# New York University <br> Steinhardt School of Culture, Education, and Human Development Department of Teaching and Learning 

ECED-GE 2314 Social Studies and Science Experiences for Younger Children
Fall 2019, Thursdays, 6:45-8:25 pm
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Office Hours: By Appointment
As an adjunct, I am not on campus every day but am happy to do office hours via phone or Skype by appointment.

## Course Description: (From Catalog)

Experiences for developing children's concepts \& skills in social studies \& science. Program planning \& use of resources: the out-of-doors, maps, globes, books, pictures \& other media. Includes techniques for integrating the two content areas, evaluating current materials, \& adapting programs for special students in regular classrooms.

## Course Overview:

For young children, science and social studies overlap in both content and appropriate teaching methodology. For the very young child, the content of these subjects revolves around developing theories and understandings about how their immediate environment works: families, neighborhoods, surrounding nature, body systems, and technology. As children grow older and enter elementary school, this circle broadens to include more nuanced and technical understandings of these subjects, as well as how the student's immediate experiences relate to and impact the broader community and world. Throughout the preschool and early elementary years, science and social studies are both a cycle of inquiry, beginning with the child's immediate experience and growing outward into understanding more abstract concepts, historical contexts, and universal scientific processes. Embedded within the teaching of science and social studies are continuous discussion and reflection - both on the part of the teacher and students - of how culture and language impact our understandings of the world around us.

The teacher's role in this process is to shift between providing inquiry-based exploratory opportunities and direct teaching. By designing an integrated thematic curricula and making necessary adjustments to published curricular materials that addresses both of these subjects and incorporates literacy, the teacher provides a variety of opportunities for students to discover and theorize on their own. This is followed with direct teaching of content that enhances what students have already begun to understand themselves. Through careful and systematic assessment, the teacher creates, revises, and re-creates curriculum that simultaneously meets students where they are and teaches content and skills that align with the standards. Throughout the curriculum, the teacher creates relevant opportunities for off-campus trips, interaction with the larger community, and social activism.

## Learner Objectives:

1. Students will plan integrated curriculum that is differentiated and builds on children's developmental abilities.
2. Students will plan curriculum that integrates social studies and science with age and grade-level standards.
3. Students will plan curriculum that integrates literacy and the arts with social studies and science.
4. Students will create curricular material that utilizes off-site local and community-based resources that supports in-classroom activities.
5. Students will embed ample opportunities to support the linguistic growth of English Language Learners within the integrated curriculum.
6. Students will create age-appropriate opportunities for social activism in their curriculum designs.
7. Students will create and use a variety of assessments to determine student learning. These assessments will be used to re-design future curriculum. Assessments will cover multiple disciplines, including literacy.

## Required Readings:

1. Teaching STEM in the Early Years (S. Moomaw) (Available in bookstore)
2. Multicultural Teaching in the Early Childhood Classroom (M. Souto-Manning) (Available in bookstore)
3. Articles (course site)
4. Science Standards and Social Studies Standards (New York State Social Studies Standards (up to grade 2), New York State Science Standards (up to grade 2), and New York State Prekindergarten Foundation for the Common Core). You will also be responsible for integrating ELA Common Core Standards, which you should receive and go over in LITC-GE 2001.

## Course Requirements:

## Course Policies and Etiquette

- Students with special needs will be accommodated per NYU's policy.
- Students are responsible for ALL information conveyed through NYU email - you should check it at least once every 24 hours.
- Students are responsible for adhering to NYU's policy on plagiarism.
- Students are expected to come to each class except in cases of illness and family emergencies. Please see attendance policy below.
- Students are expected to arrive on time and remain in class for the full duration of the meeting.
- ALL cell phone use is prohibited. Use of computers is STRICTLY limited to note taking. Violations will result in a drop in grade.
- All relevant materials passed out in class or referred to will be posted to NYU Classes. Students are responsible for making sure they have access to the site.


## Readings

Each week you will have readings assigned from your course texts and supplementary articles to be posted on NYU Classes. (See Appendix B for the course calendar.) Students will be expected to have readings completed by the assigned date and to be prepared to discuss readings in detail during lectures and class discussions. Students will demonstrate their understanding of readings through discussions and references to readings in written assignments.

Assignments are to be submitted via NYU Classes BEFORE the start of class on the day they are due. Sometimes you will be asked to also bring a hard copy of the assignment to class. See NYU Classes for specifications.

## Weekly Read Alouds (10\%)

One or two students will be assigned each week to bring in a science or social studies-related book. You will show us the book, reading a couple of pages aloud, and share with the class how you think this book could be used with young children. Be sure to consider what age child you would use this book with. Before you present the book, please submit on NYU Classes the title, author, illustrator, and a short paragraph describing the book. I will be posting these so everyone will leave the class with an annotated bibliography. Full credit will ONLY be given if this information is submitted on time.

## Observation Essays \#1 and \#2 (20\%)

Once at the beginning and once at the end of the semester, you will write a short essay detailing your observations of how science and social studies are taught in your student teaching placement. These essays will incorporate course readings and the second essay will include your recommendations for enhancements to curriculum.

## Science Lesson Plans and Implementation (35\%)

During the semester, you will conduct two consecutive science lessons on the same topic in your placement. You will be using pre- and post-assessments to design your lessons and make instructional decisions from one lesson to the next. I will meet with each of you individually early in the semester to determine what is plausible in your student teaching placement. You will be presenting your outcomes to the class and turning in your lesson plans along with a written self-assessment. Some of you will be in classrooms where science is taught as a special outside the classroom. This does NOT mean you can't teach a lesson with science content as part of literacy, math, social studies, or any other topic. There is flexibility in the implementation of this assignment.

## Community Action and Trip Paper (20\%)

This paper requires you to plan a "Community Action" project appropriate for young children and visit a possible field trip site. An example might be designing a neighborhood cleanup project that culminates with a trip to a local recycling center, or a healthy eating project and visit to a local farmer's market. While you won't likely be able to take your students on the trip, you'll visit the site yourself and do some research on what it takes to plan this type of project. The project must be something that incorporates and benefits the larger community.

## Participation (15\%)

As is clear from above, many of your assignments are presentations. Your participation grade will be determined by how much you contribute to class discussions, as well as how enthusiastically you participate in and respond to your colleagues' presentations. Additionally, this is a very hands-on class and not strictly a lecture course. Learning to teach young children is about DOING rather than HEARING, so you are expected to participate in activities that may be a little out of your comfort zone, but the class provides a safe and productive environment to do so.

## Attendance Policy:

All absences must be cleared with the professor. Students are responsible for all missed work. Two unexcused absences will result in a drop of half a grade. (Ex: an A-would become a $B+$ ). Two late arrivals or early exits $=1$ unexcused absence.

## Grading Policy:

You will receive a rubric and breakdown for each assignment that includes the following (these will also be posted on NYU Classes):

- The expectations for each element of an assignment.
- The total number of points the assignment is worth and its weight towards your total grade.
- How many points each element of the assignment is worth.
- The due date and whether you need to turn in a hard copy, e-copy, or prepare a presentation.
- A rubric outlining what elements look like at different levels. (You will also receive a copy of this rubric when your assignment is returned detailing where your assignment landed on the rubric and why.)
- Participation will be graded on a combination of contribution to discussions, professional demeanor during class, and demonstration of understanding of assigned readings.
- Please see Appendix A for Steinhardt's grading scale. All assignment and final grades will be calculated using this scale.


## Students with Disabilities:

Students with physical or learning disabilities are required to register with the Moses Center for Students with Disabilities, 726 Broadway, 2nd Floor, (212-998-4980), and are required to present a letter from the Center to the instructor at the start of the semester in order to be considered for appropriate accommodation.

## Academic Integrity:

Please note: All work turned in for this course must be ORIGINAL. When in doubt, cite a reference. Adherence to the Academic Code of Integrity for All Students is expected. See
http://steinhardt.nyu.edu/dcc/undergraduate/Statement On Academic Integrity.php. Penalties for lack of adherence to the code will be enforced. Formal proceedings will be filed.
APPENDIX A

Steinhardt School of Culture, Education, and Human Development Grading Scale

## There is no A+

A
93-100

A-
90-92

B+
87-89

| B | $83-86$ |
| :--- | :--- |
| B- | $80-82$ |
| C+ | $77-79$ |
| C | $73-76$ |
| C- | $70-72$ |
| D+ | $65-69$ |
| D | $60-64$ |

There is no D -

| F | Below 60 |
| :--- | :--- |
| IP | Incomplete/Passing |
| IF | Incomplete/Failing |
| N | No Grade |

## APPENDIX B

| Full 15\% | 10\% | 5\% | 0\% |
| :---: | :---: | :---: | :---: |
| - Comes to every class prepared with readings on-hand. <br> - Comments and questions reflect a deep reading of assigned texts. <br> - Shares thoughts on colleagues' and professor's comments and questions. <br> - Engages with colleagues during presentations both as the presenter and as the audience. <br> - Fully and enthusiastically participates in hands-on and small group activities in class. <br> - Uses electronic devices ONLY to take notes. <br> - Always behaves in a respectful and professional manner in discussions with colleagues and professor. | - Comes to most classes prepared with readings on-hand. <br> - Comments and questions reflect some reading of assigned texts. <br> - Occasionally shares thoughts on colleagues' and professor's comments and questions. <br> - Sometimes engages with colleagues during presentations both as the presenter and as the audience. <br> - Participates in hands-on and small group activities in class. <br> - Uses electronic devices ONLY to take notes. <br> - Always behaves in a respectful and professional manner in discussions with colleagues and professor. | - Comes to some classes prepared with readings on-hand. <br> - Comments and questions rarely demonstrate readings of assigned texts. <br> - Rarely shares thoughts on colleagues' and professor's questions. <br> - Rarely engages with colleagues during presentations both as the presenter and as the audience. <br> - Rarely participates in hands-on and small group activities in class. <br> - Uses electronic devices ONLY to take notes. <br> - Always behaves in a respectful and professional manner in discussions with colleagues and professor. | - Never participates in discussions. <br> - Does not demonstrate completion or understanding of readings. <br> - Uses electronic devices. <br> - Shows little to no interest in participating in handson activities. <br> - Shows disrespect to colleagues or professor. |

Please note that I do not quantify participation grades in points. Rather, your participation will be rated on the following rubric and the appropriate amount of percentage points will be added to your grade. You will receive a completed rubric with comments at the mid-term so you can see how you are doing. You will receive another at the end of the semester.

Not everyone loves talking in front of a group, and sometimes certain group dynamics make it difficult for some people to get involved in the discussion. If you are experiencing ANY difficulty in participating fully, please come see me and we will work together to find a way for you to comfortably participate.

Listed below is the course calendar including weekly topics, readings assignments, and assignment due dates. This is subject to change, so please check NYU Classes regularly for the most up-to-date information. Some weeks you are also asked to review particular standards relevant to that week's topic. (Readings in italics are posted to NYU Classes.)

As you can see, we begin the semester discussing the intersections in content of science and social studies. We then spend some weeks on each topic separately, examining content and teaching strategies, and then return to discussing them together in terms of planning and assessment at certain points throughout the semester. These content areas, as with all content areas in early childhood, are never truly and fully separate from one another. These course topics and guiding questions are all fluid and build on one another. Please keep this in mind as we move through the course.

9/5 Topic: Introduction to Course
Guiding Question: Where do we find science and social studies curriculum?
Read: Environmental Stewardship in Early Childhood
Social Studies in Today's Early Cbildbood Curricula
9/12 Topic: Standards and Relevant Curriculum
Guiding Question: What counts as curriculum? How do standards intersect with children's lives?
Read: Revien ALL standards documents. Familiarize yourself with the structure of each set of standards. Bring them to class.
Chapter 1 in Souto-Manning
Chapter 1 in Moomaw
Peter Rawitsch: Cbildbood Cannot be Standardized
9/19 Topic: Integrating Play and Literacy with Science and Social Studies
Guiding Question: How are play and literacy situated within Science and Social Studies curriculum?
Read: Environmental Education and Pedagogical Play in Early Childhood Education
STEM in the Early Years
Chapter 8 in Souto-Manning
Chapter 2 in Moomaw
9/26 Topic: Critical Inquiry and Social Justice, Part I
Guiding Question: What do critical inquiry and social justice look like at the early childhood level?
Read: Chapter 2 \& 3 in Souto-Manning
SS Standards: p. 22-28
Due: Observation Essay \#1.
10/3 Topic: Critical Inquiry and Social Justice, Part II
Guiding Question: Where do issues of social justice belong in our curriculum?
Read: Chapters $4 \& 5$ in Souto-Manning
Critical Inquiry in Early Cbildhood Education: A Teacher's Exploration
SS Standards: p. 29-42
** Come prepared with specific ideas and questions about your lesson plan assignment. We will be baving mini-conferences today.

10/10 Topic: Assessment and Choosing Topics of Study

Guiding Question: How can we measure student progress in science and social studies and use this information to make curricular decisions?
Read: Chapters 4 \& 5 in Moomaw
Documenting Early Science Learning
Observation and Assessment
10/17 Topic: Community-Based Studies, Part 1
Open Exploration
Focused Exploration
10/24 Topic: Community-Based Studies, Part 2 (Visiting Washington Square Park)
Guiding Question: How does the local community inform curriculum?
Read: Chapter 6 in Souto-Manning
Finding Their Place in the Community
Due: Explore your quadrant of WSP and bring notes and artifacts.
10/26 FIELD TRIP TO CENTRAL PARK (10:00-12:00)
Read: A Field Trip to a Strange New Place: Second Grade Visits the Parking Garage Chapter 7 in Moomaw

Please note this is a SATURDAY, replacing our 10/31 class session. Please plan on attending this trip. Children are welcome! Mine might join us as well. If there are circumstances beyond your control that prohibit you from attending, please be in touch with me and I will offer a make-up assignment.

## 10/31 WE WILL NOT BE HAVING CLASS TONIGHT. THE FIELD TRIP ON SATURDAY, OCTOBER 26th, WILL REPLACE THIS CLASS MEETING.

## Due: Community Action and Trip Paper.

11/7 Topic: Life Science
Guiding Question: What does life science look like in the early childhood classroom?
Read: Moomaw: All pages in Chapters 3, 4, \& 6 with "Life Science" in parentheses Science Standards: K, Units 1 \&゙3. Grade 1, Unit 1. Grade 2, Unit 3.

11/14 Topic: Earth Science
Guiding Question: What does earth science look like in the early childhood classroom?
Read: Moomaw: All pages in Chapters 3, 4, \& 6 with "Earth Science" in parentheses Science Standards: : Grade 1, Unit 3. Grade 2, Unit 1.

11/21 Topic: Physics
Guiding Question: What does physics look like in the early childhood classroom?
Read: Moomaw: All pages in Chapters 3, 4 , \& 6 with "Physics" in parentheses Science Standards: : K, Unit 2. Grade 1, Unit 2. Grade 2, Unit 2.
Due: Observation Essay \#2
11/28 Thanksgiving Recess
12/5 Lesson Plan Presentations

12/12 Lesson Plan Presentations

12/16 Final Lesson Plan Presentation Materials Due via NYU CLASSES.

## APPENDIX D

1. All assignments should be double-spaced.
2. ALL assignments should be turned in on time and free of spelling and grammatical errors. 5 points will be automatically deducted for late assignments OR assignments full of errors.
3. Any time you use an outside resource, even a website, you need to cite it. This includes reflection papers, lesson plans, and presentations. If you are ever unsure if you need to cite, just include it.
4. I accept MOST assignments over email. I ask that you put a heading on each page that has your last name and the page number. This makes it easier for me to keep track of assignments.
5. Assignments are due via NYU Classes BEFORE the beginning of class on the due date.
6. I am not able to review drafts and provide written feedback, but if you bring something you've written to me during office hours I'm happy to look at it and discuss it with you there.
Teacher Certification Exam Course Referral Guide:
ECED-GE 2314 Social Studies and Science Experiences for Younger Children

| Certification Exam | Relevant content in this course | Relevant assignments in this course |
| :---: | :---: | :---: |
| Academic Literacy Skills Test (ALST') | "Analyzes how and why individuals, events, and ideas develop and interact over the course of a text." <br> "Interprets words and phrases as they are used in a text, including determining technical, connotative, and figurative meanings." <br> "Integrates and evaluates content presented in diverse formats and media, including visually and quantitatively." | - Observation Essays \#1 and \#2 <br> - Class discussion participation |
| Educating All Students <br> Test (EAS) | "Demonstrates an understanding of appropriate strategies to enhance knowledge of students (e.g., learning about students' family situations, cultural backgrounds, in dividual needs, gifts and talents, and pers onal interests) and to promote a sense of community among diverse individuals and groups in the classroom." <br> 'Demonstrates knowledge of effective approaches for promoting English Language Learners' development of oral and written language proficiency in English, including adapting teaching strategies and materials." <br> "Applies knowledge of how to select, modify, and implement curricula, assessments, materials, technology, and equipment to meet the individualized needs of students with disabilities and other special learning needs." | - Observation Essays \#1 and \#2 <br> - Science Lesson Plans and Implementation <br> - Community Action Project <br> - Final Inquiry-Based Project |
| Content Specialty Test (CST')-Multi Subject* | See: <br> http://www.nystce.nesinc.com/PDFs/NY211_212_245_OBJ_DRAFT'.pdf <br> Part 3: Competency 0001 (Science and Technology) Competen cy 0002 (Social Studies) | Science Lesson Plans and Implementation Community Action Project Final Inquiry-Based Project |


|  | "Identifying appropriate assessment instruments and methods, including <br> alternative assessment, for monitoring the progress of students with <br> disabilities." |  |
| :--- | :--- | :--- |
| "Interpreting and applying formal and informal assessment data to develop <br> Content Specialty Test <br> (CST)-Students with <br> Disabilities** | "Recognizing the importance to the decision-making process of <br> background information regarding academic, medical, and family history <br> and cultural background." | - <br> "Demonstrating familiarity with techniques for supporting the functional <br> integration of students with disabilities in various settings, including general <br> education settings." | | -Science Lesson Plans and <br> Implementation <br> Community Action Project <br> Final Inquiry-Based Project |
| :--- |
| edTPA*** |
| ALL three tasks and rubrics can be addressed in the lesson plan |
| implementation and reflection. |

* Taken by students seeking ECE certification and by those seeking ECE/SPCED certification
**Taken only by students seeking dual ECE/SPCED certification
***(Early Childhood for ECE only certification; Special Education for SPCED certification)

