

Podcasts, Screencasts, and Blogs: Using New Technology in the Teaching of Chemistry

19th BCCE

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Supplemental Lecture Content

Late 20th Century:

Course web page

Audio recording of lectures

Videotaping of lectures

Early 21st Century:



RSS

Course Blog

Podcasting

Vodcasting (screencasting)

Podcasting (no ipod needed)

Audio recordings of lectures available online

- + Easy front end production
- + Exact wording from instructor captured
- + Easy retrieval by all students (automatic)
- Whole lectures give large file sizes
- Audio file contains pauses, breaks, discussions
- When reviewing, difficult for students to find 'right' spot in lecture
- 'Visual learners' have no reference

Screencasting (vodcasting)

Video recording of visual material (whole lecture experience or PowerPoint) with audio track

- + Visual reference for students reviewing
- + Available after lecture, night before exam
- + When reviewing, students quickly find the part they are looking for
- Potentially very large file sizes

Screencasts at JCC

- ★ Pre-recorded short lecture segments (5-15 minutes) that cover 1~2 specific topics each
- ★ Recorded at 'full speed' (twice as dense)
- ★ 'Talking textbook'
- ★ Alternative presentation
- ★ Students use as pre-lecture, post lecture review, exam review...

- ★ Attendance unchanged
- ★ Used by other faculty (HS, college)
- ★ Other uses: exam keys, pre-lab discussion, problem solving...

CEM 142
Official Course Blog for General Chemistry II at Jackson Community College

Final Semester Grades
May 20, 2008

I guess I lose the bet.

Semester Grades

I spoke to soon. All the reasons that I was THINKING about dropping the curve more have vanished. Almost everyone's grades picked up substantially at the end, mostly by me giving easier-than-normal exams (III and the final, where both averages were above 75%) and the final Webassign curve was huge.

In the end, the final grades stack pretty much right on those in the syllabus, the only official listing of grade percentages.

Have a nice life!

Posted in Uncategorized | 0 Comments »

Grades as of May 2
May 2nd, 2008

Class Links:
CEM 142 Syllabus
Web Assign Login
Web Assign Student Guide
Lab Schedule

Other Locations:
Doc On Main Portal
Doc On e-Life Health Blog
JCC Main

Study Stuff:
Exam 2 Study Guide
Exam 2 Study Guide
Exam 2 Study Guide
Gen Chem Virtual Textbook
Using Online Tutoring

1st and 2nd Order Reactions	41 min	flash	google video
Kinetic Molecular Theory and Transition State Theory	9 min	flash	google video
Reaction Mechanisms	11 min	flash	google video
Chapter 15 Basic Equilibrium			
Introduction of Chemical Equilibrium	15.5 min	flash	google video
Using and Calculating K_{eq} and LeChatlier	7 min	flash	google video
Calculating Magnitude of Equilibrium Shifts	11 min	flash	google video
Problems with screencasted solutions			
Chapter 16 Acid Base Equilibria			
Acids, Bases, and Conjugate Pairs	13.5 min	flash	google video
Conjugate Strengths, K_a , K_b , and K_w	15 min	flash	google video
pH Equilibrium	16 min	flash	google video
Polyprotic Acids	10.5 min	flash	google video
Hydrolysis	10.5 min	flash	google video
Common Ion Effect	7.5 min	flash	google video
Lewis Acid Base Theory	3.5 min	flash	google video
Chapter 17 Other Aqueous Based Equilibria			
Buffers	13 min	flash	google video
K_{sp} and the Common Ion Effect	8 min	flash	google video
Precipitation and pH effects on Solubility	6 min	flash	google video
Complex Ions	7.5 min	flash	google video
Qualitative Analysis	5.5 min	flash	google video

Further Information

Technology discussion (blog)
www.docott.com/education

Class blogs (with screencasts)
www.docott.com/141
www.docott.com/142
