

EDUC 385-585: Elementary Curriculum and Methods for Global Classrooms (6 units) Fall 2016



COURSE DESCRIPTION

This course is designed to provide candidates with subject-matter curriculum and pedagogical knowledge and skills in the following areas: mathematics, science, history-social science, the visual and performing arts. In each major subject area candidates learn to use appropriate instructional strategies and materials, to plan and implement instruction that fosters student achievement of state-adopted academic content standards and assists students develop as globally competent citizens who possess knowledge of other world regions, cultures, and global issues.

Time: M 12:00-1:00,
4:00-4:30 & 7:30-8:00

W 11:00-1:00,
4:00-4:30 & 7:30-8:00
and by appointment

Room: MRH – 127
Professor: C. Bobbi Hansen, Ed.D.
E-mail: chansen@sandiego.edu
Phone: 619-260-2381

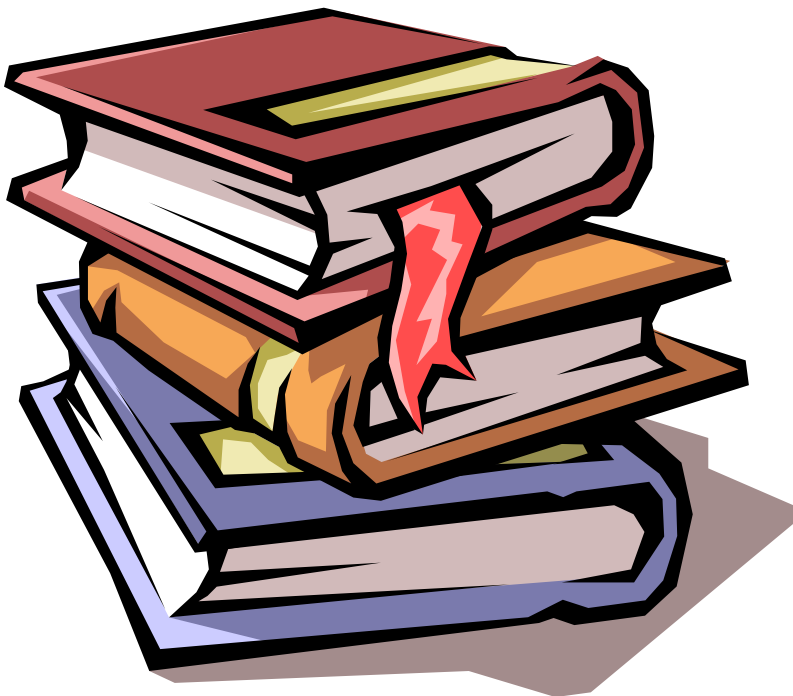
Practicum

Complete a practicum of on-site classroom observation.

- Observe and support instruction in the classroom of the cooperating teacher
- Teach three lessons. These lessons should be planned with the guidance of the cooperating teacher.
- Students are expected to draw connections between practicum observations, course readings and experiential activities with in-class reflective closure sheets.
- Students are expected to observe and reflect upon data demonstrating evidence of student learning.
- The cooperating teacher must complete a candidate evaluation. *Candidates cannot successfully complete EDUC 385-585 without a satisfactory practicum evaluation.*

Blended Learning Goals:

This course will model practices of *blended learning* (also known as hybrid learning) that allows students to integrate face-to-face learning with technology-based, digital instruction. Learning takes place in settings (or in a combination of settings) that include the classroom, home, or mobile environments and gives students an element of control over the time and the pace of their learning. In addition to having a portion of our own course content online, we will discuss the theory and practice of blended learning in the K-6 classroom.



TEXTBOOKS

Required:

1. California Department of Education. *California State Framework in Science*. Sacramento, CA: Author. (text or on-line /<http://www.cde.ca.gov/be/st/fr/>, <http://www.cde.ca.gov/ci/cr/cf/allfwks.asp>)

The Next Generation Science Standards, <http://www.nextgenscience.org>

2. California Department of Education. *California State Framework in History/Social Studies*. Sacramento, CA: Author. (text or on-line / <http://www.cde.ca.gov/ci/cr/cf/allfwks.asp>, and <http://www.socialstudies.org/system/files/c3/C3-Framework-for-Social-Studies.pdf>)

3. California Department of Education. *California State Framework in Mathematics*. Sacramento, CA: Author. (text or on-line <http://www.cde.ca.gov/ci/cr/cf/allfwks.asp>)

4. California Department of Education. *California State Framework in Visual and Performing Arts*. Sacramento, CA: Author. (text or on-line <http://www.cde.ca.gov/ci/cr/cf/allfwks.asp>)

5. Literature Book, The Sign of the Beaver by Elizabeth George Speare,

6. Packet of Readings to be purchased at the USD bookstore

7. Selected digital readings for group discussions

COURSE OBJECTIVES

USD Program Themes

Course objectives are linked to specific State of California's Teaching Performance Expectations (TPEs) and are organized around three outcomes. By the end of the semester, students will understand and be able to demonstrate the following outcomes:

Teaching Performance Expectations (TPEs)

A. Making Subject Matter Comprehensible to Students

TPE 1: Subject Specific Pedagogical Skills for Instruction

TPE 1A: Subject Specific Pedagogical Skills for Multiple Subject Teaching Assignments

B. Assessing Students Learning

TPE 2: Monitoring Student Learning During Instruction

TPE 3: Interpretation and Use of Assessments

C. Engaging and Supporting Student Learning

- TPE 4: Making Content Accessible
- TPE 5: Student Engagement
- TPE 6: Developing Appropriate Teaching Practices
- TPE 6A: Developing Appropriate Teaching Practices in Grades K-3
- TPE 6B: Developing Appropriate Teaching Practices in Grades 4-8
- TPE 6C: Developing Appropriate Teaching Practices in Grades 9-12
- TPE 7: Teaching English Learners

D. Planning Instruction and Designing Learning Experiences for Students

- TPE 8: Learning about Students
- TPE 9: Instructional Planning

E. Creating and Maintaining Effective Environments for Student Learning

- TPE 10: Instructional Time
- TPE 11: Social Environment

F. Developing as a Professional Educator

- TPE 12: Professional, Legal and Ethical Obligations
- TPE 13: Professional Growth

ACE Outcomes & Course Objectives

Academic Excellence & Critical Inquiry and Reflection

Teacher Candidates will demonstrate knowledge on how to represent content accurately and competently by applying strategies and techniques in their field of study. Engage in reflective activities, critically analyze their practice and apply higher order thinking skills to a wide array of investigative pursuits **in order to become globally competent, intercultural peace and character education teachers.**

1. Demonstrate knowledge of the state frameworks, standards and assessments related to the teaching of mathematics, science, history/social science and the visual and performing arts. (TPE 1, 3, 4) (K)
2. Demonstrate uses of a variety of evidence-based pedagogical approaches to the teaching of mathematics, science, history/social science and the visual and performing arts. (TPE 1, 4) (S)
3. Demonstrate an understanding of lesson plan development, implementation and evaluation. (TPE 5, 6, 9, 10, 13) (K, S)
4. Demonstrate awareness of and ability to evaluate the material and community resources available in the teaching of mathematics, science, history/social science, and the visual and performing arts. (TPE 4) (K, S)
5. Know and apply strategies for supporting reading in the content areas. (TPE 1A) (K, S)
6. Apply knowledge of lesson plan development to an integrated unit of study. (TPE 9) (S)
7. Demonstrate an understanding of appropriate use of a variety of assessments, such as formative and summative evaluations, works samples, observation, portfolios,

- and standards-based (TPE 3) (K, S)
8. Demonstrate ability to cultivate critical thinking and problem solving skills in students (TPE 1, 6) (S)
 9. Design, administer and interpret a variety of assessments in content subject areas. (TPE 3) (S)
 10. Demonstrate competence in the use of digital teacher management resources (TPE 13) (S)
 11. Demonstrate competence in examining and evaluating internet and software resources for mathematics, science, history/social science and the visual and performing arts. (TPE 1, 4) (S)
 12. Demonstrate ability to engage in cycles of self-evaluation of planning and teaching practices, alone and in collaborative groups (TPE 9, 13) (S, D)
 13. Demonstrate your ability to select, plan, implement and evaluate methodologies and resources for teaching international perspectives for K-6 students designed to help them develop as globally competent citizens. (TPE 9, 13) (S, D)
 14. Demonstrate your ability to identify the similarities and differences between the social studies curriculum as traditionally taught and as taught with a global perspectives emphasis. (TPE 9, 13) (S, D)
 15. Demonstrate your ability to use teaching strategies for challenging negative and distorted views of distant places. (TPE 9, 13) (S, D)

Community and Service

Teacher candidates will demonstrate the ability to create and support collaborative and caring learning communities in their professional fields of practice. They will bridge theory and practice by experiencing various dimensions of the diverse cultural communities through active service engagements that support world cultures through peace and character education traits.

16. Understand the purpose for establishing classroom meetings as a way of fostering a democratic classroom environment. (TPE 11) (K)
17. Know and apply strategies for creating a positive learning environment (TPE 11) (K, S)
18. Demonstrate your ability to use the pedagogy of service learning by creating opportunities for K-6 students to address global environmental or ecological problems and to contribute to possible solutions. (TPE 11) (K)
19. Demonstrate your ability to successfully use digital technologies to encourage students to participate in a local and global learning community.

Ethics, Values and Diversity

Teacher candidates will understand and adhere to the values and ethical codes of the university, of schools they work in, and of their professional organizations. They will create inclusive, unified, caring and democratic learning peace education communities that value individuals regardless of the global cultural background or ability, and equitably support their learning and development.

20. Demonstrate an understanding of assessment techniques and tools appropriate for individuals with diverse backgrounds and varying language, communication and cognitive abilities. (TPE 8) (K, S)
21. Know and apply strategies for learning that meet the learning styles, interests and cognitive abilities of all students. (TPE 8) (K, S)
22. Demonstrate competence in the use of electronic research tools, internet resources and the ability to use technology to support the needs of diverse learners. (TPE 8) (K, S)
23. Demonstrate your ability to systematically acquire information from a variety of digital sources regarding international issues and global environmental problems. (TPE 8) (K, S)
24. Demonstrate your ability to use global geographical knowledge and understandings to lead K-6 students in becoming active and informed international citizens. (TPE 8) (K, S)

Course Outline

ASSIGNMENT	DATE
Science Lesson Due	9/21
Read Sign of the Beaver	10/19
Science Unit Due	11/7
Math Lesson Due	11/16
Focus Student Observation Due	11/21
Online assignments	Throughout course
*Portfolio Reflection Sheets Due/Individual Conference	12/13 & 12/14

Blended (online) Classes

10/10, 10/31, 11/21

1	<p>W-8/31 Introduction</p> <p>Big Idea: HOW DO YOU WANT TO BE AS A TEACHER?</p> <p>What do you know about teaching and learning? What do you want to learn? What are you going to learn? Who? Why? How?</p> <ul style="list-style-type: none"> • 21st Century Skills and digital learning environment • CA Common Core Standards State and National NGSS Standards • EdTPA • Designing your classroom to facilitate a global learning community • Equity and Access so that ALL students may learn • Classroom Management and creating a positive classroom community and social support for students <p>Going Digital</p> <p>Supplemental</p> <p>Video: 21st Century Skills</p> <p style="text-align: center;">https://www.youtube.com/watch?v=qMG5dvhEzyo</p>
2	<p>W 9/7- Best Practices in Science Teaching and Learning: Next Generation Science Standards (NGSS)</p> <ul style="list-style-type: none"> • STEM and STE(A)M • Constructivist Teaching Practices in Science • Examining Global Issues in Science • Teaching science to special populations • Classroom Management for Science: Using spaces and materials for learning • Planning and Implementing Instruction in Science Using State-adopted Standards, Textbooks, Digital Resources, Community Resources

Science and Engineering Practices (SEP)

The eight practices of science and engineering that the *Framework* identifies as essential for all students to learn and describes in detail are listed below:

1. Asking questions (for science) and defining problems (for engineering)
2. Developing and using models
3. Planning and carrying out investigations
4. Analyzing and interpreting data
5. Using mathematics and computational thinking
6. Constructing explanations (for science) and designing solutions (for engineering)
7. Engaging in argument from evidence
8. Obtaining, evaluating, and communicating information

Description of Crosscutting Concepts from NGSS document

Crosscutting Concepts (CCC)

1. *Patterns*. Observed patterns of forms and events guide organization and classification, and they prompt questions about relationships and the factors that influence them.
2. *Cause and effect: Mechanism and explanation*. Events have causes, sometimes simple, sometimes multifaceted. A major activity of science is investigating and explaining causal relationships and the mechanisms by which they are mediated. Such mechanisms can then be tested across given contexts and used to predict and explain events in new contexts.
3. *Scale, proportion, and quantity*. In considering phenomena, it is critical to recognize what is relevant at different measures of size, time, and energy and to recognize how changes in scale, proportion, or quantity affect a system's structure or performance.
4. *Systems and system models*. Defining the system under study—specifying its boundaries and making explicit a model of that system—provides tools for understanding and testing ideas that are applicable throughout science and engineering.
5. *Energy and matter: Flows, cycles, and conservation*. Tracking fluxes of energy and matter into, out of, and within systems helps one understand the systems' possibilities and limitations.
6. *Structure and function*. The way in which an object or living thing is shaped and its substructure determine many of its properties and functions.
7. *Stability and change*. For natural and built systems alike, conditions of stability and determinants of rates of change or evolution of a system are critical elements of study.

Going Digital

- **Explore website(s)**
 - Understanding of the content, intent and vision of the Next Generation Science Standards. <http://www.nextgenscience.org>
 - California Department of Education. *California State Framework in Science.* / <http://www.cde.ca.gov/be/st/fr/>
 - San Diego County Office of Education <https://ngss.sdcoe.net>

Supplemental

- **Videos**
 - 3 Dimensions of NGSS <https://www.teachingchannel.org/videos/next-generation-science-standards-achieve>
 1. [Disciplinary Core Ideas \(DCI\)](https://www.teachingchannel.org/videos/disciplinary-core-ideas-achieve)
<https://www.teachingchannel.org/videos/disciplinary-core-ideas-achieve>
 2. [Science and Engineering Practices](https://www.teachingchannel.org/videos/science-engineering-practices-achieve)
<https://www.teachingchannel.org/videos/science-engineering-practices-achieve>
 3. [Crosscutting Concepts](https://www.teachingchannel.org/videos/crosscutting-concepts-achieve)
<https://www.teachingchannel.org/videos/crosscutting-concepts-achieve>
 - Video: The Case for NGSS http://www.lawrencehallofscience.org/services_and_expertise/ngss

3 M 9/12–Phenomenon-based Science

- Students as Scientists/ Higher Order Thinking
- SEPs -Obtaining, evaluating, and communicating information
Observing/ Comparing/ Classifying/ Inferring Hypothesizing/ Drawing Conclusions/ Communicating
 - Investigating Global Environmental Problems
 - Science Inquiry
 - Science and the Common Core Literacy Standards -Reading information texts

Going Digital

Read: <http://www.edutopia.org/blog/teaching-science-inquiry-based>

Supplemental Video:

- CCSS Reading Informational texts
- Teaching Text Features

	<p>https://www.teachingchannel.org/videos/teaching-text-features-nea</p>
4	<p>W 9/14 Explorations in Life, Earth and Physical Science: Next Generation Science Standards</p> <ul style="list-style-type: none"> • Providing students opportunities to use science concepts and investigation skills to make sense of a real world phenomenon. • Teaching the Content of Science Physical Science, Life Science, Earth and Space Sciences • Science Note booking • Close Reading • Claim/Evidence/Reasoning (CER) <p>Going Digital</p> <ul style="list-style-type: none"> • Read: Science Notebooking: http://www.sfusdschools.org/blog/science-notebooks <p>Supplemental</p> <ul style="list-style-type: none"> • Video(s): Claim evidence reasoning (CER) https://www.teachingchannel.org/videos/support-claims-with-evidence-getty (with text) • https://www.teachingchannel.org/videos/claims-evidence-science-lesson-achieve (investigation)
5	<p>M 9/19 Planning Curriculum for Students' Learning Needs</p> <ul style="list-style-type: none"> • Mapping Curriculum for Long Range (Yearly Planning and Curriculum Units) • Short-range planning: Lesson plan development, implementation and evaluation • Planning using content textbooks <ul style="list-style-type: none"> ○ Higher-order thinking ○ Students' prior knowledge, experience and learning styles ○ Planning instruction for ELLs ○ Planning instruction for students with special needs <p>Going Digital</p> <p>Explore Lesson Plan Sites http://www.lessonplanspage.com http://teachers.net/lessons/posts/4763.html</p>
6	<p>W 9/21 Micro-teaching #1: Inquiry Science (Self and Peer-Mediated Reflections) Pick one area (Life, Physical, or Earth and Space Science)</p> <ul style="list-style-type: none"> • Identify specific CA –NGSS Standards that apply to this lesson. • Lesson should use one or more Science and Engineering Practices (SEP) 1. Asking questions (for science) and defining problems (for engineering)

	<p>2. Developing and using models</p> <p>3. Planning and carrying out investigations</p> <p>4. Analyzing and interpreting data</p> <p>5. Using mathematics and computational thinking</p> <p>6. Constructing explanations (for science) and designing solutions (for engineering)</p> <p>7. Engaging in argument from evidence</p> <p>8. Obtain, evaluate and communicate information</p> <p>Lesson should be aimed at a specific grade level K-6</p> <ul style="list-style-type: none"> Bring all materials to class for lesson. <p>As a group, discuss ways each lesson may be differentiated for UNIVERSAL ACCESS for all students</p>
7	<p>M 9/26 Project-based Learning (PBL)</p> <p>Essential Questions</p> <p>What is Project based Learning (PBL)?</p> <p>How does it connect to 21st Century skills?</p> <p>How does PBL connect to global, international learning goals?</p> <p>Going Digital</p> <p>1. Read one article and watch one video about PBL in each web portal</p> <ul style="list-style-type: none"> George Lucas Foundation/Edutopia, http://www.edutopia.org/ Buck Institute for Education http://www.bie.org <p>2. Explore E-Pals, (http://www.epals.com) a global digital community of connected classrooms sponsored by National Geographic</p> <p>Quick write prompt:</p> <p>How do you believe PBL could be used in your classroom may advance student learning and connect to 21st Century workplace skills?</p>
8	<p>W 9/28 Why Engineering in the new NGSS Standards?</p> <ul style="list-style-type: none"> STEM and Engineering Practices for Elementary Students Bridge Building Engineering Project <p>Going Digital</p>

K-6 science units with an engineering problem to solve

<https://www.pltw.org/pltw-launch-curriculum>

- **Video** <http://www.eie.org/eie-curriculum/resources/what-research-says>
- **Read:** Engineering Articles:
<http://www.nytimes.com/2010/06/14/education/14engineering.html?pagewanted=all&r=0>
- Explore site: <http://www.eie.org>
Engineering Investigation-Getting to the Other Side: Designing Bridges
<http://www.eie.org/eie-curriculum/curriculum-units/get-other-side-designing-bridges>
 - Background information on types of bridges-
<http://www.pbs.org/wgbh/nova/tech/build-bridge-p3.html>
 - Choose the right type of bridge Digital Activity-
<http://www.pbs.org/wgbh/nova/tech/build-bridge-p4.html>

Supplemental

Additional Engineering Projects

<https://www.teachingchannel.org/engineering-curriculum-boeing>

9 M 10/3 Using Assessments to Drive Instruction

How do you want to be as a teacher? The Power and Responsibility of Assessing Students

- Formative (Informal) and Summative (Formal) Assessment
- Data driven decision making using student work samples
- Issues of Equity in Assessing ALL Students

Going Digital

- **Read:** Formative Assessment: one or the other and discuss with partner
 1. <http://www.ascd.org/publications/educational-leadership/mar14/vol71/num06/The-Bridge-Between-Today's-Lesson-and-Tomorrow's.aspx>
 2. <http://www.edutopia.org/blog/dipsticks-to-check-for-understanding-todd-finley>

	<p>Supplemental</p> <p>Video - Travel Journals as Student Portfolios</p> <ol style="list-style-type: none"> 1. http://www.edutopia.org/practice/creating-travel-journals-assess-learning 2. Formative and Summative_Assessment Video #2 games as assessments/ http://www.edutopia.org/blog/using-games-for-assessment-rebecca-rufotepper 3. Self reflection: student led conferences http://www.edutopia.org/practice/student-led-conferences-empowerment-and-ownership
10	<p>W 10/5 Universal Access for All Students:</p> <p>Best Practices in Teaching Using evidence-based teaching strategies: Inquiry, Simulation, Debates, Case Studies, Cooperative Projects, Service Learning, Scaffolding, Jigsaw, Peer tutoring, Questioning, Graphic Organizers</p> <ul style="list-style-type: none"> • SDAIE teaching strategies, • Teaching Strategies for Students with Identified Special Needs • Teaching Academic Language (Vocabulary) • 3 ways to differentiate a learning station <p>Going Digital</p> <p>http://www.youtube.com/watch?v=E3LijMkl2OQ</p> <ul style="list-style-type: none"> ○ Open ended • Tiered • Choice
11	<p>M 10/10 Virtual Field Trips-Blended Online Class</p> <p>Explore the Web sites of the following places:</p> <ul style="list-style-type: none"> • San Francisco Exploratorium http://www.exploratorium.edu • Lawrence Hall of Science- http://www.lawrencehallofscience.org • Virtual Museum Tours website. • Smithsonian Institution website and investigate their various virtual exhibits. • The Kennedy Center website including resources for educators and the multimedia finder. • The British Museum and explore their online collection. • The San Diego Zoo-(educator resources) http://zoo.sandiegozoo.org/content/overview • Reuben H. Fleet Science Center-(with science lesson plans) http://www.rhfleet.org/learn/school-programs-professional-development

	<p>Discussion prompt: Write a brief description of at least 5 resources (articles, videos, websites, lesson plans) from these sites that you believe are noteworthy. How do you believe science museums (both virtual and on-ground field trips) may enhance your classroom teaching/learning science environment?</p>
<p>12</p>	<p>W 10/12 Best Practices-History-Social Studies</p> <ul style="list-style-type: none"> • Planning and Implementing Instruction in History-Social Science: Using State-adopted Standards, Textbooks, Electronic Planning and Research Tools, and Community <p>Going Digital</p> <ul style="list-style-type: none"> • California Department of Education. http://www.cde.ca.gov/be/st/ss/documents/histsocscistnd.pdf • http://www.socialstudies.org/system/files/c3/C3-Framework-for-Social-Studies.pdf
<p>13</p>	<p>M 10/17 Blended Class-Field Trip-</p>
<p>14</p>	<p>W 10/19 Historical Literacy: Teaching Social Studies through Textbooks, Information Books and Children’s Literature</p> <ul style="list-style-type: none"> ○ Common Core Literacy Skills in Social Studies ○ Instructional strategies that make difficult text easier for students to read and understand. ○ Close reading ○ Text Dependent Questions ○ Claim/Evidence <p>Read: Sign of the Beaver for Class</p> <p>Going Digital</p> <p>Read:</p> <p>(1) Information text http://www.ascd.org/publications/educational-leadership/nov13/vol71/num03/Points-of-Entry.aspx</p> <p>(2) Close Reading: http://www.ascd.org/publications/educational-leadership/dec12/vol70/num04/Closing-in-on-Close-Reading.aspx</p> <p>Supplemental Videos:</p> <ol style="list-style-type: none"> 1. Text talk time –https://www.teachingchannel.org/videos/analyzing-text-lesson?resume=0

	<p>Sign of the Beaver Web quest http://questgarden.com/84/77/7/091007063349</p>
15	<p>M 10/24 The Many Faces of Geographic Literacy</p> <p>Geography is more than places on a map. It's global connections. People and cultures. Economics and environments. Our young people need to know geography in order to understand today's world—and succeed in tomorrow's.</p> <ul style="list-style-type: none"> ○ How does geography impact the lives of people around the world? ○ Develop an Awareness of Place ○ Develop Locational Skills and Understanding ○ Using Children’s Literature to Teach International Perspectives <p>Going Digital</p> <p>Explore website:</p> <ol style="list-style-type: none"> 1. National Geographic http://education.nationalgeographic.com/education/teaching-resources/?ar_a=1 2. Pinterest https://www.pinterest.com/Cre8iveCre8tion/teaching-geography/ <p>Video:</p> <ol style="list-style-type: none"> 1. Jay leno video http://www.youtube.com/watch?v=7_pw8duzGUg <p>Why geography video http://www.youtube.com/watch?v=CGpas-GPjvQ</p>
16	<p>W 10/26 Teaching for Democratic Understanding, Social Justice and Global Understanding</p> <ul style="list-style-type: none"> • Exploration of digital technologies and videos that could be employed with service learning, character education, social justice and understanding what is required of citizens in a democracy. • Classroom management to promote democratic classrooms, character building, and social justice <p>Going Digital</p> <p>Read article: How to Integrate Social and Emotional Learning into the Common Core http://greatergood.berkeley.edu/article/item/how_to_integrate_social_emotional_learning_into_common_core</p> <p>Explore website(s) https://www.teachingchannel.org/blog/2014/01/09/honoring-mlk-day/?utm_source=newsletter20160116/</p> <p>Video(s)</p> <p>Watch video of Julian Elementary School, 2010 National School of Character to see what can happen when a whole school decides to focus on Character Education</p>

	<p>http://www.youtube.com/watch?v=qaaZTprxg8Y#t=11</p> <p>Watch video of Service Learning and see one school's efforts to connect service projects with content standards so that students not only participate in improving the community, they also strengthen skills in literacy, mathematics, science and social studies.</p> <p>https://www.youtube.com/watch?v=6zecR0oSROE</p>																		
17	<p>M 10/31 Technology Plunge-Blended Online class Surf technology resources on LiveBinder at both sites (1) general tech sites http://www.livebinders.com/play/play?id=112855 (2) ipod-touch and ipad apps- http://www.livebinders.com/play/play?id=36989 Discussion Prompt: Create an annotated list of at least 8 of your favorite digital resources and how you might use them in your classroom to ensure student engagement and learning for ALL.</p>																		
18	<p>W 11/2 Mathematics-Examining the Common Core</p> <table border="1" data-bbox="302 856 889 1885"> <tr><td>CCSS in Mathematics</td></tr> <tr><td>Counting and Cardinality (K)</td></tr> <tr><td>Number & Operations in Base Ten</td></tr> <tr><td>Number & Operations-Fractions</td></tr> <tr><td>Operations and Algebraic Thinking</td></tr> <tr><td>Measurement and Data</td></tr> <tr><td>Geometry</td></tr> <tr><td>Eight Mathematical Practices-</td></tr> <tr><td><input type="checkbox"/> 1. Make sense of problems and persevere in solving them.</td></tr> <tr><td><input type="checkbox"/> 2. Reason abstractly and quantitatively.</td></tr> <tr><td><input type="checkbox"/> 3. Construct viable arguments and critique the reasoning of others.</td></tr> <tr><td><input type="checkbox"/> 4. Model with mathematics.</td></tr> <tr><td><input type="checkbox"/> 5. Use appropriate tools strategically.</td></tr> <tr><td><input type="checkbox"/> 6. Attend to precision.</td></tr> <tr><td><input type="checkbox"/> 7. Look for and make use of structure.</td></tr> <tr><td><input type="checkbox"/> 8. Look for and express regularity in repeated reasoning.</td></tr> <tr><td>Read Article:</td></tr> <tr><td>http://www.scholastic.com/teachers/top-teaching/2013/03/guide-8-mathematical-practice-standards</td></tr> </table>	CCSS in Mathematics	Counting and Cardinality (K)	Number & Operations in Base Ten	Number & Operations-Fractions	Operations and Algebraic Thinking	Measurement and Data	Geometry	Eight Mathematical Practices-	<input type="checkbox"/> 1. Make sense of problems and persevere in solving them.	<input type="checkbox"/> 2. Reason abstractly and quantitatively.	<input type="checkbox"/> 3. Construct viable arguments and critique the reasoning of others.	<input type="checkbox"/> 4. Model with mathematics.	<input type="checkbox"/> 5. Use appropriate tools strategically.	<input type="checkbox"/> 6. Attend to precision.	<input type="checkbox"/> 7. Look for and make use of structure.	<input type="checkbox"/> 8. Look for and express regularity in repeated reasoning.	Read Article:	http://www.scholastic.com/teachers/top-teaching/2013/03/guide-8-mathematical-practice-standards
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http://www.scholastic.com/teachers/top-teaching/2013/03/guide-8-mathematical-practice-standards																			

	<p>Supplemental</p> <p>Video presentation 1-Math and the Common Core-Overview (10 minutes) https://www.teachingchannel.org/videos/teaching-math-ccss</p> <p>Video presentation 2-Third Grade Model Lesson on Reasoning about Multiplication and Division (7 minutes) https://www.teachingchannel.org/videos/multiplication-division-in-the-core</p>
19	<p>M 11/7 Unit Due</p> <p>Micro teaching #2-Share your Unit with your home team. Specifically share the global/international topics in your unit.</p> <p>Going Digital http://www.livebinders.com/play/play?id=68904 http://www.livebinders.com/play/play?id=946980</p> <p>A SURPRISE EXPERIENCE!</p>
20	<p>11/9 Common Core Mathematics</p> <ul style="list-style-type: none"> ○ Counting and Cardinality (K) ○ Number & Operations in Base Ten <p>Assist students to develop conceptual understanding and skills, use math vocabulary as they talk about their mathematical thinking, and connect big ideas to meaningful independent exploration and practice.</p> <p>Going Digital:</p> <p>Websites to build number sense http://list.ly/list/1uC-elementary-math-websites-to-build-number-sense</p> <ul style="list-style-type: none"> ● Explore website(s) http://www.cde.ca.gov/be/st/ss/documents/ccssmathstandardaug2013.pdf Fractions-What’s the problem with Fractions? ● Read-You can’t do that with a worksheet. http://www.ascd.org/ascd-express/vol8/824-livers.aspx ● Video(s) https://www.teachingchannel.org/videos/teaching-fractions <p>Supplemental Videos:</p> <ol style="list-style-type: none"> 1. Number Sense-Grade 3 patterns, skip counting by 200s- https://www.teachingchannel.org/videos/teaching-number-patterns?fd=1 2. Number Sense 3-5 multiplication and division- https://www.teachingchannel.org/videos/multiplication-division-in-the-core

	https://www.teachingchannel.org/videos/formatively-assess-fraction-knowledge-sbac
21	<p>M 11/14 Mathematics Problem Solving, Reasoning & Eight Mathematical Practices</p> <ul style="list-style-type: none"> • More in-depth explanation of 8 practices http://www.corestandards.org/Math/Practice/ <p>Teaching mathematics from a problem solving perspective</p> <ul style="list-style-type: none"> • math computation in story context (i.e. story problems) • Authentic mathematical problem solving • Solving logic problems <p>Going Digital Read: Solving Word Problems</p> <p>Supplemental Videos:</p> <ul style="list-style-type: none"> • Choose 3 ways https://www.teachingchannel.org/videos/problem-solving-math • Perseverance 3-5 https://www.teachingchannel.org/videos/math-practice-standard-perseverance - https://www.teachingchannel.org/videos/persist-through-challenges-perts
22	<p>W 11/16 Math Micro teaching Micro-teaching #3: Mathematics Domains A, B, C, D, E Self and Peer-Mediated Reflections Micro Teaching –Mathematics: A Jigsaw teaching strategy Gallery sharing</p>
23	M 11/21 Focus student observation blended online class.
	Thanksgiving Break 11/23-11/27
24	<p>M 11/28 Geometry Domains A, C, D, E Geometry and Spatial Reasoning Measuring: Time/ Length/ Volume/ Weight/ Distance</p> <p>Going Digital Supplemental Video Grade 6: Perimeter and area: 22 at a table https://www.teachingchannel.org/videos/real-world-geometry-lesson?fd=1</p>
25	W 11/30 Guest Speaker
26	M 12/5 Operations and Algebraic Thinking Algebraic Thinking-Develop techniques to help students:

	<ul style="list-style-type: none"> • recognize, construct, extend, create, analyze, generalize, and describe patterns • use pattern-based thinking to understand and represent mathematical and real-world phenomena • determine mathematical rules and develop an understanding of functional relationships <p>Data, Statistics and Probability Develop techniques to help students</p> <ul style="list-style-type: none"> • formulate questions that can be addressed with data and collect, organize, and display relevant data to answer them; • select and use appropriate statistical methods to analyze data; • develop and evaluate inferences and predictions that are based on data; understand and apply basic concepts of probability. <p>Web-based links:</p> <ol style="list-style-type: none"> 1. Graph Your Favorite... http://www.1.minn.net:80/~schubert/Graph.html 2. National Center for Educational Statistics http://nces.ed.gov/nceskids 3. Math teaching strategies https://mathteachingstrategies.wordpress.com/2008/11/24/data-analysis/ <p>Supplemental Video: https://www.teachingchannel.org/videos/3rd-grade-graphing-lesson?fd=1</p>
27	<p>W-12/7- Becoming a Professional Learner Content Synthesis-Science, Social Studies, Mathematics How are you going to prepare your students to be global citizens? How are you going to help your students to become aware of issues that affect the planet?</p>
28	<p>M 12/12 Peer Mock Interviews Putting it all together: What did we learn? Final Closure Big Idea: HOW DO YOU WANT TO BE AS A TEACHER?</p>
29	<p>T 12/13 & W 12/14 Portfolio Conferences</p>

Course Assignments and Grading



I. STEM Curriculum Unit (TPEs 1, 4, 9, 14)

Each class member will prepare an interdisciplinary STEM (Science, Technology, Engineering and Mathematics) unit of study that will advance **K-6 students' understanding of the sciences**. The lessons in this unit will meet the *California Common Core State Literacy Standards for Science, NGSS-Practices* and *The California Common Core State Standards: Mathematics (CA CCSSM)* while addressing Universal Access for All Students. The Unit will also advance **K-6 students' understanding of other nations, cultures and/or global ecological issues**.

GUIDELINES

- 1) Title of STEM Unit and Grade level (K-6)
- 2) Introduction Letter to Parents (Address why STEM understanding is important for students in the 21st century how the unit addresses key STEM understanding.) List California Standards and any additional goals for students.)
- 3) 10 individual lessons on a K-6 grade level science topic:

Within the unit include the following:

- 1 lesson that incorporates mathematics (graphing, problem solving, measurement)
- 1 lesson that incorporates reading *information text* using close reading strategies
- 1 lesson that incorporates drama, art, movement or music
- 1 lesson that incorporates global topic or environmental issue by one or more of the following:
 - Integrating global content and diverse perspectives and cultures into the standard curriculum
 - Providing opportunities for students to conduct inquiry-based projects on local and global issues
 - Facilitating virtual or face-to-face exchanges with individuals, classrooms or schools in other countries
 - Having students participate in service learning projects that address global topics
- 1 project* (engineering, service learning or any other PBL idea)

- **1 “web quest” for students***
*brief explanation/does not need to be in regular lesson plan format

4) A Summative Assessment for the entire unit that is Performance or Portfolio based

5) A Scoring Rubric for the Summative Assessment that allows students to show some depth of understanding with respect to the standards/objectives.

SCORING RUBRIC FOR THEMATIC UNITS

3. Above Standard

Meets all of the criteria for the (2) score and goes beyond in at least 3 of the following ways:

- A. It is readily apparent that the student included many extra curriculum materials in the lessons and that the materials fit the intended objectives of the lessons.
- B. Differentiated Learning Strategies for UNIVERSAL ACCESS for English language learners and for students who have disabilities are extremely thorough.
- C. Student has identified and utilized a wide variety of evidence-based instructional strategies (ex. Graphic organizers, simulations, inquiry, technology-enhanced, problem-based)
- D. Use of the digital technology is extensively documented in lessons in unit.
- E. Unit has multiple global/international connections

2. At Standard

- A. Curriculum Integration-There is representation of interdisciplinary curriculum in lesson.
- B. Standards-based-The unit is fully aligned to specific SCIENCE, Math and Literacy standards.
- C. Lesson Clarity-Each lesson is written clearly and follows the format of the lesson design taught in class.
- D. Differentiated Learning Strategies for learners with identified needs are present in every lesson
- E. Assessment-Each lesson has a **Formative** (ongoing and more informal) and a **Summative** (at the end and more formal) assessment.

1. Below Standard

- A. Curriculum Integration- Not all required subject areas are present in the thematic unit
- B. Goals and Standards-Unit’s does not have goal statement and/or unit is missing standards alignment
- C. Lesson Clarity- Lesson plans are sketchy or difficult to understand.

II. Focus Student Observation

In your practicum you will identify one student with a special need who is being included in your general education class. You will record 5 observations that include the following components: (a) the student's needs (in your opinion) (b) instructional and support strategies, if any, that you have observed your teacher using with the student; (c) your opinion of the effectiveness of these supports with a "what works-what doesn't work" chart. Or if you have not seen any in use, what supports do you think could be helpful for this student to learn and become an included member of the classroom community.

SCORING RUBRIC FOR FOCUS STUDENT OBSERVATION

3 Above Standard: Five observations are extremely insightful and provide many details and/or examples.

2 At Standard: Student has made five observations and they all fully address the instructional supports used by the teacher and your opinion of the effectiveness of the supports.

1 Below Standard: Student has not made five observations and/or they do not fully address the instructional supports used by the teacher and nor your opinion of the effectiveness of the supports.

III. Final Synthesis of Subject Specific Pedagogical Knowledge

Throughout the semester you will engaged in learning tasks that exemplify best practices in standards-based instruction in science, mathematics, and social studies with the goal of gaining competence in (1) knowing and presenting accurate content of each discipline, (2) using subject specific pedagogical processes, (3) using *best practice* instructional strategies for universal access for ALL learners, (4) using formative and summative assessment strategies to support content and learning outcomes, and (5) selecting appropriate digital and other resources to enhance the learning goals for all students.

You will compile your analysis of these tasks into a course portfolio with 8 entries. Models of this assignment will be given in class.

Portfolio Reflection Sheet

Activity:

Address at least one of the following questions: Why did you select this entry for your portfolio? What does it demonstrate about your learning? What insights did you have about the teaching/learning process? (**Note: Do not include a description of the activity since you have done that for the closure sheets.**)

Web-based Learning Connection(s) (TPE 14)

List digital app or internet site that could support teachers and/or students in learning the content and give a one sentence description.

App or url:

Description:

Connection to Global/International Ideas

Does this entry have a connection to Global/International Topic? If so, briefly explain.

Theory into Practice

To show evidence of critical thinking apply what you learned by doing this task and relate to theory (frameworks, textbook, readings, lectures, videos, etc.) and to practice via your practicum.

Prompt: This activity is supported by course readings (or videos) as evidenced by..... (discuss specific articles or videos and how they relate to the activity) and demonstrates principles of good practice..... (discuss any practicum experiences that relate to activity.)

SCORING RUBRIC FOR COURSE PORTFOLIO

4. EXCEPTIONAL

A. must meet all the criteria for a score of 3

B. All writing is correct, scholarly, linked to readings, and shows that candidate has been extremely insightful regarding learnings in class.

3. ABOVE STANDARD

A. must meet all the criteria for a score of 2

B. Each piece of writing is detailed and routinely cites at least 2 specific pieces of information found in the readings, framework & standards documents, videos and classroom lectures.

2. AT STANDARD

A. Portfolio is complete and has 10 required assignments.

B. Each piece of writing cites at least one specific piece of information found in the readings, framework & standards documents, videos and classroom lectures.

C. Student has solid attendance record.

1. BELOW STANDARD

A. Portfolio is missing assignments

B. Reflections are cursory and do not indicate whether or not student has read the required materials or has learned the required information.

UPLOAD STEM Science Units:

As part of the course, you will also email a copy of your unit (Embedded Signature Assignment, ESA) to a designated [Box.com](#) folder. For the Fall 2016 semester you will need to email their ESA as a PDF to: upload.Fall_16.5a749a2z3k@u.box.com,

Name the document following this example:

Department Code, Course Number-Section Number-Last Name, First Name

EDUC385C-02-Last name, First Name

?

**COURSE GRADE SHEET
EDUC 385/585**

<u>Area</u>	<u>Total Possible Points</u>	<u>Your Points</u>
I. STEM Unit	3	
II. Focus Student Reflection	3	
III. Portfolio Assessment and Conference	4	

Late unit or portfolio -1 pt. for each.

TOTAL POINTS _____ FINAL GRADE _____

10 =A 7=B

9 =A- 6=B-

8 =B+ 5=C

BELOW 5 = Consultation with instructor-may result in D, F or I

More than 1 unexcused absence will result in one or more points deducted from total score. All absences, excused or unexcused will need to do a make-up reflection. Please discuss with your instructor any situations that occur that will cause you to miss class.

Requests for Accommodation

Reasonable accommodations in accordance with the Americans with Disabilities Act will be made for course participants with disabilities who require specific instructional and testing modifications. Students with such requirements must identify themselves to the University of San Diego Disability Services Office (619.260.4655) before the beginning of the course. Every effort will be made to accommodate students' needs, however, performance standards for the course will not be modified in considering specific accommodations.

Grade of Incomplete:

The grade of Incomplete ("I") may be recorded to indicate (1) that the requirements of a course have been substantially completed but, for a legitimate reason, a small fraction of the work remains to be completed, and, (2) that the record of the student in the course justifies the expectation that he or she will complete the work and obtain the passing grade by the deadline. It is the student's responsibility to explain to the instructor the reasons for non-completion of work and to request an incomplete grade prior to the posting of final grades. Students who receive a grade of incomplete must submit all missing work no later than the end of the tenth week of the next regular semester; otherwise the "I" grade will become a permanent "F."

A Petition for a grade of incomplete must accompany all requests for an incomplete at the end of the course term. Criteria for changing a grade of incomplete to a letter grade must be negotiated with the instructor before the final class. The criteria must be outlined on the signed Incomplete Request Form. A completed form with both the instructor and student signature must be turned in by the last session of the class. Without a student signed form the registrar requires assignment of a grade of F. A student must complete an incomplete by the 10th week of the next session or a grade of F is permanently calculated in the overall grade point average. Any attempts to complete an incomplete after the 10-week deadline requires the approval of the Associate Dean of the School of Education.

SOLES On-line Course Evaluation

Student evaluations in SOLES are collected via an on-line system that maintains student anonymity. SOLES uses these evaluations for continuous improvement of course content and instruction and as a component of its regular performance review of faculty members, so please take them seriously. Course evaluations are available to students in their MySanDiego accounts via the Active Registration link on the One-Stop Services tab. Your instructor will provide you with instructions on how to access the evaluations once they are activated near the scheduled conclusion of your course.

Statement on Plagiarism

The complete plagiarism policy is available for your review at:

http://www.sandiego.edu/associatedstudents/branches/vice_president/academics/honor_council/integrity_policy.php

All members of the University community share the responsibility for maintaining an environment of academic integrity since academic dishonesty is a threat to the University.

Acts of academic dishonesty include: a) unauthorized assistance on an examination; b) falsification or invention of data; c) unauthorized collaboration on an academic exercise; d) plagiarism; e) misappropriation of resource materials; f) any unauthorized access of an instructor's files or computer account; or g) any other serious violation of academic integrity as established by the instructor.

It is the responsibility of the instructor to determine whether a violation has occurred. An act of academic dishonesty may be either a serious violation, or, if unintentional, an infraction (a non-serious violation of course rules). If the instructor determines that an infraction (as opposed to a serious violation) has occurred, the instructor can impose penalties that may include: a) reduction in grade; b) withdrawal from the course; c) requirement that all or part of the course be retaken; and d) a requirement that additional work be undertaken in connection with the course or exercise. Students may formally challenge the instructor's determination of infraction (see below).

Instructors shall report all violations, whether, infractions or serious violations, both to the Dean's office and the student using the Academic Integrity Violation Preliminary Worksheet. The Associate Dean will contact the student and ensure she or he is aware of the Academic Integrity policy. The Associate Dean will appoint a hearing committee only when: 1) the instructor reports that a serious violation occurred, or 2) the instructor reports that an infraction occurred and the student wishes to appeal the determination of infraction.

The hearing committee will include, in addition to the Associate Dean, a faculty member and two students from the School of Leadership and Education Sciences, and a faculty member from outside the School of Leadership and Education Sciences. If the hearing committee determines that a serious violation has occurred it also will determine sanctions to be applied which may include: a) expulsion from the University; b) suspension from the University for up to one year; c) a letter of censure; and d) imposition of a period of probation. If the hearing committee determines an infraction has occurred the penalty imposed by the faculty member will be upheld. If the hearing committee determines that no serious violation or infraction has occurred, it will request the instructor to take action consistent with that determination. If the hearing committee determines that expulsion is the appropriate sanction the student may appeal to the Provost.