LEARNING TOOLS: MICROLECTURES

Microlectures are a flexible way to supplement classroom learning. They consist of focused, 5 to 10 minute video or audio lectures which each cover a single concept.

Creating a microlecture can be as easy as *plan, record, edit, publish.* They can be as simple as a short talk in front of a camera or microphone, and they can enhance learning in many ways, including:

- *Students can watch/listen when convenient.* Brief recordings can fit into commutes, walks, breaks between classes, and many other short time frames.

- *Students can watch/listen many times.* Limited classroom time can restrict the repetition needed for effective learning, particularly for students uncomfortable about asking questions in front of peers.

- *Specific information is easier to find.* Recordings with descriptive titles and summaries make finding specific information easy.

- *Instructors can demonstrate procedures.* Staged demonstrations keep the camera close and allow multiple angles, giving everyone a good view.

Ways microlectures can enhance learning

- Introduce topics before classroom activities
- Explore important or complicated concepts in depth
- Answer questions about classroom lectures or readings
- Demonstrate procedures and model behaviors
- Explain complex visual aids
- Include guest lecturers

Tips for Planning a Microlecture

No matter how complex your production will be, start by answering some questions.

1. What is your learning objective?
What will your students gain from your microlecture, and how will it fit into your overall curriculum?

2. What short topic/concept will you cover?
Can you explain your topic in five minutes or less? If not, can you break your topic down into smaller pieces? When estimating length, keep in mind that your recording should include an introduction and closing summary.

3. Will you use video or audio only?
Is a verbal explanation enough, or do you need some visual aids? Video files are much larger than audio files, but if your topic needs some visual guidance, go that route.

4. Where will you record?
Choose a quiet place with good light. Do some test recordings to evaluate background noise and your equipment's effectiveness. Even a buzzing light can have a big impact on the quality of your recording.

5. What software will you use?
UI faculty and staff can use [UICapture](#), available through the Campus Software Program. Information Technology Services (ITS) offers some guidance on how to use the software, or go to the College of Medicine [UICapture Service Catalog webpage](#).

6. Do you need special equipment?
At minimum, you need a microphone, camera, and computer, but your topic might call for other tools. You may need someone to hold the camera, or access to a specific location. Think through all the elements of your explanation to decide what you need to best present it.

Tips for Equipment & Software

Camera: Most laptops now have built-in cameras. Webcams can be purchased online for as little as $40. Your department may also already have digital video cameras on hand.

Computer & Memory: A standard desktop/laptop is generally suitable for recording short audio or video files. Recordings made and edited with UICapture are hosted on a UI server, so you will not need memory for those. If you plan to use other software, you will need storage space, such as an external hard drive. Storing large video or audio files on a shared network drive may not be the best option. Consult with your departmental technology person or Health Care Information Systems to learn about the options available to you.

Microphone: Most laptops now have built-in microphones. Other options include headsets and table top microphones. Sound quality is important in recordings with complicated concepts or specialized language, so find one that is well rated, such as a Yeti or Olympus.

Software: Consider availability, cost, and learning curve. UICapture is available at no cost to UI faculty, and content can easily be linked to ICON courses. Other audio and video recording and editing options include Adobe Premiere, Windows Live Movie Maker, Audacity, Power Sound Editor, and Wavosaur.

Studio/Recording space: Find a quiet space with good light. Consider what the camera will record behind you and choose a neutral backdrop. If this will be a regular activity, consider purchasing an inexpensive backdrop and some basic lights.

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