

CALIFORNIA STATE UNIVERSITY SAN MARCOS
SCHOOL OF EDUCATION

EDUC 422 - Technology Tools for Teaching and Learning

Thursday 17:30-20:15, Fall 2012, CRN 40483

Location: UNIV 271

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Office Hours: before & after class or by appointment

The class Cougar Course (Moodle) site: Access from <http://cc.csusm.edu/>

Mission Statement

The mission of the School 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 on-going service. Our practices demonstrate a commitment to student-centered education, diversity, collaboration, professionalism, and shared governance. (*Adopted by COE Governance Community, October, 1997*).

COURSE DESCRIPTION

This course focuses on knowledge and skills necessary to apply education-oriented productivity tools, graphic organizers, database and spreadsheets, presentation tools, school-appropriate multimedia tools, and communication tools. *The course meets the technology prerequisite skill requirement for entering the credential program.*

This course is designed for teacher candidates who have met the campus-wide Computer Competency Requirement (CCR) or have pre-requisite skills equal to the CCR and anticipate entrance into the teacher preparation program. This three-unit course partially fulfills the technology competencies as identified by the California Commission on Teacher Credentialing (CCTC) and the School of Education's Teacher Performance Expectations (TPEs) in technology, and is being considered for satisfying the Computer Integration Requirement (CIR) for the Liberal Studies Program.

The EDUC 422 course prepares teacher candidates to apply specific educational technology-based applications in methods courses for implementation in teaching and learning with students as well as to their own professional growth. When entering the teacher education program, School of Education faculty assume teacher candidates have competency in the applications covered in this course, and, therefore, will make assignments requiring teacher candidates to apply these skills.

Prerequisites

Students need to have basic computing knowledge and skills such as word processing, file and folder organization and storage, and e-mail and the Internet. It is recommended that students complete a fundamental computer literacy course with a grade B or higher in the last 12 months.

Course Objectives

Teacher candidates will demonstrate competency in:

- Meeting the National Educational Technology Standards for Teachers (NETS•T) outlined below at a basic level of proficiency;
- Using a variety of educational technology tools that are applied in teaching and learning within the credential program and used in public school settings; and
- Setting up an electronic portfolio using Taskstream and demonstrating proficiencies in all five areas of NETS•T.

Required Supplies

There is no required text for this course. Instead, you will need the following:

- ISTE online student membership.
- Taskstream membership: <http://www.taskstream.com>.
- One mass storage device, e.g., USB flash drive (4 GB or larger)
- Use of a digital video camera for the video project. A personal camera may be used, OR check-out is available from Kellogg library on 2nd floor.

It is not necessary to purchase the educational software, as many of the specific software titles are available on the Web in demo-version and/or available on campus.

Recommended Text

Solomon, G., & Schrum, L. (2010). *Web 2.0 how-to for educators*. Washington, DC: International Society for Technology in Education.

STUDENT LEARNING OUTCOMES

Teacher Performance Expectation (TPE) Competencies

This course is designed to help teachers seeking a California teaching credential to develop the skills, knowledge, and attitudes necessary to assist schools and district in implementing effective programs for all students. The successful candidate will be able to merge theory and practice in order to realize a comprehensive and extensive educational program for all students. You will be required to formally address TPE 14: CSUSM Educational Technology (based on ISTE NETS•T: see below)

The following TPEs are also addressed in this course:

- TPE 4 - Making Content Accessible (NETS•T I and II)
- TPE 5 - Student Engagement (NETS•T I and II)
- TPE 6 - Developmentally Appropriate Teaching Practices (NETS•T I, and II)
- TPE 7 - Teaching English Language Learners (NETS•T II and IV)
- TPE 12 - Professional, legal and ethical (NETS•T IV)
- TPE 13 - Professional Growth (NETS•T V)

The course also addresses Special Education Standards by California Commission on Teacher Credentialing:

- Multiple and Single Subject Program Standard 13: Preparation to Teach Special Populations (Students with Special Needs) in the General Education Classroom
- Preliminary Education Specialist Program Design Standard 6: Using Educational and Assistive Technology

ISTE National Educational Technology Standards (NETS•T) and Performance Indicators for Teachers

Effective teachers model and apply the National Educational Technology Standards for Students (NETS•S) as they design, implement, and assess learning experiences to engage students and improve learning; enrich professional practice; and provide positive models for students, colleagues, and the community. All teachers should meet the following standards and performance indicators. Teachers:

I. Facilitate and Inspire Student Learning and Creativity

Teachers use their knowledge of subject matter, teaching and learning, and technology to facilitate experiences that advance student learning, creativity, and innovation in both face-to-face and virtual environments. Teachers:

- a. promote, support, and model creative and innovative thinking and inventiveness
- b. engage students in exploring real-world issues and solving authentic problems using digital tools and resources
- c. promote student reflection using collaborative tools to reveal and clarify students' conceptual understanding and thinking, planning, and creative processes
- d. model collaborative knowledge construction by engaging in learning with students, colleagues, and others in face-to-face and virtual environments

II. Design and Develop Digital-Age Learning Experiences and Assessments

Teachers design, develop, and evaluate authentic learning experiences and assessments incorporating contemporary tools and resources to maximize content learning in context and to develop the knowledge, skills, and attitudes identified in the NETS•S. Teachers:

- a. design or adapt relevant learning experiences that incorporate digital tools and resources to promote student learning and creativity
- b. develop technology-enriched learning environments that enable all students to pursue their individual curiosities and become active participants in setting their own educational goals, managing their own learning, and assessing their own progress
- c. customize and personalize learning activities to address students' diverse learning styles, working strategies, and abilities using digital tools and resources
- d. provide students with multiple and varied formative and summative assessments aligned with content and technology standards and use resulting data to inform learning and teaching

III. Model Digital-Age Work and Learning

Teachers exhibit knowledge, skills, and work processes representative of an innovative professional in a global and digital society. Teachers:

- a. demonstrate fluency in technology systems and the transfer of current knowledge to new technologies and situations
- b. collaborate with students, peers, parents, and community members using digital tools and resources to support student success and innovation
- c. communicate relevant information and ideas effectively to students, parents, and peers using a variety of digital-age media and formats
- d. model and facilitate effective use of current and emerging digital tools to locate, analyze, evaluate, and use information resources to support research and learning

IV. Promote and Model Digital Citizenship and Responsibility

Teachers understand local and global societal issues and responsibilities in an evolving digital culture and exhibit legal and ethical behavior in their professional practices. Teachers:

- a. advocate, model, and teach safe, legal, and ethical use of digital information and technology, including respect for copyright, intellectual property, and the appropriate documentation of sources
- b. address the diverse needs of all learners by using learner-centered strategies and providing equitable access to appropriate digital tools and resources
- c. promote and model digital etiquette and responsible social interactions related to the use of technology and information
- d. develop and model cultural understanding and global awareness by engaging with colleagues and students of other cultures using digital-age communication and collaboration tools

V. Engage in Professional Growth and Leadership

Teachers continuously improve their professional practice, model lifelong learning, and exhibit leadership in their school and professional community by promoting and demonstrating the effective use of digital tools and resources. Teachers:

- a. participate in local and global learning communities to explore creative applications of technology to improve student learning
- b. exhibit leadership by demonstrating a vision of technology infusion, participating in shared decision making and community building, and developing the leadership and technology skills of others
- c. evaluate and reflect on current research and professional practice on a regular basis to make effective use of existing and emerging digital tools and resources in support of student learning
- d. contribute to the effectiveness, vitality, and self-renewal of the teaching profession and of their school and community

ISTE (International Society for Technology in Education), 2008

http://www.iste.org/Content/NavigationMenu/NETS/ForTeachers/2008Standards/NETS_for_Teachers_2008.htm

CSUSM AND SOE POLICIES

School of Education Attendance Policy

Due to the dynamic and interactive nature of courses in the School of Education, all students are expected to attend all classes and participate actively. At a minimum, students must attend more than 80% of class time, or s/he may not receive a passing grade for the course at the discretion of the instructor. Individual instructors may adopt more stringent attendance requirements (see below). Should the student have extenuating circumstances, s/he should contact the instructor as soon as possible. (Adopted by the COE Governance Community, December, 1997).

Accordingly, if more than two class sessions are missed or there is excessive tardiness (or leave early) for more than four sessions, the teacher candidate cannot receive higher than a C+. Five points may be deducted from the attendance/participation for a missed class. Notifying the instructor does not constitute an excuse. All assignments must be turned in on due date even in case of an absence. If extraordinary circumstances occur, please communicate with the instructor.

In addition to attending course sessions, students may need to use campus resources for some assignments. All students must plan times they can work in labs on campus. Students are required to check campus resources and availability of labs. Mac computers are available in ACD 202, ACD 211, UH 271, and SCI2 306 in addition to other locations such as the library 2nd floor. Students are required to use campus issued-email accounts and check email and the class Cougar Course (Moodle) site at least two times per week to communicate with instructor and peers.

Professional Dispositions

The California State University San Marcos School of Education fosters the development of the following professional dispositions among our students:

- *Social Justice and Equity*: Candidates appreciate the languages, communities, and experiences learners bring to the classroom. Candidates advocate for and support marginalized communities and individuals.
- *Collaboration*: Candidates learn and practice the skills of collaboration in their coursework and use them in their professional interactions with students, colleagues, parents, caregivers and those in the wider community.
- *Critical Thinking*: Candidates analyze various professional contexts, resulting in more informed decision-making about professional practice.
- *Professional Ethics*: Candidates learn to make and act on well-reasoned, principled judgments.
- *Reflective Teaching and Learning*: Candidates critically review their professional practice and the impact it has on student success.
- *Life-Long Learning*: Candidates are committed to actively seeking new knowledge, skills and experiences throughout their career.

(adopted by the COE Governance Community on January 19, 2007)

CSUSM Academic Honesty Policy

Students will be expected to adhere to standards of academic honesty and integrity, as outlined in the Student Academic Honesty Policy. All written work and oral presentation assignments must be original work. All ideas/materials that are borrowed from other sources must have appropriate references to the original sources. Any quoted material should give credit to the source and be punctuated with quotation marks.

Students are responsible for honest completion of their work including examinations. There will be no tolerance for infractions. If you believe there has been an infraction by someone in the class, please bring it to the instructor's attention. The instructor reserves the right to discipline any student for academic dishonesty in accordance with the general rules and regulations of the university. Disciplinary action may include the lowering of grades and/or the assignment of a failing grade for an exam, assignment, or the class as a whole.

Incidents of Academic Dishonesty will be reported to the Dean of Students. Sanctions at the University level may include suspension or expulsion from the University.

Plagiarism

As an educator, it is expected that each student will do his/her own work, and contribute equally to group projects and processes. Plagiarism or cheating is unacceptable under any circumstances. If you are in doubt about whether your work is paraphrased or plagiarized see the Plagiarism Prevention for Students website <http://library.csusm.edu/plagiarism/index.html>. If there are questions about academic honesty, please consult the University catalog.

Students with Disabilities Requiring Reasonable Accommodations

Students with disabilities who require reasonable accommodations must be approved for services by providing appropriate and recent documentation to the Office of Disable Student Services (DSS). This office is located in Craven Hall 4300, and can be contacted by phone at (760) 750-4905, or TTY (760) 750-4909. Students authorized by DSS to receive reasonable accommodations should meet with their instructor during office hours or, in order to ensure confidentiality, in a more private setting.

CSUSM Writing Requirement

The CSUSM writing requirement of 2500 words is met through the completion of course assignments. Therefore, all writing will be looked at for content, organization, grammar, spelling, and format.

If needed, it is suggested that you make an appointment with the Writing Center (http://www.csusm.edu/writing_center/) to seek help with writing skills before submitting your written assignments.

ASSIGNMENTS, REQUIREMENTS, AND GRADING

Part I. Common Assignments (110 points)

Assignment	Description	Pts	Due
Introduction	Post a self-introduction on the class discussion forum. Respond to peers' postings. This is for community building.	5	9/6
Reading reflections & comments	Students reflect on course readings related to NETS and current issues in educational technology. Students maintain professional blogs, demonstrate the ability to contribute to online discussions, and apply Netiquette in the process.	32	varies
Digital citizenship	Students explore issues concerning identity safety, cyber bullying, cyber predators, piracy, copyright, fair use, and plagiarism. They will become knowledgeable about digital citizenship featured in NETS•T Standard IV.	20	part 1: 9/23 part 2: 10/7
Information literacy	Through use of a web-based resource/tool, students will organize and manage online resources for projects and share with others. The assignment requires evaluation and review of educational web sites and reflection on classroom use.	10	10/11
Social bookmarks	Through use of a Web2.0 tool, students will organize and manage online resources for projects and share with others.	8	10/11
Video project	Working in groups of 3 or 4, students produce a video for classroom use. Students will learn how to use digital video cameras, edit video clips, and prepare a project for sharing electronically. Final editing will be completed individually in order to ensure each student has learned the process.	20	11/1
TPE 14 portfolio	Students reflect on NETS and select course artifacts to show evidence for meeting TPE 14, which is based on NETS•T.	20	draft 11/11 final 12/6
Tracking sheet	Planning and organizing documents to prepare electronic portfolio. Files are matched to the NETS under TPE 14 and documentation of file naming and organizing is required.	5	12/6

Detailed information is provided on Cougar Courses. Please note that modifications may occur at the discretion of the instructor. In addition to the assignments described above, performance assessment will be on student's cooperation and flexibility in response to unforeseen challenges and student's ability to perform tasks using a variety of technology tools.

Part II. Four Elective Assignments (60 points)

There are many technology tools for teaching and learning. Here is just a short list of commonly used tools in K-12 classrooms: iPads, iPods, smart phones, clickers, graphing calculators, Smartboards, Google tools (Maps, Earth/Sky/Moon/Mars, SketchUp, Docs, Spreadsheets, Presentations, Drawings, Forms, etc.), Twitter, Facebook, Second Life, Wikis, Photoshop, Audacity, Inspiration, Kidspiration, Prezi, Glogster, Jing, Sketch, Geometer's Sketchpad, Fathom, Edmodo, and so on.

You will choose **four** technology tools and explore their educational use. For each tool, you will create an educational artifact (broadly defined). Each artifact is worth 15 points. A few examples are:

- Use Google Form to create a survey and collect information for projects.
- iPads in education: You can create a lesson plan that involves a particular app. Or you can write a critical review of a few apps, discussing their strengths and limitations.
- Math and science teacher candidates design a learning activity using Excel (or Google) Spreadsheets
- Language arts and social studies teacher candidates use Google Earth to create a virtual tour.
- Use Audacity to create a podcast and post it on your blog.
- Create an Edmodo site for a classroom.
- Use Prezi to create an interactive presentation.
- Use Twitter and RSS feeds to follow and learn from educators around the world.
- Critically review an educational game and write a report.

We will organize inquiry groups based on interests. Each member will contribute to the collective learning of the group. Each group will also share their learning with the whole class by means of oral presentation and posting artifacts and resources on Cougar Courses. The requirements and grading rubrics will be determined by group members and the instructor.

Part III. Attendance & Professional Dispositions (20 points)

See the attendance policy and professional dispositions above (page 4).

All assignments, requirements, due dates and scoring rubrics in Parts I and II will be available through Cougar Courses. You are responsible to track your grades and progress in the course. In order to successfully complete this course, all assignments must be completed at an acceptable level noted on assignment directions and rubrics. All assignments are due by 11pm on the due date. Late assignments may be penalized by a deduction in points. After one week, late assignments may receive no credit. If extraordinary circumstances occur, please contact the instructor.

Course Grades

Final grades are calculated on the standard of:

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

Failure to complete this course with a grade of C+ or higher will prohibit a teacher candidate from entering a teaching credential program.

TENTATIVE SCHEDULE

The dynamic nature of teaching and learning makes it hard to establish a set schedule. Please note that modifications will likely to occur at the discretion of the instructor.

Session	Topics	Assignments
8/30	<ul style="list-style-type: none"> Course intro, community building, & norms Inquiry groups & elective assignments Web 2.0: Blogs 	<ul style="list-style-type: none"> Post a self-introduction on Cougar Courses Respond to peers' self-introductions
9/6	<ul style="list-style-type: none"> Web 2.0: Blogs, RSS feeds Elective tools part 1 	<ul style="list-style-type: none"> Read articles 1&2 and post reading reflections 1&2 on blog
9/13	<ul style="list-style-type: none"> Unpacking NETS and TPE 14 Elective tools part 2 	
9/20	<ul style="list-style-type: none"> Online session: Digital citizenship, part 1 	<ul style="list-style-type: none"> Complete online module 1 Submit elective 1
9/27	<ul style="list-style-type: none"> Social learning—Diigo Information literacy 	<ul style="list-style-type: none"> Read articles 3&4 and post reading reflections 3&4 on blog
10/4	<ul style="list-style-type: none"> Online session: Digital citizenship, part 2 	<ul style="list-style-type: none"> Read and comment peers' blogs Complete online module 2
10/11	<ul style="list-style-type: none"> Educational use of video Video project: Planning iMovie (bring headset) 	<ul style="list-style-type: none"> Submit "information literacy" assignment Submit social bookmarks (Diigo)
10/18	<ul style="list-style-type: none"> Video project: Filming Video project: Editing (bring headset) 	<ul style="list-style-type: none"> Read articles 5&6 and post reading reflections 5&6 on blog
10/25	<ul style="list-style-type: none"> Video project: Editing (bring headset) 	<ul style="list-style-type: none"> Submit elective 2
11/1	<ul style="list-style-type: none"> Elective tools part 3 Video showcase 	<ul style="list-style-type: none"> Submit video project
11/8	<ul style="list-style-type: none"> Online session: TPE 14 portfolio 	<ul style="list-style-type: none"> Complete online module 3 & submit draft TPE 14 portfolio
11/15	<ul style="list-style-type: none"> Elective tools part 4 Technology presentation 	<ul style="list-style-type: none"> Read articles 7&8 and post reading reflections 7&8 on blog
11/22	Thanksgiving. No class.	
11/29	<ul style="list-style-type: none"> Computational thinking Technology presentation 	<ul style="list-style-type: none"> Read and comment peers' blogs Submit elective 3
12/6	<ul style="list-style-type: none"> TPE14 portfolio Technology presentation Conclusion and looking ahead 	<ul style="list-style-type: none"> Submit tracking sheet Complete TPE 14 portfolio Submit elective 4