

E ED 480

CALIFORNIA STATE UNIVERSITY, NORTHRIDGE  
**EED 480 Social Studies and Science Curriculum Methods**  
**SPRING 2024**

COURSE CODE: EED 480  
COURSE TITLE: Social Studies and Science  
Curriculum Methods  
INSTRUCTORS:  
CLASS LOCATION:  
TIME:  
TICKET #:

OFFICE: \*By appointment only  
TELEPHONE NUMBERS:  
OFFICE: (818) 677-2621  
DEPARTMENT: (818) 677-2621  
OFFICE HOURS: Email and by  
appointment only  
Email:

**Michael D. Eisner College of Education Conceptual Framework**

The faculty of the Michael D. Eisner College of Education, regionally focused and nationally recognized, is committed to ***Excellence through Innovation***. We believe excellence includes the acquisition of professional knowledge, skills, and dispositions and is demonstrated by the growth and renewal of ethical and caring professionals - faculty, staff, candidates - and those they serve. Innovation occurs through collaborative partnerships among communities of diverse learners who engage in creative and reflective thinking. To this end we continually strive to achieve the following competencies and values that form the foundation of the Conceptual Framework.

\*We value academic **excellence** in the acquisition of professional knowledge and skills.

\*We value the use of **evidence** for the purposes of monitoring candidate growth, determining the impact of our programs, and informing ongoing program and unit renewal. To this end we foster a culture of evidence.

\*We value ethical practice and what it means to become **ethical and caring professionals**.

\*We value **collaborative partnerships** within the College of Education as well as across disciplines with other CSUN faculty, P-12 faculty, and other members of regional and national educational and service communities.

\*We value diversity in styles of practice and are united in a dedication to acknowledging, learning about, and addressing the varied strengths, interests, and needs of **communities of diverse learners**.

\*We value **creative and reflective thinking** and practice.

**Course Description:**

This course addresses the skills and understandings needed to effectively plan, implement, and evaluate instructional programs in science and social studies for diverse student populations that reflect the California Science and History/Social Science Frameworks and Academic content standards. Designed to provide teacher candidates with models of instruction consistent with our current understanding of learning processes, opportunities to develop related process skills, use of technology and the teaching and learning of Science and Social Studies. Specific learning experiences will include short and long-term planning, skills and strategies of teaching both science and social studies content. In addition, future teachers will develop related process skills and plan instructional models to include all learners, including children from diverse cultural and linguistic backgrounds, developmental levels and learning styles, and students who have special needs.

***DISPOSITIONS***

In accordance with state and national standards, students in the Department of Elementary Education at California State University, Northridge are assessed on knowledge, performance, and professional dispositions. Faculty in the Department of Elementary Education fully expect students to be successful and meet all program standards, but poor academic preparation, poor academic work, poor performance, or observed professional dispositional deficiencies will constitute grounds for a decision regarding separation from the teacher preparation program (or any other Elementary Education program) at California State University, Northridge. The Department of Elementary Education has adopted a process for ensuring that all CSUN students uphold standards of knowledge, performance, and professional dispositions recognized by the education profession. Obtain detailed information about the involuntary delay/withdrawal process, the Statement of Concern form, student appeals, and the list of Qualities Important to Future Teachers and Educational Professionals at

<http://www.csun.edu/sites/default/files/Fifth-Year-Traditional-Student-Teaching-Handbook.pdf>

**WRITTEN ASSIGNMENTS**

All written assignments will be typed or completed on a word processor in 12-point conventional font, double-spaced. Conventional spelling, grammar, and punctuation are required.

**ACADEMIC DISHONESTY**

Academic dishonesty includes cheating, fabrication, and plagiarism. Cite all sources used in your assignments, lessons, and units.

PLEASE WRITE DOWN TWO STUDENTS YOU MAY CONTACT IN CASE YOU ARE ABSENT.

**Course Objectives:**

Upon completing this course, credential candidates should:

1. Demonstrate understanding of and ability to plan using the state adopted academic content standards and frameworks in history-social science and science using Backwards design model. [TPE 3, 7]
2. Develop a sound theoretical basis for engaging students in social studies and science process skills using the inquiry process [TPE 3]
3. Apply an understanding of the structure of science and social studies and their interrelationships to planning and instruction. [TPE 3, 4]
4. Use concepts, principles, skills reflected in the California Content Standards and all other standards to design well-balanced, authentic lessons and units. [TPE 3, 7]
5. Engage students in dialogue and activities that connect the historical, cultural and sociological connection between science and social studies around “critical issues” in society that emphasizes critical thinking. [TPE 4, 6]
6. Examine the attitudes and dispositions for creating a positive learning environment in the sciences and history-social science classroom. [TPE 4]
7. Utilize formal and informal, as well as formative and summative assessments to determine student progress. [TPE 5]
8. Demonstrate an understanding of the knowledge, skills, and attitudes needed to work effectively with English Language Learners, culturally diverse students, and atypically developing learners. [TPE 1, 7]
9. Demonstrate an ability to use multiple sources (e.g., primary documents, demonstrations, experiments) to enhance learning and to balance the focus of instruction. [TPE 4, 7]
10. Identify and utilize a variety of grouping situations and positive classroom management techniques in the science/history-social science classroom. [TPE 2, 4]
11. Balance theory, research, and practice in science and history-social sciences.[TPE 3, 6]

**V. COMMON CORE AND SOCIAL STUDIES’ SKILLS INTEGRATION**

Intersection with new common core standards with expository text

Describe the connection between a series of historical events, scientific ideas or concepts, or steps in technical procedures in a text.

Compare and contrast the most important points presented by two texts on the same topic.

1. Use information gained from illustrations (e.g., maps, photographs) and the words in a text to demonstrate understanding of the text (e.g., where, when, why, and how key events occur).
2. RI.3.8. Describe the logical connection between particular sentences and paragraphs in a text (e.g., comparison, cause/effect, first/second/third in a sequence).
3. RI.3.9. Compare and contrast the most important points and key details presented in two texts on the same topic.

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4. Explain how an author uses reasons and evidence to support particular points in a text.
5. Determine the meaning of general academic and domain-specific words and phrases in a text relevant to a *Grade 5 topic or subject area*.
6. RI.5.5. Compare and contrast the overall structure (e.g., chronology, comparison, cause/effect, problem/solution) of events, ideas, concepts, or information in two or more texts.
7. RI.5.6. Analyze multiple accounts of the same event or topic, noting important similarities and differences in the point of view they represent.

### ***Integration of Knowledge and Ideas***

RI.5.7. Draw on information from multiple print or digital sources, demonstrating the ability to locate an answer to a question quickly or to solve a problem efficiently.

### ***Range of Reading and Level of Text Complexity***

RI.3.10. By the end of the year, read and comprehend informational texts, including history/social studies, science, and technical texts, at the high end of the grades 2–3 text complexity band independently and proficiently.

### **Assignments**

<b>Course Assignments</b>	<b>Percentage</b>	<b>Due</b>
Participation	15%	Ongoing
Critical Issues Assignment	10%	Week 6
Social studies lesson plan + PACT CAT	25%	Week 8
Science lesson plan + PACT CAT	25%	Week 14
Integrated Unit and Presentation	25%	Week 15

**\*\*All assignments must be turned in on time and will deduct .3 rubric points for each day assignment is late. No assignments will be accepted after 1 week late. No late submissions of units will be accepted**

The following grading scale will be used to determine final course grades.

5.0 - 4.7 A	4.4 – 4.2 B+	3.8 – 3.6 B-	3.2 – 3.1 C	2.7- 2.5 D+	2.1 – 1.9 D-
4.6 - 4.5 A-	4.1 – 3.9 B	3.5 – 3.3 C+	3.0 –2.8 C-	2.4 – 2.2 D	1.8- below F

### ***Textbook & Course Readings***

1. Burstein, J. H., & Knotts, G. (2021). *Reclaiming social studies for the elementary classroom: Integrating Culture through the arts, 3<sup>rd</sup> Edition*. Dubuque, IA: Kendall-Hunt Publishing.
2. Science articles (Koch chapters, etc.) will be uploaded on Moodle
  - Download California Content History-Social Science and Science Standards from: <http://www.cde.ca.gov/board>
  - NGSS Standards: [www.cde.ca.gov/.../ngssstandards.asp](http://www.cde.ca.gov/.../ngssstandards.asp)

### ***Recommended Texts:***

- Diaz-Rico & Weed, (2015). *The crosscultural language and academic development handbook*. 5<sup>th</sup> Ed. New York, NY: Pearson Education.
- Echevarria,J., Vogt, M.,& Short,D. (2012). *Making content comprehensible for English learners: The SIOP model*. 4th Ed. Boston, MA: Pearson, Allyn & Bacon.
- Herrell, A.L. (2015). *Fifty strategies for teaching English language learners*. 5<sup>th</sup> Ed. Columbus, OH: Merrill

### **Course Assignments:**

1. ***Class Participation*** - Education is a social endeavor and your attendance in class is important. As a member of a learning community, you will be expected to contribute in relevant ways to discussion, insight, and the critique of ideas posed and proposed in class. Therefore, your attendance, class participation, and comportment will all be factored into your earned class participation and commitment to learning points. There will be an allowance for up to **two** absences for medical and emergency situations. **When you miss the 3<sup>rd</sup> class, the highest grade you will receive is a B, 4 classes missed, the highest possible is a C and 5 classes missed, the highest possible is a D.** If you are ill and cannot come to class, please call and leave a message at (818) 677-2621 and it is your responsibility to **have a classmate collect materials and assignments for you.** Please turn off all cell phones and electronic devices including Laptops during class time to respect the classroom atmosphere. Also, please arrange for all childcare prior to class. No children are to attend class for legal and safety reasons noted by the university policy.

2. ***Critical Issue Photo Assignment-*** This assignment requirement allows students an opportunity to investigate a critical issue in society as it relates to their social studies and science teaching practices. A 2-3 page written paper is required to describe an integrated discussion of a critical issue from a social studies and science perspective. Teacher candidates are asked to photograph a series of snapshots that visually identifies a critical issue in your community. Photograph several pieces of evidence that show how this issue is seen and then write your synopsis to explain how science and social studies can be a part of the solution for solving the critical issue. Include a section on how you would approach or teach about this critical issue with students.

TPEs: 1.3, 1.4, 1.5, 2.5, 3.6, 5.1

**3. Social Studies Lesson Plan-** Design a lesson plan using the California Content Standards for History-Social Science. This lesson will be in inquiry lesson that teaches skills, content, or both to K-6 students. Include 3-5 lesson ideas, with 3 fully developed. This assignment includes a **PACT CAT** commentary to fulfill California State Assessment requirement. Include considerations for ELLs, Special needs, and gifted children.

TPEs: 1.4, 1.5, 2.5, 2.6, 3.1, 3.2, 3.3, 3.5, 3.6, 4.1, 4.2, 4.7, 5.1, 5.7, 5.8

**4. 5E Science Lesson Plan-** Design a science lesson using the **5-E Science Learning Cycle** model presented in Chapter 13 of Koch's *Science Stories*. Your lesson must conform to the Elementary Education lesson plan format and meet the following criteria:

- a) Your lesson plan must be designed to teach a specific science concept through meaningful science inquiry, e.g., exploring a concept through guided inquiry, conducting an experiment. It will not be sufficient to design a lesson to review vocabulary, teach students how to use a balance or microscope, etc.
- b) Your lesson plan must address the needs of all students in the class, either through universal design principles or through differentiating the curriculum for different populations of students. **Make sure that you pay attention to English learners, students with disabilities, the gifted, and apply knowledge of the range and characteristics of typical and atypical child development.**
- c) A partial list of requirements appears below:
  1. Identification of grade level(s) for which the lesson is written;
  2. Management decisions regarding lesson, e.g., group size, group roles, room arrangement, materials distribution, etc.);
  - 3. Identification of ELD levels, modifications from 504 plan (IEP), etc.;**
  4. State of CA science standards or NGSS for California that the lesson addresses;
  5. Statement of objectives (reflecting student learning) that the lesson addresses;
  6. Each of the five phases of the Learning Cycle format (including Evaluation);
  7. Strategies for assessing student outcomes of the lesson;
  8. Identification of at least three science websites (technology resources) coinciding with lesson topic.

TPEs: 1.4, 1.5, 2.5, 2.6, 3.1, 3.2, 3.3, **3.5**, 3.6, 4.1, **4.2**, **4.5**, 4.7, 5.1, 5.7, 5.8

**5. Integrated Social Studies & Science Unit** - Design an Integrated Social Studies and Science Unit that describes a coherent teaching plan of a minimum of **8 lessons that supports the integration of history/social science and science**. It must: a) **draw upon the California Frameworks' and NGSS and Social studies content standards' curricular approaches**, b) draw upon learning theories presented in readings and class, c) provide historical context, d) include an assessment plan, e) **address English language learners**, and f) **accommodate students with special needs including gifted/talented students**, g) **reading, writing, listening, and speaking in SS/Sci**

TPEs: 1.3, 1.4, 1.5, 2.5, 2.6, 3.1, 3.2, 3.3, 3.5, 3.6, 4.1, 4.2, **4.3**, 4.7, 5.1, 5.7, 5.8, **7.9**

Wk	Date	Topics and Assignments	Readings to prepare for next week	TPEs
1	1-25	<ul style="list-style-type: none"> <li>· Introductions and Course Overview-Syllabus</li> <li>· Why should teachers integrate Social Studies &amp; Science?</li> <li>· Social Studies and Science National Frameworks Overview</li> <li>· NGSS and CCSS: working across contexts</li> <li>· Who are YOU and what do YOU think of Science and Social Science? And who do you WANT to be?</li> <li>· What made you want to learn tonight? (HINT: the environment I created!)</li> <li>· Speaking the (academic) language of Science and Social Science, setting learning goals, and working with colleagues</li> </ul>	1. Read <i>Reclaiming</i> - Chapters 1 and 5 2. Read K-6 content standards for social studies	2.2, 3.1, 3.2, 3.5, 4.7, 6.1, 6.2, 6.3, 6.7
2	2-1	<ul style="list-style-type: none"> <li>· Processes in science and social studies</li> <li>· Integrating literacy instruction in Sci/SS</li> <li>· What is inquiry? Inquiry based learning</li> <li>· Learning Objectives – writing objectives with matching assessment</li> </ul>	1. Read <i>Reclaiming</i> - Chapter 7 and 10. 2. Read Hurd article	1.1, 1.4, 1.5, 2.5, 4.7, 5.1, 7.4
3	2-8	<ul style="list-style-type: none"> <li>· What are critical issues? Critical issue activity- Hurd article</li> <li>· Who are our students and what is critical to them? Looking at funds of knowledge and engaging students in learning</li> <li>· STEM themes with critical issues, inquiry, and problem solving</li> <li>· Learning theory in social studies and science</li> <li>· Lesson planning models—5E and inquiry</li> <li>· How do we maintain high expectations if students are not yet critical thinkers?</li> </ul>	1. Read <i>Reclaiming</i> - Chapters 11 and 12	1.1, 1.3, 1.4, 1.5, 2.5, 3.2, 4.7, 6.1
4	2-15	<ul style="list-style-type: none"> <li>· Primary Sources- Defined and types of sources</li> <li>· How to use primary sources and MTSS supports with various populations (ELLs, atypical students, gifted)</li> <li>· Accessing the community's primary sources</li> <li>· Technology in social studies (apps, websites, modules): let's explore how to create access and engagement!</li> <li>· Digital tools and digital literacy; finding secure resources</li> <li>· Historical inquiry</li> <li>· What types of questions can we ask about historical events?</li> </ul>	1. Read <i>Reclaiming</i> - Chapter 6 and 8. 2. Work on lesson ideas	1.4, 1.6, 3.5, 3.6, 3.7, 4.5, 4.6, 4.7, 4.8
5	2-22	<ul style="list-style-type: none"> <li>· Plan, design, implement, and monitor instruction</li> <li>· Assessment-Criteria, rubrics, checklists, S self-assessment</li> <li>· Assessing short- and long-term: Adjusting instruction</li> <li>· Sharing assessment with parents and families</li> <li>· Geography and Geology: Content, Skills, and Lesson examples—using Google maps and GIS for geography</li> <li>· Sample lesson ideas</li> <li>· Using hands-on lessons- Focus ELLs and students with special needs (IEPs)</li> </ul>	1. Work on lesson plan with PACT 2. Work on critical issues assignment	1.4, 1.6, 1.8, 3.1, 3.2, 3.3, 3.5, 3.6, 3.7, 3.8, 4.1, 4.2, 4.3, 4.4, 4.5, 4.7, 4.8, 5.1, 5.2, 5.3, 5.4, 5.7, 5.8

6	2-29	<ul style="list-style-type: none"> <li>• Social studies integration with other content areas</li> <li>• STEAM in social studies lessons and units</li> <li>• Introduce arts integration</li> <li>• (Academic) language across contents</li> <li>• Unit planning- long term planning</li> <li>• Knowing/assessing your students in the short- and long-term</li> <li>• Knowing/assessing all students (ELLs, special needs) using rubrics and data; planning future instruction, modification, and accommodations (esp. RE: IEP, ELD)</li> <li>• Creating learning environments that promote productive student learning, reflect diversity and multiple perspectives</li> <li>• Thematic units and planning the environment</li> <li>• Positive behavior narration in the learning environment</li> <li>• Critical issue units—focus on societal problem</li> </ul>	1. Work on lesson and unit plans with PACT <b>2. CRITICAL ISSUES ASSIGNMENT DUE</b>	1.4, 1.7, 2.2, 2.3, 2.6, 3.1, 3.2, 3.3, 3.5, 4.1, 4.3, 4.7, 5.1, 5.2, 5.3, 5.4, 5.7, 5.8
7	3-7	<ul style="list-style-type: none"> <li>• Project-based learning- define, processes, examples</li> <li>• Service learning- how can service learning work with critical issues? Connecting SS/Sci to real-life contexts.</li> <li>• Re-directing learning (progress monitoring; dip-sticking) while/and staying positive</li> <li>• Promoting student access to subject matter, making accommodations and/or modifications</li> <li>• Planning and modifying literacy instruction in Sci/SS- using MTSS to guide</li> <li>• Research skills: teaching discernment</li> <li>• Sample lessons</li> </ul>	1. Work on lesson and unit plans 2. Finish PACT commentary	1.3, 1.4, 1.8, 2.6, 3.2, 3.3, 3.6, 3.7, 3.8, 4.1, 4.2, 4.3, 4.4, 4.5, 4.7, 4.8, 5.1, 5.2, 7.2
8	3-14	<ul style="list-style-type: none"> <li>• <b>SOCIAL STUDIES LESSON PLAN DUE</b></li> <li>• Arts integration- Science and social studies example lessons</li> <li>• Multicultural Education-connecting to student interest: books and examples</li> <li>• Creating the environment for multicultural and culturally relevant learning</li> <li>• Using student self-assessment</li> </ul>		1.3, 1.4, 1.7, 2.2, 2.3, 3.1, 4.7, 5.3
	3-21	<b>SPRING BREAK</b>		
9	3-28	<ul style="list-style-type: none"> <li>• PCK—Science knowledge for teachers: knowing science, knowing <u>about</u> science</li> <li>• Nature of science</li> <li>• NGSS Standards Examination —Disciplinary Core Ideas (DCI), Cross-Cutting Concepts (CCC), and Scientific Practices (SP)</li> </ul>	Koch, Chapter 1 through 3 <b>***draw your scientist before reading chapter 2***</b>	1.4, 3.1, 4.7, 5.1, 6.7
10	4-4	<ul style="list-style-type: none"> <li>• Modeling ethical conduct for students and Examining Bias: Scientist drawing</li> <li>• Providing a supportive Learning Environment for all students (how to target ELD)</li> </ul>	Koch chapter 4 and 5	1.4, 1.6, 3.5, 6.2, 6.5

		<ul style="list-style-type: none"> <li>Reconciling faith/belief with science and knowing your community of learners</li> <li>Earth Science--Rocks and Minerals</li> <li>English Language Learners (ELL's)—science strategies</li> <li>Explore Physical Science: Chemical Properties</li> </ul>		
11	4-11	<ul style="list-style-type: none"> <li><b>STEM and STEAM: Integrating with all art forms</b></li> <li>Experimental design; students' alternative conceptions</li> <li>Physical Science: Forces, motion and energy (pendulums); experimental design; students' alternative conceptions; Phases of the moon; Electricity and magnetism (Batteries and Bulbs)</li> </ul>	1. Koch chapters 11-13 1. Read O. Lee Article	1.4, <b>1.7</b> , 3.1, 3.2., 3.3, 4.2, 4.3, 4.7, 4.8, 5.1, 6.7
12	4-18	<ul style="list-style-type: none"> <li>Planning for teaching science in the elementary classroom: scope and sequence around themes</li> <li><b>Establish, maintain, and monitor inclusive learning environments</b></li> <li><b>Asset-based pedagogies, inclusive approaches, and culturally sustaining practices that promote literacy in SS/Sci</b></li> <li>PBL in science and STEM</li> <li>Scientific Models—Phases of the moon and step book</li> <li>Different perspectives on teaching science</li> </ul>	Koch Chapter 8	1.4, 2.2., <b>2.3</b> , 6.1, 6.5, <b>7.3</b>
13	4-25	<ul style="list-style-type: none"> <li>Life Science: Lifecycles and adaptations</li> <li>Curriculum materials</li> <li><b>Instruction promoting a range of communication strategies that encourages student participation</b></li> <li>Assessing science learning</li> <li><b>5-E Science lesson plan due</b></li> <li><b>Happy DNA Day!!!</b></li> </ul>	Koch 9, 10, and 14	1.4, 3.1, 4.2, 4.3, <b>4.7</b> , 5.1
14	5-2	<ul style="list-style-type: none"> <li>Science and Social Studies integrated lessons</li> <li>Wrap-up, reflections on teaching Social Studies &amp; Science</li> <li>Educating the whole student</li> <li><b>Critical reading, writing, listening, and speaking</b></li> <li><b>Promote students' oral and written language development by attending to disciplinary academic language and vocabulary</b></li> <li><b>Professional roles and responsibilities</b></li> <li>Post assessment</li> </ul>	<b>Finish Unit Plan</b>	1.4, 6.1, 6.2, 6.5, <b>6.6</b> , <b>7.6</b> , <b>7.7</b>
15	5-9	<ul style="list-style-type: none"> <li>Final Unit Presentations</li> <li>How are you the same/different teachers of Science and Social Science today that you were 15 weeks ago?</li> <li><b>Recognizing our values and biases</b></li> <li><b>UNIT PLAN AND PACT CAT COMMENTARY DUE</b></li> </ul>	<b>UNIT PLAN DUE TODAY</b>	6.1, <b>6.2</b> , 6.3, 6.5, 6.6

## LEGEND:

1.1	Class 3: Page 7
1.3	Class 7: Page 8
1.4	Class 4: Page 7
1.5	Class 3: Page 7
1.6	Class 10: Page 8
1.7	Class 11: Page 9
1.8	Class 5: Page 7
2.2	Class 6: Page 8
2.3	Class 12: Page 9
2.5	Class 3: Page 7
2.6	Class 6: Page 8
3.1	Class 1: Page 7
3.2	Class 7: Page 8
3.3	Class 5: Page 7
3.5	5E Lesson Plan: Page 6
3.6	Class 4: Page 7
3.7	Class 4: Page 7
4.1	Class 6: Page 8
4.2	5E Lesson Plan: Page 6
4.3	Integrated Unit: Page 6
4.5	5E Lesson Plan: Page 6
4.7	Class 13: Page 9
4.8	Class 4: Page 7
5.1	Class 6: Page 8
5.2	Class 7: Page 8
5.3	Class 8: Page 8
5.7	Class 6: Page 8
5.8	Class 6: Page 8
6.1	Class 1: Page 7
6.2	Class 15: Page 9
6.3	Class 1: Page 7
6.5	Class 10: Page 8
6.6	Class 14: Page 9
7.2	Class 7: Page 8
7.3	Class 12: Page 9
7.4	Class 2: Page 7
7.6	Class 14: Page 9
7.7	Class 14: Page 9
7.9	Integrated Unit: Page 6