

Fall 2003
Course Syllabus for
C & I 235: Content Area Applications of Educational Technology

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Sections/Location:

Section A: Tuesday, 1-1:55 PC-lab Education Teaching Assistant-Ya-hui Chung
Section B: Wednesday, 4-4:55 PC-lab Education Teaching Assistant Young-Jin Lee
Section C: Thursday, 9-9:55 PC-lab Education Teaching Assistant-Mei-Li Shih

Course Description

This Course C & I 235 will combine face-to-face lecture, online support and activities, discussions, and lab work. Students will collaborate with their distributive learning team member(s) to develop classroom presentation material. This is a ONE unit course. You are required to spend a minimum of 2 hours homework each week in addition to your hour lecture/lab. The course is graded satisfactory/unsatisfactory.

Technology integration of content material is a necessary skill that must be developed by all individuals that will be in the labor force, whether in preK-12 or higher education environments. Technology continues to pervade virtually all aspects of our society in the United States and globally. Despite recent research, theory, and frameworks for studying and understanding the impact of technology on K-12 education, the scope, depth, and breadth of technology use in school environments remain largely misunderstood and under-used. This course takes a multi-disciplinary approach to examining content and technology integration. One significant part of this course is the opportunity to create an electronic portfolio that will be used throughout the remainder of your program to develop assignments, and communicate with educators around the nation. The electronic portfolio is manifested as a website.

Relationship of this course to UIUC Teacher Education Conceptual Framework:
Curriculum and Instruction 235 is a beginning level course that integrates content using technology for elementary teacher education program students.

Required Text:

Intel (2002). Intel Teach To the Future

Conn, K. (2002). The Internet & the Law: What Educators Need to Know. Alexandria, VA: ASCD.

Rose, D. & Meyer, A. (2002). Teaching Every Student in the Digital Age. Alexandria, VA: ASCD.

Simkins, M., Cole, K., Tavalin, F., & Means, B. (2002). Increasing Student Learning Through Multimedia Projects. Alexandria, VA: ASCD.

Resource for portfolio development:

Introduction to the Web and e-Portfolios

For the e-portfolio tutorial and other resources, you can find them in <http://talent.ed.uiuc.edu/tutorials/index.html>

Web based resources for standards (listed in Blackboard weekly).

Optional texts and websites:

International Society for Technology in Education
<http://www.iste.org>

Illinois State Board of Education
<http://www.isbe.state.il.us>

National Boards for Professional Teaching Standards
<http://www.nbpts.org>

Content and Technology

- Attend lecture/lab sessions
- Read all assigned chapters
- Required participation in threaded discussions
- Actively participate in class discussion
- Complete assigned online and face to face activities
- Engage in course dialogues to support learning
- Complete electronic portfolio
- Complete multimedia presentations
- Active participation in online sessions
- Possible scheduled chat room sessions with teaching assistants

Course Requirements

Students will:

- Integrate language, social studies and science concepts with technology.
- Design and Develop an Electronic Portfolio.
- Effectively use a course management system.
- Actively participate in both synchronous and asynchronous discussions using Blackboard. Attendance and participation in class sessions -- whether face-to-face or online -- is mandatory, as discussions and collaborative experiences are important parts of the course. The class schedule may change as the course progresses; changes will be posted on the course website.
- Each student is expected to complete all readings, exercises, quizzes, multimedia major projects, field trips, and written assignments, as well as to participate in class and electronic discussions. Design a presentation for an elementary or middle school classroom.
- Students missing a class are responsible for completing any assignments and readings before the beginning of the next class. Students missing the due date for an assignment must make immediate arrangements with the instructor through the teaching assistant to fulfill that requirement before the next class.
- Obtaining and regularly use your web folders for updating your electronic portfolio.
- Contact instructor to enable individualization of the course to the needs of each student, special arrangements on requirements and assignments may be negotiated in writing with the instructor.

Final Multimedia Project and Outcomes

- Examine issues related to the internet and the law
- Learn terminology, questions, content, and issues dealing with technology
- Formulate a personal definition and understanding of teaching with technology
- Articulate ideas, opinions, and point of view in clear, concise and considerate manner
- Become skilled in e-portfolio development

In your final project you and your group partner(s) will:

- Develop a multimedia project with integrated content (math, art, science, literacy, social studies and technology). This may be completed with Flash, PowerPoint, PDF, etc. You must include analyses of data (Excel, Word).
- Provide multiple assessment strategies for diverse learners
- Write a on-page summary of your project

This Course meets the following Technology Standards for All Teachers

Standard 1: The competent teacher will use computer systems to run software: to access, generate and manipulate; and to publish results. He or she will evaluate performance of hardware and software components of computer systems and apply basic troubleshooting strategies as needed.

Standard 2- Personal and Professional Use of Technology: The competent teacher will apply tools for enhancing personal professional growth and productivity: will use technology in communicating, collaborating, conducting research, and solving problems and will promote equitable, ethical, and legal use of computer/technology resources.

Standard 3 – The competent teacher will apply learning technologies that support instruction in their grade level and subject areas. He or she must plan and deliver instructional units that integrate a variety of software, applications, and learning tools. Lessons developed must reflect effective groups and assessment strategies for diverse populations.

*Standard 4.-*The competent teacher will apply concepts and skills in making decisions concerning the social, ethical, and human issues related to computing and technology. The competent teacher and understand the changes in information technologies, their effects on workplace and society, their potential to address lifelong learning and workplace needs, and the consequences of misuse.

Standard 5 – Productivity Tools – The competent teacher will integrate advanced features of technology based productivity tools to support instruction, extend communication outside the classroom, enhance classroom management, perform administrative routines more effectively, and become more productive in daily tasks.

Standard 6 – Telecommunications and Information Access:
The competent teacher will use telecommunications and information access resources to support instruction

Standard 7 – Research, Problem Solving, and Product Development
The competent teacher will use computers and other technologies in research, problem solving, and product development. The competent teacher will appropriately use a variety of media, presentation, and authoring package; plan and participate in team and collaborative projects that require critical analysis and evaluation; and present products developed.

*Standard 8 –Information Literacy Skills-*The competent teacher will develop information literacy skills to be able to access, evaluate and use information to improve teaching and learning.

Course Calendar, Readings, online and Face to face laboratory activities

Session 1: September. 2, 3, 4

Overview: Review syllabus, expectations, An Introduction to purpose of course

Intel material

Multimedia projects

Copyright Laws

Universal Design for Learning

Demonstration by TA's how to use blackboard (This assignment will be completed in the PC Lab)

Homework Reading Assignments

The Internet and the Law Chapters 1-3
Teaching every student in the digital age Chapters 1-2
Technology Integration Case

Session 2: September. 9, 10, 11

Review Web Folder development
Copyright Issues
Intel Module: 1.01-1.37

Homework Reading Assignments

The Internet and the Law Chapters 4-5
Intel Module: 1.38-1.48
Teaching every student in the digital age Chapters 3-4

Session 3: September. 16, 17, 18

Fieldtrip to NCSA for training on technology integration, simulation and modeling data
Online Quiz posted the above dates for each section and available and due on 9/16 for groups that meet on 9/16, for groups that meet on 9/17, and for groups that meet on 9/18. The quiz is available after 3p.m. You may take the quiz only once and it is a timed quiz (30 minutes). Please be careful and do not make any mistakes. If you submit the quiz or your time is up, you will not be allowed to re-take it. You will receive your score based on what you submit and/or whatever you complete within 30 minutes.

Homework Reading Assignments

Intel Module 2: 2.01-2.37
Teaching every student in the digital age Chapter 5

Session 4: Assignment due: Sept. 23, 24, 25

Guest Speaker: Population Workshop

Homework Reading Assignments

Intel Module 2: 2.01-2.37
Teaching every student in the digital age Chapter 6
Increasing Student Learning through Multimedia Chapters 1-2

Session 5: September 30, October 1, 2

Intel Module 3: 3.01-3.06

Homework Reading Assignments

Teaching every student in the digital age Chapter 7
Increasing Student Learning through Multimedia Chapters 3-4

Session 6: October 7, 8, 9

Intel Module 4: 4.01-4.19

Homework Reading Assignments

Intel Module 4.20-4.37
Teaching every student in the digital age Chapter 8
Increasing Student Learning through Multimedia Chapters 5-6

Session 7: October 14, 15, 16

Intel Module 5: 5.01-5.28

Homework Reading/Assignments

Increasing Student Learning through Multimedia Chapters 7-9

Session 8: October 21, 22, 23

Intel Module 5: 5.29-5.49

Quiz on University Design available on 10/21, 10/22, 10/23 and due on the same date as your scheduled class.

Homework Reading/Assignments

Intel 5.50-5.58

Session 9: October 28, 29, 30

NCSA Simulation and Modeling Data for technology integration (may change depending on availability at NCSA)

Intel Module 6: 6.01-6.26

Session 10: November 4, 5, 6

Midterm Presentations on Solar System

Intel 6.27

Homework Reading/Assignments

Intel 6.30-6.32

Session 11: November 11, 12, 13

Intel Module 7: 7.01-7.17

Session 12: November 18, 19, 20

Intel Module 8: 8.01-8.09

Holiday: Week of November 24

Session 13 December 2, 3, 4

Intel Module 9: 9.01-9.11

Session 14 December 9, 10, 11

Intel Module 10: 10.01-10.09

Session 15 December 16, 17, 18

Final portfolios and major group project posted in Blackboard

Your final grade will be evaluated based on the following distribution:

Quizzes 10% - 20 points

Participation & Attendance 15% -30 points

Midterm project 15% A multimedia project on the Moon and/or Solar System -30 points

E-Portfolio 20% -40 points

Multimedia Projects 40% A specific topic that will be negotiated with the instructor -80 points

Grading /Scoring System HIGHEST POSSIBLE POINTS

200 points

- A Superior All work is completed as assigned on time and superior. This includes class participation
- B Adequate All work is submitted by due date. Class participation is significant
- C Substandard Minimal requirements are met on time. Class participation is minimal
- D Unacceptable Due dates are not always met and class participation is not consistent.
- F Failed Not all required assignments are completed.

Grading table

Grade	Points	Per Centages
A	190-200	95-100
A-	180-189	90-94
B+	172-179	86-89
B	166-171	83-85
B-	160-165	80-82
C+	152-159	76-79
C	146-151	73-75
C-	140-145	70-72
D+	132-139	66-69
D	126-131	63-65
F	130	62 & below

Attendance:

Attendance is expected in your university classes. Attendance will be taken at the beginning of each class. If you arrive late for class, see me or your TA after class to make sure your attendance is recorded. If it is not recorded, even if you were in class, it will count as an unexcused absence. Unexcused absences beyond one will result in losing 10 points off your total points for each absence. For example, if you are absent two times beyond your one unexcused classes, you will lose 20 points off your total points. Excused absences are those that are accompanied by a statement from an appropriate health care worker; or in the case of a funeral, a message to me (email is suitable), stating your reason for missing class. You are granted one unexcused absence for this course before your grade will be affected. I encourage you to save these up for reasons such as special family occasions or illnesses that do not require a health care

clinic/office visit. The only exception to lab absence is extreme illness and will require a physician's statement.

Participation, Presentation and Writing Guidelines

Group participation

Required Fieldtrips

Organized, clear concise presentations and writing assignments

Critical analysis in your summary

Clear writing style (<http://www.english.uiuc.edu/cws/wworkshop/bibliostyles.htm>)

Complete e-portfolio

Academic Integrity

(http://www2.uiuc.edu/admin_manual/code/rule_33.html) The following information was taken from UIUC's academic integrity policy.

Plagiarism

Representing the words or ideas of another as one's own in any academic endeavor is a form of plagiarism. This includes copying another student's paper or working with another person when both submit similar papers to satisfy an individual, not a group, assignment, without authorization.

Cheating

Using or attempting to use in any academic exercise materials, information, study aids, or electronic data that the student knows or should know is unauthorized.

Fabrication

Unauthorized falsification or invention of any information or citation in an academic endeavor is an example of fabrication.

Facilitating Infractions of Academic Integrity

Helping or attempting to help another to commit an infraction of academic integrity, where one knows or should know that through one's acts or omissions such an infraction may be facilitated.

Bribes, Favors, and Threats

Infractions of academic integrity include bribing or attempting to bribe, promising favors to, or making threats against any person with the intention of affecting a record of a grade or evaluation of academic performance. This includes a student who conspires with another person who then takes the action on behalf of the student.

Academic Interference

Tampering with, altering, circumventing, or destroying any educational material or resource in a manner which deprives any student of fair access or reasonable use of that material or resource.

Computer-Related Infractions

Computer-related infractions defined by applicable laws, contracts, or University policies (such as unauthorized use of computer licenses, copyrighted materials, intellectual property, or trade secrets).

Relevant websites

Connect for Kids

<http://www.connectforkids.org/>

Create Your Own Web Page

<http://www.smplanet.com/webpage/webpage.html>

Webgenies - web site design for kids

<http://www.webgenies.co.uk/indexnoflash.htm>

Design Tenets for Web Pages

<http://www.bham.wednet.edu/technology/webtenets.htm>

Learning HTML for Kids

<http://www.goodellgroup.com/tutorial/index.html>

IPL Kidspage: Learning HTML

<http://www.ipl.org/div/kidspage/kidsweb/>

Clip Art

http://www.yahooligans.com/computers__games__and_online/world_wide_web/web_page_design/Clip_Art/

Simulation and Modeling

<http://www.isat.jmu.edu/common/projects/vism/curric.htm#Stella>

Read, write, think

<http://www.readwritethink.org/>

Microsoft Lesson Plans Site

<http://www.microsoft.com/education/default.asp?ID=LessonPlans>

Space Day activities

<http://www.spaceday.org/index.html>

Nesstar

<http://www.nesstar.com/>

<http://www.nesstar.org/>

NASA Mars Event

<http://www.eventscope.org/new/html/do.htm>

Windows to the Universe

<http://www.windows.ucar.edu/>

<http://www.windows.ucar.edu/tour/link=/mythology/mythology.html>

<http://www.windows.ucar.edu/sparc/>

Guidelines and process for case projects

No more than 4 to a group

- Explore a planet and decide which one you would like to use. You cannot choose earth.
- After choosing a planet, star or other matter in the solar system, find out the distance from our planet
- Students will word process or PowerPoint your proposed research outline.
- Use search engines on the WWW to locate websites related to the Moon (1st project) Solar System (2nd project).
- Gather data about the moon (1st project) and solar system (2nd project)
- Develop an introduction to your project and a table of contents
- Find out about the environmental conditions
- Find out how long it will take to travel to the designation
- You must incorporate literature, science, social science and math (demonstrated using software applications)

The Case of the Shrinking Moon

Recent issues on human rights, moral judgments and distributions of wealth related to travel to the moon have been in the press. This case examines conditions of wealth as they relate to access, morality and aspects of access to our moon. The case has roles of the following actors: An astronaut, 2 families (1 wealthy, 1 poor), an environmentalist, NASA and a financier on a fact finding mission to determine cost of chartering a flight to the moon. Case participants will determine what the conditions entail and possible approaches and action to charter a flight to the moon. Each participant has limitations as to the range of actions he or she can take. Each has varying levels of power, knowledge, and connection with the working conditions detailed. Students must decide how to create a course of action from each actor's unique perspective.

The situation draws out important themes from the following topics: Environmental issues, Star Wars, distribution of power, scientific movements and international relations.

What is the cost (financial and environmental) of purchasing a charter flight to the moon?

Consider the following questions: Who will be in charge in the family? You can only choose one person to act on behalf of the family. What are their roles? How many NASA employees will you have involved? You must describe your actors in detail (gender, race, social class).

