

MATHEMATICS EDUCATION

Grade Level 5-12
REPA 3

NOT VALID
WITHOUT
OFFICIAL
TRANSCRIPT
EVALUATION

Purdue University Course Catalog 2022-2023

CONTENT

CREDIT HOURS

Major Courses

| | | | |
|---|-------|---|-----|
| MA | 35100 | Elementary Linear Algebra | 3 |
| MA | 36600 | Ordinary Differential Equations | 4 |
| MA | 37500 | Introduction to Discrete Mathematics | 3 |
| MA | 46000 | Geometry | 3 |
| MA | 48400 | Seminar on Teaching College Algebra and Trigonometry ¹ | 3 |
| STAT | 31100 | Introductory Probability | 3 |
| STAT | 35000 | Introduction to Statistics ¹ | 3 |
| <i>One of the following:</i> | | | 3 |
| MA | 30100 | An Introduction to Proof Through Real Analysis (3) | |
| MA | 34100 | Foundations of Analysis (3) | |
| <i>One of the following:</i> | | | 3 |
| MA | 45000 | Algebra (Honors) (3) | |
| MA | 45300 | Elements of Algebra I (3) | |
| <i>One of the following:</i> | | | 3-4 |
| CS | 15900 | Programming Applications for Engineers (3) | |
| CS | 17700 | Programming with Multimedia Objects (4) | |
| CS | 18000 | Problem Solving and Object-Oriented Programming (4) | |
| <i>One of the following (Calculus I Selective):</i> | | | 4-5 |
| MA | 16100 | Plane Analytic Geometry and Calculus I (5) | |
| MA | 16500 | Analytic Geometry and Calculus I (4) | |
| <i>One of the following (Calculus II Selective):</i> | | | 4-5 |
| MA | 16200 | Plane Analytic Geometry and Calculus II (5) | |
| MA | 16600 | Analytic Geometry and Calculus II (4) | |
| <i>One of the following (Calculus III Selective):</i> | | | 4-5 |
| MA | 26100 | Multivariate Calculus (4) | |
| MA | 27101 | Honors Multivariate Calculus (5) | |

Total Content 43-47

¹The higher grade between STAT 35000 or MA 48400 is used toward content GPA.

PROFESSIONAL EDUCATION

Professional Education Course Requirements

| | | | |
|------|-------|---|---|
| EDCI | 20500 | Exploring Teaching as a Career <i>*required for TEP admission</i> | 2 |
| EDCI | 22550 | Mathematics Education Seminar | 1 |
| EDCI | 27000 | Introduction to Education Technology and Computing | 1 |

| | | | |
|---------------|-------|---|----|
| EDCI | 28500 | Multiculturalism and Education <i>*required for TEP admission</i> | 2 |
| EDCI | 30900 | Reading in Middle and Secondary Schools: Methods and Problems | 1 |
| EDCI | 35000 | Community Issues and Applications for Educators | 1 |
| EDCI | 37001 | Teaching and Learning English as a New Language | 2 |
| EDCI | 42500 | Teaching of Secondary Mathematics – Methods 1 | 3 |
| EDCI | 42600 | Teaching of Secondary Mathematics – Methods II | 3 |
| EDCI | 49800 | Supervised Teaching | 12 |
| EDPS | 23500 | Learning and Motivation | 2 |
| EDPS | 24000 | Children with Gifts, Creativity, and Talents | 1 |
| EDPS | 24800 | Differentiating Curriculum and Instruction | 1 |
| EDPS | 26501 | The Inclusive Classroom | 2 |
| EDPS | 32700 | Classroom Assessment | 1 |
| EDPS | 36201 | Positive Behavioral Supports | 2 |
| EDPS | 43010 | Secondary Creating and Managing Learning Environments | 1 |
| EDST | 20010 | Educational Policies and Laws <i>*required for TEP admission</i> | 1 |
| EDCI/ EDPS | 20001 | Special Pop Sem: Focus on Students with Disabilities and Differentiation (1), OR Special Pop Sem: Focus on Students with Disabilities and Differentiation (1) | 1 |
| EDCI/ EDPS | 20002 | Special Pop Sem: English Lang Learners and Students with Gifts (1), OR Special Pop Sem: English Lang Learners and Students with Gifts (1) | 1 |

Learner Pathway Course 3

Pick **ONE** course from the selective below in a pathway of your choice (required). ABA courses are included if allowed by the plan of study. Students can take two additional courses in the same pathway to complete requirements for an add-on teaching license in ELL or HA or take one additional course in the SPED pathway for a certificate in SPED.

English Language Learners Licensure Pathway

| | | |
|------|-------|---|
| EDCI | 51900 | Teaching English Language Learners (3) |
| EDCI | 52600 | Language Study for Educators (3) |
| EDCI | 55900 | Academic Language and Content Area Learning (3) |

Special Education Non-Licensure Pathway

| | | |
|------|-------|---|
| EDPS | 21100 | Special Education Law, Policy, and Ethical Guidelines (3) |
|------|-------|---|

High Ability Licensure Pathway

| | | |
|------|-------|--|
| EDPS | 54200 | Curriculum and Program Development in Gifted Education (3) |
| EDPS | 54500 | Social and Affective Development of Gifted Students (3) |

Applied Behavior Analysis Non-Licensure Pathway

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|------|-------|---|
| EDPS | 34100 | Introduction to Philosophical Underpinnings and Concepts of Applied Behavior Analysis (3) |
| EDPS | 34200 | Applied Behavior Analysis – Assessment and Intervention (3) |
| EDPS | 44100 | Introduction to Ethics and Practice of Applied Behavior Analysis (3) |
| EDPS | 44200 | Advanced Intervention in Applied Behavior Analysis (3) |

Total Professional Education 44

Licensure Information

All Purdue University Program and Indiana Department of Education requirements must be met for recommendation for Indiana licensure.

After all requirements are met, Purdue graduates will be considered eligible to apply to the [Indiana Department of Education](#) for licensure under REPA 3 in:

Mathematics (5-12) Addition in Blended and Online Teaching (5-12)

Optional: Addition in High Ability (P-12) or ELL (P-12) if chosen pathway requirements are completed

Visit the [Indiana Department of Education website](#) for more information about what courses can be taught once licensed in this area.

Please reference the 2022-2023 Mathematics Education Guidelines and Requirements and the 2022-2023 Mathematics Education Checklist for more information.