

Teaching using Video Lessons

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Lesson Materials (Video and Notes) available at
<http://faculty.mercer.edu/mccreanor_pt/>

Introduction to the Workshop

- How I structure my courses
 - Pre-classroom lesson (video)
 - Pre-classroom assignment
 - Classroom Sessions
 - Discuss lesson
 - Review assignment
 - Collaborative (active) learning activities
 - Submission of missed problems from assignment
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Why video lessons?

- Long-term time savings
- Opens up day time (or night time) hours for you and students
- Makes classroom time more interactive
- Enables active learning activities

Student Feedback – 1 of 2

Engineering Hydrology (EVE 385) - Student Feedback on Course Structure
<p>The Fall 2009 offering of EVE 385 utilized pre-recorded videos in addition to reading assignments to deliver course content. Classroom time was used to discuss content from the lesson and to review homework problems.</p>
<p>What did you like best about the structure of this course?</p> <ol style="list-style-type: none"> I like the recorded lectures. When you can refer back to the lecture, it makes paying attention and participating easier. I also enjoyed the re-works. I seemed to have learned more when I was allowed to correct myself. That most lessons were video recorded, allowing the student the ability to go back over them to better understand concepts. We didn't have to go to class every time. It was nice to be able to do it when we had time to do it. I really liked the videos. It allowed me to look back on class periods and follow the concepts, also helped for when I had to miss class for golf tournaments. Being able to view the lectures on my own time and actually having the ability to pause the videos, take notes, and repeat if necessary. Being able to rework missed problems for full credit. I enjoyed the videos and meeting only once a week to discuss the problems. It worked out for the most part., I felt like it really prepared me for the class discussions. I also liked being able to redo homework sets. I feel I learned more the second time I did the homeworks. I like that we can use class time to ask specific questions and work problems and that we can take the online lectures at a slower pace than classroom lectures. I liked the days that we came to class. I felt these days were the times where more complete learning took place, as the class could do a question and answer session. I also like the fact that I could review past lectures via an on-line video.
<p>What did you like least about the structure of this course?</p> <ol style="list-style-type: none"> I feel like we may not have covered as much material as we should/could have. The course <i>is</i> fast-paced, but there is a lot of material to cover. Sometimes it was really frustrating when watching the videos and doing <i>homework</i> because you did not understand something and we could <i>not</i> just ask you then like you can in a classroom setting. So, some things are better to have explained in person. One thing that was a negative was <i>that</i> around exam time having to go back online to get info. Having some notes would help. Also having to go back and forth between some on-line sources during <i>homework</i> assignments. Some times it seemed to take precedence over my other <i>courses</i>. It was hard to view videos many times because of streaming issues. It was also sometimes hard to load the notes part of the lecture on Blackboard because it took so long to open them on Blackboard. I did not like the assignments that were completely Excel (Assignments #9, 10, and 11). I thought it was more confusing because of the structure of the class and harder to ask questions about them. I did not feel as if the videos were informative enough. More often than not the videos were theory or conceptual based I would have liked to have seen more problems worked.
<p>Did the structure of this course result in a larger, smaller, or about the same time commitment as other engineering courses?</p> <ol style="list-style-type: none"> About the same, however, my time was used more efficiently, in that my retention of information is greater per unit time. I would say it took up a large amount of time because the homework assignments were a major part of the grade and most were time consuming. I feel like it was the same amount of work as you are supposed to do in other classes but you can't slack off and get away with not doing work like you can in other classes. So, all in all I think the work load was appropriate. Resulted in a litter longer time because in order to understand the assignments you had to watch the videos which took some time. Slightly longer, since classes did not always meet on a set schedule. More time commitment because I had to sit down and watch video. But I feel like I learned more in this class than any other class. It was just different and interesting. About the same or maybe a bit larger on certain nights – when an assessment <i>was</i> due. A larger time commitment was required as many videos were longer than <i>75 minutes</i> and had slow loading times.

Student Feedback – 2 of 2

Groundwater Hydrology (EVE 490) - Student Feedback on Course Structure	
The Fall 2009 offering of EVE 490 utilized pre-recorded videos in addition to reading assignments to deliver course content. Classroom time was used to discuss content from the lesson and to review homework problems.	
What did you like best about the structure of this course?	
<ul style="list-style-type: none"> i. The ability to go back and watch entire lectures while preparing for a test. ii. I liked the take-home test idea. It didn't make me feel rushed and I was able to think clearly when solving the problems. iii. Being able to manage my time to fit class needs (i.e., watching lessons and working problems at convenient times for me.) iv. We could learn the material on our own time. Lecture time in class wasn't wasted because you learn at your pace. v. I like that we mostly work at home to figure out problems and have a good chance to discuss them in class. vi. I liked how class time was dedicated to ensuring understanding of the material and for questions. vii. The freedom of being able to do the lesson whenever. viii. Having take-home tests helps me understand the material really well because they take a lot more time. ix. I like being able to go over the material at a time that fits my schedule. x. If the course stayed online, I like meeting after the assignments are due to discuss. 	
What did you like least about the structure of this course?	
<ul style="list-style-type: none"> i. Having to change my learning style. In the beginning, I struggled, but I began to develop over the semester and learned a lot. ii. I didn't like all the videos that needed to be watched. Most of the time I would go off of the notes that were included to solve problems. iii. If a certain concept from the lesson is difficult to grasp, you can't ask questions until the next class period. iv. Finding computers that worked with all the online windows media player, PDF, XLSX, etc. but that doesn't have much to do with the actual course. v. I don't like relying on the videos to learn the material before working problems. They are sometimes hard to get to stream correctly, and are less interactive than class. I think it would be easier to follow the videos if there was more in class introduction. vi. The video lessons were long and took a lot of time. Some videos had some dead time that was boring. vii. Needed more examples or class time to do problems so they could be understood completely. viii. The videos were hard for me to watch and learn from. ix. I wish we could have some in class lectures on some of the harder material that is covered. x. Some lessons I think would have been better learned in class and not online. 	
Did the structure of this course result in a larger, smaller, or about the same time commitment as other engineering courses?	
<ul style="list-style-type: none"> i. About the same if you factor in the missed class time for the online lessons, then it all equals out. Although the homeworks did take a while to do, but they helped develop an understanding of the material. ii. It was about the same time commitment. iii. There was a nice balance with the amount of time spent working out of class and the time when class did not meet. iv. About the same v. Larger (it felt that way) vi. It had overall the same, however it seemed it was all lumped together. I had to dedicate a day and watch the videos and do the assignment together. vii. About the same amount of time commitment. viii. About the same, maybe a little bit more because understanding the recording took a lot of "pausing" and "rewatching" ix. About the same. x. Larger usually just because I try to take very detailed notes so the videos take me a while. 	
How could the content of this course be modified to better suit your learning needs?	
<ul style="list-style-type: none"> i. Perhaps, a discussion board online, where questions can be asked while watching the videos and can be answered in class. ii. If the number of videos were cut down that would be more convenient. 	

Workshop Assignment

- Bring laptop
 - I will have several microphones (2-mm plug) with me
 - Download WebEx Player and install on your laptop
 - <http://www.webex.com/play-webex-recording.html>
 - Bring materials for a short (~10-minute) video lesson)
 - Be selfish, cover something that you are tired of covering in class (unit conversion, syllabus, etc.)
 - What would your follow up assignment be?
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Workshop Structure

- Comments and Discussion on the use of video lessons
- Demonstration of the recording process
- Discussion of video lesson assignment
- Work time to prepare video lessons
- Presentation of select video lessons
 - Demo of using WebEx for desktop sharing
- Final comments and discussions