



Pittsburg State University
College of Arts & Sciences Program Guide

Degree: Bachelor of Science in Education
 Major: Mathematics (Grades 6-12)
 Emphasis/Option:
 Minor (if required):

As of Fall 2016

**Major (Mathematics) Core Requirements
 (46 hours)**

| | |
|---|---|
| MATH 150: Calculus I | 5 |
| MATH 155: Calculus II | 5 |
| MATH 212: Matrix Algebra | 2 |
| MATH 253: Calculus III | 3 |
| MATH 304: Mathematics for Education II..... | 3 |
| MATH 343: Introductory Applied Statistics..... | 3 |
| MATH 413: Introduction to Mathematical Thought | 3 |
| MATH 471: Manipulatives for Teaching Mathematics | 1 |
| MATH 472: Calculators in Teaching Mathematics | 1 |
| MATH 473: Mathematical Software | 1 |
| MATH 513: Discrete Structures | 3 |
| MATH 607: History of Mathematics | 3 |
| MATH 613: Abstract Algebra | 3 |
| MATH 636: Basic Concepts of Geometry | 3 |
| MATH 656: Mathematical Modeling | 3 |
| MATH 699: Senior Seminar | 1 |
| CIS 230: Visual Basic Programming | |
| or CIS 240: C ++ Programming | 3 |
| or a computer programming course approved by the mathematics department | |

The degree requirements for a B.S. in Education with a major in mathematics requires a minimum of 124 semester hours.

All students preparing to teach must meet the general education requirements for all baccalaureate degrees as well as the requirements for teacher licensure.

Students planning to teach should become familiar with the current Regulations for Certifying School Personnel, issued by The State Board of Education. Information concerning these regulations may be obtained from the Director of Teacher Education, 110 Hughes Hall, Pittsburg State University.

Professional Education** (37 hours)**

| | |
|--|---|
| EDUC 261: Explorations in Education | 3 |
| PSYCH 263: Developmental Psychology | 3 |
| PSYCH 357: Educational Psychology | 3 |
| MATH 479: Techniques for Teaching Mathematics | 3 |
| MATH 480: Internship in Secondary Mathematics Teaching | 1 |
| SPED 510: Overview of Special Education | 3 |
| EDUC 520: Methods and Materials for Academic Literacy | 3 |
| MATH 679: Mathematics Education Seminar | 1 |

PSYCH 357 Education Psychology, MATH 479 Techniques for Teaching Mathematics, EDUC 511 Methods and Materials in Middle Level Education, EDUC 520 Methods and Materials for Academic Literacy require admission to Teacher Education to enroll in the class.

****See [Admission to Professional Semester](#) for professional education grade point requirements.

Professional Semester (17 hours)

| | |
|---|---|
| EDUC 458: Methods and Curriculum | 3 |
| EDUC 462: Secondary and Middle Level Education | 2 |
| EDUC 464: Foundations of Measurement and Evaluation | 2 |
| EDUC 480: Supervised Teaching in the Secondary School | 3 |
| EDUC 482: Supervised Teaching in the Secondary School | 5 |
| MATH 579: Supervised Student Teaching and Follow-Up of Teachers | 2 |

GENERAL EDUCATION REQUIREMENTS

(40-45 hrs.)

Basic Skills 9 hours

| | | | |
|---------|-----|---------------------------------------|---|
| COMM | 207 | Speech Communication..... | 3 |
| ENGL | 101 | English Composition..... | 3 |
| ENGL | 190 | Honors English Composition | |
| OR ENGL | 299 | Introduction to Research Writing..... | 3 |

Must have a "C" or better in each of these Basic Skill courses.

Sciences 8-9 hours

| | | | |
|--|---------|-------------------------------------|---|
| Natural Sciences (<i>Select one</i>) | | | |
| BIOL | 111/112 | General Biology and Laboratory..... | 5 |
| BIOL | 113 | Environmental Life Science..... | 4 |
| BIOL | 211 | Principles of Biology I..... | 4 |

| | | | |
|---|---------|--|---|
| Physical Sciences (<i>Select one</i>) | | | |
| CHEM | 105/106 | Introductory Chemistry and Laboratory.... | 4 |
| CHEM | 107/108 | Chemistry for Life Sciences and Laboratory | 4 |
| PHYS | 160/165 | Physical Geology and Laboratory..... | 4 |
| PHYS | 166/167 | Meteorology and Laboratory..... | 4 |
| PHYS | 171/172 | Physical Science and Laboratory..... | 4 |
| PHYS | 175/176 | Descriptive Astronomy and Laboratory..... | 4 |
| PHYS | 375/176 | Solar System Astronomy and Laboratory... | 4 |

Social Studies (Select one) 3 hours

| | | | |
|-----|-----|--------------------------------------|---|
| SOC | 100 | Introduction to Sociology..... | 3 |
| WGS | 200 | Introduction to Women's Studies..... | 3 |

Political Studies (Select one) 3 hours

| | | | |
|------|-----|---|---|
| POLS | 101 | U.S. Politics..... | 3 |
| POLS | 103 | Comparative Political Institutions..... | 3 |

Producing and Consuming 2-3 hours

(*Select one from one of the following two categories*)

| | | | |
|------------|-----|--|---|
| Economy | | | |
| ECON | 191 | Issues in Today's Economy..... | 3 |
| FCS | 230 | Consumer Ed. and Personal Finance..... | 3 |
| Technology | | | |
| EET | 247 | Computer Programming for Electronic Sys..... | 3 |
| GT | 190 | Introduction to Technological Systems..... | 2 |
| GT | 350 | Technology and Civilization..... | 3 |
| EDTH | 330 | Technology for the Classroom..... | 3 |
| TE | 551 | Integrated Technology for Educators..... | 3 |
| TM | 350 | Societal Influence of Technology..... | 3 |

Fine Arts and Aesthetic Studies (Select one)..... 2-3 hours

| | | | |
|-----|-----|---|---|
| ART | 155 | Printmaking and Paper Arts..... | 3 |
| ART | 178 | Introduction to the Visual Arts..... | 3 |
| ART | 188 | The Designed World..... | 3 |
| ART | 217 | Crafts I..... | 3 |
| ART | 222 | Jewelry Design I..... | 3 |
| ART | 233 | Drawing I..... | 3 |
| ART | 244 | Ceramics I..... | 3 |
| ART | 266 | Sculpture I..... | 3 |
| ART | 277 | Painting I..... | 3 |
| ART | 288 | Introduction to Art History I..... | 3 |
| ART | 289 | Introduction to Art History II..... | 3 |
| ART | 311 | Art Education..... | 3 |
| ART | 351 | Printmaking, Papermaking, Bookarts and the Letterpress..... | 3 |

| | | | |
|-------|-----|---------------------------------------|---|
| ART | 430 | Automotive: Art and Design..... | 3 |
| COMM | 105 | Performance Appreciation..... | 3 |
| COMM | 205 | Performance Studies..... | 3 |
| COMM | 295 | Theatre History..... | 3 |
| ENGL | 250 | Introduction to Creative Writing..... | 3 |
| HHP | 151 | Dance Appreciation..... | 3 |
| MUSIC | 120 | Music Appreciation..... | 3 |
| MUSIC | 121 | Introduction to Music Literature..... | 2 |

Cultural Studies (Select one) 3 hours

| | | | |
|------|-----|--|---|
| ANTH | 101 | Introduction to Cultural Anthropology..... | 3 |
| MLL | 114 | Chinese Language and Culture I..... | 3 |
| MLL | 124 | French Language and Culture I..... | 3 |
| MLL | 154 | Spanish Language and Culture I..... | 3 |
| MLL | 184 | Russian Language and Culture I..... | 3 |
| MLL | 194 | Korean Language and Culture I..... | 3 |
| GEOG | 106 | World Regional Geography..... | 3 |
| GEOG | 300 | Elements of Geography..... | 3 |
| GEOG | 304 | Human Geography..... | 3 |
| WGS | 399 | Global Women's Issues..... | 3 |

Health and Well Being 4-6 hours

| | | | |
|--------------------------------|-----|------------------------------------|---|
| Psychological | | | |
| PSYCH | 155 | General Psychology..... | 3 |
| Physical (<i>Select one</i>) | | | |
| FCS | 203 | Nutrition and Health..... | 3 |
| FCS | 301 | Nutrition..... | 3 |
| HHP | 150 | Lifetime Fitness Concepts..... | 1 |
| NURS | 303 | Introduction to Public Health..... | 3 |

Human Heritage 6 hours

(*Select one from two of the following three categories*)

| | | | |
|------------|-----|-------------------------------------|---|
| History | | | |
| HIST | 101 | World History to 1500..... | 3 |
| HIST | 102 | World History from 1500..... | 3 |
| HIST | 201 | American History to 1865..... | 3 |
| HIST | 202 | American History from 1865..... | 3 |
| Literature | | | |
| ENGL | 113 | General Literature..... | 3 |
| ENGL | 114 | General Literature(Genre)..... | 3 |
| ENGL | 116 | General Literature(Theme)..... | 3 |
| ENGL | 120 | Literature and Film..... | 3 |
| ENGL | 315 | Mythology..... | 3 |
| ENGL | 320 | Literature and Film..... | 3 |
| Philosophy | | | |
| PHIL | 103 | Introduction to Philosophy..... | 3 |
| PHIL | 105 | Ethics..... | 3 |
| PHIL | 111 | Ethics: Applied Emphasis(____)..... | 3 |
| PHIL | 112 | Biomedical Ethics..... | 3 |
| PHIL | 113 | Business Ethics..... | 3 |
| PHIL | 114 | Environmental Ethics..... | 3 |
| PHIL | 207 | Critical Thinking..... | 3 |
| PHIL | 208 | Logic..... | 3 |
| PHIL | 231 | World Religions..... | 3 |

Notes: Must have a "C" or better in each of the Basic Skills courses.

CIS 230 or 240 satisfies the General Education requirements.

NOTE: The information contained herein is intended to be used for the planning of a student's academic program and does not constitute a contract. While this guide was prepared with the latest information, courses, graduation requirements, and curricula are subject to change.

When a student attains 85 semester hours of credit (including current enrollment) the student must apply for a degree check in the Office of the Registrar (Degree Checking Section), Room 102 Russ Hall.

MINIMUM GENERAL REQUIREMENTS: The minimum requirements for graduation include 124 semester hours of which 60 hours must be from a four year university. In addition, 45 semester hours must be upper division and 30 hours in residence at PSU (including 24 of the last 30). Minimum GPA for non-education degree is 2.0 overall [2.0 in major], secondary education degree is 2.5 overall [2.75 in major], and early/late childhood/unified degree is 2.80 overall [3.0 in major]. A minimum GPA of 2.0 in any minor and in residence coursework is required. General Education and all degree requirements are provided in the online catalog. Refer to individual departments for specific requirements.