COLLEGE OF CHARLESTON
SMFT 703-001: Curriculum, Policy, and Systems in Science & Math
Monday, 7:00-9:45 pm, ECTR 216
Face-to-Face and Online
Spring 2016

Instructor: William R. Veal, Ph.D.
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Office Hours: Tuesdays & Thursdays: 12:30-3:00 pm; or by appointment
Email Hours: M-F 12-3 pm
Course Meeting: ECTR 216
Course Times: Monday, 7:00-9:45

Course Description and Objectives:
This course is designed to examine possible solutions to current problems in curriculum and policy within school systems in South Carolina. This course is designed to increase organizational and interpersonal skills that empower teachers to alter school climates and garner technical support while designing and implementing K–12 programs of excellence.
This is an advanced course in teaching science and mathematics at the K-12 grade levels. In this course Teacher/Students (TSs) will study the elements necessary to navigate the institution of policy making, curriculum development, and policy analysis and interpretation. The organization, content, and delivery of this course will focus on policy making leading to decisions at the district, school, and classroom levels.

Course Objectives:

1. Analyze and promote the natures of curriculum, policy and systems in South Carolina public schools. Teachers will:
   a. Examine and critically critique policy issues in science and mathematics education and determine their role in mitigating the issues for implementation,
   b. Become facilitators of change for school improvement in science and mathematics,
   c. Identify factors impinging on the teaching of science and mathematics in K-12 settings.

2. Learn and use practices consistent with national and state standards and policies.
   a. Describe the way national and state policy is made in science and mathematics education and how it influences college faculty and public school teachers,
   b. Analyze sources of satisfaction for mathematics and science teachers and use this information to help prevent stress and burnout,
   c. Diagnose institutional needs, prescribe a desired state for science and mathematics and design and implement interventions to attain that desired state,
   d. Use professional organizations to the benefit of school mathematics and science programs,
   e. Develop networks with scientists, business, and industry in the community.

3. Systematically analyze a school setting for factors impinging on the teaching of mathematics and science in order to help teachers achieve maximum effectiveness when beginning work in a new school or continuing work at an existing site.
   a. Compare expertise to enhance the knowledge base and performance of science and mathematics teachers in schools and school districts,
   b. Evaluate overall science and mathematics programs,
   c. Evaluate all dimension of the school environment that relate to the teaching and learning of science and mathematics.
<table>
<thead>
<tr>
<th><strong>Student Learning Outcomes</strong></th>
<th><strong>Assessment Method and Performance Expected</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>What will students know and be able to do when they complete the course?</td>
<td>How will each outcome be measured? Who will be assessed, when, and how often? How well should students be able to do on the assessment?</td>
</tr>
<tr>
<td>1. Recognize how national policies in science and mathematics are developed and implemented.</td>
<td>Students will summarize and analyze 5 sections related to math and/or science of the Every Student Succeeds Act. Students will be assessed once on the final product and a set of discussion responses online. Students will earn an 80% or higher on the completed analysis and discussions.</td>
</tr>
<tr>
<td>2. Develop an action plan about a math or science topic for implementing policy at the local level.</td>
<td>Students will complete a detailed plan for implementing the policy in their school or work environment. Students will be assessed once on the final product and a set of discussion questions online. Students will earn an 80% or higher on the project and discussions.</td>
</tr>
<tr>
<td>3. Demonstrate knowledge of policy legislation and implementation at the state and local level.</td>
<td>Students will complete a policy brief about a current issues revolving around a math or science topic in their school. Students will be assessed once on the final product and a set of discussion questions online. Students will earn an 80% or higher on the project and discussions.</td>
</tr>
</tbody>
</table>

**Textbook, Equipment, and Technology**

**Required Text:** There is no required text. All readings will be online in OAKS, found online, or in a course packet.

**Class Supplies:**

Common Core Standards (both practice and content) for mathematics K-12 (online [http://www.corestandards.org/Math](http://www.corestandards.org/Math))

NCTM Standards (both process and content) for K-12 (online [http://nctm.org/standards](http://nctm.org/standards))


Every Student Succeeds Act (online [https://www.gpo.gov/fdsys/pkg/BILLS-114s1177enr/pdf/BILLS-114s1177enr.pdf](https://www.gpo.gov/fdsys/pkg/BILLS-114s1177enr/pdf/BILLS-114s1177enr.pdf) and in OAKS as a pdf)

iPads, tablets, or computers are needed to complete work at home. In addition, these should be brought to class so that resources can be ascertained.

**Technology and Method of Instruction:** The main method of delivery will be face-to-face with many sessions online and include discussion, lecture, videos, group learning, group projects, and interactive activities.
Utilization of Computer Applications (Available in the CofC managed computer labs located in JC Long, Library, and other campus sites. If unfamiliar with these applications, set up a time for tutoring with me.)

- Internet
- Word processing
- OAKS

Online Communication
Since this is an online course, you will be required to participate in many online discussions with the professor and peers. In order to do this, we must build a community online that allows all to express their feelings, ideas, comments, and frustrations. The following are guidelines for participating in this online community:

- Everyone must comment in both number and quality;
- Polite and cordial argumentation is healthy;
- Respect what others have to say and cite others when appropriate;
- Do not attack a person, rather argue the idea;

Navigating Through the Course
I suggest the following in navigating through the course:

1. Start on the homepage with any announcements.
2. Look at the calendar to see if there are any items that are due.
3. Go to Content.
4. Follow the Module outlines from start to finish. You may go back at any time to reread the directions or content.
5. Each Module starts with objectives; see if you can finish these by the end of each Module.
6. Lectures & Readings contain the main ‘content’ and information for learning. You should be able to read all of the information, articles, or postings within the first 4 days of class.
7. Media Sources contains any video or audio support for the lectures and readings. These can be considered part of the content and information to learn.
8. Explore sections will include any activities that you will have to do alone, in pairs, or in groups. This is the action part of the course and you will be doing something; researching, arguing, constructing, posting, and responding.
9. Assignments will have all of the assignments that you are to complete, where to turn them in, and the due date.
10. Discussion will take you to the discussion board where you will find any discussion topics and threads to follow.

How to Access the Communication Tools

Lecture and Readings: Most attachments and documents here are in pdf. You will find some lectures recorded using voicethread. Most of these will be a guided lecture through a PPT presentation with some additional slides and explanations of content. Please progress and complete each of these. The readings are a compilation of online readings, which include chapters and articles. Most of these can be found online and are linked in the Module.

Media Sources: You will find links to various videos, podcasts, or streaming media sources that will help you develop skills of analysis. Watch and complete all media sources. Summarizing these may help you apply the content to your assignments and discussions.

Explore: These are activities that you will do or complete online. In addition to the readings, watching videos, and listening to lectures or podcasts, these are activities that are web-based and will involve you or a pair of students to complete a task that involves finding 'data' online to complete the task, which will usually be a set of questions to answer. Discussions may be used to follow-up on the activity and can be found in the Assignment section.
Assignments: Some Modules will have assignments. Specific due dates with instructions will be given at the beginning of each Module. Some assignments will require you to work in pairs or groups. The DropBox will be accessible to submit all assignments. Each assignment will have a specific method for labeling each assignment.

Discussions: Each Module will have a corresponding discussion or discussions. It is required that you make a minimum of two comments per discussion topic. This can consist of an original comment or a response to someone else's comment. Secret Word – Edisto The quality and depth of the comments will be assessed. Since this is asynchronous learning, it is expected that you will log into the course at least 2 times during the duration of the Module.

Grading Policy

Course Requirements:
Demonstration of SOE Dispositions
Examples of how dispositions are evident are provided in italics.
- Belief that all students can learn, participation and attitudes expressed about students and learning
- Value and respect for individual differences, interactions in class discussions and participation in group work
- Value of positive human interactions, participation in class and in group work
- Exhibition and encouragement of intellectual curiosity, enthusiasm about learning, and willingness to learn new ideas, participation in class and group discussions and performance on assessments
- Dedication to inquiry, reflection, and self-assessment, participation in class and group discussions; performance on assessments (especially the reading and course reflections assignments)
- Value of collaborative and cooperative work, thoughtful, constructive critiques of others’ work, participation in class activities
- Sensitivity toward community and cultural contexts, participation in class and group discussions, tolerating, discussing, and respectfully listening to differing points of views
- Engagement in responsible and ethical practice, performance on assessments, class attendance, and participation in group activities
- Development of professional mastery over time, performance over time in writing, thinking, and expression of knowledge

Completion of all assigned readings and assignments ON TIME.
See Course Assignments below for detailed descriptions.

Responsibility for ALL course content
Including lecture, outside readings, handouts, research, etc. Since this is partly an online course, it is imperative that you respond to the discussion questions, complete small tasks that contribute to the discussions, and submit any work to be developed.

Responsibility for keeping up with grades and attendance
If you miss a class, ask a classmate for the missed assignments and notes.

Course Assignments:
Due dates for course assignments, as well as scheduled exams, are listed on the tentative daily schedule at the end of the syllabus. Any changes will be announced in class or posted on OAKs. All assignments must be turned in during the class on the date due. If, for medical or serious personal reasons, an assignment is late, the instructor should be informed of the reasons. Otherwise, each late course assignment will receive a FIVE-PERCENT deduction per day that it is late. DO NOT give assignments to School of Education personnel. Assignments will NOT be accepted via email (unless specified explicitly).

All assignments must be typed and follow APA style guidelines, unless otherwise specified.
Policy Paper. This is a 6-7 page (doubled spaced) Math/science politics and policy paper excluding the reference list. Identify a national or state policy problem and give the rationale for why this is a policy issue. Your paper must include the following:

(a) Re-state the policy. An overview of how the policy was developed. Who and why was this policy developed?
Who were/are the key players? Who were included and who were excluded from the process?
(b) What was the social, political, economic and context within which this policy was developed?
(c) How was/is the policy implemented?
(d) How was assessment of the policy implementation done? In other words, how successful has this policy been and what factors have influenced its success or lack of success?
(e) What is your personal analysis of this policy? You must support your statements with evidence/literature.
(f) Provide a re-write of the policy based upon your knowledge.
(g) You will present this to the class in a simulated College of Charleston – Education Council Meeting. Directions will follow.

Action plan. This is a practical proposal for direct impact on your school. This is a 2-4 page document in the form of a letter to the principal or administrator in the district office.

(a) State a current issue in mathematics or science in your school or district. Supply data to support the issue. What is the objective? What is the end product?
(b) Develop and implement an action plan to change the issue. This might include what you or a group of teachers should and will do. Supply answers to these headings: What?, Who?, by When?, What resources?, and How will it be communicated?

Online Participation. During each online section of the course, each student is required to make a post and respond to another student. Participation includes the following:

(a) Response to discussion questions and posts.
(b) Completion of small activities or development of conceptual maps that are asked within each Explore section of the online Modules.
(c) Completion of any Assignments that are intended to be completed online and can be found in the Assignment section of the online Modules.

Every Student Succeeds Act (ESSA) – Elementary and Secondary Education Act. You will have to explore and analyze the impact of this policy and answer questions for 5 sections or themes.

(a) 1) Download the pdf of ESSA found in the Lecture & Readings section above. 2) Do a search by clicking the magnifying glass or click ctrl F. Choose the word mathematics or science. 3) Search the entire document and find where the word mathematics or science is written. Analyze the "Section" that the word appears. Find out under which section it is and what that section means. 4) Read at least 5 Sections using the words mathematics or science and complete the Assignments below.
(b) You will complete and answer all of these questions for 5 different sections and themes within ESSA related to mathematics or science. Once you do a search and find, for example, "science" on page 119 shows up in:
   Part A - Supportive Effective Instruction
   Sec. 2101. Formula Grants to states
   (c) State Uses of Funds
   (4) State Activities
   (B) Types of State Activities
   (iv) Carrying out programs that establish, expand, or improve alternative routes for State certification of teachers (especially for teachers of children with disabilities, English learners, science, ...

The questions to answer are based upon the entire section and sub-sections in which you found the word.

1) What does the policy state? Supply word for word the statement at the final level.
2) What does the policy statement mean? How do you interpret this?
3) What is the impact at the state of SC level?
4) What impact will this policy have on your as a teacher in your school?

Assignments
It will be possible to earn 500 points during the semester. They will be distributed as follows:

<table>
<thead>
<tr>
<th>Assignment</th>
<th>Due Date</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESSA Analysis</td>
<td>February 1</td>
<td>125</td>
</tr>
<tr>
<td>Action Plan</td>
<td>March 14</td>
<td>75</td>
</tr>
<tr>
<td>Policy Paper</td>
<td>April 21</td>
<td>125</td>
</tr>
<tr>
<td>Policy Presentation</td>
<td>April 25</td>
<td>25</td>
</tr>
<tr>
<td>Participation: Online &amp; In-Class</td>
<td>Throughout - April 21</td>
<td>150</td>
</tr>
</tbody>
</table>

Evaluation Scale

<table>
<thead>
<tr>
<th>Letter Grades</th>
<th>Percentage Range</th>
<th>Grade Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>91-100%</td>
<td>4.0</td>
</tr>
<tr>
<td>B+</td>
<td>89-90%</td>
<td>3.3</td>
</tr>
<tr>
<td>B</td>
<td>84-88%</td>
<td>3.0</td>
</tr>
<tr>
<td>C+</td>
<td>82.83%</td>
<td>2.3</td>
</tr>
<tr>
<td>C</td>
<td>77-81%</td>
<td>2.0</td>
</tr>
<tr>
<td>F</td>
<td>≤76%</td>
<td>0.0</td>
</tr>
</tbody>
</table>

Attendance Policy

Excessive absences (i.e., more than 15% - approximately 5 hours/2 classes – may result in receiving a “WA/F.”) Students will be tardy if they arrive in class within the first 20 minutes after class has started. Three tardies result in one absence. Students will be absent if they arrive after 20 minutes or if they leave class early. Regarding being tardy or having to leave class early, exceptions will be made on an individual basis, but students must speak with me about extenuating circumstances for such exceptions. Regarding absences, if a student exceeds allowable absences due to extenuating circumstances beyond the student’s control, a panel of professors from that semester will review the circumstances and make a final decision.

If a student exceeds allowable absences due to extenuating circumstances beyond the student’s control, a panel of professors from that semester will review the circumstances and make a final decision. SNAP students, if they wish special accommodations, must see the professor within the first two weeks of the course or as soon as they find out about potential accommodations if determined mid semester. Athletes who will miss class due to athletic events must see the professor within the first two weeks of the course and submit athletic schedule for the semester, identifying classes that will be missed. No other absences will be allowed for athletes who miss the maximum allowable absences due to athletic events.

Written and Oral Communication

TSs are expected to use correct grammar at all times. Points will be deducted on written assignments for grammatical errors. All references must follow the American Psychological Association (APA) Guidelines for Term Papers. Writing Lab is located on the first floor of Addlestone Library (Monday through Thursday 9:00 am to 9:00 pm and Friday 9:00 am to noon). Further, it is imperative that TSs use correct grammar in all oral communication, especially during field experiences. Classroom teachers, student peers, and I will collaborate to eliminate all oral grammatical errors, using an approach of constructive criticism.
Academic Integrity Statement

CofC Honor System

Lying, cheating, attempted cheating, and plagiarism are violations of our Honor Code that, when identified, are investigated. Each incident will be examined to determine the degree of deception involved. Incidents where the instructor determines the student’s actions are related more to a misunderstanding will handled by the instructor. A written intervention designed to help prevent the student from repeating the error will be given to the student. The intervention, submitted by form and signed both by the instructor and the student, will be forwarded to the Dean of Students and placed in the student’s file.

Cases of suspected academic dishonesty will be reported directly by the instructor and/or others having knowledge of the incident to the Dean of Students. A student found responsible by the Honor Board for academic dishonesty will receive a XF in the course, indicating failure of the course due to academic dishonesty. This grade will appear on the student’s transcript for two years after which the student may petition for the X to be expunged. The student may also be placed on disciplinary probation, suspended (temporary removal) or expelled (permanent removal) from the College by the Honor Board.

Students should be aware that unauthorized collaboration—working together without permission—is a form of cheating. Unless the instructor specifies that students can work together on an assignment, quiz and/or test, no collaboration during the completion of the assignment is permitted. Secret Word – Edisto. Other forms of cheating include possessing or using an unauthorized study aid (which could include accessing information via a cell phone or computer), copying from others’ exams, fabricating data, and giving unauthorized assistance. Research conducted and/or papers written for other classes cannot be used in whole or in part for any assignment in this class without obtaining prior permission from the instructor.

Students can find the complete Honor Code and all related processes in the Student Handbook at http://studentaffairs.cofc.edu/honor-system/studenthandbook/index.php

TSs are expected to be respectful and considerate of one another. Cell phones should be turned off while in class. If an emergency, TAs may be excused to the hallway to talk or text. Laptops should only be used in class if they are facilitating the development of mathematical thinking; if they appear to be a distraction, I will ask that they be put away. Disrespectful conduct will result in a loss of participation points.

ADA Accommodations for Students with Disabilities

In compliance with the Americans Disabilities Act (ADA), all qualified students are entitled to “reasonable accommodations.” Any students requiring accommodations should contact the Center for Disability Services (953-1431) and provide me with documentation of needed accommodations within the first two weeks of the course or as soon as they find out about potential accommodations if determined mid semester.

Center for Student Learning: I encourage you to utilize the Center for Student Learning’s (CSL) academic support services for assistance in study strategies and course content. They offer tutoring, Supplemental Instruction, study skills appointments, and workshops. Students of all abilities have become more successful using these programs throughout their academic career and the services are available to you at no additional cost. For more information regarding these services please visit the CSL website at http://csl.cofc.edu or call (843)953-5635.

Mission Statements

All teacher preparation programs in the College of Charleston’s School of Education (SOE) are guided by a commitment to the conceptual framework of “Making the Teaching and Learning Connection.” Three elements of teacher competency (ETS) are fundamental to this framework: teachers must (1) understand and value the learner, (2) know what and how to teach and assess within a conducive learning environment, and (3) understand themselves as professionals. In addition, these competencies are foundational to the learning and assessments
within this course, facilitating the development of knowledge, skills, and dispositions necessary for becoming an effective teacher.

Below are the specific end-of-course outcomes related to these teacher competencies. They are derived from the standards set forth by the National Council of Teachers of Mathematics (NCTM) National Science Teachers Association (NSTA) and relate to those of the (1) School of Education (SOE), (2) Council for Accreditation of Education Preparation (CAEP), (3) National Association for the Education of Young Children (NAEYC), (4) Association for Middle Level Education (AMLE), and State Standards for Teacher Education (SC). They, therefore, indicate the expectations for teacher candidates within the School of Education, early childhood teachers, elementary-grades teachers, and middle-grades teachers.

1. Teacher candidates (TSs) will demonstrate how all students learn mathematics or science concepts. EHHP I; NAEYC 4b

2. TSs will recognize the importance of all students’ ideas, interests, beliefs, experiences, and needs in the design, implementation, differentiation, and evaluation of mathematically- and scientifically-based lessons. EHHP I; NAEYC 1a, 5; AMLE 3.K5, 3.D4, 4.P3; SC 4

3. TSs will develop instructional practices derived from current research-based information. EHHP III; NAEYC 1, 4b; AMLE 1.P5, 1.P10, 4.K3, 5.K2; SC 4 (diverse learning styles)

4. TSs will assess student knowledge and dispositions using ongoing, systematic informal and formal assessments. EHHP VI; NAEYC 3, 4b; AMLE 1.P6, 5.K8, 5.D5, 5.P4, 6(all)

5. TSs will communicate concepts, ideas, and philosophies about and through science and mathematics. EHHP II; NAEYC 4b; AMLE 4.K4, 4.D4, 4.P5

6. TSs will demonstrate knowledge of the content and process/practice standards as prescribed by the NCTM, Common Core, Next Generation Science Standards, and the SC Standards. EHHP II; NAEYC 4b, 5; AMLE 4, 6.K5; SC 7

7. TSs will demonstrate in-depth competency of mathematical or science knowledge and skills. EHHP II;

Course Alignment with Common Core Standards

College and Career Readiness Mathematics Practice Standards
1. Make sense of problems and persevere in solving them.
2. Reason abstractly and quantitatively.
3. Construct viable arguments and critique the reasoning of others.
5. Use appropriate tools strategically.
6. Attend to precision.
7. Look for and make use of structure.

College and Career Readiness ELA Standards

Reading.
Key ideas and details.
Integration of knowledge and ideas.
Range of reading level and text complexity.

Speaking and Listening.
Comprehension and collaboration.
Presentation of knowledge and ideas.

Writing.
Text types and purposes.
Production and distribution of writing.
Range of writing.

Language.
Conventions of Standard English.
Tentative Weekly Schedule

Class 1 - Week 1

**Online**
Module 1: Introduction to Course and National Policy
Objectives: 1) Analyze sections of Every Student Succeeds Act (ESSA) related to math and science.
2) Introduce one another in the online forum.
Learning Outcome: Become familiar with ESSA.
Readings: ESSA
ESSA White House Fact Sheet

Class 2 - Week 2

MLK – No Class. Continue analysis and online discussion.

Class 3 - Week 3

**Face-to-Face**
Module 1: ESSA and National Policy
Objectives: 1) Define Policy and what it does at a national level.
2) Recognize the players in policy development.
Learning Outcome: Determine the impact of ESSA on classroom and informal science and mathematics settings.
Readings: ESSA
ESSA White House Fact Sheet
ESSA vs NCLB

Class 4 - Week 4

**Face-to-Face**
Module 2: STEM and Implementation
Objectives: 1) Analyze SC policy on math and science issues.
2) Define accountability for ESSA and compare the changes with ESSA.
Learning Outcome: Apply tenants of ESSA to classrooms, and determine impact of new accountability plans at the state, district, grade, and discipline levels.
Readings: ESSA vs NCLB for STEM Education
CRS Report on Every Student Succeeds Act
ESSAA Primer Accountability
ESSA Accountability Chart

Class 5 - Week 5

**Online**
Module 2: STEM Strategic Plan
Objectives: 1) Read the 2013 White House Strategic Plan for STEM
2) Organize thoughts and impact for the Implementation Roadmaps within the Strategic Plan.
Learning Outcome: Comment of the Implementation Roadmaps and suggest changes that might lead to policy changes.
Readings: The White House STEM Strategic Plan
<table>
<thead>
<tr>
<th>Class 6 - Week 6</th>
<th>February 15</th>
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<tbody>
<tr>
<td><strong>Online</strong> Module 3: SC Policy</td>
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</tbody>
</table>
| **Objectives:** | 1) Analyze SC policy on math and science issues.  
2) Develop a roadmap for policy development at the state level. |
| **Learning Outcome:** | Compare and Contrast national and state STEM policies. |

<table>
<thead>
<tr>
<th>Class 7 - Week 7</th>
<th>February 22</th>
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</thead>
<tbody>
<tr>
<td><strong>Face-to-Face</strong> Module 3: SC Policy</td>
<td></td>
</tr>
</tbody>
</table>
| **Objectives:** | 1) Analyze SC policy on math and science issues.  
2) Develop a roadmap for policy development at the state level. |
| **Learning Outcome:** | Determine impact of SC STEM policies on classrooms and informal STEM settings. |

<table>
<thead>
<tr>
<th>Class 8 - Week 8</th>
<th>February 29</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Online</strong> Module 3: SC Policy</td>
<td></td>
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</tbody>
</table>
| **Objectives:** | 1) Become familiar with the wording for education legislation in SC.  
2) Develop a collaboration for math and science education. |
| **Learning Outcome:** | |

*Place-based Math & Science Policy: Start developing your policy statements and bills.*

<table>
<thead>
<tr>
<th>Class 9 - Week 9</th>
<th>March 7</th>
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<tbody>
<tr>
<td><strong>Spring Break</strong></td>
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<tr>
<th>Class 10 - Week 10</th>
<th>March 14</th>
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</thead>
<tbody>
<tr>
<td><strong>Online</strong> Module 3: Curricular</td>
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</tbody>
</table>
| **Objectives:** | 1) Define curriculum for math and science.  
2) Adjust current definitions of math and science curriculum to include local knowledge and culture. |
| **Learning Outcome:** | Develop a curriculum outline to implement a new idea from the STEM strategic plan or state policy. |
| **Readings:** | TBD |
Class 11 - Week 11  March 21
**Face-to-Face**
Place-based Math & Science Policy
Objectives:  1) Present Action Plans
            2) Explore practical applications of policy leading to change.
Learning Outcome: Connect policy to the local level through action plans.
Readings: None

Class 12 - Week 12  March 28
**Online**
Curriculum
Objectives:  1) Learn the history of math and science curriculum development.
            2) Develop a timeline for shifts in curricular thought for math and science.
Learning Outcome: Outline curricular thought in math and science.
Readings: TBD

Class 13 - Week 13  April 4
**Face-to-Face**
Place-based Math & Science Policy
Objectives:  1) Present Action Plans
            2) Explore practical applications of policy leading to change.
Learning Outcome: Connect policy to the local level through action plans.
Readings: None

Class 14 - Week 14  April 11
**Online**
Teacher Evaluation
Objectives:  1) Determine impact of new legislation on teacher evaluation.
            2) Compare new and old versions of teacher evaluation.
Learning Outcome:
Readings: TBD

Class 15 - Week 15  April 18
**Face-to-Face**
Accountability in Science & Math
Objectives:  1) Determine how accountability in math & science influence teaching and curriculum.
            2) Determine steps to alter legislative bills for accountability.
Learning Outcome: Identify impact of math & science accountability for teaching and curriculum.
Readings: TBD

Project – Week 16  April 21  Thursday night (Make up for MLK class.)
**Face-to-Face**
Projects in Math & Science Policy