##### EED 480 Social Studies and Science Curriculum MethodsSPRING 2022

Instructor: Dr. Susan Belgrad



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| HYBRID CLASS OFFICE: (818) 677-4901DEPARTMENT: (818) 677-2621OFFICE HOURS: ED 2102MONDAY/WEDNESDAY   by appointmentsusan.belgrad@csun.edu |
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# 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: EED 480. Science/Social Science Curriculum and Methods**

**Engagement in Environmental Awareness/Global Learning
Purpose and Course Definition:**

In this course, focus will be placed on environmental literacy and sustainability practices. EED 480 students will have the opportunity to engage in learning that addresses important knowledge about the climate crisis, environmental justice, CSUN Sustainability, and how California State Standards and Environmental Literacy recommendations promote the integration of science and social studies content in addressing the climate crisis. Together, we will become aware of how to promote global citizenship and prepare to engage students in observations, activities and lessons that focus their attention on how their families, schools and communities can reduce their carbon footprint, conserve water and reduce waste (including plastics that do not biodegrade in landfills). Students will work in teams and then individually to design social studies, science and STEAM-integrated problem (project) based learning (PBL) that incorporate a variety of academic theories to achieve this course’s specific learning objectives.

**This course addresses the critical skills and understandings** that Multiple Subject Credential and Preliminary Education Specialist Credential candidates need in order to effectively plan, implement, and evaluate instructional programs in science and social science for diverse student populations that reflect the California Science and Social Science (CSSS) Frameworks, Common Core Standards (CCSS), Academic Content Standards, and the Next Generation Science Standards (NGSS) and the CA Environmental Principles and Concepts.

 It is designed to provide teacher candidates with emerging models of inquiry-based instruction such as problem-based learning (PBL), which includes cooperative learning structures that are consistent with our current understanding of student learning processes. Participants will have opportunities to develop important process skills, use of computer science and other technologies associated with integration of science, technology, engineering, the arts and mathematics (STEAM). Participants will learn about environmental literacy by engaging in the instructional models of teaching and learning in science and social science that promote effective inquiry and active engagement in climate justice.

 Furthermore, the course is designed to assist teacher candidates in developing strategies for teaching diverse children (those of widely differing cultural and linguistic heritages, developmental levels and learning styles) and special populations to ensure equal access to the core curriculum. This course is restricted to Integrated Teacher Education Program candidates admitted to the credential program.

**STUDENT DISPOSITIONS**It will be the goal of the course instructor to create a safe, engaging, and caring learning community as a model for the fundamental rights and needs of every student to grow and learn in a democratic learning community. 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 expects students to be successful and meet all program standards. (However, 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 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.pdfLinks to an external site.](http://www.csun.edu/sites/default/files/Fifth-Year-Traditional-Student-Teaching-Handbook.pdf)

# WRITTEN ASSIGNMENTS- All written assignments will be submitted via CANVAS using a 12-point conventional font, double-spaced. Conventional spelling, grammar, and punctuation are required. (Rubrics for significant individual and group assignment are provided).

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

# EED 480 COURSE Teacher Performance Expectations:

Upon completing this course, credential candidates should meet the following TPEs:

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| TPE 1 | Demonstrate an understanding of the knowledge, skills, and attitudes needed to work effectively with English language learners and culturally diverse students |
| TPE 2 | Identify and utilize a variety of grouping situations and positive classroom management techniques in the science/history-social science classroom (understand the principles of developmentally-appropriate curricula and instruction). |
| TPE 3 | Demonstrate an understanding that promotes application of the structure of science and social studies and their interrelationships to planning and instruction. \*Develop a personally-sound theoretical basis for how to consistently engage students in social studies and science process skills using the inquiry-based processes.\*Show basic ability to use concepts, principles, skills that are reflected in the California Content Standards to design well-balanced, authentic lessons and units for elementary students.Demonstrate understanding of and ability to plan such lessons and units while using the state- adopted, academic-content standards and frameworks in history-social science and science using the Backwards Design Model.      |
| TPE4 | Show evidence of how to engage diverse students in dialogue and activities that connect the historical, cultural and sociological connection between science and social studies around “critical issues” in society that engages them in problem solving, creativity and critical thinking.Engage in reflection upon their developing attitudes and dispositions needed to create a positive classroom- learning environment in the sciences and history-social science. |
| TPE 5 | Demonstrate an understanding of how to create, modify and implement formal and informal, (formative and summative assessments) that authentically show evidence of continuing student progress. |
| TPE 6 | Demonstrate an ability to use multiple sources (e.g., primary documents, demonstrations, experiments) to enhance learning and to balance the focus of instruction. Balance theory, research, and practice in science and history-social sciences |

**COURSE OBJECTIVES:**
**A.**Demonstrate understanding of critical importance of social studies and science education for PK-5 students.

**B.**Show evidence of understanding of how TPEs can be integrated into social studies and science curricula.

**C.**Demonstrate awareness and understanding of PK-5 educator's important role in introducing students to environmental literacy and sustainability.

**D.** Show evidence of PK-5 schooling that promotes equity and social justice through intersectional study of civics, economics, science, and technology (Social Studies Themes)

**Social Studies Themes:**

1. Culture
2. Time, Continuity and Change
3. People, Places and Environment
4. Individual Development and Identity
5. Individual Groups and Institutions
6. Power, Authority and Governance
7. Science, Technology and Society
8. Production, Distribution and Consumption
9. Science, Technology and Society
10. Global Connections
11. Civic Ideals and Practices

 **COMMON CORE, NGSS AND SOCIAL SCIENCE SKILLS INTEGRATION—Inquiry, Cooperative Learning and Project-Based Learning**

Course activities and assignments will demonstrate the important intersections between the [Common Core State Standards (Links to an external site.)](https://www.cde.ca.gov/re/cc/) (CCSS) with students’ awareness of [the 21st century skills (Links to an external site.)](https://ed.sc.gov/scdoe/assets/File/agency/ccr/Career-and-Technology-Education/documents/21stCenturySkillsforStudentsTeachers.pdf) including social-emotional learning (SEL) and habits of mind (HOM). Promoting inquiry, collaboration and project-based learning leads to increased student ability to write expository text about the connections learned between historical events, scientific ideas or concepts, the rise of industrialization and the consequences to the planet,

 **K-6**[**CONTENT STANDARDS FOR CALIFORNIA** (Links to an external site.)](https://www.cde.ca.gov/be/st/ss/documents/histsocscistnd.pdf)**TEACHERS –**

**CA Standards Mobile Application**

[“ (Links to an external site.)](https://www.cde.ca.gov/re/mo/castandards.asp)California educators can use a [Mobile App (Links to an external site.)](https://www.cde.ca.gov/re/mo/castandards.asp) for quick access to the Arts, Career Technical Education, Computer Science, English Language Arts, English Language Development, Health Education, History–Social Science, Mathematics, Physical Education, School Library, Science (CA NGSS), and World Languages content standards they rely on to design the knowledge, concepts, and skills that students should acquire at each grade level. Use the app to search, filter, and sort standards to isolate specific content, identify standards common across disciplines, and inform decisions around instruction and assessment.

The content standards in the CA Content Standards Mobile App reflect the input of educators from across the state, and the approval of the Instructional Quality Commission and the State Board of Education. For more information on standards, curriculum, and instructional resources, or to share ways the app can better support your work, contact Curriculum Frameworks and Instructional Resources Division at the California Department of Education.

**CA HISTORY SOCIAL SCIENCE FRAMEWORK**
 “The framework identifies and defines four key elements of the discipline that are interwoven throughout the framework: content, inquiry, literacy, and citizenship.  Instead of focusing only on memorizing historical narrative, the framework features ways to guide students through an investigation of the discipline, using the lenses of economists, geographers, historians, and political scientists. The History-Social Science Framework is full of helpful resources and guidance to support educators as they align their curriculum and instruction to this approach.

### This framework guides educators as they design, implement, and maintain a coherent course of study to teach content, develop inquiry-based critical thinking skills, improve reading comprehension and expository writing ability, and promote an engaged and knowledgeable citizenry in history and the related social sciences.” CDE

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### ****NGSS and CA FRAMEWORK****

On September 4, 2013, the SBE adopted the Next Generation Science Standards for California Public Schools, Kindergarten through Grade Twelve (CA NGSS) as required by California Education Code 60605.85. The [NGSS Appendices A-M (Links to an external site.)](http://www.nextgenscience.org/next-generation-science-standards) were also adopted to assist teachers in the implementation of the new science standards and to aid in the development of the new science curriculum framework.

### A Blueprint for California Environmental Literacy:

### [California Environmental Principles and Concepts](https://www.coastal.ca.gov/coastalvoices/resources/EPCs.pdf)

“Recognizing that critical environmental concerns face . . ., A Blueprint for Environmental Literacy: Educating Every Student In, About, and For the Environment is included in the course readings to assure that students understand how to provide “guiding strategies and recommendations to realize the ambitious goal of achieving environmental literacy for all California students”  California CDE.

### Recently, California teacher educators, scientists, policymakers, school administrators and teachers gathered at the ECCLPS summit to plan the course for promoting environmental literacy for every California student: [Achieving Climate Stability and Environmental SustainabilityLinks to an external site.](http://www.csun.edu/~sb4310/AchievingClimateStability-Report-FINAL%2011-22%20%281%29.pdf)

## COURSE READINGS

* Next Generation Science Standards
[cde.ca.gov/.../ (Links to an external site.)**ngss** (Links to an external site.)standards.asp
 (Links to an external site.)](http://www.cde.ca.gov/.../ngssstandards.asp)
* The CA History, Social Science Frameworks
[https://www.cde.ca.gov/ci/hs/cf/documents/hssfwchapter1.pdf
 (Links to an external site.)](https://www.cde.ca.gov/ci/hs/cf/documents/hssfwchapter1.pdf)
* Content Standards for Social Studies
[https://www.cde.ca.gov/be/st/ss/documents/histsocscistnd.pdf
 (Links to an external site.)](https://www.cde.ca.gov/be/st/ss/documents/histsocscistnd.pdf%20%20%20)[Achieving Climate Stability and Environmental SustainabilityLinks to an external site.](http://www.csun.edu/~sb4310/AchievingClimateStability-Report-FINAL%2011-22%20%281%29.pdf)
* The Constitution of the United States of America [https://www.constitutionday.com/constitutional-amendments-bill-of-rights.html (Links to an external site.)](https://www.constitutionday.com/constitutional-amendments-bill-of-rights.html)
* Science articles (Koch chapters, etc.) can be accessed from the **MODULEs**  Download
* California Content History-Social Science and Science Standards from: [http://www.cde.ca.gov/board
(Links to an external site.)](http://www.cde.ca.gov/board%28Links%20to%20an%20external%20site.%29)
* 21st Century Skills—4 Cs of Common Core [https://ed.sc.gov/scdoe/assets/File/agency/ccr/Career-and-Technology-Education/documents/21stCenturySkillsforStudentsTeachers.pdf (Links to an external site.)](https://ed.sc.gov/scdoe/assets/File/agency/ccr/Career-and-Technology-Education/documents/21stCenturySkillsforStudentsTeachers.pdf)
* California Environmental Principles and Concepts
[https://www.californiaeei.org/epc/ (Links to an external site.)](https://www.californiaeei.org/epc/)
* Creating 21st Century Global Citizens [http://www.csun.edu/~sb4310/480SP%2019/Creating%2021st%20Century%20Global%20Citizens%20A%20design%20led%20systems%20approach%20to%20transformative%20secondary%20education%20for%20sustainability.pdfLinks to an external site.](http://www.csun.edu/~sb4310/480SP%2019/Creating%2021st%20Century%20Global%20Citizens%20A%20design%20led%20systems%20approach%20to%20transformative%20secondary%20education%20for%20sustainability.pdf)
* STEM: How to Educate for America’s Future
[csun.edu/~sb4310/STEM\_How%20to%20Educate%20for%20Americas%20Future\_Article%20Series.pdfLinks to an external site.](http://www.csun.edu/~sb4310/STEM_How%20to%20Educate%20for%20Americas%20Future_Article%20Series.pdf)
* Teaching Kids Water Conservation [https://www.schooliseasy.com/2015/05/teaching-kids-water-conservation/ (Links to an external site.)](https://www.schooliseasy.com/2015/05/teaching-kids-water-conservation/)
* ECCLPS Summit Report. [Achieving Climate Stability and Environmental SustainablyLinks to an external site.](http://www.csun.edu/~sb4310/AchievingClimateStability-Report-FINAL%2011-22%20%281%29.pdf)
* CA Environmental Principles & Concepts (EP&Cs**)** [https://www.californiaeei.org/epc/ (Links to an external site.)](https://www.californiaeei.org/epc/)
* Climate Literacy Framework https://www.climate.gov/teaching/essential-principles-climate-
              literacy/essential-principles-climate-literacy
* United States National Action for Climate Empowerment Strategic Planning Framework
[https://www.aceframework.us/ (Links to an external site.)](https://www.aceframework.us/)
* United Nations Sustainable Development Goals (SDGs) [https://sdgs.un.org/goals (Links to an external site.)](https://sdgs.un.org/goals)

#### COURSE ASSIGNMENTS – Following are the signature assignments in the course:

**Individual Participation and Work**-As a member of an online, engaged-learning community, you will be expected to contribute in relevant ways to discussions with your insights and proactive critique of ideas shared in class. Ten, individual assignments that include Forum Discussions and maintaining a Handbook of Social Studies Themes are included in the course.

**Group Activities**- The course includes 5 group activities of varying levels of difficulty that assure understanding of important work in collaborative learning communities (See the Agenda).

 **Social Studies Lesson Plan**-Following the development of a model, cooperative social-studies lesson presented by the instructor, you will be guided to create a [cooperative learning lesson Links to an external site.](http://www.csun.edu/~sb4310/480CourseDocs.htm) that meets the needs of diverse students: ELLs, students with atypical development, and gifted children.  [The engaged learning lesson design templateLinks to an external site.](http://www.csun.edu/~sb4310/601%20files/engaged%20learn%20placemat.doc) will assist you to align with the California Content Standards for History-Social Science (and Frameworks) at the grade level of your student teaching placement. This lesson needs to engage K-5 students in inquiry and active construction of knowledge that also seeks to develop social-emotional learning skills (SEL) and intelligent behaviors/habits of mind (HOM).

**Science Lesson Plan**- Following a model lesson led by the instructor, which includes the [BCES/ NASA 5-E Framework,(Links to an external site).](http://www.csun.edu/~sb4310/5eframeworkscore.docx) you will be guided in designing a **Science Launch Lesson** in a cooperative learning style lesson using the inquiry cycle model presented in [Chapter 13 of Koch’s Science Stories(Links to an external site.](http://www.csun.edu/~sb4310/480SP%2019/Koch%20Chapters/Koch%206th%20-%20Chapter%2013.pdf))This assignment builds upon the structures applied in the Social Studies Plan and includes both formal and informal (formative) assessments that meet the California State Assessment requirements and offer feedback to promote learning for all students. A rubric and planning guide will be provided by the instructor.

**Integrated STEAM PBL on Environmental Science Unit** – With your grade-level group you will follow on from your science launch lesson to design an Integrated Science PBL Plan that integrates other STEAM disciplines, technology, engineering, arts and mathematics; describes a coherent teaching plan that supports the integration of history/social science and science. A rubric and planning guide for the PBL will be provided by the instructor.

**Groups will work on this unit design** to be sure that it draws upon:
a) the curricular approaches of NGSS and California Science Frameworks, the
    California Social Studies Content standards; and the
 California Environmental Principles and Concepts;
b) the learning theories presented in readings and class;
c) the historical context when relevant; **and it must also include:**
       1) a formative assessment plan that provides student feedback
       2) a summative assessment plan that includes student self-assessment;
       3)  a plan to address the needs of English language learners;
 4) a plan for how lesson will accommodate students with typical and atypical
 development including gifted/talented students.