# California Supplementary Authorization in Computer Concepts and Applications Instructional Technology Planning and Management EDST E633 - D (3 units)

#### Mission Statement of the College of Education, CSUSM

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 diversity, educational equity, and social justice, exemplified through reflective teaching, life-long learning, innovative research, and ongoing service. Our practices demonstrate a commitment to student centered education, diversity, collaboration, professionalism, and shared governance.

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#### **Computer Concepts and Applications Supplementary Authorization**

This course is one of the four courses that have been approved to satisfy the California Supplementary Authorization (CSA) in Computer Concepts and Applications requirement. All four courses are offered completely online! Regardless of where you live in the state, you may now fulfill CSA requirements by completing four, three-unit, graduate-level courses in Computer Concepts and Applications, offered collaboratively by the CSUSM College of Education and Extended Studies. Contact Extended Studies for more information: Catherine Boyle at (760) 750-8713 or cboyle@csusm.edu.

#### **Graduate Credit**

This is a graduate level course, and successful completion can be applied toward elective requirements for some Masters Programs including the Masters in Education option in Science, Mathematics, and Educational Technology and Critical Studies through the College of Education at Cal State San Marcos. Note that students must receive an A or B in order to use the course as one of their electives.

#### **Course Description**

This course prepares educators to plan, manage and assess technology infused classroom environments. Development of a technology-rich instructional unit utilizing technology, conducting a pilot lesson and developing rubrics to assess the quality of both the content and technology components will be important elements of the course assignments.

#### **Course Objectives**

- Analyze and evaluate emerging technologies for use in the classroom
- Assess technology infused classroom environments
- Effectively plan and manage technology usage within the core curriculum
- Develop a technology rich instructional unit for classroom use
- Conduct a pilot lesson from the instructional unit created in class
- Create a multimedia presentation using video production

#### **Required Text**

• Grabe, M., & Grabe, C. (2002). **Integrating Technology for Meaningful Learning** (4<sup>th</sup> ed.). Boston: Houghton Mifflin.

#### **Material required**

- Microsoft Office Suite (Word, PowerPoint, Excel)
- Up-to-date computer and operating system that has the ability and speed to use WebCT and participate in activities such as multimedia production, use online survey and rubric tools, and create, edit and post a WebQuest), as well as play sound files and movie clips.

Access to a digital camera and digital video camera

#### **Plagiarism and Cheating**

All work submitted for this course should reflect students' efforts. When relying on supporting documents authored by others, cite them clearly and completely using American Psychological Association (APA) manual, 5<sup>th</sup> edition. Failure to do so may result in failure of the course. Please be sure to read and understand the university policy on plagiarism and cheating, as it will be strictly enforced. Academic dishonestly will not be tolerated and will result in a failing grade for this course and will be reported to the University.

#### **Attendance Policy**

In this online course, the instructor has adopted this policy: you must be active in online coursework including email, discussions and activities regularly (at least twice weekly), or you cannot receive a grade of A or A-; if you are inactive for one week or more, you cannot receive a grade of B+ or B. If you have extenuating circumstances, you should contact the instructor as soon as possible.

Modules begin on Monday each week and end on Sunday (see online schedule of modules).

#### **Grading Policy**

All required work is expected to be on time. It is expected that students will proofread and edit their assignments prior to submission. Students will ensure that the text is error-free (grammar, spelling), and ideas are logically and concisely presented. The assignment's grade will be negatively affected as a result of this oversight. Each written assignment will be graded approximately 80% on content and context (detail, logic, synthesis of information, depth of analysis, etc.), and 20% on mechanics (grammar, syntax, spelling, format, uniformity of citation, etc.). All citations, where appropriate, will use American Psychological Association (APA) format. Consult American Psychological Association (APA) Manual, 5<sup>th</sup> edition for citation guidance.

Course	Assignments

20 points
25 points
5 points
15 points
5 points
10 points
10 points
10 points
100 points

A= 93-100	B+=86-89	C+= 77-79		
A-=90-92	B=83-86	C= 73-76	D=60-69	F=59 or lower.
	B-=80-82	$C_{7} = 70.72$		

## **Course Outline**

Week	Date	Topic	Assignment
Week 1	Module 0	Welcome Course Overview	CTAP Assessment Discussion Board – Community Building
	Module 1	Assessing Educational Technology ISTE-NETS	Cyberhunt Discussion Board
Week 2	Module 2	Integrating Multimedia into the Classroom	Multimedia Video production: I Movie/Movie Maker Discussion Board
Week 3	Module 3	Using Tools to Enhance Your Project Based Learning Activity	Spreadsheets PowerPoint Rubrics
Week 4		Thanksg	iving Break
	Module 4	Planning A Project Based Learning Activity	Web Quest Development Discussion Board
Week 5	Module 5	Components of Your Project Based Learning Activity Assessing Your Classroom	Rubrics Technology - Self Assessment
Week 6	Module 6	Managing Your Project Based Learning Activity	Management Plan (Interview) Discussion Board
	Module 7	Implementing Your Project Based Learning Activity	Pilot Lesson Reflection Discussion Board
Week 7	Module 8	Managing Technology in the Classroom	Management Plan (Classroom)
	Module 9	What the future holds	CTAP Assessment Video production in your Classroom Discussion Board - Reflection

WebQuest 20 Points

**Learner Objectives:** Develop a WebQuest for classroom use.

Assessment: WebQuest will have all components required and will be posted on the internet.

Resource(s):	Title and necessary information:	
Textbook/pages	Integrating Technology for Meaningful Learning – Chapter 6	
Internet Site(s)	http://webquest.sdsu.edu/: Bernie Dodge's WebQuest website	
	http://teacherweb.com/WQIndexSrch2.htm : Sample WebQuest on Teacher Web	
	www.teacherweb.com : Free month web posting	
	http://www.webtechu.com/tutorial/geojoin1.php : Geocities tutorial	
	http://teacherweb.com/TWQuest.htm : WebQuest - Get Started	

#### **Task Guidelines**

Welcome to the world of WebQuest! A WebQuest is a web based inquiry-oriented activity in which most or all of the information used by learners is drawn from the Web. WebQuests are designed to maximize the time on task by focusing on using information rather than looking for it, and to support learners' thinking at the levels of analysis, synthesis and evaluation. WebQuest was developed in early 1995 at San Diego State University by Bernie Dodge and Tom March. It has since become a model for project based instruction with many variations and examples available.

WebQuests consist of specific components which help ensure a complete interactive activity if designed properly. These components MUST be present in your WebQuest in order to receive full credit for the assignment. You will be able to see examples and get all the information you need at: <a href="http://webquest.sdsu.edu/">http://webquest.sdsu.edu/</a>.

For this assignment, you can work individually or in pairs. The assignment consist of developing an interactive learning WebQuest. You will need to design an activity that you can use in your classroom immediately as the second part of this assignment is to pilot your creation with students. The WebQuest is worth 20 points.

Required components outside of WebQuest requirements which must be embedded:

- PowerPoint
- Spreadsheet
- Rubric

There are several options when it comes to publishing your WebQuest. If you or your district/school has a web site, that would be the best option. Another option is to use the free one-month trial of <a href="https://www.teacherweb.com">www.teacherweb.com</a>, which allows you to publish your WebQuest for free for a month. After that, you have to pay \$2.50/month if you would like to keep it live. If you would like to see the capabilities of Teacher Web, visit: <a href="http://teacherweb.com/WQIndexSrch2.htm">http://teacherweb.com/WQIndexSrch2.htm</a> and see some examples. Finally, Geocities offers free web hosting. To get started go to: <a href="http://www.webtechu.com/tutorial/geojoin1.php">http://www.webtechu.com/tutorial/geojoin1.php</a> for a tutorial on how to access a free Geocities account.

Are you ready to begin? <a href="http://teacherweb.com/TWQuest.htm">http://teacherweb.com/TWQuest.htm</a>

Note: In order to receive full credit, you MUST publish your WebQuest. When you are ready to submit, just copy and paste the url where you upload your assignments.

Discussion Boards 15 Points

**Learner Objectives:** To gain a broader perspective on discussion topics from peers. Help students

better contemplate, organize, and understand readings and to be better prepared

for thoughtful discussion

<u>Assessment</u> Participation in the discussion board forums

3

Resource(s):	Title and necessary information:
Internet Site(s)	Course Website: <a href="http://courses.csusm.edu">http://courses.csusm.edu</a>

#### **Task Guidelines**

Critical, engaged discussion will make this a richer class for all of us. In preparation for this kind of thoughtful discourse, you will be responsible for reading and responding to a variety of prompts in a variety of ways. If your responses cease to function in these ways and seem to be "busy work" then you need to adjust what you're doing. Seek alternative ways of responding in order to meet the goal—it is your responsibility to make the work worthwhile. Each student is responsible for **one** main post and **two** sub-post each week at a minimum. Students should try to post early in the week to give peers an opportunity to respond. **Discussions must do one of three things:** add to what was presented, expand what was presented, or take a new position from what was presented.

#### **Pilot Lesson Reflection**

10 Points

**<u>Learner Outcomes:</u>** Use reflective practices to improve instruction

Assessment: Written reflection on the experience of piloting the WebQuest

Resource(s):	Title and necessary information:
Textbook/pages	Integrating Technology for Meaningful Learning – Chapter 9 pages 358-368

#### **Task Guidelines**

The WebQuest created in the class is to be piloted in your classroom. Whether it is a full scale implementation or a selected few, you will be expected to evaluate your work and it's effectiveness with students. You may find it helpful to solicit feedback from your students and embed the feedback into your reflection.

#### Requirements:

1-2 page written reflection responding to, but not limited to the following:

- 1. What worked?
- 2. How did the students respond?
- 3. What did you learn?
- 4. What would you change?

#### **Management Plan/Interview**

10 points

Learner Objectives: Create a plan to utilize your WebQuest on the class level

Assessment: Written plan completed based on information received from interview

Resource(s):	Title and necessary information:
Textbook/pages	Integrating Technology for Meaningful Learning – Chapter 1

#### **Task Guidelines**

#### The Interview (5 points):

As you can imagine, there are many ways to handle web based projects in a classroom. Your job for this assignment is to contact someone at an educational institution and interview them. Your goal is to find out how they manage their web based activities. Some questions you could ask:

What are the first things you consider when planning to use technology with students?

How do students know what is expected?

What type of preparation takes place prior to implementation?

How are students trained or prepared to use technology?

What are the challenges to using technology with students?

What works well?

How do the students like the experience?

After your interview, write up a summary (1-2 paragraphs) about the way they manage technology with their students.

#### Possible interviewees:

- Email or call an instructor at a local college who is listed in a course schedule as teaching an online course.
- Contact a K-12 school district office and ask to speak to the online learning coordinator.

#### The Management Plan (5 points):

Now that you have interviewed someone who uses technology with their students and have some ideas of how you might manage your own classroom, you are ready to create your own plan. You have created your WebQuest and piloted it with some students...you have learned a lot. Now it is time to figure out how to implement the WebQuest on a large scale. Your task is to create a management plan for your class specifically related to teaching your WebQuest. There are many things to consider to ensure that it will run smoothly and to guarantee that all students are engaged and on task. What steps do you need to take?

#### Plan should consist of but not limited to:

- Instructions for students
- Computer usage rules
- Daily plan
- Timeline/rotation schedule
- Deadlines/checklist

Cyberhunt 5 points

Learner Objectives: To familiarize yourself with the variety of technology available for classroom use

<u>Assessment:</u> Completed evaluation forms

Resources	Title and necessary information:	
Textbook/chapters	Integrating Technology for Meaningful Learning – Chapters 8 and 9	
Internet Site(s)	www.google.com : Search engine	
	http://www.altavista.com/ : Search engine	
	http://www.mamma.com/ : Search engine	
	http://www.dogpile.com/info.dogpl/ : Search engine	

#### **Task Guidelines**

Technology is constantly changing. Some innovations are around for a long time while others come and go almost instantly. This is your opportunity to discover what is out there and how, if the world was perfect and you had an infinite budget, you could use it to enhance learning in your classroom. Get ready for your Cyberhunt.

**First:** Search on the Internet, using any search engine you choose, to find two technological innovations that you would like to have in your classroom. Remember the sky is the limit and your students are worth the effort.

#### Possible Innovations:

- AlphaSmarts
- Ebooks (electronic books)
- Smart Boards
- GPS /RFID tracking devices
- Wearable computers
- Internet 2
- BLOGS
- IPODS
- PDA's
- Digital Video

**Second:** Answer the four questions below for each innovation chosen

- 1. Name of Item:
- 2. URL where information was located:
- 3. Description of item and how it works:
- 4. Explanation of how it could be used in your classroom:

### **Video Production Project**

#### 25 points

Learner Objectives: Create a multimedia presentation using video production

<u>Assessment:</u> Completed project and reflection

Resources	Title and necessary information:
Textbook/chapters	Integrating Technology for Meaningful Learning – Chapter 7
Internet Site(s)	WebCT Tutorial

#### **Task Guidelines**

Here is you chance to be a star...or a director...or just a really "cool," effective and engaging teacher. Whichever the motivation, this is the opportunity. For this assignment, you will create a multimedia video project. Its components will consist of:

Digital video Still photographs Audio Transitions Titles

#### **Technology - Self Assessment**

10 points

**<u>Learner Objectives:</u>** To establish minimal standards for technology in the classroom and to evaluate

own space.

<u>Assessment:</u> Completed rubric and narrative.

Resources	Title and necessary information:
Textbook/chapters	
Internet Site(s)	Education World (Article) - <a href="http://www.educationworld.com/a curr/curr248.shtml">http://www.educationworld.com/a curr/curr248.shtml</a>
	Landmark Project - <a href="http://landmark-project.com/classweb/tools/rubric_builder.php">http://landmark-project.com/classweb/tools/rubric_builder.php</a>
	Rubistar - http://rubistar.4teachers.org/index.php
	TeAchnology - http://www.teach-nology.com/web_tools/rubrics/
	Rubrics for Teachers - <a href="http://www.rubrics4teachers.com/">http://www.rubrics4teachers.com/</a>

### Task Guidelines

Read article on Education World website on rubrics, then check out some of the other sites and find one that will work for you for this assignment. Keep it in mind as you follow the steps below.

**First:** Create a rubric for what an "ideal" classroom would look like in regards to educational technology – software and hardware.

**Second:** Once the rubric is completed, evaluate your classroom using the rubric. Where is your class based on the standards you created? What steps can you take to improve it?

Third: Write a brief narrative describing your classroom with it's' pros and cons. Attach to completed rubric.

**CTAP Assessment** 5 points

**<u>Learner Objectives:</u>** To assess pre and post computer using ability

Assessment: .Receipt of completion from both assessments

Resources	Title and necessary information:
Internet Site(s)	www.ctap.org : Assessment site

<u>Task Guidelines</u> Login to CTAP and take assessment at the beginning of this course and at the end to make a comparison in technology growth.

## **Assignment Checklist**

Week	Assignment Due	<b>Due Date</b>
1	Module 0	1 <sup>st</sup> Sunday night by
	CTAP Assessment (2.5 points)	midnight
	Discussion Board - 0 (2 points)	
	Module 1	
	Cyberhunt (5 points)	
	Discussion Board - 1 (2 points)	
2	Module 2	2 <sup>nd</sup> Sunday night
	Discussion Board - 2 (2 points)	by midnight
	Module 3	
3	Module 4	3 <sup>rd</sup> Sunday night by
	Webquest (20 points)	midnight
	Discussion Board - 4 (2 points)	
4	Module 5	4 <sup>th</sup> Sunday night by
	Technology Self Assessment (10 points)	midnight
	Module 6	
	Managing – The Interview (5 points)	
	Discussion Board - 6 (2 points)	
5	Module 7	5 <sup>th</sup> Saturday night
	Pilot Lesson Reflection (5 points)	by midnight
	Discussion Board - 7 (2 points)	
	Module 8	
	Managing – The Management Plan (5 points)	
	Module 9	
	CTAP Assessment (2.5 points)	
	Discussion Board - 9 (3 points)	
	Video Project (20 points)	

Note: For detailed instructions for each assignment, see the appropriate module.

EDST E633D Fall 2006 9