difficult or frequently misunderstood
- Contextualize the assigned readings and explain your intention in assigning them. Provide advice about how to learned from assigned texts in preparation for lecture—especially for what may be unfamiliar types of texts such as primary sources or research articles
- During lecture, incorporate short pauses in which you are not delivering new content, but which students can use to catch up, fill gaps in their notes, resolve a confusion, etc. so they can attend fully to subsequent new content. The Zoom chat function might be used to collect student questions during these pauses.

RECOMMENDED DIGITAL TOOLS:

- Asynchronous discussion
  - Use the Discussion tool in Canvas or the Discussion Board tool in Blackboard
  - Take advantage of Ed Discussion, available in both Canvas and Blackboard, for Q&A style discussions that also allows for inline LaTeX and run-able code snippets
  - Use VoiceThread, a platform for asynchronous discussions on multimedia resources, which makes it possible for students to leave audio, video and text responses
- Digital projects and assignments
  - Create a collaborative course blog with one of McGraw’s Commons course website platforms
  - Encourage students to work on digital projects using free, online, easy-to-use tools such as ArcGIS Online, TimelineJS, StoryMapJS, or Google MyMaps (see descriptions in the Course Tool Finder)
Use Codio, an integrated development environment (IDE), to create, assign, test and grade computer programming or data science assignments.

- **File sharing and collaborative writing**
  - Share files in Canvas, Blackboard, or in Google Drive
  - Make use of Google Docs for collaborative writing and peer feedback

- **Live lectures and lecture capture**
  - Use Zoom and take advantage of its interactive features during synchronous class meetings
  - Use Mentimeter, an online polling tool which can be used in conjunction with Zoom, to increase engagement and participation during class
  - Use Zoom or your computer’s camera feed to record your lecture and upload it to your course site via Kaltura
  - Narrate your lecture slides and upload them to your course site