Math 304 Math for Young Children

Credit Hours: 3
Scheduled hours per week
Lecture: 3
Lab: 0
Other: Field Experience of 10 hours required

Catalog Course Description: Study of interactions which set the stage for math talks and problem solving skills. Examine and evaluate use of materials, problem solving techniques, and enriching conversations that will foster mathematic processes.

Pre-requisites: None

Co-requisites: None

Course Learning Outcomes:

1. Students will demonstrate positive guidance and interactions to enhance instruction in the primary mathematics classroom.
2. Students will identify, demonstrate and utilize manipulative for math and fine motor for the Early Childhood classroom.
3. Students will demonstrate knowledge of communication avenues to enrich students' process and problem solving related to primary mathematics instruction.
4. Students will demonstrate the inclusion of literature within the mathematics context.
5. Shadow and relate teaching experiences to NCTM/NAEYC joint position statement on practices in Early Childhood to Promote Good Beginnings.

NAEYC Standards Met:

1a: Knowing and understanding young children's characteristics and needs **1b:** Knowing and understanding the multiple influences on development and learning
1c: Using developmental knowledge to create healthy, respectful, supportive, and challenging learning environments
3b: Knowing about and using observation, documentation, and other appropriate assessment tools and approaches
3c: Understanding and practicing responsible assessment to promote positive outcomes for each child
4a: Understanding positive relationships and supportive interactions as the foundation of their work with children
4b: Knowing and understanding effective strategies and tools for early education **4c:** Using a broad repertoire of developmentally appropriate teaching/learning approaches
4d: Reflecting on their own practice to promote positive outcomes for each child

5a: Understanding content knowledge and resources in academic disciplines **5b:** Knowing and using the central concepts, inquiry tools, and structures of content areas or academic disciplines
5c: Using their own knowledge, appropriate early learning standards, and other resources to design, implement, and evaluate meaningful, challenging curricula for each child.

Topics to be studied:

Guidance and interactions with early primary children Assistive technology specifically available for primary grades

In-depth exploration of manipulatives and materials and uses within the primary mathematics field

Literature connections to the primary mathematics field
measures of dispersion
normal distribution
managing money – compound interest and personal finances

Relationship of Course to Program or Discipline Learning Outcomes:

(What program outcomes are being met by this course?
For general education courses, a listing of the general education competencies that are met.)

Relationship of Course to General Education Learning Outcomes:	
Composition and Rhetoric Students illustrate a fundamental understanding of the best practices of communicating in English and meet the writing standards of their college or program-based communication requirements.	
Science & Technology Students successfully apply systematic methods of analysis to the natural and physical world, understand scientific knowledge as empirical, and refer to data as a basis for conclusions.	
Mathematics & Quantitative Skills Students effectively use quantitative techniques and the practical application of numerical, symbolic, or spatial concepts.	x
Society, Diversity, & Connections Students demonstrate understanding of and a logical ability to successfully analyze human behavior, societal and political organization, or communication.	
Human Inquiry & the Past Students interpret historical events or philosophical perspectives by identifying patterns, applying analytical reasoning, employing methods of critical inquiry, or expanding problem-solving skills.	
The Arts & Creativity Students successfully articulate and apply methods and principles of critical and creative inquiry to the production or analysis of works of art.	
5/3/2016	

Relationship of Course to Mathematics (MATH) Student Learning Outcomes:	
Demonstrate understanding of the language of mathematics, by their use of symbols, definitions, word phrases, and representations.	x
Display proficiency in mathematical computations.	x
Implement mathematical techniques to solve applied problems.	x
Employ appropriate technology to demonstrate knowledge of mathematical concepts.	x
Exhibit mastery of core course competencies.	x
10/20/2017	

Special requirements of the course: Morning/Calendar Meeting Presentation

Additional information: None

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