

LSC Use Only No:	LSC Action-Date:	UWUCC USE Only No.	UWUCC Action-Date:	Senate Action Date:
		09-24N	R-1218109 AP 4-13-10	App-4/20/10

**Curriculum Proposal Cover Sheet - University-Wide Undergraduate Curriculum Committee**

Contact Person John D. Baker	Email Address jdbaker@iup.edu
Proposing Department/Unit Mathematics	Phone 724-357-3795

Check all appropriate lines and complete information as requested. Use a separate cover sheet for each course proposal and for each program proposal.

<b>1. Course Proposals (check all that apply)</b>	
<input type="checkbox"/> New Course	<input type="checkbox"/> Course Prefix Change
<input checked="" type="checkbox"/> Course Revision	<input type="checkbox"/> Course Number and/or Title Change
<input type="checkbox"/> Course Deletion	<input checked="" type="checkbox"/> Catalog Description Change
ELED 313 Teaching Mathematics in the Elementary School	
<u>Current Course prefix, number and full title</u>	<u>Proposed course prefix, number and full title, if changing</u>
<b>2. Additional Course Designations: check if appropriate</b>	
<input type="checkbox"/> This course is also proposed as a Liberal Studies Course.	<input type="checkbox"/> Other: (e.g., Women's Studies, Pan-African)
<input type="checkbox"/> This course is also proposed as an Honors College Course.	
<b>3. Program Proposals</b>	
<input type="checkbox"/> New Degree Program	<input type="checkbox"/> Program Title Change
<input type="checkbox"/> New Minor Program	<input type="checkbox"/> New Track
<input type="checkbox"/> Catalog Description Change	<input type="checkbox"/> Program Revision
<input type="checkbox"/> Other	
<u>Current program name</u>	<u>Proposed program name, if changing</u>
<b>4. Approvals</b>	
Department Curriculum Committee Chair(s)	Date
	3-26-09
Department Chair(s)	
	3-27-09
College Curriculum Committee Chair	
	4/03/09
College Dean	
	4/7/09
Director of Liberal Studies *	
Director of Honors College *	
Provost *	
Additional signatures as appropriate: (include title)	
	4/28/09
	4/28/09
UWUCC Co-Chairs	
	4/19/10

where applicable  
**Received**

**APR 19 2010**

**Liberal Studies**

**Received**

**MAR 26 2010**

**Liberal Studies**

**Received**

**NOV 17 2009**

**Liberal Studies**

## **Part II. Description of Curriculum Change**

### **1. New Syllabus of Record**

#### **I. CATALOG DESCRIPTION**

**ELED 313 Teaching Mathematics in the Elementary School**

**3c-01-3cr**

**Prerequisites: MATH 152 and ECED 280**

**Examines contemporary curriculum and methods of instruction used in elementary school mathematics (Grades 2-4). Students become acquainted with books, materials, and other resources helpful to prospective teachers. Course activities include experiences in teaching elementary school mathematics.**

#### **II. COURSE OUTCOMES**

##### **RELATIONSHIP OF COURSE TO COLLEGE CONCEPTUAL FRAMEWORK:**

**The College of Education has developed a teacher education program based upon a pre-service teacher who is competent in content and pedagogy. ELED 313 is a methods course which utilizes the student's knowledge of the mathematics content of the elementary grades as a vehicle to develop a pedagogical framework for learning to teach mathematics. In the course, students use a variety of materials for teaching, observe exemplary teachers, plan lessons, work with elementary children, and make journal entries. These activities help pre-service teachers become reflective practitioners who are capable of inquiry into a variety of methods of teaching mathematics while learning to collaborate and interact with their peers and with experienced teachers. The structure of this course addresses the five content standards applicable to all grade levels as recommended by the National Council of Teachers of Mathematics (NCTM).**

**The student will be able to:**

- 1. examine specific techniques to promote equity (high expectations and strong support for all students) including multicultural and individual differences for topics in Grades 2-4.**
- 2. investigate and reflect upon the importance of a coherent, focused, and well-articulated mathematics curriculum including the sequencing of topics in Grades 2-4.**
- 3. investigate learning theories (including concrete and visual to abstract instructional approaches) and the methods of teaching mathematics that provide content knowledge in operations, algebra, geometry, measurement, and data analysis and probability for Grades 2-4.**
- 4. develop, teach, modify, and explore a mathematics lesson and related curriculum suitable for the school classroom in Grades 2-4.**
- 5. examine the ways in which children learn and develop their mathematics ability such as (a) the integration of problem-solving and real-world applications into the teaching of mathematics, (b) the role of communicating mathematical ideas in learning to clarify, refine and consolidate one's knowledge, and (c) the advantages to connecting mathematics to the outside world.**
- 6. explore the role of assessment in learning important mathematics at the Grades 2-4 levels.**
- 7. investigate the essential role that technology plays in a student's mathematical learning including an examination of the appropriate uses of calculators and computers to develop number sense and mathematical concepts, as well as to problem solve.**
- 8. illustrate awareness of current trends related to the teaching of mathematics in the elementary school.**

9.

Course Outcome	College Conceptual Framework / Danielson	INTASC Standard /Principle	NCATE / ACEI Elementary Education Program Standard	Course Assessment Measuring Outcome
1	1, 2	3	2.3, 4.0	Midterm, Final, Projects, and Quizzes
2	1	1, 4	2.3	Midterm, Final, Projects, and Quizzes
3	1, 2, 3, 4	2, 6, 7, 9	2.3, 3.1 - 3.5	Midterm, Final, Projects, and Quizzes
4	1, 2, 3, 4	2, 6, 7, 9	2.3, 3.1 - 3.5	<b>Key Assessment: Practice Teaching Project</b>
5	1, 2, 3, 4	2, 4 - 7, 9	2.3, 3.1 - 3.5	Midterm, Final, Projects, and Quizzes
6	1	8	4.0	Midterm, Final, Projects, and Quizzes
7	1, 2	4, 6	2.3	Midterm, Final, Projects, and Quizzes
8	1	2 - 5	2.3, 4.0	Midterm, Final, Projects, and Quizzes

### III. COURSE OUTLINE / TIME SCHEDULE

#### A Development of Pedagogy for Grades 2-4

4 academic hours

(*Outcome #1, #5, #6, #7, #8*)

1. Helping all children construct mathematical concepts
  - a. teaching children with special needs (2.5 hrs.)  
(Chapter 4 and Chapter 6 in textbook; additional materials drawn from references marked with \*)
  - b. teaching English Language Learners (2.5 hrs.)  
(Chapter 4 and Chapter 6 in textbook; additional materials drawn from references marked with \*)
  - c. teaching gifted children
  - d. addressing gender and multicultural issues
2. Using assessment as a teaching tool
3. Teaching mathematics through problem solving, reasoning and communicating
4. Examining current trends in teaching mathematics at grades 2-4, including state and national standards and curriculum issues
5. Incorporating appropriate uses of technology into the grades 2-4 classroom

#### B Teaching of Number and Operations in Grades 2-4 by providing children opportunities to:

8 academic hours

(*Outcome #2, #3, #5*)

1. Use a variety of models in the development of place value and base-ten number system knowledge.
2. Investigate multiple models to when developing the meaning of subtraction, multiplication and division.
3. Apply multiple strategies, including invented strategies, to develop the algorithms for computation of whole number operations.
4. Master basic facts with understanding.
5. Use number properties to assist in the development of mental computation and estimation.

6. Integrate length, area, and set models in the development of fraction concepts.
  7. Connect the base ten number system and fractions to the development of the concept of decimals.
- C Teaching of Algebra Concepts in Grades 2-4 providing children opportunities to:  
8 academic hours  
(*Outcome #2, #3, #5*)
1. Explore numerical patterns to make predictions.
  2. Represent numerical patterns in several ways when exploring repeating patterns and growing patterns.
  3. Demonstrate that the equal sign, =, means equivalency, and does not mean “find the answer”
  4. Solve open number sentences in both computational form and non-computational form.
  5. Explore various representations of algebraic concepts such as functions, tables, and graphs.
- D Teaching of Geometry and Measurement in Grades 2-4 by providing children opportunities to:  
8 academic hours  
(*Outcome #2, #3, #5*)
1. Apply ideas about relative position by describing, naming, and interpreting relative positions in space.
  2. Classify shapes and their properties and recognize the relationship among various shapes and properties.
  3. Investigate two dimensional shapes by recognizing and applying flips, slides, and turns
  4. Investigate and predict the results of putting together and taking apart two- and three-dimensional shapes.
  5. Explore the process and meaning of measurement of attributes by making comparisons, using models, and using appropriate instruments.
- E Teaching of Data Analysis and Probability in Grades 2-4 by providing children opportunities to:  
8 academic hours  
(*Outcome #2, #3*)
1. Collect data in order to answer a question of interest.
  2. Discuss variability of data within a set of data
  3. Represent and interpret data using tables and graphs such as line plots, bar graphs, circle graphs, pictograph and line graphs.
  4. Describe events as likely or unlikely and discuss the degree of likelihood using such words as certain, equally likely, and impossible.
  5. Conduct experiments to determine experimental probability.
- F Teaching a Mathematics Lesson in Grades 2-4  
3 academic hours  
(*Outcome #4*)
1. Plan a problem solving lesson that develops a mathematical concept.
  2. Examine a variety of teacher resources and curricular materials and choose appropriate materials for teaching a problem solving lesson.
  3. Teach a problem solving mathematics lesson to children in grades 2-4.

This syllabus covers 39 academic hours leaving 3 academic hours for testing and/or review. The final is an additional 2 academic hours.

#### IV. EVALUATION METHODS

Criteria used in assessing the competency of the student will vary depending upon the instructor. More specifically, the following guidelines are recommended:

- 40% Assessments. Tests (midterm and final). Tests provide a summative assessment of topics covered. Performance assessments consist of group and individual tasks that closely resemble those of practicing teachers. Performance assessments may be used as formative as well as summative evaluations.
- 20% Participation and Quizzes. Participation includes attendance, homework, and in-class activities. Quizzes provide a formative assessment of class members' understandings.
- 40% Projects. Group and individual projects show students' understandings and application of course topics. Projects include but are not limited to: in-class activities and presentations, course topic reflections and writing assignments, creating manipulatives for classroom use, reviews of elementary school journals and textbooks, a portfolio of student's work, and field experiences such as school classroom observations, student interviews, and practice teaching.

The Practice Teaching Project, the key assessment, comprises 20% of the course grade and shall be required of all instructors of ELED 313, and should be part of a field experience. The project's intent is to have students develop and teach a model math lesson to elementary school children. All other projects will combine to comprise 20% of the course grade.

#### V. GRADING SCALE

90 – 100%	A
80 – 89%	B
70 – 79%	C
60 – 69%	D
0 – 59%	F

#### VI. UNDERGRADUATE-COURSE ATTENDANCE POLICY

The course attendance policy is consistent with the University policy.

#### VII. REQUIRED TEXT

Van De Walle, J., Karp, K., & Bay-Williams, J. (2010). Elementary and middle school mathematics: Teaching developmentally, 7<sup>th</sup> Edition. New York: Pearson – Allyn and Bacon.

#### VIII. SPECIAL RESOURCE REQUIREMENTS

None.

## IX. BIBLIOGRAPHY

- Bassarear, T. (2001). *Mathematics for Elementary School Teachers*. Boston, MA: Houghton Mifflin.
- Bay-Williams, J & Van de Walle, J. (2010). *Field Experience Guide: Resources for Teachers of Elementary and Middle School Mathematics, 3<sup>rd</sup> Edition*. New York: Pearson – Allyn and Bacon.
- Bennett, A. B & Nelson, L. T. (2004). *Mathematics for elementary teachers: A conceptual approach*. Boston, MA: McGraw-Hill.
- \* Bley, N.S. & Thornton, C.A. (2001). *Teaching mathematics to students with learning disabilities, 4<sup>th</sup> Edition*. Austin, TX: ProEd.
- Burns, M. (2000). *About teaching mathematics: A K-8 resource*. Sausalito, CA: Math Solutions Publications.
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- \* Echevarria, J., Vogt, M., & Short, D. (2008). *Making content comprehensible for English learners: The SIOP model*. Boston, MA: Pearson.
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- \* Kersaint, G., Thompson, D., & Petkova, M. (2009). *Teaching mathematics to English language learners*. NY: Routledge.
- Masingila, J. O., Lester, F. K., & Raymond, A. M. (2002). *Mathematics for elementary teachers via problem solving*. Upper Saddle River, New Jersey: Prentice Hall.
- Musser, G. L., Burger W. F., & Peterson, B. E. (2003). *Mathematics for elementary teachers, a contemporary approach, Fourth Edition*. New Jersey: Prentice-Hall.
- National Council of Teachers of Mathematics (NCTM) (2006). *Curriculum focal points for prekindergarten through grade 8 mathematics: A quest for coherence*. Reston, VA: NCTM.
- \*National Council of Teachers of Mathematics. *Changing the faces of mathematics: Perspectives on latinos*. Reston, Virginia.
- National Council of Teachers of Mathematics. *Teaching Children Mathematics*. Reston, Virginia. (Formerly known as the *Arithmetic Teacher*)
- National Council of Teachers of Mathematics. *Yearbooks*. Reston, Virginia
- National Council of Teachers of Mathematics. *Mathematics Teaching in the Middle School*. Reston, Virginia
- National Council of Teachers of Mathematics. *Curriculum and Evaluation Standards for School Mathematics, Addenda Series*. Reston, Virginia
- National Council of Teachers of Mathematics. (1989) *Curriculum and evaluation standards for school mathematics*. Reston, Virginia: The National Council of Teachers of Mathematics.
- National Council of Teachers of Mathematics. *Principles and Standards for School Mathematics, Navigations Series*. Reston, Virginia: The National Council of Teachers of Mathematics.

- National Council of Teachers of Mathematics. (2000) *Principles and standards for school mathematics*. Reston, Virginia: The National Council of Teachers of Mathematics.
- National Council of Teachers of Mathematics. (1991) *Professional standards for teaching mathematics*. Reston, Virginia: The National Council of Teachers of Mathematics.
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- O'Connell, S. (1997). *Glyphs II – grades 4-6*. Grand Rapids, MI: McGraw-Hill Children's Publishing.
- O'Daffer, P. G., Clemens, S. R.(1992). *Geometry: and investigative approach*. Menlo Park, CA: Addison-Wesley.
- O'Daffer, P., Charles, R., Cooney, T., Dossey, J., Schielack, J. (1998). *Mathematics for Elementary School Teachers*. Menlo Park, CA: Addison-Wesley.
- Smith, N., Lambdin, D., Lindquist, M., & Reys, R. (2001). *Teaching elementary mathematics: A resource for field experiences*. NY: John Wiley & Sons.
- \* Vogt, M. & Echevarria, J. (2008). *99 ideas and activities for teaching English learners: The SIOP model*. Boston, MA: Pearson.
- Ward, R. (2009). *Literature-based activities for integrating mathematics with other content areas, grades 3-5*. Boston, MA: Pearson.

## 2. Summary of the Revision

We propose to change the prerequisites and establish a current syllabus of record. The last syllabus we have on file is from 2008.

**Current** – ELED 313 Teaching Mathematics in the Elementary School 3c-01-3cr

Prerequisites: MATH 151, 152, and one of ELED 257, ECED 280, EDEX 222 or 231

Examines contemporary curriculum and methods of instruction used in elementary school mathematics. Students become acquainted with books, materials, and other resources helpful to prospective teachers. Course activities include experiences in teaching elementary school mathematics.

**Proposed** – ELED 313 Teaching Mathematics in the Elementary School 3c-01-3cr

Prerequisites: MATH 152 and one of ECED 280 or ELED 257

Examines contemporary curriculum and methods of instruction used in elementary school mathematics. Students become acquainted with books, materials, and other resources helpful to prospective teachers. Course activities include experiences in teaching elementary school mathematics.

## 3. Rationale for the Revision

### 1. Prerequisite Change

**Rationale:** The current list of prerequisites was shortened. EDEX 222 and EDEX 231 are no longer needed as prerequisites. New teacher training guidelines from the state resulted in combining the special education program with the early childhood so students will have taken ECED 280 or ELED 257 before taking this course. MATH 151 is redundant since it is a prerequisite for MATH 152.

### 2. Course Revision

**Rationale:** The new IUP teacher training program for Grades pre-K – 4 includes this course to provide the methods of teaching mathematics in Grades 2-4. Currently, the content of this course emphasizes Grades K-6. A new outcome was added for the field experience (#4) to highlight the key assessment. In the course outline, hours were added to “A. Development of Pedagogy” for special needs and English-Language Learning methods of teaching. Topics and hours were eliminated from “B. Teaching of Number Concepts” as unneeded.

## 4. Old Syllabus of Record

Next page



## I. CATALOG DESCRIPTION

ELED 313 Teaching Mathematics in the Elementary School

3c-01-3cr

Prerequisites: MATH 151, 152, and one of ELED 257, ECED 280, EDEX 222 or 231

Examines contemporary curriculum and methods of instruction used in elementary school mathematics. Students become acquainted with books, materials, and other resources helpful to prospective teachers. Course activities include experiences in teaching elementary school mathematics.

## II. COURSE OUTCOMES

### RELATIONSHIP OF COURSE TO COLLEGE CONCEPTUAL FRAMEWORK:

The College of Education has developed a teacher education program based upon a pre-service teacher who is competent in content and pedagogy. ELED 313 is a methods course which utilizes the student's knowledge of the mathematics content of the elementary grades as a vehicle to develop a pedagogical framework for learning to teach mathematics. In the course, students use a variety of materials for teaching, observe exemplary teachers, plan lessons, work with elementary children, and make journal entries. These activities help pre-service teachers become reflective practitioners who are capable of inquiry into a variety of methods of teaching mathematics while learning to collaborate and interact with their peers and with experienced teachers.

The student will:

1. examine the role of high expectations and strong support for ALL students (National Council of Teachers of Mathematics [NCTM], Equity Principle for School Mathematics) including multicultural and individual differences.
2. investigate and reflect upon the importance of a coherent, focused, and well-articulated mathematics curriculum (NCTM Curriculum Principle for School Mathematics) including the sequencing of topics.
3. investigate learning theories, and learn and practice the methods of teaching mathematics that provide knowledge of what children understand and need to learn, and how to challenge and support them in their mathematical development (NCTM Teaching Principle for School Mathematics) including (a) concrete and visual to abstract instructional approaches and (b) the design and implementation an elementary mathematics lesson suitable for the school classroom.
4. examine the ways in which children learn and develop their mathematics ability (NCTM Learning Principle for School Mathematics) such as (a) the importance of positive attitudes in teaching and learning, (b) the integration of problem-solving and real-world applications into the teaching of mathematics, (c) the role of communicating mathematical ideas in learning to clarify, refine and consolidate one's knowledge, and (d) the advantages to connecting mathematics to the outside world.
5. explore the role of assessment in learning important mathematics (NCTM Assessment Principle for School Mathematics) such as issues, options, and tools.
6. investigate the essential role that technology plays in a student's mathematical learning (NCTM Technology Principle for School Mathematics) including an examination of the appropriate uses of calculators and computers to develop number awareness and mathematical concepts, as well as to solve problems.

7. illustrate awareness of current trends related to the teaching of mathematics in the elementary school.

Course Objective	College Conceptual Framework / Danielson	INTASC Standard /Principle	NCATE / ACEI Elementary Education Program Standard	Course Assessment Measuring Objective
1	1, 2	3	2.3 Mathematics, 4.0 Assessment for Instruction	Tests, Projects, and Quizzes; Varies by Instructor
2	1	1, 4	2.3 Mathematics	Tests, Projects, and Quizzes; Varies by Instructor
3	1, 2, 3, 4	2, 6, 7, 9	2.3 Mathematics, 3.1 - 3.5 Instruction	<b>Key Assessment:</b> Practice Teaching Project
4	1, 2, 3, 4	2, 4 - 7, 9	2.3 Mathematics, 3.1 - 3.5 Instruction	<b>Key Assessment:</b> Practice Teaching Project
5	1	8	4.0 Assessment for Instruction	Tests, Projects, and Quizzes; Varies by Instructor
6	1, 2	4, 6	2.3 Mathematics	Tests, Projects, and Quizzes; Varies by Instructor
7	1	2 - 5	2.3 Mathematics, 4.0 Assessment for Instruction	Tests, Projects, and Quizzes; Varies by Instructor

### III. COURSE OUTLINE / TIME SCHEDULE

#### A. Development of Pedagogy (3 weeks)

1. Helping all children construct mathematical concepts (*Objective #1*). 1 hr.
  2. Assessment in the classroom (*Objective #5*). 3 hrs.
  3. Instruction via problem solving (*Objective #4b*). 3 hrs.
  4. The role of affect and culture in learning mathematics (*Objective #1*). 0.5 hrs.
  5. General techniques for children with special needs (*Objective #1*). 1 hr.
  6. Current trends in teaching mathematics (*Objective #7*). 0.5 hrs.
7. Technology in the elementary school classroom is an important topic where explorations and demonstrations are integrated into content areas when appropriate. It is expected that the students will be exposed to about one hour of accumulated instruction time as part of the credit hours given in this Course Outline. (*Objective #6*).

#### B. The Teaching of Number Concepts (6 weeks) (*Objectives #2, #3, #4*)

1. The development of number concepts and relations. 2 hrs.
2. Developing meanings for the operations. 2 hrs.
3. Helping children master the basic facts. 2 hrs.
4. Whole number place value development 2 hrs.
5. Pencil-and-paper computation with whole numbers. 2 hrs.
6. Mental computation and estimation. 1 hr.
7. Development of fraction concepts. 3 hrs.
8. Computation with fractions. 1 hr.
9. Decimal and Percent concepts and computations. 2 hrs.
10. Developing the concepts of ratio and proportion. 1 hr.

C. The Teaching of Non-Number Concepts (4 weeks)	(Objectives #2, #3, #4)	
1. Developing measurement concepts.		2 hrs.
2. Geometric thinking and geometric concepts.		3 hrs.
3. Logical Reasoning: Attribute and pattern.		3 hrs.
4. Exploring the concepts of probability and statistics.		2 hrs.
5. Preparing for algebra.		1 hr.
6. Functions and variables.		1 hr.
D. Teaching a Mathematics Lesson (1 week)	(Objective #3)	
1. Planning for developmental instruction.		1 hr.
2. Examining teacher resources and classroom textbooks.		1 hr.
3. Teaching a mathematics lesson.		1 hr.
Final exam		2 hrs.

#### IV. EVALUATION METHODS

Criteria used in assessing the competency of the student will vary depending upon the instructor. More specifically, the following guidelines are recommended:

- 40% Assessments. Tests (midterms and final). Tests provide a summative assessment of topics covered. Performance assessments consist of group and individual tasks that closely resemble those of practicing teachers. Performance assessments may be used as formative as well as summative evaluations.
- 20% Participation and Quizzes. Participation includes attendance, homework, and in-class activities. Quizzes over recently covered material provides a formative assessment of class members' understandings.
- 40% Projects. Group and individual projects show students' understandings and application of course topics. Projects include but are not limited to: in-class activities and presentations, course topic reflections and writing assignments, creating manipulatives for classroom use, reviews of elementary school journals and textbooks, a portfolio of student's work, and field experiences such as school classroom observations, student interviews, and practice teaching.

The Practice Teaching Project, the key assessment, comprises 20% of the course grade and shall be required of all instructors of ELED 313, and should be part of a field experience. The project's intent is to have students develop and teach a model math lesson to elementary school children.

All other projects will combine to comprise 20% of the course grade.

## V. EXAMPLE GRADING SCALE

90 - 100	A
80 - 89	B
70 - 79	C
60 - 69	D
0 - 59	F

## VI. UNDERGRADUATE-COURSE ATTENDANCE POLICY

The course attendance policy is consistent with the University policy.

## VII. REQUIRED TEXT

Van De Walle, J. (2007). Elementary and middle school mathematics: Teaching developmentally, 6<sup>th</sup> Edition. New York: Pearson – Allyn and Bacon.

## VIII. SPECIAL RESOURCE REQUIREMENTS

None.

## IX. BIBLIOGRAPHY

- Bassarear, T. (2001). Mathematics for Elementary School Teachers. Boston, MA: Houghton Mifflin.
- Bennett, A. B & Nelson, L. T. (2004). Mathematics for elementary teachers: A conceptual approach. Boston, MA: McGraw-Hill.
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- National Council of Teachers of Mathematics. Teaching Children Mathematics. Reston, Virginia. (Formerly known as the Arithmetic Teacher)
- National Council of Teachers of Mathematics. Yearbooks. Reston, Virginia
- National Council of Teachers of Mathematics. Mathematics Teaching in the Middle School. Reston, Virginia
- National Council of Teachers of Mathematics. Curriculum and Evaluation Standards for School Mathematics, Addenda Series. Reston, Virginia
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- Smith, N., Lambdin, D., Lindquist, M., & Reys, R. (2001). Teaching elementary mathematics: A resource for field experiences. NY: John Wiley & Sons.

## Part III. Letters/Emails of Support or Acknowledgement

### 1. ELED & ECED – George Bieger



Indiana University of Pennsylvania  
[www.iup.edu](http://www.iup.edu)

Department of Professional Studies  
in Education  
Davis Hall, Room 303  
570 South Eleventh Street  
Indiana, Pennsylvania 15705-1050

P 724-357-2400  
F 724-357-2961  
[www.iup.edu/pse](http://www.iup.edu/pse)

February 27, 2009

To Whom It May Concern:

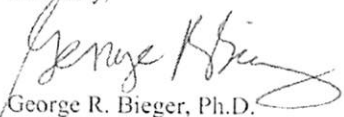
I am writing in reference to the proposed changes in several courses (i.e., MATH 151, MATH 152, MATH 320, and MATH 313) in the Department of Mathematics that will affect undergraduate students in Elementary Education and Early Childhood Education in our department.

The Professional Studies in Education faculty has collaborated successfully for many years with faculty in the Department of Mathematics and we are very familiar with the courses and the proposed changes. The proposed revisions are being made to make these courses, and therefore our programs, consistent with the standards dictated by the Pennsylvania Department of Education (PDE). The proposed revisions are necessary for IUP's teacher education programs to remain fully accredited by the PDE as approved teacher certification programs.

The proposed changes have the full and unqualified support of the Department of Professional Studies in Education, and we encourage all relevant entities (i.e., UWUCC and the University Senate) to approve the proposed revisions.

Please contact me if you have a need for additional information, or if you have any questions.

Sincerely,

  
George R. Bieger, Ph.D.  
Professor and Acting Chairperson

2. From EDEX – Joe Domaracki

----- Original Message -----

From: "Joseph W. Domaracki ,Ph.D." <[jwdomara@iup.edu](mailto:jwdomara@iup.edu)>

To: "John Baker" <[jdbaker@iup.edu](mailto:jdbaker@iup.edu)>

Sent: Friday, February 27, 2009 11:56 AM

Subject: Re: support letter for ELED 313 & MATH 320

> Dr. Baker,

> I am writing in support of the course proposals for MATH 320 and  
> ELED 313. Both courses will be an integral part of the new Early  
> Childhood Special Education Teacher Preparation Program. The changes  
> being proposed are most appropriate and will benefit our students and  
> the program.

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> Joseph Domaracki

> Chair,

> Department of Special Education and Clinical Services

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> John Baker wrote:

>> Joe: I am looking for a letter or email of support for the following  
>> two course revisions to support the new ECED/EDEX program. For  
>> students in the EDEX program, we will continue to allow them to take  
>> ELED 313, just as we will continue to offer the current version of  
>> ELED 313 until the new program takes effect. If you have further  
>> question, let me know. John

>>

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> --

> Joseph W. Domaracki, Ph.D.

> Professor

> Chairperson

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