

Note: Individual Instructors complete the asterisked (*) components of the syllabus. ALL other components will be prescribed by University College, the Department Chair, or Course Custodian and must be included on each instructor's syllabus as provided.

NEW (CAC Approval Date):

UPDATED (Date): 11/01/05

***TERM / YEAR / CAMPUS LOCATION**

COURSE NUMBER, TITLE and CREDITS

EDUU552, Using Technological Tools in Teaching, 3 credits

***INSTRUCTOR NAME AND CONTACT INFORMATION:**

voice :

e-mail:

office hours / or out of class time contact information

CUC COURSE CUSTODIAN

Carla Piper, Ed. D. piper@chapman.edu

Course Support - <http://www.chapman.edu/univcoll/faculty/piper>

BULLETIN COURSE DESCRIPTION

This course builds on the knowledge and skills of previous technology in education courses and experiences, taking students deeper into the world of technology and its applications in the teaching/learning process. The primary focus of the course is on increasing student proficiency levels in utilizing a variety of technologies, including the advanced use of computers and the use of digital peripherals. Assignments will be engaging and project-based. Students will develop curriculum plans, design instructional units, and create technology-rich communities/environments that effectively utilize constructivist teaching strategies and promote active learning.

PREREQUISITES

EDUU451/551: Educational Applications of Computers OR Preliminary Educational Technology SSAT/CSET or equivalent course with approval.

RESTRICTIONS

None

ESSENTIAL EQUIPMENT AND FACILITIES

Internet Access and Chapman ID

Classroom or lab must provide a computer for each student. Class size should not exceed 24 students or the number of networked computers available. A large whiteboard, bulletin boards, overhead projector, television, VCR, and an instructor computer with Microsoft Office and access to the Internet should be provided. Additional equipment should include an LCD presentation system, full-page color scanner, digital to analog TV converter, and digital camera. Students and instructors need to have access to email.

Online: Internet access: Chapman ID in order to access eCollege

Students will be required to spend 45 hours of on-line class time within the scheduled period in order to complete requirements for 3 semester units of credit. Pre-scheduled online chat, threaded discussion, tests, and assignments will be completed through the eCollege website – <http://www.chapman-online.org>. Students should expect that an additional 90 hours of preparation beyond the 45 hours of on-line class time will be required for successful completion of course assignments.

COURSE LEARNING OBJECTIVES

Through the class experiences, readings, assignments, and case studies, candidates will be able to:

- Use of technology for meeting subject matter content standards as well as state and national technology standards for student learning.
- Design and create technology-rich classroom environments that promote student learning.
- Develop technology-enhanced instructional strategies to meet diverse needs of students.
- Plan and implement online learning activities to promote information literacy, global communication, collaboration, and student-generated research.
- Use computer and video tools for performance and electronic portfolio assessment of student learning, providing feedback to students and their parents.
- Use computer applications to manipulate and analyze data (e.g. create, use, report from a database, and generate charts and reports from a spreadsheet).
- Use multimedia elements of sound, video, graphics, music, and interactivity to present information and provide instruction of content curriculum through a presentation program (e.g. Powerpoint).
- Create an instructional design for effective student learning using a multimedia, hypertext authoring program (e.g. Hyperstudio).
- Create a thematic interdisciplinary multimedia instructional website aligned with state curriculum content standards.
- Research and examine assistive technologies available for students with disabilities.
- Create a classroom technology plan, design a scope and sequence for technology instruction, and examine acceptable use policies.
- Demonstrate competence in evaluating the authenticity, reliability, and bias of the data gathered in online research.
- Explore innovative technologies currently being developed and discuss innovations for use of new technologies useful for classroom instruction (e.g. digital video, hand-held devices, voice recognition, projection systems, etc.)
- Use technology in lessons to increase each student's ability to plan, locate, evaluate, select, and use information to develop problem-solving skills for lifelong learning.
- Use e-mail and threaded discussion for purposes of communication and collaboration with colleagues.

MAJOR STUDY UNITS

Unit One: Meeting Standards with Technology

- Pre-lesson: Lesson Plans, Objectives and Assessment
- National Standards for Technology in Education
- California Technology Standards for Teachers
- Teacher Performance Expectations
- Educational Technology Profile

Unit Two: Integrating Technology into Lesson Planning through Primary Sources

- California Subject Matter Content Standards
- Making Connections between Standards and Curriculum Planning
- Integrating Technology into Lesson Planning
- Using Primary Sources on the Web
- Legal and Ethical Issues (Copyright and Plagiarism)
- Safety and Privacy Issues
- Acceptable Use Policies

Unit Three: Developing Higher Order Thinking Skills

- Essential Questions
- Inquiry Learning and Understanding by Design
- WebQuests and Activity Structures
- Performance Assessment and Rubric Design

Unit Four: Student Research Using Online Data

- The Research Process - Scientific Inquiry
- Big Six Skills Approach to Computer Research Skills
- Graphic Organizers and Flow Charts
- Analyzing Data with Spreadsheets, Charts, Graphs

- Locating and Collecting Data on the Web
- Creating Surveys
- Maintaining a Database for Recording Data

Unit Five: Spreadsheets and Databases for Multiple Measures Assessment

- Data Driven Decision Making - No Child Left Behind
- Title I Multiple Measures Assessment
- Data Use and Technology
- Quality School Portfolio System
- California STAR Test Data
- Importing and Analyzing Data Using Excel
- Multiple Measures Assessment Databases Tools
- Exploring Database Gradebooks with Access, FileMaker Pro, and Excel

Unit Six: Multimedia Technology Electronic Portfolio

- Multimedia, Hypertext, and Hypermedia
- Interactivity and Student Choice
- Adding Sound, Narration, Video, Animation
- Linking Programs and WWW Sites
- Introduction to Hyperstudio
- Multimedia Electronic Portfolios

Unit Seven: Designing Multimedia Curriculum Projects

- Using Instructional Design Concepts
- Linear, Branching, and Circular Designs
- Meeting Subject Matter Content Standards
- Lesson Planning Using Video
- Scriptwriting and Storyboarding to Meet Curriculum Objectives
- Discussion of New Multimedia Technologies

Unit Eight: Assistive Technologies

- Research Technological Devices Useful for Inclusion of Students with Different Disabilities
- Develop Individualized Plans for Teaching Students with Diverse Needs
- Locate Websites with Additional Information on Assistive or Adaptive Technologies
- Review Case Studies and Laws Regarding Equal Access to Education
- Webliography

Unit Nine: Creating an Instructional Website

- Developing a Thematic Website Based on Curriculum Content
- Explore Multimedia Elements of Web Publishing
- Online Interactive Teacher Resources
- Scanning, Digitizing, Gif Animation, Audio, Java Applets

INSTRUCTIONAL STRATEGIES

Instructional strategies for this course will include case method, lecture, discussion, small group work, and online communication. Instructors are to model integration of technology into instruction through a variety of strategies. Instructors will engage candidates in on-line threaded discussions, messaging, emailing attachments, and chat rooms through eCollege or Blackboard.

REQUIRED TEXTS (Select One of the Following Texts)

Chapman On-Line Bookstore: <http://www.mbsdirect.net/chapman>

- Grabe, M. & Grabe, C. (2001). Integrating Technology for Meaningful Learning. 4/e. Houghton & Mifflin Company. Boston & New York. (Fourth Edition: ISBN 0-618-30580-7).
- Lever-Duffy, J., McDonald, J.B., & Mizell, A.P. (2005). Teaching and Learning with Technology. 2/e. Boston: Allyn & Bacon. (Second Edition: ISBN: 0-205-43048-1).

RECOMMENDED TEXTS

Online Resources Available at: <http://www.chapman.edu/soe/faculty/piper//teachtech>

REQUIRED SOFTWARE

- Microsoft Office: Word, Excel, Powerpoint
- Web Authoring: Frontpage or Netscape
- Firefox Web Browser - <http://www.mozilla.org/products/firefox/>
- Audio Editor: Audacity from Soundforge - <http://audacity.sourceforge.net/>
- Graphics Editor: Irfanview - <http://www.irfanview.com/index.htm>
- Video Formats
 - Real Player – <http://www.real.com>
 - Quicktime - <http://www.apple.com/quicktime/>
 - Windows Media Player - <http://www.microsoft.com/windows/windowsmedia/default.aspx>

Student Software Recommendations (for home installations)

- Open Office (Free Office Suite if Microsoft Office is not available) - <http://www.openoffice.org/>
- Mozilla (Free Web Authoring Suite) - <http://www.mozilla.org/products/mozilla1.x/>

SUGGESTED VIDEO CASE STUDIES

- InTime – Integrating New Technologies into the World of Teaching. Retrieved July, 2003: <http://www.intime.uni.edu/>
- Teaching Now: Video Classroom - <http://www.videoclassroom.org/index2.php>
- Edutopia Online: The George Lucas Educational Foundation – <http://www.glef.org>
- Apple Learning Interchange - http://ali.apple.com/ali_sites/ali/index.html

*STUDENT PERFORMANCE REQUIREMENTS

Graduate students are expected to maintain a 3.0 (B) average, however A and B grades must be earned in the course through meeting the criteria for such grades as outlined by the instructor. Students who earn a C+ or below in the course will be required to repeat the course in order to receive credit.

*METHODS OF EVALUATION FOR DETERMINING GRADES

Project-Based Assignments
Ed Tech Profile – Self Assessment Reflection, Lesson Planning, Objectives and Assessment
Internet Lesson Plans Designed to Meet Standards – Technology/Subject Matter Content/California Standards for the Teaching Profession <ul style="list-style-type: none">• Primary Sources Lesson Plan and Powerpoint• Essential Questions Lesson and Rubric• Student Research Project Lesson Plan Using Database/Spreadsheet
Spreadsheet Data Report (STAR and Stanford 9 Test Data Tables and Graphs)
Multiple Measures Classroom Database
Multimedia Technology Electronic Portfolio
Interactive Multimedia Curriculum Design
Assistive Technologies – Research Paper, Powerpoint, or Webliography
Curriculum Website

ATTENDANCE AND OTHER CLASS POLICIES

Class Attendance policies are determined by each instructor and shall be included on the course outline distributed during the first week of each class. The university recommends as a minimal policy that students who are absent 20% of the course should be failed.

On-line Attendance Policy:

Class participation will be required through online discussion. Online students will be required to attend at least three virtual chat sessions, as well as participate in threaded discussions. Chat session times, topics, and assignment deadlines will be posted at the beginning of the course. You will be expected to log in to the course regularly, complete the required reading, participate in online discussions, and complete all assignments. You will be required to take exams and quizzes. Specific times will be posted for real-time virtual chat. In addition, the course professor will be available for e-mail questions and discussion during a 3-hour period weekly. The instructor will respond to any questions within 72 hours.

Online Class Discussion:

Weekly online discussion is required for this course. You must participate in threaded discussion and e-mail as a part of each unit of study. Questions will be posted for each unit. Your responses should relate not only to the question, but also to the comments of your classmates and instructor and the topics of your assigned readings. These responses should clearly demonstrate that you have read the required articles, thoroughly examined recommended websites, and participated fully in course assignments and exercises. Your discussion should be relevant to the topic and should move the discussion forward. You should not simply agree or disagree with what has already been stated. Interact with your classmates constructively and respectfully, allowing for everyone to participate. Follow the rules of netiquette. The quality of your discussion is more important than the frequency or length of your responses.

Netiquette for Online Course:

- Be polite and respectful of one another.
- Avoid personal attacks. Keep dialogue friendly and supportive, even when you disagree or wish to present a controversial idea or response.
- Be careful with the use of humor and sarcasm. Emotion is difficult to sense through text.
- Be helpful and share your expertise. Foster community communication and collaboration.
- Contribute constructively and completely to each discussion. Avoid short repetitive “I agree” responses and don’t make everyone else do the work.
- Consider carefully what you write. Re-read all e-mail and discussion before sending or posting. Remember that e-mail is considered a permanent record that may be forwarded to others.
- Be brief and succinct. Don’t use up other people’s time or bandwidth.
- Use descriptive subject headings for each e-mail message.
- Respect privacy. Don’t forward a personal message without permission.
- Cite references. Include web addresses, authors, names of articles, etc.
- Keep responses professional and educational. Do not advertise or send chain letters.
- Do not send large attachments unless you have been requested to do so or have permission from all parties.

HYBRID CLASS GUIDELINES FOR ON GROUND INSTRUCTION

On ground instructors for EDUU552 are encouraged to use Blackboard as an additional strategy to develop proficiency with online computer mediated discussion, curriculum, and assessment. Instructors will notify the campus and submit a course outline to the full-time faculty or program manager for approval prior to the course term. The outline will include specific online activities to be used. Courses must meet on ground every week. Instructors will maintain a balance of at least 75% on ground and 25% on Blackboard. Instructors will monitor student access and incorporate Blackboard in grading to assure all students are involved in discussions and other online activities.

Suggested activities include:

- On-line quizzes
- On-line grade book and assignment drop box
- Discussion
 - Teaching cases read---before class discussion, after class discussion, or in place of class discussion
 - Video case studies (see list below)
 - Personal and professional discussion of instructional strategies, curriculum resources, classroom management, educational technology issues, assessments, lesson planning, etc.
 - Sharing useful online resources for curriculum, instruction, and assessment
- Online assignments and resources
 - Examination of content standards and frameworks
 - Review of national and state technology standards
 - Review of educational research
 - Journaling
 - Reviews of instructional websites and resources

CHAPMAN UNIVERSITY COLLEGE ACADEMIC WRITING STANDARDS

Specific writing standards differ from discipline to discipline, and learning to write persuasively in any genre is a complex process, both individual and social, that takes place over time with continued practice and guidance. Nonetheless, Chapman University has identified some common assumptions and practices that apply to most academic writing done at the university level. These generally understood elements are articulated here to help students see how they can best express their ideas effectively, regardless of their discipline or any particular writing assignment.

Venues for writing include the widespread use of e-mail, electronic chat spaces and interactive blackboards. Chapman University is committed to guaranteeing that students can expect all electronic communication to meet Federal and State regulations concerning harassment or other “hate” speech. Individual integrity and social decency require common courtesies and a mutual understanding that writing--in all its educational configurations--is an attempt to share information, knowledge, opinions and insights in fruitful ways.

Academic writing (as commonly understood in the university) *always* aims at correct Standard English grammar, punctuation, and spelling.

The following details are meant to give students accurate, useful, and practical assistance for writing across the curriculum of Chapman University College.

Students can assume that successful collegiate writing will generally:

- Delineate the relationships among writer, purpose and audience by means of a clear focus (thesis statements, hypotheses or instructor-posed questions are examples of such focusing methods, but are by no means the only ones) and a topic that’s managed and developed appropriately for the specific task.
- Display a familiarity with and understanding of the particular discourse styles of the discipline and/or particular assignment.
- Demonstrate the analytical skills of the writer rather than just repeating what others have said by summarizing or paraphrasing
- Substantiate abstractions, judgments, and assertions with evidence specifically applicable for the occasion whether illustrations, quotations, or relevant data.
- Draw upon contextualized research whenever necessary, properly acknowledging the explicit work or intellectual property of others.
- Require more than one carefully proofread and *documented* draft, typed or computer printed unless otherwise specified.

DOCUMENTATION

Any material not original to the student must be cited in a recognized documentation format (APA, ASA, MLA or Chicago-style) appropriate to the particular academic discipline. For quick reference to documentation standards for various fields you may refer to: www.chapman.edu/library/reference/styles.

Deliberate use of information or material from outside sources without proper citation is considered plagiarism and can be grounds for disciplinary action. See the explanation of Academic Integrity below.

ACADEMIC INTEGRITY

As a learning community of scholars, Chapman University emphasizes the ethical responsibility of all its members to seek knowledge honestly and in good faith. Students are responsible for doing their own work, and academic dishonesty of any kind will not be tolerated. "Violations of academic integrity include, but are not limited to, cheating, plagiarism, or misrepresentation of information in oral or written form. Such violations will be dealt with severely by the instructor, the dean/center director, and the standards committee. Plagiarism means presenting someone else's idea or writing as if it were your own. If you use someone else's idea or writing, be sure the source is clearly documented." Other guidelines for acceptable student behavior are specified in the *Chapman University College Catalog*.

ACADEMIC WRITING GUIDE

Student's Name _____ Instructor _____

Paper Assignment _____ Course Title _____

(Instructor: Read the entire paper through then reflect on its merits employing the following criteria. Our goal is to provide guidance to the student progressively in order to improve the quality of his or her writing.)

Criteria	Comments	NSW	Dev	WD
The writer demonstrates an understanding of the assignment by using a style, form and language that is appropriate for its intended audience.				
The writer has chosen a topic in accord with the assignment and limited it sufficiently to explore in depth in the space allotted.				
The paper focuses its presentation by means of a clear statement of purpose (thesis statement, hypothesis or instructor posed question) and logically organized sub-topic paragraphs or sections.				
The writer substantiates abstractions, judgments and assertions with specific illustrations, facts and evidence appropriate to the assignment and/or discipline.				
The writer has added to on-going discussions of the topic with his or her own critical analysis, rather than simply repeating what others have said through quotation-stacking, paraphrasing or summaries.				
The writer draws upon research whenever necessary to support critical analysis or assertions made and properly acknowledges the work of others by utilizing a standard documentation format acceptable for the course.				
The paper conforms to the minimal essentials of Standard American English grammar, word choice, spelling and punctuation.				

N S W = Needs Significant Work,

D = Developing

WD = Well Developed

OVERALL RATING

The writer meets the needs of the particular audience and succeeds in his or her intended purpose--honestly engaging the subject and establishing her or his authority by offering a persuasive and supportable analysis.	<p>Needs Significant Work Developing Well Developed</p> <p> -----></p>
Comments:	

A. If this version of the paper is to receive a grade, the grade is _____ . Instructor _____ Date _____

AMERICANS WITH DISABILITIES ACT STATEMENT

Any personal learning accommodations that may be needed by a student covered by the “Americans with Disabilities Act” must be made known to the instructor as soon as possible. **This is the student's responsibility.** Information about services, academic modifications and documentation requirements can be obtained from the director of the Center for Academic Success at the Orange Campus at 714-997-6828 or from the director of a Chapman regional campus.

GOALS OF THE EDUCATIONAL TECHNOLOGY ASSESSMENT PLAN

Chapman University College faculty, instructors, and students will participate in annual learning outcomes assessment. The educational technology program must provide evidence supporting claims of educational effectiveness. Engagement in assessment activity is expected in order to evaluate strengths and weaknesses in the educational program and make meaningful efforts at improvement. Instructors will be asked to have students participate in an online student survey. The course custodian will request analysis and evidence of student work in the areas of student writing and electronic portfolios for assessment.

1. University College Goal: Personalized Education - Students will receive personalized education by faculty in the areas of advising, teaching, mentoring, and career/graduate school preparation.

2. University College Goal: Student Writing - Students will demonstrate competence in the use of online research resources and be able to write a scholarly research review using proper APA electronic format for citations and references. EDUU451/551 students will review one research article on the use of technology in education.

3. Department Goal: Meeting Technology Standards for Teachers. Students will demonstrate understanding of and proficiency in national technology standards for teachers. Technology Standards for Teachers:
http://cnets.iste.org/teachers/t_stands.html

4. Department Goal: Electronic Portfolio. Students will show evidence of meeting technology standards and Teacher Performance Expectations (TPE) or national standards for technology leadership through an electronic assessment portfolio.

QUICK ACCESS TO THE ON-LINE CHAPMAN LIBRARY RESOURCES

<http://www.chapman.edu/library/>

SELECTED BIBLIOGRAPHY

- Acceptable Use Policies Online Resources
 - Virginia Department of Education: <http://www.pen.k12.va.us/go/VDOE/Technology/AUP/home.shtml>
 - The Internet Advocate: <http://www.monroe.lib.in.us/~lchampel/netadv3.html>
- American Psychological Association (APA) Online Resources
 - Electronic Reference Formats - <http://www.apastyle.org/electmedia.html>
 - University of Wisconsin Writing Center APA - <http://www.wisc.edu/writing/Handbook/DocAPA.html>
 - University of Wisconsin Hypertext Writing Guide - <http://www.uwsp.edu/psych/apa4b.htm>
 - Walden University - <http://www.waldenu.edu/acad-rsrcs/writing-center/index.html>
- American Library Association Internet Use Policies - <http://www.ala.org/alaorg/oif/internetusepolicies.html>
- Apple Learning Interchange - http://ali.apple.com/ali_sites/ali/index.html
- Barrett, Helen: Electronic Portfolios - <http://electronicportfolios.com/>
- Burns, P., Roe, B. & Ross, E. (1999). *Technology for literacy learning: A primer*. Houghton Mifflin Company, Boston, MA.
- California Online Resources:
 - California Department of Education - <http://www.cde.ca.gov/>
 - California Content Standards and Frameworks – <http://www.cde.ca.gov/ci>
 - California Content Standards - S.C.O.R.E - <http://www.score.k12.ca.us>
 - Education Technology - <http://www.cde.ca.gov/ls/et/>
 - California Technology Assistance Project - <http://ctap.k12.ca.us/>
 - CTAP Training Guides for Level I and Level II - <http://www.fcoe.k12.ca.us/techprof/>
 - California Course Models – Searchable Standards – CTAP - <http://www.history.ctaponline.org/>
 - California Learning Resource Network – CLRN - <http://www.clrn.org/home/>
 - California STAR Test Data - <http://star.cde.ca.gov/>
 - Dataquest - <http://data1.cde.ca.gov/dataquest/>
 - Ed Tech Profile - <http://www2.edtechprofile.org/index.php>
 - Lesson Plan Builder - <http://www.lessonplanbuilder.org/lessons/>
- Chou, L., McClintock, R., Moretti, F., Nix, D.H. (1993). *Technology and Education: New Wine in New Bottles*. New York: New Lab for Teaching and Learning. Retrieved July, 2003: <http://www.ilt.columbia.edu/publications/papers/newwine1.html>

- Child Internet Protection Act Resources:
 - Federal Communications Commission - <http://www.fcc.gov/cgb/consumerfacts/cipa.html>
 - CIPA - American Library Association - <http://www.ala.org/cipa/>
- The Computer Ethics Institute: http://www.brook.edu/its/cei/cei_hp.htm
- Ed Tech Profile - <http://www2.edtechprofile.org/index.php>
- Education Resources Information Center (ERIC): <http://www.eric.ed.gov>
 - The Educator's Reference Desk - <http://www.eduref.org/>
 - ERIC Digests.org - <http://www.ericdigests.org/>
 - Search ERIC - <http://SearchERIC.org>
- Edutopia Online: The George Lucas Educational Foundation: Innovative Classrooms, Skillful Educators, Involved Communities – <http://www.glef.org>
- Goldman, S. R., Williams, S. W., Sherwood, R.D., Hasselbring, T.S. and the Cognition and Technology Group at Vanderbilt (1999). Technology for teaching and learning with understanding: A primer. Houghton Mifflin Company. Boston. MA.
- Gordon, D.T. (2000) The digital classroom: How technology is changing the way we teach and learn. Cambridge, MA: Harvard Education Letters.
- Grabe, M. & Grabe, C. (1998) Learning with internet tools: A primer. Houghton Mifflin Company. Boston. MA.
- Grabes' Integrating Technology Textbook Online Resource Site - <http://ndwild.psych.und.nodak.edu/book/book4/index.html>
- Harris, J. (1998) Wetware: Why use activity structures? <http://virtual-architecture.wm.edu/>
- The History of Computing. Virginia Polytechnic Institution and State University - <http://ei.cs.vt.edu/~history/>
- How Stuff Works - <http://computer.howstuffworks.com/>
- International Society for Technology in Education (ISTE) - <http://www.iste.org>
- The International Technology Education Association (ITEA) - <http://www.iteaconnect.org/>
- InTime – Integrating New Technologies into the World of Teaching - <http://www.intime.uni.edu/>
- Library of Congress: <http://lcweb.loc.gov>
- Lever-Duffy Companion Website for Teaching and Learning with Technology Textbook - http://wps.ablongman.com/ab_leverduffy_teachtech_2
- Marco Polo: Internet Content for the Classroom - <http://www.marcopolo-education.org/home.aspx>
- McClintock, R. (2000). Cities, Youth, and Technology: Toward a Pedagogy of Autonomy. Institute for Learning Technologies, Teachers College, Columbia University. Retrieved July, 2003: <http://www.ilt.columbia.edu/publications/cities/cyt.html>
- McClintock, R. (1999). The Educators Manifesto: Renewing the Progressive Bond with Posterity through the Social Construction of Digital Learning Communities. Institute for Learning Technologies (ILTweb). Teachers College, Columbia University. Retrieved July, 2003: <http://www.ilt.columbia.edu/Publications/manifesto/index.html>
- Means, B. (1994) Technology and Education Reform. San Francisco: Jossey-Bass Publishers
- Microsoft On-line Tutorials - <http://www.microsoft.com/education/?ID=Tutorials>
- National Education Technology Standards (NETS)
 - NETS - <http://cnets.iste.org/teachers/>
 - NETS for Teachers - http://cnets.iste.org/teachers/t_stands.html
 - NETS for Students - http://cnets.iste.org/students/s_stands.html
- National Center for Education Statistics - <http://nces.ed.gov/>
- Online Journals
 - Ed Week - <http://www.edweek.org/>
 - Electronic Text Center - <http://etext.lib.virginia.edu/>
 - IT Journal Online - <http://etext.virginia.edu/journals/itjournal/>
 - Journal Of Computer-Mediated Communication - <http://www.ascusc.org/jcmc/>
 - Journal of Technology Education - <http://scholar.lib.vt.edu/ejournals/JTE/>
 - Kappan Articles On-line - <http://www.pdkintl.org/kappan/khome/karticle.htm>
 - Library in the Sky - <http://www.nwrel.org/sky/>
 - Technology Source - <http://horizon.unc.edu/TS/>
 - Tech-LEARNING - <http://www.techlearning.com/>
 - T.H.E. Journal.com - <http://www.thejournal.com/>
 - Triangle Journals - <http://www.triangle.co.uk/>
- Piper, C. (2000) Electronic Portfolios in Teacher Education Dissertation Web – <http://www.soundpiper.com/EPWeb>
- Shelly, G.B., Cashman, T.J., Vermont, M.E., & Walker, T.J. (1999). Discovering computers. Cambridge, MA: Course Technology ITP
- Solomon, G., Allen, N.J., & Resta, P. (2003). Toward Digital Equity: Bridging the Divide in Education. Boston: Allyn & Bacon.
- TaskStream Tools of Engagement - <http://www.taskstream.com/pub/>
- Teaching Now Video Classroom - <http://www.videoclassroom.org/index2.php>

- Thorsen, C. (2003). TechTactics: Instructional Models for Educational Computing. Boston: Allyn & Bacon.
- Tomei, L.A. (2002). The Technology Façade: Overcoming Barriers to Effective Instructional Technology. Boston: Allyn & Bacon.
- Topscott, D. (1999). Growing up digital. McGraw-Hill. - <http://www.growingupdigital.com>
- U.S. Copyright Law - <http://www.loc.gov/copyright>
- U.S. Department of Education Online Resources - <http://www.ed.gov>
 - No Child Left Behind <http://www.nochildleftbehind.gov/>
 - The Gateway - U. S. Department of Education – <http://www.thegateway.org>
 - U.S. Department of Education (1993). Using Technology to Support Education Reform. Archived retrieved July, 2003: <http://www.ed.gov/pubs/EdReformStudies/TechReforms/>

***INSTRUCTOR’S CLASS BY CLASS ASSIGNMENT SCHEDULE**

[Attach sheets as necessary.]