



California State University San Marcos
For some assignments use the following website:
<http://hale.pepperdine.edu/~kahayden>

Also as a resource use:
<http://www.blackboard.com/courses.CBT>

A good site for accessing tutorials and content:

<http://www.csusm.edu/ilast>

Fall 2001

College of Education

EDUC 500

Computer-Based Technology in Education

CRN 41493 EDUC 500 (03): 3 units

INSTRUCTOR: Cynthia Sistik-Chandler

Class Location: 271 Univ Hall (Office UHall 321)

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Class: Thursday; Time: 7:15 - 10:00 PM

Office hours: Thursday 6:00-7:00 PM or by appointment

COURSE DESCRIPTION:

In December of 1998, the CTC adopted a new technology standard for Multiple and Single Subject Teaching Credential candidates. The new technology standard requires credential candidates to 1) demonstrate their effective use of technology at a "basic" level (Level 1) prior to issuance of a preliminary credential; and 2) demonstrate their effective use of technology at an "advanced" level (Level II) prior to issuance of a professional clear credential. The purpose of this class is to prepare credential candidates to meet this new technology standard.

Standard 20.5 - Use of Computer-Based Technology in the Classroom

Candidates are able to use appropriate computer-based technology to facilitate the teaching and learning process.

This class emphasizes the curricular implications of computer-based technologies in education. It has been designed to work in tandem with other courses in the Teacher Education Program in meeting the California State requirement for computer education course work to obtain a preliminary teaching credential. If you are entering

the teacher education program, you will be challenged to use what you have experienced in educational settings, EDUC 350, and what you know about teaching children. If you are already teaching in the classroom you will be encouraged to apply what you are learning in educational settings.

PREREQUISITE

Successful completion of the CSUSM Computer Literacy requirement or approval of instructor. This course is designed to enable decision-making regarding the use of computers to an educational setting. It does not cover instruction of basic computer competencies.

REQUIRED TEXT AND MATERIALS

- Teachers Discovering Computers: Integrating Technology in the Classroom (Shelly & Cashman)
- Five Disks 1.40 MB PC or Mac Format (Label with your name)
- Pay for Print Card: May be purchased in Academic Hall 202
- Optional - Zip disk for heavier duty storage of Multi-media "stacks"

HIGHLY RECOMMENDED TEXT

NETS for Students: Connecting Curriculum & Technology. (2000). International Society for Technology in Education (ISTE). ISBN 1-56484-150-2

Optional Resources

- Bowers, C.A. 1988. *The Cultural Dimensions of Educational Computing*. Teachers College: New York, NY.
- Cummins, Jim & Sayers, Dennis. 1995 *Brave New Schools: Challenging cultural literacy through global learning networks*. St. Martin's Press: NY.
- National Educational Technology Standards for Teachers: NETS Book

COE Mission Statement

The mission of the College of Education Community is to collaboratively transform public education by preparing thoughtful educators and advancing professional practices. We are committed to the democratic principles of educational equity and social justice for all learners, exemplified through reflective teachers, learning and service. We value diversity, collaboration, professionalism and shared governance.

COURSE OBJECTIVES:

This class will help you to:

- Gain proficiency in the use of computers
- Make informed and critically reflective decisions regarding the choice, use and creation of educational technology applications

The following required competencies for all California teachers have been established by legislation. Commencing January 1, 2000, the minimum requirements for the preliminary multiple or single subject credential include demonstration of the ability to do the following:

(1) Identify issues involved in the access to, use of, and control of computer-based technologies, including, but not limited to:

- (a) The impact of technology upon the learning process;
- (b) The moral, legal, and ethical implications, including copyright infringement;
- (c) The economic and social implications of that access, use, and control, including the need
- (d) To provide equitable access to technology.

(2) Demonstrate, within appropriate subject areas and grade levels, the application and use of computer-based technology as a tool to enhance the development of problem solving skills, critical thinking skills, or creative processes through course-based projects and demonstration lessons. Demonstrate knowledge of basic operations, terminology, and capabilities of computer-based technology and the use of computer hardware, software, and system components.

(3) Appropriate to the subject area and grade level, demonstrate a basic understanding of and ability to use representative programs from each of the following categories:

- (a) Computer applications and electronic tools, such as word processing, data bases, graphics, spreadsheets, telecommunications (including email), portfolio management, page-layout, networking, reference, and authoring software;
- (b) Technology-based activities, such as simulations, demonstrations, tutorials, drill and practice, and interactive software;
- (c) Utility programs for classroom administration, such as those for record keeping, gradebook, lesson planning, generating instructional materials, and managing instruction.

(4) Demonstrate the application and use of computer-based technologies as tools to enable the development of problem-solving skills, critical thinking skills, and creative processes. Examples of such skills and processes are: gathering and analyzing data,

generating and testing hypotheses, classifying, comparing and contrasting, inferring, evaluating and composing and designing.



ADMINISTRATIVE REQUIREMENTS OF STUDENTS

This class will utilize distributed learning instructional strategies. Students must keep up with class assignments from week to week and will complete the lab assignments in both on-campus or off-campus locations. Plan to spend up to seven hours out of class each week to complete required readings, communicate with email, complete or expand lab assignments and to gain familiarity with educational technology applications.

Students are required to keep a copy of all work and are expected to submit examples of best practice for their portfolio evaluation. All proof of work accomplished is the responsibility of the student. Students will construct a notebook, portfolio, including disk(s) of the work done over the semester to serve as a professional portfolio and sampling of technology accomplishments. In some cases assignments may be completed within the allotted class time.

Please be sure to read and understand the CSUSM policy on plagiarism and cheating, as it will be strictly enforced. Academic dishonesty including plagiarism or copyright infringement will be reported to the University and will result in a course grade of F.

Attendance Policy

Due to the dynamic and interactive nature of this course, all students are expected to attend specifically designated classes and communicate regularly with email study groups and instructor to participate in distributed learning activities. Attendance for Ed500 is measured by the degree of active participation both online and in class, the quality of lab work assignments, and the degree of investment as evidenced by positive interaction with professor and peers. Should the student have extenuating circumstances, s/he should contact the instructor as soon as possible.

REQUIREMENTS AND EVALUATION:

California State University San Marcos has adopted an all-university writing requirement. In each course, students are required to write at least 2500 words in essays, exercises, papers and examinations.

- **Quizzes, Labs and Assignments**

Quizzes will cover any material taught during class lessons or assigned readings. Labs will reflect work done at the computers. Assignments will be made to reinforce concepts covered in class and to provide adequate practice. Dependability and promptness are expected. Late assignments will receive reduced points. If you find you cannot be in class, please make sure another class member delivers your assignment. All assignments should be prepared in a digitized format and **printed out free of spelling and/or grammar mistakes**. Back up your work regularly. (Note: Email and WebCT assignments = 5 points each; all other assignments = 10-15 points; Quiz = 30 points).

- **Assignment Evaluation**

Total points for an assignment (may be 15, 10, or 5 points) will be given when: all components of the assignment have been completed to the fullest extent and submitted on time, no grammar or spelling errors are evident, and student has shown understanding of the course concepts addressed in the assignment. Points are deducted for late, incomplete or when the quality of the work does not reflect a graduate level.

- **Portfolio Assessment and Final Project**

Critical Analysis: This class requires that you engage in self-reflection to assess the degree to which you have comprehended and are able to apply the concepts covered in this class. You are required to create a portfolio of appropriate samples from your class assignments that you believe best reflect your progress and growth. These may include, but not be limited to the following: sample of a word-processed document, database or spreadsheet projects, PowerPoint or HyperStudio Stacks, telecommunication assignments. (Your portfolio will be submitted with 6 samples and reflections, organized in a folder with a table of contents).

Reflection: From your portfolio samples, select two that are most meaningful to you. Using a word processor, compose a critical reflection describing (a) why you selected these two to write about, (b) What did you enjoy about completing them? (c) What challenges did they present? (d) How did you overcome any obstacles? (e) What did you learn from those assignments? And, most importantly... (f) how would you change your work now that you have had time to reflect? (These reflections equal three pages double-spaced, 12-point Times Font - submitted with portfolio).

Synthesis: From the items in your portfolio, select one application that you would like to investigate further. Develop a project beyond what the original assignment required. Expand your skills in the application to a higher degree (instructor approval

required). The goal of this assignment is to demonstrate your ability to identify, act on, and achieve goals for self-learning with educational applications of technology. (Final Project). This project will be presented to the class prior to the week of finals.

Application: Using the Lesson Plan Template specified, create a lesson utilizing technology to teach a particular content or skill (developed in the final project). Describe the target population (including age), curriculum standards, instructional objectives, instructional plan for implementation, and methods of evaluation. If you have not previously taught in the classroom, take your plan to a classroom teacher and get feedback before you present. This lesson plan will coincide with the Synthesis (Final Project).

- **Class Investment**

Your investment in this class is demonstrated through regular class attendance and participation, through active, constructive and creative contributions - both online and in class, and through participation in cooperative collaborative learning. The past experience, teaching and computer expertise of class members will benefit everyone and provide a valuable resource for the class

50% - labs & assignments

30% - quizzes, portfolio and final project

20% - class investment (attendance and participation)

GRADING PROCEDURES AND ASSIGNMENTS

Grading is calculated on the standard of

94 - 100 = A	80 - 83 = B-	70 - 73 = C-
90 - 93 = A-	77 - 79 = C+	60 - 69 = D
87 - 89 = B+	74 - 76 = C	below 60 = F
84 - 86 = B		

You must maintain a B average in your teacher education courses.

Statement of CLAD Emphasis

In 1992, the College of Education voted to infuse Crosscultural, Language and Academic Development (CLAD) competencies across the curriculum. The CLAD competencies are attached to this syllabus and the competencies covered are highlighted.

Definitions

The following definitions are applied from SEC. 2. Section 44259.3 in the Education Code:

- (1) "Educational technology" means the use of computer-based technology in instruction.
- (2) "Computer-based technology" means technologies based on the computer, such as telecommunications, interactive video, and compact disks.
- (3) "System components" means hardware and includes, but is not limited to, printers, monitors, modems, disk drives, scanners, video capture devices, video projection devices, compact disk-read only memory (CD-ROM), and other peripherals that work together in a system.
- (4) "Telecommunications" means the use of computers, modems, and telephone lines to move voice, video information, and data over distances.

(5) "Networking," means terminals or computers, or both, linked for the purpose of moving information and data over distances.

(6) "Course-based project" means an end of course or challenge requirement for the purpose of demonstrating technology competency, especially computer centered subject area expertise.

(7) "Authoring software" means text, graphics, photos, pictures, video, and sound are typically sewn together into a project using authoring software. These software tools are designed to manage multimedia elements and provide user interaction.

EDUC500 Computer Based Technology in Education
 Cynthia Sistek-Chandler
 cynthiac@myexcel.com

Fall 2001 Calendar Class Thursdays: 7:15 – 10:00
 Office Hours: Thursdays 6:00-7:00 p.m. UH321 or by appointment
 Voicemail: 760-750-8208

Home Office Voicemail: 858-571-1199
FAX: 858-571-5083

Date	Goal/Obj	CTC	Topic	Outcome & Rea
August 23, 2001 1	2 3a 3c	Basic computer skills Standards for technology Word Processing Labels/Merging Beginning Graphics	<ul style="list-style-type: none"> Intro to Basic Mac Skills Teacher State Standards Student Tech. Standards Word Processing 	Students write a letter using a word processor. <u>Due Week 2</u> Students self-assess their competencies using the rubric. Reading: Chapter 2
August 30, 2001 2	1c 3a	Internet Issues of access to technology	Intro to Internet Issues of Internet use and access: class discussion	Web Work Sheet Students learn to use the Internet to access information. Activity: <u>Due Week 2</u> Read by this class: Chapter 2
September 6, 2001 3	3a	Email	Email: Intro and attachments and email programs. PDF's and other attachment issues.	Students use email to send a copy to teacher.

Date	Goal/Obj	CTC	Topic	Outcome & Rea
Sept. 13, 2001 4	3a	Asynchronous Communication Tools Threaded discussions Synchronous Discussion Desktop publishing	<ul style="list-style-type: none"> Web CT: threaded discussion Newsletter: Class News 	Threaded discussion Readings: <u>Due Week 4</u> Students use desktop publishing to express their ideas and communicate with others. Due Week 6
Sept 20, 2001	3a	New Technologies Sharing information	Virtual Fieldtrips • Videoconferencing	Students collaborate with other educators to share information. use the web for information. Em

5				Due Week 7
Sept. 27, 2001 6	2 3b 3c	Evaluate Software Multimedia Software	<ul style="list-style-type: none"> Software review and evaluation SDCOE MTV Van PowerPoint 	Students evaluate relevance of three programs using Week 8 Use technology lesson. Due We
October 4, 2001 7	2 3a 3c 4	Spreadsheet	Organizing Information: Spreadsheets	Students use a spreadsheet program to create a mini-grant. Mini-Grant Due
Date	Goal/Obj	CTC	Topic	Outcome & Re
October 11, 2001 *Field Trip to the SDCOE or Virtual Class 8		Evaluate Software	Study for Mid-Term Utilize WebCT or email for setting up study groups.	Review Education Study for Mid-Ter
October 18, 2001 9	1b	**Midterm Chapters 1-5 Copyright Issues Ethical Use Issues	**Midterm Chapters 1-5 <ul style="list-style-type: none"> Copyright and Ethics <ul style="list-style-type: none"> Final Project Topics 	<i>Students demonstrate</i> <i>test</i> Students reflect on education related and ethical use: Students send in project: Email k
October 25, 2001 10		Lesson Presentations Databases	Databases	Organize information for student project selected grade level area. Due Week 11 Readings: Chapter discussion group 14
November 1 st , 2001 11	2 1a 1c	Effective Uses of Technology Management & Assessment Strategies Professional Reading	Classroom Management	Students are aware of resources for technology in the classroom. Students reflect on a journal based on best p

	4	(References on Blackboard)		research finding
Date	Goal/Obj	CTC	Topic	Outcome & R
November 8 th , 2001 12	2 3a	Multimedia Other technologies	<ul style="list-style-type: none"> ❑ Multimedia (authoring) ❑ Digital Camera ❑ Scanner 	Students use a r program to expl stimulating prob higher level thin Week 13
November 15 th , 2001 13	2 3a	Use of the web in curriculum Relate technology to content	<ul style="list-style-type: none"> ❑ Web Page Resources: ❑ Filamentality 	Students create student use of I resources: Due Send email with Students consid learning environ management of Students expand the use of a soft
November 29 th , 2001 14	2 3a 4	Effective use and application of technology in curriculum	<ul style="list-style-type: none"> ❑ Work Portfolio ❑ Final Projects ❑ Present Final Projects 	Students reflect in Technology Pr they put togethe and final Project Due Week 15 <i>Self Assess CTA</i>
December 6 th , 2001 15	2 4	Effective use and application of technology in curriculum	Present Final Projects	Students evalua projects and sha learning experie
Finals Week			No Class	Return Portfol by appointmen