# The University of Akron

**College of Education** 

Educational Foundations and Leadership

5100:635-411 Emerging Technologies for Instruction 3 Credits

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#### I. COURSE DESCRIPTION

This course will examine broad trends in the area of emerging technologies for instruction, as well as specific technologies that support aspects of the teaching and learning process. Learners in the course will develop, or expand an existing information collection and sorting system for staying ahead of technological innovation that might impact education. We will also develop general criteria for assessing the utility of specific technologies.

This is a blended course with regular classroom meetings and Springboard supported. Thus, you will need to be familiar with the features of Springboard system. You should be able to find Springboard after logging to your Zipline account. Or you can login with your ID and password directly to the Springboard system via this link: <a href="https://springboard.uakron.edu/index.asp">https://springboard.uakron.edu/index.asp</a>. Many relevant course documents and resources will be uploaded to the CONTENT space of Springboard. Also, extended course discussion and some discussion activities will take place in Springboard as well. Students will require the use of a computer with Internet access to utilize the online resources.

## II. RATIONALE

Technologies that support teaching and learning are being introduced into elementary, secondary, post-secondary, and corporate learning environments at an ever-increasing rate. Educators at all levels are faced with the challenge of understanding how these extensions to existing technologies and innovative new technologies affect the teaching/learning process and how to effectively integrate the new technologies into the instructional environment.

#### III. COURSE GOALS/OBJECTIVES

The goal is for students to develop a broad understanding of origins, current trends and future possibilities for instructional technologies. Participants that complete all assignments and actively engage in the instructional activities will be able to:

- Classify emerging technologies into global categories.
- Identify the theories of learning and/or instruction that support the instructional technology.
- Identify the strengths and weaknesses of a specific instructional technology.
- Develop evaluation/assessment instruments for instructional technologies.

- Specify characteristics of the intended learning environment that are critical factors for successful integration of a new technology.
- Design an instructional strategy to match a target audience and a specific technology.
- Evaluate each component of the instructional technology with respect to the instructional design process.
- Evaluate each component of the instructional technology with respect to concerns and issues related to accessibility and diversity.
- Develop an information collection system to stay current on trends and issues related to technology in education.

#### IV. COURSE OUTLINE

Your main projects or tasks in this class including 3 primary elements:

- Participate in Extended Class Discussion in Discussion Board
- Introduce Emerging Technologies to Class in DB
- Complete Module Projects

\*\*\* For more detail information about learning tasks and due dates, please refer to Course Calendar upload under CONTENT space Course Info folder.

Summer 2009	Dates	Topic/Assignments
Module 1	5/17 - 5/23	I. Orientation II. Intro to Emerging Tech in K-12
Module 2	5/24 - 5/30	I. Online Teacher Community II. Virtual Learning Environments
Module 3	5/31 - 6/06	Web 2.0 Tools
Module 4	6/7 - 6/13	I. Mobile/Communication Technologies     II. Instructional Creation Technologies
Module 5	6/14 - 6/20	Assessing Learning Technologies

# Class and Discussion Board Participation:

In-Class discussion/attendance and DB Participation is worthy for **20 points of your final grade**. You will be expected to participate in not only in-class discussion but also online discussion forums. **To receive full credit for in-class discussion**, you will need to participate in class discussion actively. Below are DB activities and points for participation:

- **A. Module 1- Orientation:** In the first module, you will first introduce yourself in the Get to Know You discussion forum and provide at least a reply message to others. [2 posts  $\times 0.5$  points =1 points]
- **B. Module 1- Group Case Study Report:** In the first module, you will work as a group to give group feedback to each of other groups' reports of Case Studies. [7 groups x 0.5 points = 3.5 points]
- **C. Weekly Topic Discussion:** In each module, you will be assigned several readings regarding to the module topics. After reading these required readings,

you will participate in Weekly Topic Discussion by providing at least 1 initial and 1 reply posts to share your thoughts. [5 topics x2 posts x0.5 points =5 points]

- **D. Emerging Technology Sharing:** After reviewing technologies introduced by other groups, you will provide at least 1 individual feedback to their report. [7 groups  $\times$ 1 post  $\times$ 0.5 points =3.5 points]
- **E. Module Project Submission Discussion:** In each module (not include module I), each group will submit their group project by Friday (1 initial post). After reviewing other groups' submissions, you will provide your feedback to their work by posting at least 2 individual feedback. [4 modules x2 posts x0.5 pints =4 points]

To receive full credit for DB discussions, the postings must be substantive responses such as "good idea," or "interesting point," while appreciated as general feedback to your classmates, **will not be considered substantive responses**. Substantive responses are those that extend the discussion, elaborate on points others have made, etc. In addition to participating in DB discussion, you will also attend face-to-face class meetings. **1-3 points of participation will be given based on the class attendance.** 

- Emerging Technology Sharing (Group Project)
  Start from Module 2, each week two groups will share cool and new emerging technologies with class in DB. You will be assigned in a small group with 2-3 members. A buddy list of assigned groups will be located under CONTENT space Course Info folder. Each group will identify a technology that matches with the topics that will be addressed in that particular module. Since this is a group activity, you are required to work closely with your buddy(ies). In your group report, you will need to tell us:
  - 1. Why you think it is valuable for us to know
  - 2. How do you know or learn about this tool
  - 3. What is the tool
  - 4. Where and How can we access to the tool
  - 5. How to use it (generally)
  - 6. How it can be applied to assist teaching or learning
  - 7. Your experience with it

The group report for introducing an emerging technology will need to be posted by **Wednesday** as well as feedback by **Saturday**.

# • Module Projects

You will need to complete five module projects throughout the semester. Each project is worthy for **different points**: M1-5 points; M2-10 points; M3-20 points; M4-20 points; M5-15 points. The instruction for the module projects will be delivered before the project starts. Basically, each module will be due on

**Friday** in the Module week and the feedback for others' projects will be due on **Saturday**.

No late submission for DB discussion and project work will be accepted.

# V. REQUIRED TEXT

No required textbook. Required readings are online in the Springboard.

#### VI. INSTRUCTOR CONTACT INFORMATION

I can meet in-person if you visit UA campus. (Of course, you will need to make an appointment with me in advance.) You can also reach me virtually via my office telephone and e-mail address listed above. Or leave me a message in the Springboard course discussion board. If you are asking questions regarding to course content, I prefer you use the course discussion board.

## VII. INSTRUCTIONAL STRATEGIES/ACTIVITIES/TECHNOLOGY

Students will participate in not only in-class meetings but also Springboard. Students will experience aspects of diverse hypermedia and multimedia tools. In the end, students will need to reflect what they have learned by learning tasks in module projects.

## VIII. EVALUATION/STUDENT ASSESSMENT

Assessment for learning will be done formatively through class discussions and DB discussions and summatively using module projects. Mastery of course objectives is the ultimate goal and you are advised to ensure that you understand the objectives and how they are being measured in the course. Master's level students should be self-directed in terms of their learning and their own self-evaluation of their progress.

The following assignments/discussion must be completed and submitted for a grade. It is your responsibility to complete these assignments/discussions by the due dates. **Because summer semester is very intensive, no late submission or resubmission will be accepted.** Also, you are required to submit the assignments via Springboard by following the regulations addressed in the assignment instructions.

What will be assessed?	How will this be assessed?	Weight	<b>Due Date</b>
I. Class & DB discussion	Reflective engagement in all aspects of the course discussion and DB discussion. Both quantity and quality are used as indicators.	<b>20</b> pts	Throughout course.
II. Emerging	Rubrics will be provided in the		G1&2-M2
Technology	Emerging Technology Sharing	<b>10</b> pts	G3&4-M3
Sharing (Group	Instruction	10 pts	G5&6-M4
Project)			G7&8-M5
III. Module Projects	Requirements and criteria are	M1- <b>5</b> pts	Each

(Group & Individual Project)	varied across projects. Rubrics will be provided within Module Project Instructions.	M2-10 pts M3-20 pts M4-20 pts M5-15 pts	Friday in Module Week
	Total:	100 pts	

#### IX. STUDENT ETHICS AND OTHER POLICY INFORMATION

For further information about The University of Akron's policies regarding student ethics and conduct, please consult the following sources:

http://www.uakron.edu/libraries/depts/tt/plagiarism/, then select "Plagiarism & Academic Integrity" (academic honesty); or

http://www.uakron.edu/studentlife/sja/codecon.php (Student Code of Conduct). Any student who feels she/he may need an accommodation based on the impact of a disability please consult <a href="http://www.uakron.edu/access/">http://www.uakron.edu/access/</a> and the Office of Accessibility at (330) 972-7928.

In addition to the information above, here are some additional policies for learning in this class:

- Reviewing Student Work. In this course, it sometimes requires you to present your work electronically so other students can see it; and you will also be asked to review the work of other students, as part of the instructional process of the class. Your work may be used as an example of how to accomplish a discussion or for ideas by other students. In many cases having other students peer review your work helps support your own learning and leads to better outcomes for everyone in the course. If at any time you feel uncomfortable sharing your work, or with the feedback or comments on your work by other students, contact the instructor as soon as possible.
- <u>Feedback</u>. You may receive feedback on all of your work. You may ask for my or other students' feedback before the assignment is due. If you want feedback before an assignment is due, you MUST request the feedback at least three days prior to the due date to allow enough time for us to give you feedback and for you to implement our suggestions. If you submit a request for feedback at a later time, we will do our best to give you feedback but do not rely on our comments we may be too busy to help you by the due date. No matter what, you should always utilize the knowledge base of your fellow classmates when you have a question or need help. Post to the discussion boards, ask for feedback from your classmates.

#### X. BIBLIOGRAPHY

- Brown, J. S., Collins, A., & Duguid, P. (1989). Situated Cognition and the Culture of Learning. Educational Researcher, 18(1), p. 32-42.
- Duffy, T. M., Lowyck, J., & Jonassen, D. (Eds.), (1993). Designing environments for constructivist learning. Heidelberg: Springer-Verlag.
- Ely, D. P. (1996). Trends in educational technology. Syracuse, NY: ERIC Clearinghouse on Information and Technology, Syracuse University.

- McCombs, B. L. et al., (1993). Learner-centered psychological principles: Guidelines for school redesign and reform. Washington, DC: American Psychological Association and the Mid-continent Regional Education Laboratory, (ED 371-994).
- Pea, R. (1992). Augmenting the discourse of learning with computer-based learning environments. In E. de Corte, M. Linn, H. Mandl, & L. Verschaffel (Eds.),
- Computer-based learning environments and problem-solving. [NATO Series, subseries F: Computer and System Sciences] (p. 313-343). New York: Springer-Verlag.
- Rogers, E. M., Diffusion of Innovations (4th edition 1996). New York: Simon & Schuster.