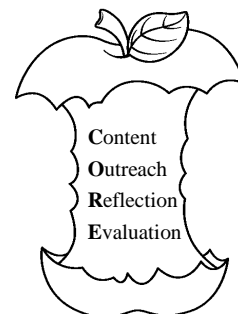


Eastern Illinois University
Early Childhood, Elementary, and Middle Level Education Department
ELE 4770: Teaching Science and Social Science in the Primary Grades (K-3)

Instructor: Dr. Sham'ah Md-Yunus
 Office: 2203 Buzzard Hall
 Email: smdyunus@eiu.edu
 Office Hours: M & Th: 1-4 pm
 Tel: 217-581-5728 (Voice Messages Only)
 Class Meetings: Thursdays, 4:30-7:00 pm, Buzzard Hall 2430
 Semester: Spring 2017



Unit Theme: Educators as creators of effective educational environment, integrating diverse students, subjects, strategies, societies, and technologies

Course Description: This course introduces teacher candidates to content area instruction in the primary grades. Coursework includes research-based teaching methods coupled with effective instructional theory and developmental considerations in designing curriculum for teaching young children. Teacher candidates will develop lesson plans and an integrated thematic unit of study with a focus on science and social studies instruction. (3-0-3)

Prerequisites & Concurrent Enrollment: Prerequisites for this course are ELE 3250 and ELE 3281 or permission of department chair. University Teacher Education and department requirements for enrollment must be met.

Co-requisites for this course are ELE 4100, ELE 4880, and ELE 4280.

Course Purpose: Building on knowledge of human growth and development, and an awareness of learning and the means of facilitating and stimulating learning, this course addresses two major areas of the primary curriculum: science, and the social sciences/social studies. This course will focus on students' involvement in planning lessons and activities appropriate for science, and social sciences in the primary grades.

Course Textbooks:

1. Ashbrook, P. (2017). *Science learning in the early years*. NY: NSTA Press.
2. Wallace, M. (2006). *Social studies: All day, every day in the early childhood classroom*. NY: Thompson Delmar Learning.

Supplemental Material: LiveText Account

Teaching Model:

The Information-Processing Models

- Information-processing models emphasize ways of enhancing the human being's innate drive to make sense of the world by acquiring and organizing data, sensing problems and generating solutions to them, and developing concepts and language for conveying them (pp 10-13).

Joyce, B., Weil, M., & Calhoun, E. (2015). *Models of teaching*. (9 th ed.). Boston: Pearson.

Dispositions: Teacher candidates in the department of EC/ELE/MLE will exhibit professional ethical practices, effective communication, and sensitivity to diversity, the ability to provide varied teaching practices evidenced in a supportive and encouraging atmosphere for learning.

Live Text Assessment and/or Practicum Requirements: For those classes with Live Text and/or Practicum- If the portfolio, practicum, and/or Live Text requirements are rated by the instructor to have been completed in less than a satisfactory manner then no more than a "D" may be earned in the class regardless of the number of points earned.

Standards

Course Requirements & demonstrated competencies with the following standards:

Illinois Professional Teaching Standards (IPTs):

http://www.isbe.net/PEAC/pdf/IL_prof_teaching_stds.pdf

- Eastern Illinois University Professional Dispositions
<http://www.eiu.edu/clinical/forms/DispositionsforEIUCandidates.pdf>
- Illinois Social Emotional Learning Standards (SEL) http://www.isbe.net/ils/social_emotional/standards.htm
- Association for Childhood Education International (ACEI): <http://www.isbe.net/rules/archive/pdfs/20ark.pdf>
- National Association for the Education of Young Children (NAEYC):
<http://www.ncaete.org/Standards/ProgramStandardsandReportForms/tabid/676/Default.aspx>
- New Generation Science Standards: <https://www.nextgenscience.org/>

Outcomes specific to ELE 4770:

Teacher candidates enrolled in this course will:

- Discover and apply a contextual base for helping children construct fundamental concepts in science and social studies.
- Synthesize fundamental scientific concepts and processes that promote young children's development of scientific knowledge and skills, including use of scientific thinking, reasoning, and inquiry.
- Analyze fundamental concepts, skills, and modes of inquiry in social studies.
- Apply Common Core Standards in the design of lesson plans.
- Investigate alternative methods of achieving learning outcomes including constructivist methods and higher-order critical thinking skills to differentiate instruction.
- Use current technologies to design and implement research-based best practices in individual, small group, and whole class learning activities.
- Apply appropriate content knowledge in a variety of educational situations.

Course Requirements	Demonstrated Competencies	Aligned Standards
Participation	<ul style="list-style-type: none"> • Performance includes presence, participation and preparation for group and whole class discussions. 	<p>IPTS: 1A, 1B, 1C, 1E, 1F, 1G, 2A, 2C, 2D, 2E, 2F, 3A, 3B, 3C, 3D, 3E, 3F, 4A, 4B, 4C, 4D, 4E, 4F, 4G, 4H, 5A, 5B, 5C, 5D, 5E, 5F, 5G, 7A, 7B, 7C, 7D, 7E, 7F, 7G, 7H, 7I, 8F, 8G, 9A, 9B, 9C, 9E, 9G, 9H</p> <p>NAEYC: 1a, 1b, 1c, 2a, 2B, 2C, 3a, 3b, 3c, 3d, 4b, 4c, 5a, 5b, 5c, 6a, 6b, 6c, 6d, 6e,</p> <p>ACEI : 1.0, 2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 2.7, 3.1, 3.2, 3.3, 3.4, 3.5, 4.0, 5.1</p> <p>SELS: 1A. 5a. 1A.5b., 1B.5a., 1B.5b., 1C.5a., 1C.5b., 2A.5a., 2A.5b., 2B.5a., 2B.5b., 2C.5a., 2C.5b., 2D.5a., 2D.5b., 3A.5a., 3A.5b., 3B.5b., 3C.5a., 3C.5b</p> <p>Dispositions: IWS, EC, PEP. SDE</p>
Development, Demonstration/ Presentation: Activity File	<ul style="list-style-type: none"> • Students will research and collect developmentally appropriate activities for science and social studies in the primary classroom. 	<p>IPTS: 2A, 2B, 2I, 5A, 9A, 9S, 9T,</p> <p>NAEYC: 1a, 1b, 1c, 4b, 4c, 5a, 5b, 6b, 6d</p> <p>ACEI : 1.0, 3.1, 3.3,</p> <p>SELS: 1A. 5a. 1A.5b., 1B.5a., 1B.5b., 1C.5a., 1C.5b., 2A.5a., 2A.5b., 2B.5a., 2B.5b., 2C.5a., 2C.5b., 2D.5a., 2D.5b., 3A.5a., 3A.5b., 3B.5b., 3C.5a., 3C.5b</p> <p>Dispositions: IWS, EC, PEP. SDE</p>
Development, Demonstration/ Presentation: Science Kit	<ul style="list-style-type: none"> • Students will develop and construct a science kit to promote young children's development of scientific knowledge and skills including the use of scientific thinking, reasoning, and inquiry. 	<p>IPTS: 1A, 1B, 1C, 1E, 1G, 1I, 1J, 2A, 2B, 2C, 2D, 2G, 2I, 2K, 2N, 2P, 3A, 3K, 3L, 3Q, 5A, 5B, 5C, 5D, 5E, 5L, 5S, 7A, 7B, 7K</p> <p>NAEYC: 1a, 1b, 1c, 3a, 3b, 4a, 4b, 4c, 4d, 5a, 5b, 5c, 6a, 6b, 6c, 6d,</p> <p>ACEI: 1.0, 2.2, 3.1, 3.2, 3.3, 3.4, 3.5, 4.0</p> <p>SELS: 1A.5a. 1B.5a. 1B.5b. 1C.5a. 1C.5b. 2C.5b., 3A.5b., 3B.5b., 3C.5a.</p> <p>Dispositions: PTSL, SDE, EC, IWS</p>

Tests and Examinations	<ul style="list-style-type: none"> The student will demonstrate knowledge of the course content by appropriately responding to test items that require the application of course information. 	IPTS: 1A, 1B, 1C,1E,1F, 1G, 2A,2C,2D, 2E,2F, 3A,3B,3C, 3D, 3E, 3F, 4A, 4B, 4C,4D, 4E,4F,4G,4H, 5A, 5B, 5C, 5D,5E, 5F, 5G, 7A, 7B, 7C,7D, 7E,7F,7G,7H, 7I, 8F,8G,9A,9B,9C,9E,9G,9H NAEYC: 1a, 1b, 1c, 2a, 2B, 2C, 3a, 3b, 3c, 3d, 4a, 4b, 4c, 4d, 5a, 5b, 5c, 6A, 6B, 6c, 6d,6e ACEI : 1.0, 2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 2.7, 3.1, 3.2, 3.3, 3.4, 3.5, 4.0, 5.1 SELS: 1A. 5a., 1B.5a.,1B.5b., 1C.5a., 1C.5b.,3A.5b., 3B.5b., 3C.5a. Dispositions: EC
Development, Demonstration/ Presentation: Thematic Unit	<ul style="list-style-type: none"> Students will create a thematic unit integrating all content areas with a focus on science and social studies instruction. Using Common Core Standards, developmentally appropriate lesson plans will be designed according to the format established by the EC/ELE/MLE Department and adapted for the following strategies: Direct Instruction, Concept Teaching, Cooperative Learning, Problem-Based Instruction, Classroom Discussion, and Inquiry. Demonstrate an understanding of fundamental scientific concepts and process and how to promote young children's development of scientific knowledge and skills, including their use of scientific thinking reasoning, and inquiry. Demonstrate an understanding of fundamental concepts, skills, and modes of inquiry in the social studies and how to promote young children's development of knowledge and skills in this area. Develop competence in planning, teaching and assessing themed learning activities that meet state goals and standards. 	IPTS: 1A, 1B, 1C,1E, 1G,1I, 1J, 2A 2B, 2C,2D, 2G,2I, 2K, 2N, 2P, 3A,3H, 3K, 3L, 3Q, 5A, 5B, 5C,5D, 5E, 5F, 5I, 5L, 5M, 5O, 5R, 5S, 7A,7B, 7K, 9A, NAEYC: 1a, 1b, 1c, 2a, 3a, 3b, 3c, 3d, 4a, 4b, 4c, 4d, 5a, 5b, 5c, 6c, 6d ACEI : 1.0, 2.1, 2.3, 3.1, 3.2, 3.3, 3.4, 3.5, 4.0, 5.1 SELS: 1A. 5a., 1B.5a.,1B.5b., 1C.5a., 1C.5b.,3A.5b., 3B.5b., 3C.5a. Dispositions: PTSL, SDE, EC, IWS

Core Assignments	Brief Description [Details are described in the Course Assignment in the separate document]	Points/Due Date	Approximate Weight
Participation	Performance includes presence, participation and preparation for group and whole class discussions	10 pts. Ongoing throughout semester	5%
Tests and Examinations	Tests and examination consist of multiple measure, including multiple choice, short answers, and essay questions. Questions will be derived from lecture, assigned readings, article handouts and class discussions.	50 Midterm: TBA Final: 12/13/17	25%

Activity File	Compile 20 activities for science, and social studies for teachers to use in the K-3 classroom (10 activities for each subject area). Activities must be developmentally appropriate practice for young children and must be selected from various sources.	30 pts 9/24/2107	15%
Science Kit	Construct a science kit for K-3 students. Kit must include the following items: title of the kit, science concepts and objectives, goals and standards, student's grade level, materials and resources, assessments, integration with other subject areas, and how the kit address the developmentally appropriate practice guidelines. Students are also required to develop a lesson plan to be used with the kit. The science kit will be presented to class.	50 pts 10/19/2017	25%
Thematic Unit	Construct a literature based thematic unit with the integration of all learning areas with focus on science, and social studies for two weeks teaching. Students must research the topic and develop lesson plans. The activities must be planned around a theme for primary children grades K, 1, 2, or 3. Unit must include a letter to parents, list of resources in addition to a children's book list including a synopsis of each book. Unit must have an assessment activity as well as a self-assessment completed in writing. All unit contents must be placed in a binder and be organized neatly. The Unit will be presented in class.	200 pts. 12/3/2017	35%
Live Text		12/7/2017	No points but mandatory
Graduate students: Students receiving graduate credit must meet graduate level requirements for this class. An expanded assignment/additional assignment is required in order to receive graduate credit in this course. One option would be to expand the thematic unit to 10-12 pages with a minimum of 10 sources. The nature of this assignment may vary and will be determined after consultation between the individual student and the instructor.			To be determined
DETAILED INSTRUCTIONS AND EXPECTATIONS FOR EACH ASSIGNMENT WILL BE PROVIDED BY THE INDIVIDUAL INSTRUCTOR			

Grading Scales: A = 93%-100%, B = 84%-92%, C = 75%-83%, D = 66%-74%, F=Below 62%

Attendance Policy: Attendance is **mandatory** for this class. If you absent, please bring proof of absences and I will allow you to do a "make-up work." Further, you need to check in the syllabus and/or your classmates what were discussed in class. To do make-up, go to https://works.bepress.com/shamah_md-yunus/ and choose article. Summarize one page, double line spacing, print hard copy and submit it to me.

Electronic Devices Policy: Using electronic devices are **strictly prohibited** in this class except for the accommodations purposes or with the permission of the instructor

Assignments: Students are responsible for all material covered in class and all assignments on the syllabus or assignments made in class. Assignments are to be completed by class time on the date for which they appear on the syllabus. **No late assignments will be accepted and all assignments will be submitted to D2L. Please read carefully detail of the assignments instructions, directions, and rubrics in the Assignment Descriptions posted on d2l.**

Live Text Requirements: Submit letter to families and one lesson form the Thematic Unit in the live text. Submission must be in one document

COURSE OUTLINE

Science for Young Children

This section discusses science content standards, teaching strategies using concept development, process of inquiry and process of skills in science, planning for science fundamental concepts in science and science activities for young children. Topics covers in this sections are; physical science, life science, earth and space science, environmental awareness, health and nutrition.

Social Science/Studies for Young Children.

This sections discusses the ten strands in the social studies area; culture, time, continuity, and changes; people, places, and environment; individual development and identity individuals, groups, institutions; power, authority, and governance; production, distribution, and consumption; science, technology, and society; global connections; civic ideals and practices; time, continuity, and change

Weekly Schedule

Week/Date	Topic	Reading/Homework
1:8/24	1.Syllabus and Assignments 2. Science for Young Children <ul style="list-style-type: none"> • Concept Development in Science • How Concepts Develop and Acquired • Promoting Young Children’s Concept Development through Problem Solving • How Young Children Use Concepts 	Research topic for thematic unit Review checklist on “Evaluating the Unit Plan” Ashbrook, Chapters 1, 14, 18, 14,
2:8/31	1.Science for Young Children <ul style="list-style-type: none"> • Assessing the Child’s Developmental Level • Planning for Science 2.Using Skills, Concepts, and Attitudes for Scientific Investigations in the Primary Grades <ul style="list-style-type: none"> • Overview of Primary Science • Characteristics of an excellent Early Childhood Science Curriculum • Next Generation Science Standards (NGSS) • 	Review NGSS (https://www.nextgenscience.org/) Topic for unit due Ashbrook, Chapters 2 & 3, 27, 39,
3: 9/7	Using Skills, Concepts, and Attitudes for Scientific Investigations in the Primary Grades: Continued <ul style="list-style-type: none"> • STEM • Process and Inquiry skills • Teaching Methods 	Web for unit due Ashbrook, Chapters 11, 4, 12, 17, 47, 53, 54,
4:9/14	Physical Science <ul style="list-style-type: none"> • Properties of Matter • Heat and Temperature • Light and Color 	Ashbrook, Chapters 5, 6, 9, 15, 31,
5:9/21	Space Science and Environmental <ul style="list-style-type: none"> • Earth Materials • Atmosphere and Weather • Astronomy and Space 	Ashbrook, Chapters 8, 10, 24, 50, 29, 33, 41, 43, 52
6:9/28	Biological/ Life Science <ul style="list-style-type: none"> • Living Things • You and Your Body • You and Environment 	Ashbrook, Chapters 7, 8, 21, 25, 28, 30, 51, 52, 25, 34, 44

7:10/5	Health Science <ul style="list-style-type: none"> Physical Health General Health and Safety Issues Nutrition 	Ashbrook, Chapters 55, 35,
8:10/12	Social Studies/Social Science for Primary Child <ul style="list-style-type: none"> Concepts, purpose, approach, themes, principles Planning and assessment for Social Studies Instructions Planning for social studies instructions Teaching Methods and Strategies Assessment for social studies instructions 	Wallace, Chapters 1,2, 3, 4 & 11
9:10/19	1.Resources for Learning :School, Family, & Community 2.Children’s Literature in Social Studies Instruction <ul style="list-style-type: none"> Overview of Children’s Literature in Social Studies Instruction Using Children’s Literature to Address Issues of Diversity and Acceptance and to Support Multicultural Understanding Connecting to Diverse Populations Finding the Right Books Guest Speaker	Wallace, Chapter 6
10:10/26	Self, Others, and the Community: Social Skills <ul style="list-style-type: none"> Self-concept Relating to others Factors effecting social development 	Wallace, Chapters 3 & 10
11:11/2	Culture, Diversity, and Values <ul style="list-style-type: none"> The concepts of culture, diversity and values How children learn about others and values 	
12:11/9	Children’s Study of Time, Continuity, and Change: History <ul style="list-style-type: none"> Science, technology, and society Key Concepts, support, and resources of History in the Early Childhood Classroom The change and continuity of human life 	Wallace, Chapter 8
13:11/16	People, Places, and Environment: Geography <ul style="list-style-type: none"> Geography skill and instructions for the Young Child The earth Direction, location, region and relationships within places 	Wallace, Chapter 7
14: 11/24	Thanksgiving Break – No Class	
15:12/1	Production, Consumptions, and Decision Making: Economics <ul style="list-style-type: none"> Economics literacy and concepts Scarcity Production and consumption Jobs and careers Using Children’s Literature in Economics Education 	Wallace, Chapter 9
16:12/7	Developing Citizenship; Civic and Government <ul style="list-style-type: none"> Concepts and democratic values Political concepts 	Wallace, Chapter 5

	<ul style="list-style-type: none"> • Ownership and pride Global Connections <ul style="list-style-type: none"> • Global concepts and global education • Interconnectedness and interdependence • Resources for learning about others 	
	Final Exam Week: 12/11-12/15	

NOTE: If your Live Text requirements are rated, by the instructor, to have been completed in less than a satisfactory manner then no more than a "D" may be earned in the class regardless of the number of points earned.

Academic Integrity

"The Department of EC/ELE/MLE is committed to the learning process and academic integrity as defined within the Student Conduct Code Standard I. "Eastern students observe the highest principles of academic integrity and support a campus environment conducive to scholarship." Students are expected to develop original and authentic work for assignments submitted in this course. "Conduct in subversion of academic standards, such as cheating on examinations, plagiarism, collusion, misrepresentation or falsification of data" or "submitting work previously presented in another course unless specifically permitted by the instructor" are considered violations of this standard."

Student Success Center

Students who are having difficulty achieving their academic goals are encouraged to first contact their instructor. If needing additional help, please contact the Student Success Center (www.eiu.edu/~success) for assistance with time management, test taking, note taking, avoiding procrastination, setting goals, and other skills to support academic achievement. The Student Success Center provides individualized consultations. To make an appointment, call [217-581-6696](tel:217-581-6696), or go to 9th Street Hall, Room 1302.

Students with Disabilities

If you are a student with a documented disability in need of accommodations to fully participate in this class, please contact the Office of Student Disability Services (OSDS). All accommodations must be approved through OSDS. Please stop by Ninth Street Hall, Room 2006, or call 217- 581-6583 to make an appointment.

ELE 4770 References
***Denotes Unit Conceptual Framework References**

- *Bloom, B. S. (Ed). (1956). *Taxonomy of educational objectives: The classification of educational goals. Handbook I, Cognitive domain*. NY: Longmans, Green.
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- Ruscoe, A. (2005). *Addition: Applying addition strategies*. NY: World Teachers Press.
- Ruscoe, A. (2005). *Subtraction: Applying addition strategies*. NY: World Teachers Press.
- Seefeldt, C. (2001). *Social studies for the preschool/ primary child*. Upper Saddle River, NJ: Pearson/ Merrill/Prentice Hall.
- Sharp, J.M., & Hoiberg, K.B. (2005). *Learning and teaching K-8 mathematics*. NY: Allyn and Bacon.
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Posture and eye contact (5)

Total Points Thematic Units _____ **/280**