

The Use of Lecture-Capture Software to Teach Soils

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Introduction

- Several companies now offer software that can record academic lectures and place them on password-protected course websites for future review by students
- Examples of these companies include:
 - Tegrity
 - Panopto
 - Accordent
 - Fracton Technologies
 - Cisco
 - EchoSystems
 - Galicaster
 - UbiCast
- Many universities and some university systems have moved to a standard software offering for their institution(s) to make technical support of the software easier to achieve and to allow the negotiation of better prices for the use of the software
- This software offers instructors a number of advantages, but there are also some disadvantages
- This presentation is based on the presenter's personal experience using lecture-capture software over the last five years

Some Advantages

- Students who miss class for legitimate reasons (e.g., participation in school-sanctioned extra-curricular activities, illness, or family emergencies) are able to get lecture materials by logging into the class website. This provides these students with a more complete exposure to the material than simply copying a classmate's notes.
- The instructor is able to direct students who miss class for legitimate reasons to the recorded lecture to catch up with the class
- Allows "simultaneous" offering of lecture and online versions of the same course, making more complete overlap between the lecture and online offerings easier to accomplish
- The ability to address course conflicts for graduating seniors by allowing them to take the lecture portion of the class via recorded lecture
- Students who desire more in-depth learning are able to go back to selected portions of previous lectures to review and reconsider a topic of discussion or to fill in vague sections of their notes, allowing more of a learn-at-your-own-pace environment
- The ability to post a lecture using the lecture capture software provides a means to hold class even when the instructor has to miss due to travel or illness



The screenshot shows a web browser displaying a Tegrity lecture recording. The interface includes a search bar at the top right, a central presentation area with a slide titled "Contour Cultivation", and a control bar at the bottom. Red arrows point from text annotations to various parts of the interface:

- "Displays the date and time of the recording" points to the top left of the recording player.
- "Displays anything the instructor has put up electronically during the lecture" points to the top right of the recording player.
- "Allows a student to search the recording for key words" points to the search bar.
- "Allows the display of any web links or other notes the instructor has inserted into the presentation" points to the "Bookmarks and Notes" section on the right.
- "Controls to run/pause/advance the presentation, for volume, and for speed" points to the playback controls at the bottom.
- "Allows the student to instantly move to any point in the recording" points to the progress bar at the bottom.
- "Allows the student to send the instructor a question about the part of the presentation currently displayed" points to the question icon at the bottom.
- "Provides a printer-friendly version" points to the printer icon at the bottom.
- "Allows the student to download the recording" points to the download icon at the bottom.

Some Potential Disadvantages

- Some faculty have concerns about the ownership of the intellectual property generated through recordings of their classes, others have expressed concern that the recordings could be used to replace large numbers of faculty
- There is the possibility of decreased student attendance in class because the students feel they can watch class later at a time of their own choosing
- Additional time is spent by the instructor dealing with the technology
- Problems with hardware or software during class time can prevent recording a given day's lecture

Personal Responses to Disadvantages

- Science is always changing, therefore, science faculty can't be replaced by recordings as the field changes and recordings only a few years old will be out of date. To further address this, Dickinson State deletes all recordings that are more than a semester old unless the instructor requests they be saved.
- I have not had reduced attendance. Modern course management software offers many options, and I've told my classes I would turn off access to any students who become habitual skippers. Finally, in-class work/assignments will address this concern as well.
- The additional time spent with the recordings has been minimal for me, and I've judged it to be worth my time. This may not be the same for all.
- Luckily the problems I have encountered have not happened often; however, I usually do miss out on one to two lecture recordings per semester.