Program is under revision to meet the emerging Indiana Rules for Educator Preparation and Accountability (REPA) requirements. Please see an education advisor for more details.

This program sheet is effective for all students starting at IUB beginning summer 2015.

INDIANA UNIVERSITY
SCHOOL OF EDUCATION
Office of Teacher Education
Bloomington

B.S. EDUCATION: MATHEMATICS

This Bachelor of Science in Education degree enables you to teach Middle School/Junior High or High School students. Course requirements for this program are valid at IUB as reflected in the School of Education Bulletin. A 4 year college plan requires completion of 15 credits each semester. A 2.5 GPA overall is required for retention and graduation. A total of 120 credits are required for graduation.

May 2015

PREREQUISITES FOR AUTHORIZED COURSES
(Competitive enrollment. Meeting minimum requirements does not guarantee enrollment in authorized courses.)

1. Students may satisfy the Academic Skills Assessment requirement by using any of the following options:
   - Qualifying scores on CASA
     - Reading 220, Math 220, Writing 220
   - SAT combined score of at least 1100
     - ○ Sum of MA + VE = 1100
   - ACT composite score of at least 24
     - ○ Sum of EN + MA + RE + SR scores divided by 4 = 24
2. 2.5 GPA overall.
3. 21 credits and a 2.0 GPA in the content field with at least 15 credits completed and 6 credits in progress. Grade of C or higher is required in each content field course.
4. Completion of or enrollment in prerequisites: Grade of C or higher is required in each EDUC course.

Course		Credits
• EDUC-M 300	*Teaching in a Pluralistic Society* **(D)**	3
• EDUC-P 312	*Learning Theory into Practice* **AND**	3
• EDUC-P 313	*Adolescents in a Learning Community*	3
	(To enroll in P312 and P313 you must register for EDUC-BE 312)	
• EDUC-W 200	*Using Computers in Education* **(IF)**	3

5. Apply by October 1 for Spring Semester Block I courses.
6. Submit TEP Application Online: https://info.educ.indiana.edu/teachered/

I. IUB & SCHOOL OF EDUCATION GENERAL EDUCATION REQUIREMENTS
http://gened.iub.edu/courses/genedcourses.html
(Careful selection & completion of courses with a "C" or higher grade may allow double counting within General Education, Professional Education &/or Content Field.)

Oral Expression (Select one)
(Grade of C or higher required)   **3 credits**

ANTH-A 122	*Interpersonal Communication* **(S&H)**	3
COLL-P 155	*Public Oral Communication*	3
EDUC-G 203	*Comm. for Youth Serving Professionals* **(S&H)**	3

English Composition (EC) (Select one)
(Grade of C or higher required)   **0-3 credits**

CMLT-C 110	*Writing the World*	3
ENG-W 131	*Reading, Writing & Inquiry I* **OR**	3
ENG-W 131EX	*Elementary Composition-Exempt*	0
ENG-W 170	*Intro to Argumentative Writing-Projects in Reading & Writing*	3

Intensive Writing Course (IW) (Select one)   **3 credits**

EDUC-H 205	*Intro to Educational Thought (P: English comp)* **(S&H)**	3
EDUC-H 340	*Education & American Culture (P: English comp & Soph. standing)*	3

Mathematical Modeling (MM) (Select one)   **3-4 credits**

MATH-M/S/V 118	*Finite Mathematics*	3
MATH-D 116	*Intro to Finite Mathematics I* **AND**	2
MATH-D 117	*Intro to Finite Mathematics II (P: D116)*	2
MATH-J 113	*Intro to Calculus with Applications*	3
MATH-M 119	*Brief Survey of Calculus I*	3
MATH-M 211	*Calculus I*	4
MATH-M 213	*Accelerated Calculus*	4

Arts & Humanities (A&H)   **6 credits**
Complete at least 2 courses for a total of at least 6 credits.

- _____
- _____

Social & Historical Studies (S&H)   **6 credits**
Complete at least 2 courses for a total of at least 6 credits.

- _____
- _____

Natural & Mathematical Sciences (N&M)
(Complete ONE of the following options.)   **5+ credits**

Option I: Complete at least 2 courses for a total of at least 5 credits. At least 1 of these courses must be a Natural Science (*) course.

- _____
- _____

Option II: Complete a 5 credit science course.

- _____

(The class taken to fulfill the Mathematical Modeling requirement cannot be counted towards the 5+ credits needed to fulfill the N&M requirement.)

World Languages (WL)/World Cultures (WC)
(Complete ONE of the following options.)   **6 credits**

Option I: Language Study (WL): Complete the study of an approved single language through the second semester of the second-year level of college-level coursework.

- _____
- _____

Option II: World Culture (WC): Complete at least 2 courses for a total of at least 6 credits.

- _____
- _____

Option III: International Experience (IE): Complete an approved study abroad program or internship of at least 6 credits & at least 6 weeks abroad in duration.

- _____
- _____

Information Fluency (IF)		3 credits
EDUC-W 200	*Using Computers in Education*	3

Diversity in the U. S. (D)		3 credits
EDUC-M 300	*Teach in a Pluralistic Society (P: Soph. standing)*	3

Enriching Educational Experiences (EEE)		12 credits
EDUC-M 480	*Student Teaching: Secondary*	12

II. PROFESSIONAL EDUCATION
48 credits/2.5 GPA
(C or higher grade is required in each course listed below.)

TEP Prerequisite Education Courses		12 credits
EDUC-M 300	*Teaching in a Pluralistic Society (P: Soph. standing)* **(D)**	3
EDUC-P 312	*Learning Theory into Practice (P: Soph. standing)* **AND**	3
EDUC-P 313	*Adolescents in a Learning Community (P: Soph. standing)* **(To enroll in P312 and P313 you must register for EDUC-BE 312)**	3
EDUC-W 200	*Using Computers in Education* **(IF)**	3

Required Non-Authorized Course		6 credits
EDUC-A 308	*Legal & Ethical Issues for Teachers (P: Soph. standing)*	3
EDUC-H 205	*Intro to Educational Thought (P: English comp)* **(S&H) (IW)** *OR*	3
EDUC-H 340	*Education & American Culture (P: English comp & Soph. standing)* **(IW)**	

Teacher Education Program (TEP)		30 credits

Completion of TEP prerequisites is required.
These courses must be taken before student teaching.

EDUC-K 306	*Teaching Students with Special Needs: Secondary Classrooms*	3

Courses must be taken in prescribed blocks. Successful completion (C or higher) of all courses in each block is a prerequisite for the next block and student teaching.

Block I and Block II must be completed in sequence, without interruption, from one semester to the next. Students may add an additional semester(s) between the completion of Block II and Student Teaching (Block III).

Block I (Spring only)		8 credits
EDUC-M 321	*Secondary School Mathematics Curriculum & Assessment*	3
EDUC-M 303	*Field Experience I*	2
EDUC-M 469	*Content Area Literacy*	3

Block II (Fall only)		6 credits
EDUC-M 422	*Teaching Mathematics in the Secondary School*	3
EDUC-M 403	*Field Experience II*	2
EDUC-S 303	*Classroom Management*	1

Block III (Student Teaching)		13 credits

Students may not enroll in other classes while completing student teaching. (Exception: EDUC-M 202 Job Search Strategies for Educators)

EDUC-M 420	*Student Teaching Seminar*	1
EDUC-M 480	*Student Teaching in the Secondary School* **(EEE)**	12

III. MATHEMATICS CONTENT
42 credits/2.0 GPA
(C or higher grade is required in each course listed below.)
(Check with the department regarding when courses will be offered.)

Analysis		12 credits
MATH-M 211	*Calculus I* **_(MM)_**	4
MATH-M/S 212	*Calculus II (P: M 211)* **_(N&M)_** *OR*	4
MATH-M 213	*Accelerated Calculus (P: Placement by exam)* **_(N&M)_**	
MATH-M/S 311	*Calculus III (P: M/S 212 or M 213)*	4

Algebra		9 credits
MATH-M 301	*Linear Algebra & Applications (P: M/S 212)* **OR**	3
MATH-M/S 303	*Linear Algebra for Undergraduates (P: M/S 212)*	
MATH-M 391	*Intro to Mathematical Reasoning (P: M/S 212; R: M/S 212) (Spring Only)*	3
MATH-M/S 403	*Intro to Modern Algebra (P: M 301 or M/S 303) (Fall only)* **OR**	3
MATH-T 403	*Modern Algebra for Secondary Teachers (P: M 301 or M/S 303 & M 391) (Fall only)*	3

Probability & Statistics		3 credits
MATH-M 365	*Intro to Probability & Statistics (P: M/S 212)*	3

Geometry		3 credits
MATH-T 336	*Topics in Euclidean Geometry (P: M/S 212) (Fall only)*	3

Applied Mathematics		3 credits
MATH-M 447	*Math Models & Applications I (P: M 301 or M/S 303 & M/S 311 (C: M 365) (Fall only)*	3

Computer Programming		3 credits
MATH-M 371	*Elementary Computational Methods (P: M/S 212) (Spring only)*	3

Math in Secondary Curriculum		3 credits

Complete the following:

EDUC-M 302	*Algebra Throughout the Sec. Curriculum (P: M 301 or M/S 303) (C: T 403) (Fall only)*	1
EDUC-M 302	*Calculus Throughout the Sec. Curriculum (C: M/S 212) (Spring only)*	1
EDUC-M 302	*Probability & Statistics Throughout the Sec. Curriculum (C: M 365) (Spring only)*	1

Electives		to total 42 credits

Program must include at least one of the following:

MATH-M 321	*Intuitive Topology (Spring only) (P: M/S 212)*	3
MATH-M/S 343	*Introductions to Differential Equations with Applications I (P: M/S 212)*	3
MATH-M 380	*History of Mathematics (P: M/S 212) (Fall only)* **OR**	3
HPSC-X 380	*History & Philosophy of Mathematics (P: M/S212) (Spring only)*	
MATH-M 405	*Number Theory (P: M/S 212)*	3
MATH-M/S 413	*Introduction to Analysis I (P: M 301 or M/S 303 & M/S 311) (Fall only)*	3

Select any other mathematics course at the 300 level or above, but the following are recommended:

MATH-M 330	*Exploring Mathematical Ideas (P: M 211)*	3
MATH-M 415	*Elementary Complex Variables with Applications (P: M/S 311) (Spring only)*	3
MATH-M 448	*Mathematical Models and Applications II (P: M 301 or M/S 303 & M/S 311 & M 365) (Spring only)*	3
MATH-M 453	*Cryptograhy (P: M 301 or M/S 303)*	3

IV. ELECTIVES (To total 120 credits)