

Course & Section Nos.	EDUC 422 Section 2
Course Title	Technology Tools for Teaching and Learning
Class Roster No.	21077
Days	Monday
Time	9:30 AM to 12:20 PM
Course Location	University Hall 271
Semester / Year	Spring 2018
Instructor	Rong-Ji Chen, Ph.D.
Phone	760.750.8509
E-Mail	rchen@csusm.edu
Office	UH 418
Hours	By Appointment or before and after class

SCHOOL OF EDUCATION MISSION & VISION STATEMENT

(Adopted by SOE Governance Community, January 2013)

Vision

To serve the educational needs of local, regional, and global communities, the School of Education advances innovative practice and leadership by generating, embracing, and promoting equitable and creative solutions.

Mission

The mission of the School of Education community is to collaboratively transform education. We:

- Create community through partnerships
- Promote and foster social justice and educational equity
- Advance innovative, student-centered practices
- Inspire reflective teaching and learning
- Conduct purposeful research
- Serve the School, College, University, and Community

BASIC TENETS OF OUR CONCEPTUAL FRAMEWORK

- Student centered education
- Research and theory specific to the program field inform practice
- Connections and links between coursework and application
- Strong engagement between faculty and candidates
- Co-teaching clinical practice
- Culturally responsive pedagogy and socially just outcomes

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.*

Chen: 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).

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, teacher candidates are expected to have competency in the applications covered in this course. Therefore, School of Education faculty will make assignments requiring teacher candidates to apply technology concepts and skills.

Course Prerequisites: Necessary Technical Competency Required of Students

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.

This course has a few online sessions. To successfully complete online activities, you need to use Cougar Courses (download course materials, watch presentations and videos, upload your assignments, post discussion responses and reply to peers' posts, join online chats, etc.). You need to use e-mail effectively and know how to attach files. It is best that you know how to make minor configuration changes in a Web browser (change font sizes, open and close tabs, allow or disable pop-ups and plug-ins, enable Cookies and JavaScript, etc.). In addition, you are expected to use office applications (such as a word processor, a presentation tool, a spreadsheet tool, an image viewer, a PDF reader, etc.), engage in collaboration, and apply Web literacy skills (conduct an effective search with a search engine, evaluate trustworthiness of web content, understand copyrights). Lastly, you may need to troubleshoot basic hardware and software problems.

Contact Information for Technical Support Assistance

If you need any technical support, contact IITS Student Help Desk: <http://www.csusm.edu/sth/>.

Course Objectives

Teacher candidates will demonstrate competency in:

- Meeting the International Society for Technology in Education Standards for Educators (2017) 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
- Understanding the affordances and limitations of educational use of technology.

REQUIRED TEXTS, MATERIALS AND ACCOUNTS

Required Texts

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

- Cloud-based storage (e.g., Google Drive or Dropbox) or a mass storage device, e.g., USB flash drive (16 GB or larger).
- Use of a digital video camera for the video project. Check-out is available from the Kellogg library on 2nd floor. Alternatively, a mobile device with a good video camera may be used.

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

Recommended Text (optional)

- Boss, S. & Krauss, J. (2014). *Reinventing project-based learning: Your field guide to real-world projects in the digital age* (2nd ed.). Washington, DC: International Society for Technology in Education.
- Kolb, L. (2017). *Learning first, technology second: The educator's guide to designing authentic lessons*. Washington, DC: International Society for Technology in Education.

Cougar Courses

Access from <https://cc.csusm.edu/>, where course materials and assignments are posted.

COURSE AND PROGRAM LEARNING OUTCOMES

Teacher Performance Expectation (TPE) Competencies

This course is designed to help candidates seeking a California teaching credential to develop the skills, knowledge, and attitudes necessary to assist schools and districts 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 3: Understanding and organizing subject matter for student learning

Particularly, the course will focus on the elements pertaining to using technology to facilitate students' equitable access to the curriculum.

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 Standards for Educators

The course engages students in working toward the following standards set forth by the International Society for Technology in Education Standards for Educators (2017) at a novice teacher's level of proficiency.

1. Learner

Educators continually improve their practice by learning from and with others and exploring proven and promising practices that leverage technology to improve student learning. Educators:

- a. Set professional learning goals to explore and apply pedagogical approaches made possible by technology and reflect on their effectiveness.
- b. Pursue professional interests by creating and actively participating in local and global learning networks.
- c. Stay current with research that supports improved student learning outcomes, including findings from the learning sciences.

2. Leader

Educators seek out opportunities for leadership to support student empowerment and success and to improve teaching and learning. Educators:

- a. Shape, advance and accelerate a shared vision for empowered learning with technology by engaging with education stakeholders.
- b. Advocate for equitable access to educational technology, digital content and learning opportunities to meet the diverse needs of all students.
- c. Model for colleagues the identification, exploration, evaluation, curation and adoption of new digital resources and tools for learning.

3. Citizen

Educators inspire students to positively contribute to and responsibly participate in the digital world. Educators:

- a. Create experiences for learners to make positive, socially responsible contributions and exhibit empathetic behavior online that build relationships and community.
- b. Establish a learning culture that promotes curiosity and critical examination of online resources and fosters digital literacy and media fluency.

- c. Mentor students in the safe, legal and ethical practices with digital tools and the protection of intellectual rights and property.
- d. Model and promote management of personal data and digital identity and protect student data privacy.

4. Collaborator

Educators dedicate time to collaborate with both colleagues and students to improve practice, discover and share resources and ideas, and solve problems. Educators:

- a. Dedicate planning time to collaborate with colleagues to create authentic learning experiences that leverage technology.
- b. Collaborate and co-learn with students to discover and use new digital resources and diagnose and troubleshoot technology issues.
- c. Use collaborative tools to expand students' authentic, real-world learning experiences by engaging virtually with experts, teams and students, locally and globally.
- d. Demonstrate cultural competency when communicating with students, parents and colleagues and interact with them as co-collaborators in student learning.

5. Designer

Educators design authentic, learner-driven activities and environments that recognize and accommodate learner variability. Educators:

- a. Use technology to create, adapt and personalize learning experiences that foster independent learning and accommodate learner differences and needs.
- b. Design authentic learning activities that align with content area standards and use digital tools and resources to maximize active, deep learning.
- c. Explore and apply instructional design principles to create innovative digital learning environments that engage and support learning.

6. Facilitator

Educators facilitate learning with technology to support student achievement of the 2016 ISTE Standards for Students. Educators:

- a. Foster a culture where students take ownership of their learning goals and outcomes in both independent and group settings.
- b. Manage the use of technology and student learning strategies in digital platforms, virtual environments, hands-on makerspaces or in the field.
- c. Create learning opportunities that challenge students to use a design process and computational thinking to innovate and solve problems.
- d. Model and nurture creativity and creative expression to communicate ideas, knowledge or connections.

7. Analyst

Educators understand and use data to drive their instruction and support students in achieving their learning goals. Educators:

- a. Provide alternative ways for students to demonstrate competency and reflect on their learning using technology.
- b. Use technology to design and implement a variety of formative and summative assessments that accommodate learner needs, provide timely feedback to students and inform instruction.
- c. Use assessment data to guide progress and communicate with students, parents and education stakeholders to build student self-direction.

ISTE (International Society for Technology in Education), 2017 (<https://www.iste.org/standards/for-educators>).

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)

COURSE REQUIREMENTS

Part I. Attendance & Professional Dispositions (20 points)

See the attendance policy (page 6) and professional dispositions (above).

Part II. Assignments and Online Modules

Assignment	Description	Pts	ISTE Standards
Community forum	Post a self-introduction on the class community forum. Respond to peers' postings. The purpose is community building.	5	3a
Reading reflections & comments	Reflect on course readings related to ISTE Standards and current issues in educational technology; maintain a professional blog, contribute to online discussions, and apply Netiquette.	32	1c, 3a
Apps integration plan	Use learning sciences to review educational apps and use appropriate apps to facilitate student learning.	10	3b
Maker project	Design and print a 3D model; reflect on the maker movement and design thinking in education.	10	5c, 6d
Google Drive collaboration	Use tools on Google Drive and collaborate on projects.	13	4a, 7c
Digital citizenship & cyber safety	Explore issues concerning information literacy, digital footprint, identity safety, cyber bullying, cyber predators, piracy, copyright, and fair use.	10	3c, 3d
Teacher website	Create an appealing, newsworthy, and interesting Web site for students and parents to support learning.	10	2b
Video project	Record video footage, edit video clips, and produce a video for classroom use.	20	4a, 5b
Computational thinking & coding	Explore computational thinking and use Scratch to create an inspiring educational project.	10	6c
Professional learning network	Use Web 2.0 tools or social media to build a professional learning network and engage in collaborative learning and professional growth.	10	1b, 4c
Professional learning reflection	Reflect on professional growth per the <i>ISTE Standards for Educators</i> ; set professional learning goals.	10	1a

*Assignments subtotal 140 points + Attendance & professional dispositions 20 points = 160 points.

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.

Assignment Policy

All assignments, requirements, due dates and scoring rubrics will be available through Cougar Courses. *You are responsible to successfully submit all assignments, review instructor's feedback, and 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 11 p.m. on the due date, unless specified otherwise.

Late assignment policy: 10% deduction for being one day late, 20% deduction two days late, 30% deduction three days late, and so on. After a week, no assignments will be accepted. If extraordinary circumstances occur, please contact the instructor BEFORE the deadline. You may request up to 3 extensions.

Course Grades

Final grades are calculated on the standard of:

A: 93% - 100% A-: 90% - 92% B+: 87% - 89% B: 83% - 86%
 B-: 80% - 82% C+: 77% - 79% C: 73% - 76% C-: 70% - 72%
 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.

Final Exam Statement

There is no final exam for this course.

School of Education Attendance Policy

Due to the dynamic and interactive nature of courses in the School of Education, all candidates are expected to attend all classes and participate actively. At a minimum, candidates 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. Should the candidate have extenuating circumstances, s/he should contact the instructor as soon as possible. *(Adopted by the COE Governance Community, December, 1997).*

Course Attendance Policy

You are expected to actively participate in in-class and online discussions, group work, presentations, and hands-on activities throughout the course. A positive professional disposition includes a willingness to consider and discuss new ideas objectively, curiosity, perseverance, and seriousness about improving one's self as a teacher. It can also include a sense of humor and social intelligence (e.g., the tact and ability to make others feel comfortable and to contribute)

According to the above policy and conditions, students missing more than one class session (including online module) cannot earn an A or A-. Students missing more than two class sessions cannot earn a B or B+. Students missing more than three classes cannot earn a C+. Arriving late or leaving early by more than 20 minutes counts as an absence. 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, UH 272, UH 273, 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.

TENTATIVE COURSE 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
S1 (1/22)	<ul style="list-style-type: none"> • Course intro, community building, & CC orientation • Today's learners • Makerspace: Design thinking and 3D printing, part 1
S2 (1/29)	<ul style="list-style-type: none"> • Makerspace: Design thinking and 3D printing, part 2 • ISTE Standards for Students and Educators • 1-to-1 technology and meaningful integration of mobile tools

	<ul style="list-style-type: none"> • Sign up for presentations • Online module for the next session: Blog assignment & reading groups
S3 (2/5) Online	<ul style="list-style-type: none"> • <i>Online module 1: Setting up a blog & reading reflections</i>
S4 (2/12)	<ul style="list-style-type: none"> • Visual learning: (1) Concept mapping, (2) Animoto • App presentations 1-5 • Online module for the next session: Teacher website
S5 (2/19) Online	<ul style="list-style-type: none"> • <i>Online module 2: Teacher website (part 1)</i>
S6 (2/26)	<ul style="list-style-type: none"> • Intro to personal learning network (PLN) • Social network tools for collaborative learning • App presentations 6~10 • Online module for the next session: Google Drive & apps
S7 (3/5) Online	<ul style="list-style-type: none"> • <i>Online module 3: Collaboration, Google Drive, and Apps</i>
S8 (3/12)	<ul style="list-style-type: none"> • App presentations 11-15 • Coding with Scratch
3/19	Spring break
S9 (3/26) Online	<ul style="list-style-type: none"> • <i>Online module 4: Teacher website (part 2)—Digital citizenship & cyber safety</i> • <i>(Optional) Scratch workshop</i>
S10 (4/2)	<ul style="list-style-type: none"> • Visual learning: Screencasting • App presentations 16~20 • Flipping classrooms
S11 (4/9) Online	<ul style="list-style-type: none"> • <i>Online module 5: Personal learning network</i>
S12 (4/16)	<ul style="list-style-type: none"> • Educational use of video • Video project: Planning & preparation for filming • Video editing using Apple iMovie
S13 (4/23)	<ul style="list-style-type: none"> • Video project: Filming • Video project: Editing (bring ear buds or a headset)
S14 (4/30) Optional	<ul style="list-style-type: none"> • Video project: Editing (<i>optional session: If you've completed the video project, use the class time to work on other projects.</i>)
S15 (5/7)	<ul style="list-style-type: none"> • Computational thinking • App presentations 21~25 • Professional learning reflection • Course evaluation

GENERAL CONSIDERATIONS

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 assignments must be original work, clear and error-free. All ideas/material 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 accordingly.

Academic Honesty and Integrity: Students are responsible for honest completion and representation of their work. Your course catalog details the ethical standards and penalties for infractions. There will be zero 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.

Refer to the full Academic Honesty Policy at:

http://www.csusm.edu/policies/active/documents/Academic_Honesty_Policy.html

Plagiarism

As an educator, it is expected that each candidate 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 seek approval for services by providing appropriate and recent documentation to the Office of Disability Support Services (DSS). This office is in Craven Hall 4300, contact 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. Alternatively, in order to ensure confidentiality, in a more private setting.

Credit Hour Policy Statement

Per the University Credit Hour Policy, students are expected to spend 3 hours in class and additional 6 hours outside of the classroom each week because this is a 3-unit course in a 15-week timeframe. The course has a few online sessions. The online tasks are designed to reflect an appropriate amount of time needed for the course credit.

All University 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. For this class please use APA Manual, 6th edition (see a guide at <http://owl.english.purdue.edu/owl/section/2/10/>).

Use of Technology

Candidates are expected to demonstrate competency in the use of various forms of technology (i.e. word processing, electronic mail, Moodle, use of the Internet, and/or multimedia presentations). Specific requirements for course assignments with regard to technology are at the discretion of the instructor. Keep a digital copy of all assignments for use in your teaching portfolio. All assignments will be submitted online, and some will be submitted in hard copy as well. Details will be given in class.

Electronic Communication Protocol

Electronic correspondence is a part of your professional interactions. If you need to contact the instructor, e-mail is often the easiest way to do so. It is my intention to respond to all received e-mails in a timely manner. Please be reminded that e-mail and on-line discussions are a very specific form of communication, with their own nuances and etiquette. For instance, electronic messages sent in all upper case (or lower case) letters, major typos, or slang, often communicate more than the sender originally intended. With that said, please be mindful of all e-mail and on-line discussion messages you send to your colleagues, to faculty members in the School of Education, or to persons within the greater educational community. All electronic messages should be crafted with professionalism and care.

Things to consider:

- Would I say in person what this electronic message specifically says?
- How could this message be misconstrued?
- Does this message represent my highest self?
- Am I sending this electronic message to avoid a face-to-face conversation?

In addition, if there is ever a concern with an electronic message sent to you, please talk with the author in person in order to correct any confusion.

Audio and Video Taping

Students may not record (audio or video) in this class except in accordance with ADA accommodations. Any recordings made in connection with a disability accommodation are for the student's personal academic use only and may not be distributed in any manner to any other individual.