

# Curriculum Proposal Cover Sheet – form is available on-line as an interactive PDF

LSC Use Only Proposal No: LSC Action-Date:	UWUCC Use Only Proposal No: <u>12-61a</u> UWUCC Action-Date: <u>AP-11/27/12</u> Senate Action Date: <u>App-1/29/13</u>
---	---

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

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

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

**1. Course Proposals (check all that apply)**

New Course                       Course Prefix Change                       Course Deletion  
 Course Revision                       Course Number and/or Title Change                       Catalog Description Change

Current course prefix, number and full title: \_\_\_\_\_

Proposed course prefix, number and full title, if changing: \_\_\_\_\_

**2. Liberal Studies Course Designations, as appropriate**

This course is also proposed as a Liberal Studies Course (please mark the appropriate categories below)

Learning Skills     Knowledge Area     Global and Multicultural Awareness     Writing Intensive (include W cover sheet)  
 Liberal Studies Elective (please mark the designation(s) that applies – must meet at least one)

Global Citizenship                       Information Literacy                       Oral Communication  
 Quantitative Reasoning                       Scientific Literacy                       Technological Literacy

**3. Other Designations, as appropriate**

Honors College Course                       Other: (e.g. Women's Studies, Pan African)

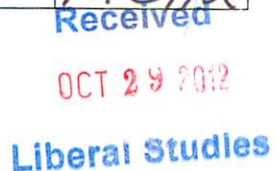
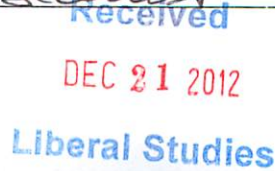
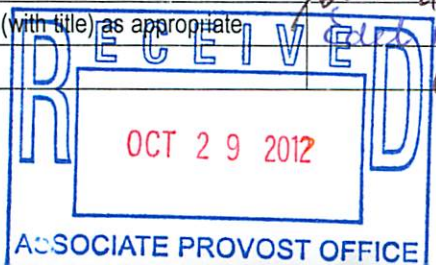
**4. Program Proposals**

Catalog Description Change     Program Revision     Program Title Change     New Track  
 New Degree Program     New Minor Program     Liberal Studies Requirement Changes     Other

Current program name: \_\_\_\_\_

Proposed program name, if changing: Minor in Elementary + Middle Level Mathematics

5. Approvals	Signature	Date
Department Curriculum Committee Chair(s)	<u>Edel Reilly</u>	<u>9/20/12</u>
Department Chairperson(s)	<u>See</u>	<u>9/20/12</u>
College Curriculum Committee Chair	<u>Ame Kende</u>	<u>9/24/12</u>
College Dean	<u>Deane Huff</u>	<u>9/24/12</u>
Director of Liberal Studies (as needed)		
Director of Honors College (as needed)		
Provost (as needed)	<u>James W. Steman</u>	<u>10/30/12</u>
Additional signature (with title) as appropriate	<u>Edel Reilly (TECC)</u> <u>P. Narli</u>	<u>10/22/12</u> <u>10/25/12</u>
UWUCC Co-Chairs	<u>Gail Sechrist</u>	<u>12/3/12</u>



Part II – Description of Program Change

**Minor – Elementary and Middle Level Mathematics** **18**

**Required Courses:** 12cr

- MATH 151 Elements of Mathematics I
- MATH 152 Elements of Mathematics II
- MATH 456 Geometry for Elementary/Middle-Level Teachers
- MATH 471 Algebra for Elementary/Middle-Level Teachers

**Controlled Electives:** 6cr

MATH 153, 317, 420, 457, 458, 459, 461(1)

(1) Other MATH content courses with the approval of the minor advisor.

**Minor in Elementary and Middle Level Mathematics**

The minor consists of 18 credits in elementary and middle level mathematics education. The minor may offer additional preparation for the teaching of elementary and middle mathematics. This minor does not lead to certification and is not open to students majoring in the Middle-Level Education 4-8/Mathematics Specialization.

1. **Rationale/Justification:** With recent changes to state certification requirements, the mathematics concentration is no longer an option for elementary education majors. The old programs have been replaced at IUP by the ECSP major (Early Childhood Education/Special Education) and the MIDL major (with a Math track for Grades 4-8).

The new state guidelines eliminate the elementary education graduates who emphasized mathematics in their coursework, and are highly desirable applicants for teaching positions in many school districts. The Minor in Elementary and Middle School Mathematics allows those who have the time and inclination to take extra coursework in math that is specifically designed to give them content and pedagogy in teaching math for the elementary and middle school grade levels. This minor does not lead to certification nor is it open to students in the Middle Level Education Math Specialization.

2. **Summary of Courses:** same as #1 above

**Required Courses:** 12cr

MATH 151, MATH 152, MATH 471, MATH 456

**Controlled Electives** 6cr

MATH 317, MATH 420, MATH 457, MATH 458, MATH 459,  
MATH 461, Courses for math majors and minors including  
MATH 105 and above

**Credit Requirements:** 18 credits

**Sequencing:** MATH 151 and MATH 152 are the prerequisite courses for the other math courses in the minor. The other coursework can be taken in any order.

**Restrictions:** None

### **3. Recommended Course Sequence:**

**Freshman Year – MATH 151 (fall), MATH 152 (spring)  
Sophomore Year – MATH 456 (fall), elective course (spring)  
Junior Year – MATH 471 (fall), elective course (spring)**

### **Part III – Implementation**

- 1. Faculty: No additional faculty will be needed. Courses for this minor are already offered on a regular basis for the MIDL – Math major. The additional students can easily be accommodated into sections that are offered.**
- 2. Resource: No additional resources are needed.**
- 3. We expect an increase in number of students up to 5 ECSP majors. This number of students can be easily absorbed into the current offerings of classes**
- 4. Intended Implementation Date: Fall 2013**

### **Part IV – Periodic Assessment**

**The Mathematics Department will evaluate this program as part of its assessment plan. We will also be monitoring student perceptions and attitudes about mathematics. All this will be accomplished with the usual course grades and current surveys.**

### **Part V – Course Proposals**

**All courses for this minor exist and are regularly offered.**

### **Part VI – Letters of Support or Acknowledgement**

**Although other majors are welcome to fulfill the requirements of this new minor, students majoring in ECSP are the primary focus. A letter of support has been included from Dr. Sue Rieg, Chairperson of Professional Studies in Education and Dr. Janice Baker, Chairperson of Special Education and Clinical Services.**