

EDUC 540 Educational Technology

**College of Education
James Madison University**

**Second 4-Week Summer Session 2006
Section 1; 8:30 – 11 am
Monday, Tuesday, Wednesday, and Thursday
Harrison 117**

Welcome to EDUC 540. While many of you are quite familiar with computers and other technologies (CD-ROMs, DVD players, VHS recorders, camcorders, digital cameras, etc.), this course will challenge you to consider how these tools (and others) may be used to enhance learning, teaching, and instructional administration and management. Ideas will be drawn from a variety of areas, including instructional design and development, educational psychology, human-computer interaction, instructional media development, and more. The best way to learn about instructional technologies is to actually work with them, and there will be many opportunities for hands-on, minds-on learning. Since technology is a constantly changing field, this course should be considered a beginning of a lifelong study of technology. Hang on! There is a lot to this class, and it will move pretty quickly.

Instructor

John Hollenbeck, Ph.D.

Email john@jhollenbeck.com
Web http://jhollenbeck.com
Phone none
IM drjohnonaim

Office Hours

Monday, Tuesday, and Wednesday
11 am – 12 pm, and other times by appointment
with advance notice (at least 24 hours)!

Purpose of Course

The goal of the course is to have educators develop competencies which will enable them to plan systematically for the selection, utilization, and evaluation of instructional media for classroom use and to assess the effectiveness of commercially produced materials. Instruction in the use of electronic information retrieval will also be presented. The successful completion of the course should contribute to the development of prospective teachers as reflective decision makers and problem solvers.

Course Objectives

Upon completion of this course, students will be able to

- Use electronic technologies to access and exchange information.
- Identify, locate, evaluate, and use technology resources to support the Standards of Learning including such technologies as presentation devices, digital cameras, camcorders, and instructional software.
- Use technologies for data collection, information management, problem solving, decision-making, communication, and presentation within the curriculum.
- Plan and implement lessons and strategies that integrate technology to meet the diverse needs of learners in a variety of educational settings.
- Discuss knowledge of ethical and legal issues relating to the use of technology.
- Apply the principles of instructional development to the process of analyzing learners, developing objectives, acquiring and evaluating instructional resources, enabling the use of resources and technology, fostering learner interaction, and evaluating the results of the plan.
- Use current periodicals, electronic databases, and the Internet to learn about new educational technologies and their implementation in the curriculum.

Course Content

- Planning procedures for producing a variety of instructional/learning materials
- Computer technologies (equipment and materials) and their uses in school settings.
- Web page development
- Using the Internet in K-12 learning and teaching
- Graphics, layout, and visual composition
- Issues in technology including copyright, information access, intellectual freedom, censorship
- Presentation systems and software
- Digital video and audio technologies
- Computer-assisted instructional development

Textbook

There is no assigned text for this class. Readings and tutorials will be accessed electronically throughout the session.

Instructional Methods

A variety of instructional methods will be modeled throughout this course including such strategies as

1. Small and large group discussions (both in class and online)
2. Guided practice
3. Demonstrations
4. Cooperative learning
5. Presentations

Course Requirements

1. Extensions to hands-on, in-class activities may include, but are not limited to the following applications:
 - iMovie
 - Adobe Photoshop Elements
 - Macromedia Dreamweaver
 - Internet and WWW
2. Digital video project w/ lesson plan and rationale: Students will design and develop a lesson plan in his/her content area and grade level that demonstrates the effective and proper utilization of digital video to enhance learning and teaching. More details will follow.
3. WebQuest project: working in teams of 2, students will design, develop, and implement a WebQuest that can be used in each team member's teaching discipline. WebQuests are constructive, inquiry-oriented activities that encourage learners to gather, analyze, and synthesize information and create an end-presentation to demonstrate the experience. I've got lots of examples to share with you, and we'll even work through a sample WebQuest in class. More details will follow.
4. Research paper: Each student will write a research paper (approximately 5-7 pages) on some aspect of instructional technology. Topics include (but are not limited to) an examination of an emerging technology (e.g., wireless networking, personal digital assistants (PDAs), digital voice or video communications, high definition television (HDTV), etc.) or it could take the form of a research proposal in which you could assess the impact of a technology on teaching and learning. I only offer these as suggestions and you are free to choose your own topic, however, please have your topic reviewed by me before setting out on your research. Normally, papers written in the field of education follow the style guidelines set forth by the American Psychological Association (APA), and I am asking that you adhere to those guidelines in writing this paper. If you are not familiar with APA "style", I have handouts and other resources that will acquaint you with this format.

Evaluation

Digital video project w/ lesson plan and rationale	15 %
Research Paper Proposal.....	5 %
Teacher Tools.....	15 %
WebQuest.....	20 %
WebQuest Assessments.....	5 %
Technology Applications Tests	15 %

Research Paper20 %

Investment 5 %

- Attends class regularly
- Submits assignments on time
- Participates knowledgably and regularly in class discussions
- Assumes responsibility for own learning
- Exhibits good disposition

Note: the weights shown above are only approximate and may vary slightly based on the number and types of projects assigned during the semester.

Grading

Grades will be based on tests, group and individual projects, and class involvement and participation. ***A 9-point grading scale will be used that includes pluses and minuses as follows:***

94 – 100	A	82 – 85	B-
91 – 94	A-	76 – 82	C
88 – 91	B+	< 76	F
85 – 88	B		

Late Work Policy

Projects not submitted in class on the specified due dates will be accepted ONLY when 1) they are accompanied by documents that verify medical illness or other emergency for you or members of your immediate family or 2) you have negotiated with me well in advance of the due date to submit the project at a later date. Late projects that do not meet either one of above conditions will NOT be accepted.

A Few Words About Class Attendance

Regular attendance, promptness, and active participation are important for successfully mastering the course objectives. Attendance is a critical part of this course and is viewed as a professional obligation.

Unexcused absences will result in lowering of the course grade as five percentage points will be deducted from the final average for each unexcused absence. Please notify me by e-mail if you have to miss a class, and when you return, please check with me to determine whether the absence is recorded as “excused” or not. There's lots of work to be accomplished and it won't get finished if you aren't in class. Anything less than your full participation just invites trouble later on.

Communication

I am available during office hours to discuss questions and/or concerns you may have about the course; please feel free to email as well. While I maintain high expectations for student achievement, I am reasonable and flexible and quite willing to make accommodations as needed. Please communicate with me throughout the course and not just after problems have arisen.

Other Required Materials (please purchase ASAP!)

(1) 256MB or larger USB “flash” drive (aka, pen drive, key drive, thumb drive, etc.)

Supporting References

- Anglin, G. (1987). Effects of pictures on written prose: How durable are pictures? *Educational Communications and Technology Journal*, 35, 25-30.
- Clark, D. (1983). Reconsidering research on learning from media. *Review of Educational Research*, 53, 445-459.
- Clark, R.E. (1994). Media will never influence learning. *Educational Technology, Research and Development*, 42, 21-29.
- Jonassen, D.H. (1994). Learning with media: Restructuring the debate. *Educational Technology, Research and Development*, 42, 31-39.
- Kozma, R.B. (1991). Learning with media. *Review of Educational Research*, 61, 179-211.
- Kozma, R.B. (1994). A reply: Media and methods. *Educational Technology, Research and Development*, 42, 1-14.
- Mingolarra, J.A. (1994). The best medium for the best teaching. *Educational Media International*, 31, 25-29.
- Morgan, T. (1996). Using technology to enhance learning: Changing the chunks. *Learning and Leading with Technology*, 23, 49-51.
- Pavio, A. (1980). Imagery as a private A-V. *Instructional Science*, 9, 295-309.
- Shrock, S.A. (1994). The media influence debate: Read the fine print, but don't lose sight of the big picture. *Educational Technology, Research, and Development*, 42, 49-53.
- Wilson, B.G. (1987). Applying hard and soft technologies to weaknesses in traditional instruction: Possible progress and some unintended side-effects. *Educational Technology*, 27, 7-11.

Academic Honesty

All students are expected to adhere to and abide by the policies set forth by the JMU Honor Council. Unless otherwise specified, all work is to be done individually and should reflect your and your efforts only in completing the assigned projects. If you have any questions about this, please ask me prior to completing the assignments. For more detailed information on JMU's Honor Policy, please see <<http://www.jmu.edu/honor>>.

Course Courtesies

- Please, no checking, reading, sending e-mail during class time unless strictly related to this course. Come early, stay late, but please, no e-mail during class.
- No AOL Instant Messenger sessions (or other similar applications) during class.
- Be on time; I like to start promptly and end on time. Thanks ☺
- Come prepared to learn—bring notes, books, media, open minds, etc. to class each day.
- Please do your own work recognizing that some of the material may not be grasped easily.
- Don't hesitate to ask questions.
- Don't hesitate to call, write, or stop by if you need any help or information.
- Please, no web surfing outside of specific course-related activities during class.
- Notify me in advance, when reasonably possible, if you have to miss a class.

The bottom line: please be respectful of others' levels of experience and knowledge about the technology and software we'll be using throughout the semester. Generally speaking, this course attracts a wide variety of students, each with different skill sets, from many different programs. Consequently, timing, pace, and time on task will be adjusted to accommodate the range of learners each semester.

Course Schedule & Important Dates (subject to change *with notice*)

Monday, June 12	Introductions; Review syllabus and expectations; Review ETMC policies; Textbook website intro.; Why use technology?; How do you plan to use technology?; Factors affecting successful technology integration; What is learning? MS Word 101
Tuesday, June 13	Learning theories; Information processing theory; Research paper proposal details. MS PowerPoint
Wednesday, June 14	Digital image editing with iPhoto UnitedStreaming Teacher Tools - Excel
Thursday, June 15	Digital image editing with PhotoShop Elements cont'd. Research paper proposal due! Homework Assignment: <ul style="list-style-type: none"> • Digital video project w/ lesson plan and details (due June 22).
Monday, June 19	Digital image editing with PhotoShop Elements. Teacher Tools work due!
Tuesday, June 20	Digital movie editing with iMovie.

Wednesday, June 21	Digital movie editing with iMovie cont'd; ETMC digital video procedures. Homework Assignment: <ul style="list-style-type: none"> • WebQuest project (due June 6).
Thursday, June 22	Open lab to work on digital video projects. Homework Assignment: <ul style="list-style-type: none"> • Read WebQuest handouts.

Monday, June 26	WebQuests; Web development. Digital Video Project due
Tuesday, June 27	Web development cont'd.
Wednesday, June 28	Open lab to work on WebQuest project. Digital video project w/ lesson plan and rationale due!
Thursday, June 29	Open lab to work on WebQuest project.

Monday, July 3	Web Fine Tuning. Accessibility
Tuesday, July 4	No Class. Independence Day.
Wednesday, July 5	Copyright and Ethics. Research Papers due! Homework Assignment: <ul style="list-style-type: none"> • WebQuest assessments.
Thursday, July 6	Technology Applications Test. WebQuest Assessments due!

Due Dates for Assignments

June 15	Research paper proposal
June 15	Teachers Tools
June 22	Digital video project w/ lesson plan and rationale
July 3	WebQuests
July 5	Research paper
July 6	Peer-reviewed WebQuest assessments