# EDUC 422: TEACHING, LEARNING AND TECHNOLOGY
## Section 01, CRN 40011
## Fall 2020 (Aug 31 to Dec 12)

**Class Meetings:**
Synchronous online: Tuesdays 9-11:50 AM
Zoom link: https://csusm.zoom.us/j/93829127228

Asynchronous online learning activities on Cougar Courses

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**Office Hours:** After class or by Appointment

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## COURSE CATALOG DESCRIPTION

Required for all credential candidates. Focuses on developing knowledge and skills using technology for teaching and learning within the broader context of Science, Technology, Engineering, Arts, and Math (STEAM) education through fifteen (15) hours of field experience with children in K-12 educational settings. Certificate of clearance and TB risk assessment required prior to engaging field experience hours.
**\*Due to COVID-19, the field experience for EDUC 422 will be virtual. Certificate of clearance is still required, but TB risk assessment is not required.

## ADDITIONAL INFORMATION ON THE COURSE

This course is one of the three prerequisite courses for entering the teacher credential program at CSUSM. The other two prerequisite courses are EDUC350 Foundations of Teaching as a Profession and EDUC364 The Role of Cultural Diversity in Schooling. This is also a required course for the Minor in Education Studies.

### Remote Learning in Fall 2020: Some Considerations

Due to the COVID-19 pandemic, this class will be held online with both synchronous sessions and asynchronous online activities. Such remote teaching and learning brings many challenges (and flexibility). A challenge is community building. We will meet virtually via Zoom, and there will be discussion forums on Cougar Courses. All class members are expected to actively participate in both venues and pitch in to make this a wonderful class for everybody. **Note that effective learning happens in a caring community and that every class member is responsible for the collective learning of the class**.

**Access to Technology:** It's crucial for you to log into Cougar Courses a few times every week to stay engaged. If you have any technology needs such as access to the Internet or a computer, please contact IITS for Students. For example, you may be able to check out a laptop or a webcam.

**Camera On:** During a synchronous Zoom session, I'd love to see your face and get to know you. So I expect you to turn on your camera. However, if you have a good reason for not showing your face in a particular session, please let me know. See this quick guideline: Camera on? Camera Off?

**Civility:** This fall semester brings heightened concerns related to COVID-19, the political climate, social unrest, financial hardships, online learning, and many other issues. It will therefore be

especially important for all of us to be highly self-aware and self-monitoring to ensure that stress does not negatively influence the way we interact with others.  It is the expectation that students' words and actions will be professional, collaborative, courteous and supportive at all times. Instances of a failure to display a civil disposition, that violates CSUSM's student code of conduct, will be directed to the appropriate campus administrator.

**Cougar Care Network:** The pandemic can be stressful for many people. If you need help dealing with issues in your study, work, or life, use Cougar Care Network (CCN).  It provides information, connection to resources, advocacy and support for students dealing with personal, academic, financial or other challenges which may adversely affect their academic success and/or collegiate experience. Contact Cougar Care Network at (760) 750-7627 or via ccn@csusm.edu.

**Academic Honesty:** Each student shall maintain academic honesty in the conduct of their studies and other learning activities at CSUSM. The integrity of this academic institution, and the quality of the education provided in its degree programs, are based on the principle of academic honesty. The maintenance of academic integrity and quality education is the responsibility of each student within this university and the California State University system. Cheating and plagiarism in connection with an academic program at a campus is listed in Section 41301, Title 5, California Code of Regulations, as an offense for which a student may be expelled, suspended, put on probation, or given a less severe disciplinary sanction.

CSUSM has established a resources portal called CSUSM as One.  Check it out.

# COURSE PREREQUISITE

Due to the COVID-19 pandemic, this course is fully online with both synchronous sessions and asynchronous activities. The synchronous sessions require video conferencing through Zoom. To successfully complete online activities, you need to use Cougar Courses (download course documents, watch presentations and videos, upload your assignments, post discussion responses and reply to peers' posts, join online forums, 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, an image viewer, a PDF reader, etc.), engage in collaboration and file sharing (such as Google Drive & Apps), 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.

# COURSE OBJECTIVES

The course objectives are:
   a. Contextualize STEAM teaching and learning in authentic contexts.
   b. Develop and disseminate STEAM learning experiences.
   c. Implement, assess and reflect on STEAM learning experiences.
   d. Engage in instructional conversations and collaborations that enhance STEAM teaching and learning across content areas.
   e. Increase confidence and self-efficacy in STEAM teaching and learning.
   f. Increase understanding of design thinking.

# COURSE LEARNING OUTCOMES

In the end of this course, students will meet the International Society for Technology in Education (ISTE) Educator Standards. (see https://www.iste.org/standards/standards/for-students). These standards are:

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.
2. **Leader:** Educators seek out opportunities for leadership to support student empowerment and success and to improve teaching and learning.
3. **Citizen:** Educators inspire students to positively contribute to and responsibly participate in the digital world.
4. **Collaborator:** Educators dedicate time to collaborate with both colleagues and students to improve practice, discover and share resources and ideas, and solve problems.
5. **Designer:** Educators design authentic, learner-driven activities and environments that recognize and accommodate learner variability.
6. **Facilitator:** Educators facilitate learning with technology to support student achievement of the 2016 ISTE Standards for Students .
7. **Analyst:** Educators understand and use data to drive their instruction and support students in achieving their learning goals.


# COURSE MATERIALS & RESOURCES

There is not a required textbook. A few articles will be posted on Cougar Courses for reading assignments. You'll need the following resources:

1. **Google Drive:** This is an online file storage service provided by Google. It allows users to create, share, and collaboratively edit files stored in the cloud. Students should have access to Google Drive through their CSUSM e-mail. If you do not have access to Google Drive, you can create an account at drive.google.com. Directions on how to create an account are available at: https://support.google.com/drive/answer/2424384?hl=en

2. **Additional File Storage:** While you can create, upload, and store files using Google Drive, you may need to use an additional secondary cloud file storage service such as Dropbox (You can create an account at www.dropbox.com) and/or purchase a USB stick (16 GB or larger) to store large files.

3. **Cougar Courses:** Course materials, assignment instructions, and grades will be available on Cougar Courses site. Available at: https://cc.csusm.edu/. Be sure to set your preferred email in your profile settings of Cougar Courses so that you receive important announcements and communications. It is your responsibility to check the course site regularly and bring any issues immediately to the instructor's attention.

4. **Campus Resources:** In addition to attending class meetings, students may need to use campus resources for some assignments. It is the student's responsibility to make arrangements to have the technology resources available in order to complete scheduled assignments and due dates. 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.

5. **Backing Up Work:** Many technology platforms you will be using in this course are online and require a username and password. However, for some assignments you will need to take a screenshot or copy/paste your work into a word file, therefore it is important that you backup your work.

6. **Username & Password:** You will be using a variety of online platforms. Avoid creating a new username and password for each platform, instead, use the same username and password for all platforms for you to easily remember.

# UNIVERSITY AND SCHOOL OF EDUCATION POLICIES

**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, teacher 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.

**Professional Dispositions:** The California State University San Marcos School of Education fosters the development of the following professional dispositions among teacher candidates:
- *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.

**Academic Honesty Policy:** Students are 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 including resources found online. 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.

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.

**Writing Requirement:** The CSUSM writing requirement of 2500 words is met through the completion of course assignments. Therefore, all assignments 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.

Because it is important for teachers to be able to effectively communicate their ideas to students, parents, colleagues, and administrators, writing that is original, clear and error-free is a priority for the School of Education.

**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 4200, 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 or, in order to ensure confidentiality, in a more private setting.

DSS website is at http://www.csusm.edu/dss/. The CSUSM's accessibility policy can be found at https://www.csusm.edu/accessibility/.

# COURSE EXPECTATIONS

**Professional Demeanor:** It is expected that students will conduct themselves as professional adults who show respect to others, bring a positive attitude, and demonstrate productive engagement with people, process, and tasks to be completed. Professional demeanor includes, but not limited to, meeting the following expectations:

1. Arriving to all class meetings and field experience (practicum) **on time**. Emailing the instructor when you are unable to attend class meetings or when you will be late. If you come late to class more than twice in the semester, you will be considered absent. Consistently being late to class will not be tolerated. You cannot be late to the field experience.
2. Submitting required assignments **on time**. When you are unable to complete an assignment and need more time, e-mail the instructor and explain the reasons for requesting an extension, and provide a projected timeline for successful completion of the assignment.
3. Approaching problems with a disposition to find solutions rather than feeling helplessness or hopelessness when facing a challenge or difficulty. This applies to the learning and teaching of different technologies and other class and field work related issues.
4. Working respectfully and productively with peers, the instructor, children, and school site staff at all times.
5. Contributing to and being part of a supportive and collaborative teaching and learning environment. This includes helping classmates with technical and/or content issues, interacting with your peers, selecting one or two class "buddies" to ensure that you receive information and handouts if you miss a class, and help you keep track of the course assignments, upcoming tasks, and deadlines.

**Electronic Communication:** My goal is to respond to your e-mails as soon as possible. However, I have other job responsibilities and family obligations. While it is my intention to respond to all received e-mails in a timely manner, it might take up to 24 hours to respond to your e-mail.

**Online Etiquette:** Please keep in mind that electronic communication is a very specific form of communication, with its own nuances and etiquette. For instance, electronic messages sent with no title or greetings, 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 online 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 to correct any confusion. Be aware that messages sent within an online context may be open to misinterpretation. When concerned, meanings should be verified to clarify sender's intent.

# COURSE ACTIVITIES

**CLASS MEETINGS**
This course has both synchronous sessions and asynchronous online activities. (a) There will be required face-to-face class meetings via Zoom on Tuesday morning. The official class time is 9-11:50 AM, but we may or may not meet for the entire 2 hours and 50 minutes, depending on the tasks of a session. (b) Asynchronous online activities include but are not limited to reading, watching video lectures or tutorials, participating in discussion forums, designing artifacts, and so on. Per the University Credit Hour Policy, students are expected to spend a minimum of 6 hours *outside* of the classroom each week because this is a 3-unit course. The online tasks are designed to reflect an appropriate amount of time needed for the course credit.

**FIELD EXPERIENCE**
Due to COVID-19, the field experience will go online. You will choose a school site (from a list provided) and virtually engage in the school's after-school STEM program. Working with a small group of class members, you will guilde elementary or middle school students in exploring a series of STEM activities called "design challenges." More information will be given in class and on Cougar Courses.

# COURSE ASSIGNMENTS

**CITI Training:** As part of your field experience, you will take on the role of a teacher-researcher, collecting data (information) about children's STEM learning through photos, field notes, and interviews. You will complete the CITI (Collective Institutional Training Initiative (CITI) and receive a certificate upon completing the appropriate modules and submit the certificate to the instructor. The modules will provide information about procedures and guidelines that must be followed when doing research in educational settings with children.

**Certificate of Clearance:** A Certificate of Clearance is issued by the Commission on Teacher Credentialing (CTC) to credential program candidates. Title 5 regulations require that an application for Certificate of Clearance be filed to determine whether or not a candidate meets the state standards for character and fitness to teach in California's public schools. A Certificate of Clearance is valid for five years. Additional information about the Certificate may be obtained here.  You are required to submit documentation of the Certificate of Clearance to your instructor.

**Discussion Forums:** There will be discussion forums on Cougar Courses. You will submit an initial post to share your thoughts then reply to at least two of your peers' posts. Your replies are expected to substantive and move beyond saying "good job" (See the "norms for collaboration in discussion forums" link in cougar courses for additional details on how to effectively communicate in online discussion forums).

**Field Experience Reflections:** At the end of each after-school session with children, students will submit a reflection that documents what happened during the session and their reflections about the session.

**Create Your Own Design Challenge:** This assignment has a few parts. (a) You will work in a group to **create a design challenge** that integrates and emphasizes technology. You will set learning goals that are met with the design challenge and the grade level(s) that are targeted. The description of the design challenge needs to be clear so that a fellow educator can follow the description and engage students in

the design challenge. (b) Additionally, you will put together **a short presentation** of your design challenge.

**Instructional Video:** Based on the design challenge you created, you will make an instructional video (3-8 min) and share it using social media so that other teachers can implement the lesson in their own classrooms.

**Teaching, Learning, and Technology Portfolio:** You will build a website as a means to document your work, showcase your learning, and things you have created as a future educator. Your portfolio (i.e. website) must include: (1) your bio with a photo, (2) the design challenges you complete for the course, (3) your own design challenge and presentation, (4) your instructional video, (5) a narrative about how you met at least two ISTE standards for educators, and (6) a written plan for how you will integrate STEAM powered by Maker Education in your future classroom.

**All assignments are due by 23:59 pm on the due date.**

# GRADING

It is expected that work will be turned in on time and course expectations will be met. Please discuss individual issues with the instructor promptly if extraordinary circumstances prohibit you from turning in assignments on time, going to the school sites, or participate in course activities. Points will be deducted if assignments are submitted late (10% penalty per day late) **except for the field notes assignment. If you submit your field notes past 48 hours mark, you will receive no credit**.

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

You are responsible to track your grades and progress in the course by logging in Cougar Course.

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

| Assignments | Points | Percentage |
|:---:|:---:|:---:|
| **CITI Training** | **10** | **4%** |
| **Certificate of Clearance** | **10** | **4%** |
| **Discussion Forums**<br>(10 points x 8) | **90** | **36%** |

| | | |
|---|---|---|
| **Field Experience Reflections**<br>(10 points x 6) | **60** | **24%** |
| **Create Your Own Design Challenge:**<br>1. Description of Design Challenge (25 points)<br>2. Presentation (5 points) | **30** | **12%** |
| **Instructional Video** | **30** | **12%** |
| **Teaching Learning & Technology Portfolio** | **20** | **8%** |
| **Total** | **250** | **100%** |

# COURSE SCHEDULE

<u>Please note that modifications may occur at the discretion of the instructor and based on coordination with the school sites.</u> Any changes to assignments and activity schedule will be announced in class OR students will be notified via e-mail through the course announcements in Cougar Courses. To successfully complete this course, *all assignments must be completed* at an acceptable level noted on assignment directions. **<u>All assignments are due by 23:59 pm on the due date</u>**.

| Week | Date | Topics | Due Dates |
|---|---|---|---|
| 1 | Sept. 1 | ● Introductions & course overview<br>● Field experience sign-up | Discussion forum: Learning community<br><br>CITI Training: <u>Due Monday, Sept. 7</u> |
| 2 | Sept. 8 | ● Intro to STEAM powered by Maker Education<br>● Design Thinking: 5 steps | Discussion forum: Making a "Most Magnificent Thing" |
| 3 | Sept. 15 | ● Review of G Suite<br>● Teachers as researchers: Taking field notes<br>● Facilitate STEM exploration | Discussion forum: Asking good questions |
| 4 | Sept. 22 | Practice Design Challenge 1 | Discussion forum: Design challenge 1 |

| 5 | Sept. 29 | Prepare for Design Challenge 1 implementation | **Certificate of Clearance** Due Monday, Sept. 28 |
|---|---|---|---|
| 6 | Sept. 29 - Oct 5 | **Field Experience:** Implement Design Challenge 1  Practice Design Challenge 2 | Field Experience Reflection #1 Due within 48 hours of implementation  Discussion forum: Design challenge 2 |
| | Oct. 6 | Prepare for Design Challenge 2 implementation | |
| 7 | Oct.  6-12 | **Field Experience:** Implement Design Challenge 2  Practice Design Challenge 3 | Field Experience Reflection #2 Due within 48 hours of implementation  Discussion forum: Design challenge 3 |
| | Oct. 13 | Prepare for Design Challenge 3 implementation | |
| 8 | Oct. 13-19 | **Field Experience:** Implement Design Challenge 3  Practice Design Challenge 4 | Field Experience Reflection #3 Due within 48 hours of implementation  Discussion forum: Design challenge 4 |
| | Oct. 20 | Prepare for Design Challenge 4 implementation | |
| 9 | Oct. 20-26 | **Field Experience:** Implement Design Challenge 4  Practice Design Challenge 5 | Field Experience Reflection #4 Due within 48 hours of implementation  Discussion forum: Design challenge 5 |
| | Oct. 27 | Prepare for Design Challenge 5 implementation | |
| 10 | Oct. 27- Nov 2 | **Field Experience:** Implement Design Challenge 5  Practice Design Challenge 6 | Field Experience Reflection #5 Due within 48 hours of  implementation  Discussion forum: Design challenge 6 |
| | Nov.. 3 | Prepare for Design Challenge 6 implementation | |
| 11 | Nov.3-9 | **Field Experience:** Implement Design Challenge 6 | Field Experience Reflection #6 Due within 48 hours of implementation |

| | Nov. 10 | <ul><li>Holistic reflection on field experience</li><li>Create a design challenge</li></ul> | |
|---|---|---|---|
| 12 | Nov. 17 | <ul><li>Create a design challenge (con't)</li><li>Storyboarding the instructional video</li></ul> | |
| 13 | Nov. 24 | **Thanksgiving. No class meeting.** | |
| 14 | Dec. 1 | <ul><li>Recording the instructional video</li><li>Editing & publishing the instructional video</li></ul> | Create Your Own Design Challenge <u>Due Tuesday, Dec 1</u> |
| 15 | Dec. 8 | <ul><li>Lesson presentations</li><li>Construct a Teaching Learning & Technology Portfolio</li></ul> | Instructional Video Presentation slides <u>Both Due Tuesday, Dec 8</u> |
| 16 | Dec. 15 | **Finals Week. No class meeting.** | Teaching Learning & Technology Portfolio <u>Final Submission Dec 15</u> |