Early Childhood, Elementary, and Middle Level Education Department
ELE 4770: Methods and Curriculum in the Primary Grades

Instructor:  Mrs. Dana Stodden
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Email:  dgstodden@eiu.edu
Office Hours:  Monday-Thursday, 9:00-10:00 a.m. Monday 6:00-7:00 or by appointment
Phone:  Office:  217/581-7900;  Home:  217/844-2328; Cell:  217/663-7813
Class Meetings:  Monday Evening 7:00-9:30 p.m.

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

Course Description:  Study of curriculum and techniques for teaching mathematics, science, and social studies in the primary grades. Planning lessons and units of instruction.

Prerequisites & Concurrent Enrollment:  ELE 3250.  University Teacher Education requirements apply and department requirements for enrollment must be met, including an expectation of second semester Junior standing.

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 three major areas of the primary curriculum: mathematics, science, and the social studies. This course will focus on students' involvement in planning lessons and activities appropriate for mathematics, science, and social studies in the primary grades.

Course Textbooks:

Supplemental Material:  Live Text

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.


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

Live Text Assessment Requirement:  For those classes with Live Text or Practicum- If the portfolio 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/profprep/standards.htm
•  Illinois Core Technology Standards (ICTS):  www.isbe.state.il/profprep/standards.htm
•  National Association of Education for Young Children Standards (NAEYC):  http://www.naeyc.org/accreditation/nextra.asp

Outcomes specific to ELE 4770:

Students will:

•  Provide:  a contextual base for helping children construct fundamental concepts in math and science through experiences that are designed to meet each child’s developmental needs.
•  Demonstrate mathematical skills, concepts, and procedures and how to promote young children’s development of mathematical understandings and their ability to apply mathematical skills in varied context.
•  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.

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- Demonstrate alternative methods of achieving similar learning outcomes including constructivist methods and higher order and critical thinking skills.
- Provide for the uniqueness of individuals, recognizing the characteristics of culturally pluralistic and “at risk” populations, and foster appreciation for those differences.
- Use appropriate technology to support teaching and learning.

<table>
<thead>
<tr>
<th>Course Requirements</th>
<th>Demonstrated Competencies</th>
<th>Aligned Standards</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participation</td>
<td>• Performance includes presence, participation and preparation for group and whole class discussions.</td>
<td>IPTS: 1, 10, 11  ICTS: 2  ICLS: 1, 2, NAEYC: 4c, 5  Dispositions: PEP, EC, SDE</td>
</tr>
<tr>
<td>Development, Demonstration/Presentation: Activity File</td>
<td>• Performance includes the presentation of Activity Files with the integration of technology</td>
<td>IPTS: 1, 2, 3, 4, 5, 6, 7  ICTS: 1, 2, 3, 6, 7  ICLS: 2, NAEYC: 1, 3, 4b, 4c, 5  Dispositions: PTSL, SDE</td>
</tr>
<tr>
<td>Development, Demonstration/Presentation: Science Kit</td>
<td>• Performance includes the presentation of a Science Kit with the integration of technology</td>
<td>IPTS: 1, 2, 3, 4, 5, 6, 7  ICTS: 1, 2, 3, 6, 7  ICLS: 2, NAEYC: 1, 3, 4b, 4c, 5  Dispositions: PTSL, SDE, EC, IWS</td>
</tr>
<tr>
<td>Tests and Examinations</td>
<td>• Tests and examinations are one of the forms of assessments of students’ content knowledge about curriculum and teaching mathematics, science, and social studies in the primary grades.</td>
<td>IPTS: 1, 8  ICTS: 1, 7  ICLS: 2, NAEYC: 1, 3, 4b, 4c, 4d  Dispositions: EC</td>
</tr>
</tbody>
</table>
| Development, Demonstration/Presentation: Thematic Unit | • Performance includes students’ involvement in planning integrated thematic unit lessons and activities appropriate for young children in all learning areas focusing on math, science and social studies.  
  • Performance must demonstrate a contextual base for helping children construct fundamental concepts in all learning areas through experiences that are designed to meet each child’s developmental needs.  
  • Unit must demonstrate an understanding of integration of the fundamental mathematical skills, concepts, and procedures and how to promote young children’s development of mathematical understandings and their ability to apply mathematical skills in varied context.  
  • 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 | IPTS: 1, 2, 3, 4, 8  ICTS: 1, 2, 3, 4, 6, 8  ICLS: 1, 2, 3, NAEYC: 1, 3, 4b, 4c, 4d  Dispositions: PTSL, SDE, IWS, PEP, EC |
themed learning activities that meet state goals and standards.

<table>
<thead>
<tr>
<th>Core Assignments</th>
<th>Brief Description</th>
<th>Points/Due Date</th>
<th>Approximate Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participation</td>
<td>Performance includes presence, participation and preparation for group and whole class discussions</td>
<td>60</td>
<td>15%</td>
</tr>
<tr>
<td>Tests and Examinations</td>
<td>Tests and examination consist of multiple measure, including multiple choice, short answers, and essay questions. Questions will be derive from lecture, assigned readings, article handouts and class discussions.</td>
<td>60</td>
<td>15%</td>
</tr>
<tr>
<td>Activity File</td>
<td>Compile 30 activities for math, 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.</td>
<td>60</td>
<td>15%</td>
</tr>
<tr>
<td>Science Kit</td>
<td>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.</td>
<td>60</td>
<td>15%</td>
</tr>
<tr>
<td>Thematic Unit</td>
<td>Construct a literature based thematic unit with the integration of all learning areas with focus on math, science, and social studies for two weeks teaching. Students must develop at least fifteen lesson plans using Live Text. The activities must be planned around the theme for primary children grades 1, 2, or 3. Unit must include a letter to parents, list of resources, in addition to a list and synopsis of children's books, 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.</td>
<td>200</td>
<td>40%</td>
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</tbody>
</table>

Detailed instructions and expectations for each assignment will be provided by the individual instructor.

Grading Scales: A = 92%-100%, B = 82%-91%, C = 72%-81%, D = 62%-71%, F=Below 62%

Attendance: Regular attendance and class participation are expected and count as part of your grade. Five points will be deducted for each absence.

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. Three points shall be deducted for each week day that the material is late.

COURSE OUTLINE

This course focus on three main subject areas; mathematics, science and social studies for the elementary grades students.

Math for Young Children
This section discusses the Illinois Learning Standards for Math, concept development in math, how concepts develop and acquired, promoting young children’s concept development through problem solving, and assessing the child’s developmental level. Topics cover in this section are concept development, fundamental concepts and skills in mathematics, applying fundamental concepts,
attitudes, and skills, symbols and higher level activities and mathematics concepts and operation. Five content standards in math will be discuss; numbers and numbers operations, geometry, algebra, measurement, data analysis and probability.

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 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.

August 24   Introduction, Overview of Syllabus and Assignments
Concept Development in Math, Science, & Social Studies in Young Children
• Social Studies in the Early Childhood Classroom
  ✓ What are the Social Studies
  ✓ Public Education in Democracy
  ✓ Influences on Early Childhood Social Studies Instruction
  ✓ The Code of Ethical Conduct
  ✓ The How and What of Early Childhood Social Studies Instruction
  ✓ Characteristics of an Excellent Social Studies Curriculum
  ✓ Theoretical Background for Effective Social Studies Instruction

August 31 Concept Development in Mathematics and Science
✓ How Concepts Develop
✓ How Concepts are Acquired
✓ Promoting Young Children’s Concept Development through Problem Solving
✓ Assessing the Child’s Developmental Level
✓ The Basics of Science
✓ How Young Children Use Concepts
✓ Planning for Science

September 7 No Class Labor Day

September 14 Creating and Planning for a Social Studies Learning Environment - --Activity File
✓ Providing an Accepting Atmosphere for all Children
✓ The Teacher
✓ Theory and Practice
✓ Physical Environment
✓ Thematic Learning
✓ Cooperative Learning
✓ Technology in Early Childhood Classroom
✓ A Direct Teaching Model: the Model for Effective Teaching and Supervision
✓ Teaching Methods and Strategies
✓ Theoretical Bases for Planning in Early Childhood Classrooms
✓ Making a Plan
✓ Curriculum Development
✓ Weekly Lesson Plans

September 21 Fundamental Concepts and Skills in Math and Science
✓ One-to-One Correspondence
✓ Number Sense and Counting
✓ Logic and Classifying
✓ Comparing
✓ Early Geometry: Shape
✓ Early Geometry Spatial Sense
✓ Parts of Wholes
✓ Language and Concept Formation
✓ Fundamental Concepts in Science

September 28 Children’s Literature in Social Studies Instruction- Thematic Topic Due
✓ Overview of Children’s Literature in Social Studies Instruction
✓ Why Use Children’s Literature in Social Studies Instruction?
✓ Genre
✓ Reading Aloud
✓ Strategies to Use with Children’s Literature
✓ Using Children’s Literature to Address issues of Diversity and Acceptance and to Support Multicultural Understanding
✓ Connecting to Diverse Populations
Finding the Right Books

October 5  Applying fundamental Concepts, Attitudes, and Skills in Math and Science
✓ Ordering, Seriation, and Patterning
✓ Measurement: Volume, Weight, Length, and Temperature, Time
✓ Interpreting Data Using Graphs
✓ Application of Fundamental Concepts in Preprimary Science
✓ Integrating the Curriculum through Dramatic Play and Thematic Units and Projects
✓ Symbols
✓ Groups and Symbols
✓ Higher Level Activities and Concepts

October 12  Week 8: Midterm Activity File Due

October 19  Civics and Government, Geography and the Environment
✓ Democracy
✓ Teaching for Effective Citizenship
✓ Civics Today
✓ Character Education in Social Studies
✓ Geography Instruction for the Young Child
✓ Using Maps in the Early Childhood Classroom
✓ Understanding the Earth
✓ Geography and Literature

October 26  Mathematic Concepts and Operations for the Primary Grades
✓ Operations with Whole Numbers
✓ Patterns
✓ Fractions
✓ Numbers above 10 and Place Value
✓ Geometry, Data Collection, and Algebraic Thinking
✓ Measurement with Standard Units

November 2  History, Economics, Anthropology, and Archaeology
✓ Biography
✓ Key Concepts of History in the Early Childhood Classroom
✓ Support for Historical Themes in Early Childhood Classroom
✓ Using Historical Fiction with Young Children
✓ Using Biography with Young Children
✓ Economics
✓ Using Children’s Literature in Economics Education
✓ Anthropology in Early Childhood Education
✓ Archaeology

November 9  Using Skills, Concepts, and Attitudes for Scientific Investigations in the Primary Grades
✓ Overview of Primary Science
✓ Life Science
✓ Physical Science
✓ Earth and Space Science
✓ Environmental Awareness
✓ Health and Nutrition
✓ Authentic Assessment in Early Childhood Classroom
✓ Functions of Assessment

November 16  Bringing it to Life: Drama, Art, Music, Movement, Fieldtrips, Cooking, and Storytelling
✓ Drama and Social Studies
✓ Storytelling and Social Studies
✓ Visual Arts and Social Studies
✓ Music and Social Studies
✓ Creative Movement and Social Studies
✓ Fieldtrips and Social Studies
✓ Cooking Social Studies
✓ Components of Assessment in Early Childhood Classroom
✓ Options in Assessment
✓ How Can I Grade These Kinds of Assessments?
Standardized Tests
A Call for Appropriate Assessment

November 30
Thematic/Science Kit Presentation

December 7
Thematic/Science Kit Presentation

Monday December 14
Final Exam, 7:30 - 9:30 p.m.

ELE 4770: Integrated Thematic Unit
Math, Science and Social Studies
(Two copies of the Unit are to be turned in- one will be returned)

Due Date for Thematic Unit, Presentation and LiveText Requirements is November 30.

Task: Develop an integrated thematic unit for two weeks of teaching in the Primary Grades Classroom. (1,2,3)

Portions of this Thematic Unit will be submitted to LiveText (see attached sheet).

General Guidelines:
1. Select a children’s trade book to begin to build a thematic unit Literature based
2. Select grade level (1st, 2nd or 3rd Grade)
3. Write a letter to families explaining the theme and outlining activities. Please make the letter creative and informative.
4. For this thematic unit you will make 15 integrated lesson plans using at least 10 other children’s books based on the same, these plans are to be as follows: Each unit is contain the following:
   - Initiating lesson
   - 4 Math Lessons
   - 4 Science Lessons- including science kit lesson plus 3 more
   - 4 Social Studies Lessons- geography, history, cultural diversity, and other social science of your choice.
   - 1 lesson in the creative area of your choice
   - 1 Culminating Lesson
5. Compile a list of children’s books that correlate with your thematic unit. Use both fiction and non-fiction books. Please include: Title, author, publisher, ISBN# and a synopsis of the book.
6. Please develop an assessment activity. How will you know if the children learned as a result of this unit? Make the assessment activity meaningful and specific to your unit, it should directly correlate to your unit goals and Illinois Learning Standards.
7. Topic should be well researched for optimum student learning. Make a list of resources used to prepare your thematic unit, use APA format.
8. Please place entire thematic unit neatly in a binder well organized with tabs and a cover sheet. Turn in two copies- only one in binder will be returned.

Thematic Unit: Self Assessment
Each question is worth 5 points. Please answer all questions thoroughly with specific examples from your thematic unit!
   1. Why is your unit suitable for the age level being taught?
   2. How does your unit differentiate instruction for diverse learners, both culturally and academically?
   3. How does your unit engage students in positive collaboration?
   4. How does your unit use technology to aid in student learning?
   5. How does your assessment activity effectively evaluate student learning during the thematic unit?

<table>
<thead>
<tr>
<th>Grading for the Integrated Thematic Unit and Guidelines for Unit Organization</th>
<th>Possible Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Letter to Families</td>
<td>10</td>
</tr>
<tr>
<td>List of Resources</td>
<td>10</td>
</tr>
<tr>
<td>Lesson Plans (8 points Each)</td>
<td>120</td>
</tr>
<tr>
<td>Assessment Activity</td>
<td>10</td>
</tr>
<tr>
<td>Children’s Book List</td>
<td>10</td>
</tr>
<tr>
<td>Self Assessment</td>
<td>25</td>
</tr>
<tr>
<td>Overall Planning and Organization</td>
<td>10</td>
</tr>
<tr>
<td>Presentation of the Unit</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>200</strong></td>
</tr>
</tbody>
</table>

ELE 4770: Science Kit
Due: Monday, November 30

1. Select a science experiment; use the same topic for the science kit as your thematic unit.
2. Develop a science experiment where young students in grades 1-3 can explore and use inquiry skills. This can be done whole group or small group, either with a teacher, aide or helper as a guide for learning.
3. A modified lesson plan is due with this assignment. Please distribute a handout to the class & myself.
4. During the class presentation you will briefly explain the process and show how your kit works.

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**Thematic Unit Presentations**

There will be two days for presentation of the Thematic Unit and Science Kit. Students’ names will be drawn randomly out of a hat on day of presentation.

**Activity File Instructions**

Math, Science and Social Studies

1. Compile activities for math (10), science (10) and social studies (10) for a total of 30 activities.
2. At the top of each page, please write the grade level that you intend to use the activity for and the citation of the resource in APA format.
3. Sources of the activities can be from the internet, teacher’s resource books, education magazines, self created, etc.
   (Note: Please do not get all activities from the same source, use a large variety.)
4. Organize your file according to each subject area, numbering each activity 1-10. Hole punch and place in a three ring binder or three prong folder.
5. Include a cover sheet-
   - Name, Class, Date, Assignment, Instructor
6. All activities are to be developmentally appropriate for grade specified and relate to the standards.

Each activity is worth two points.

This assignment is worth a total of 60 points and Due at Midterm Monday October 12, 2009

**Science Kit Due: Monday, November 30**

1. Select a science experiment, use the same topic for the science kit as your thematic unit.
2. Develop a science experiment where young students can explore and use inquiry skills. This can be done whole group or small group, either with a teacher, aide or helper as a guide for learning.
3. *A lesson plan is due with this assignment,* a brief summary of your science kit, directions for recreating the experiment, source and any templates used.
4. During the class presentation you will briefly explain the process and show how your kit works. Presentation should be about 2-3 minutes in length.

This assignment is worth a total of 60 points and Due at Midterm Monday November 30, 2009

**ELE 4770: LiveText Requirements for Thematic Unit**

Please include the following in one submission:

<table>
<thead>
<tr>
<th>Letter to Families</th>
<th>Favorite (best) Lesson from Unit</th>
</tr>
</thead>
</table>

Please put me, Mrs. Stodden, as a reviewer.

Please do not send the document via attachment as I will not be able to access your work using the EIU rubric.

**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.

**ELE 4770 References**


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Students with Disabilities: If you have a documented disability and wish to discuss academic accommodations, please contact the Office of Disability Services at 581-6583.

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All lessons including the initiating and culminating lesson, must use this activity outline unless you choose to use the Department lesson plan format.

I. ACTIVITY OUTLINE- Name of Lesson
   A. Content-area: Math, Science, Social Studies (geography, history, economics, etc.), Creative Activity.
   B. Illinois State Standards and Goals: Write state goals and standards which the lesson will support.
   C. Objective: The student will demonstrate knowledge of measurement by taking unifix cubes and counting the number of cubes it takes to measure an object.
   D. Materials: Unifix Cubes
      - Paper
      - Pencils
      - Book- How Big is a Foot?
   E. Background Information: Include any information that is necessary to teach this lesson.
   F. Procedure: Includes teacher preparation and what the child is to do.
      1. Discuss measuring and measurement. Explain that people use rulers, yardsticks, even hands or feet, to measure, but that we are going to use cubes. Ask the students questions like do you know how tall you are? Or, how many cubes do you think it would take to measure your hand? After the mini discussion, read the story How Big is a Foot?
      2. The teacher will demonstrate measuring using the cubes. Count out loud how many cubes long an object is and write it on the board.
      3. Ask the children if they have any questions. To check understanding have the children measure how long their desk tops are and write that number on the chalkboard.
      4. As children work, walk around the room to help them as needed.
      5. Have the students find objects to measure with their cubes. Have the children write their answers on their sheet of paper.
      6. Divide the children into small groups and give each group a list of objects to measure. The children will go around the room measuring these objects using unifix cubes. To avoid having more than one group measuring an object, each list will start with a different object.
      7. To summarize this activity, ask the children to share their findings with the other children in the class.
   G. Extension/Alternative: Have the children use standard units of measurement to measure the objects measured by the unifix cubes.
   H. Evaluation: Observe the child’s interest and participation.
      - Did the child work cooperatively with others?
      - Did the students demonstrate knowledge of measurement by completing the problems?
      - Did the students use the unifix cubes to help them measure the objects?
      - Were they able to use standard units of measurement to measure the same object?
      - Also, observe the child’s language. Did he/she count the cubes in a rational, meaningful way? Did he/she use words related to measurement? As a teacher, was I prepared for the lesson? Did I motivate the students to participate in this activity?