



# Pittsburg State University

## College of Arts & Sciences Program Guide

Degree: Bachelor of Science in Education

Major: Mathematics

Emphasis/Option:

Minor (if required):

As of Fall 2014

### 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 or a computer programming course approved by the mathematics department	3

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

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\*\*\*\* (37-40 hours)

EDUC 261: Explorations in Education	3
PSYCH 263: Developmental Psychology	3
PSYCH 357: Educational Psychology	3
MATH 479: Techniques for Teaching Mathematics	1-3
MATH 480: Clinical Experience in Secondary Mathematics Teaching	1
SPED 510: Overview of Special Education	3
EDUC 511: Methods and Materials in Middle Level Education	3
EDUC 520: Methods and Materials for Academic Literacy	3
MATH 679: Mathematics Education Seminar	1

MATH 479 Techniques for Teaching Mathematics must be taken for 3 hours.

EDUC 511 Methods and Materials in Middle Level Education required of students seeking middle level certification.

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

# GENERAL EDUCATION REQUIREMENTS

(40-47 hrs.)

<b>Basic Skills</b>	<b>9 hours</b>
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.	
<b>Sciences</b>	<b>8-9 hours</b>
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
<b>Social Studies (<i>Select one</i>)</b>	<b>3 hours</b>
SOC 100 Introduction to Sociology .....	3
WOMEN 200 Introduction to Women's Studies .....	3
<b>Political Studies</b>	<b>3 hours</b>
POLS 101 U.S. Politics .....	3
<b>Producing and Consuming</b>	<b>2-3 hours</b>
<i>(Select one from one of the following two categories)</i>	
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
<b>Fine Arts and Aesthetic Studies (<i>Select one</i>).....</b>	<b>2-3 hours</b>
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
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
MUSIC 321 History of Music.....	3

<b>Cultural Studies (<i>Select one</i>)</b>	<b>3-5 hours</b>
MLL 114 Chinese Language and Culture I .....	5
MLL 124 French Language and Culture I .....	5
MLL 154 Spanish Language and Culture I .....	5
MLL 184 Russian Language and Culture I .....	5
MLL 194 Korean Language and Culture I.....	5
GEOG 106 World Regional Geography .....	3
GEOG 300 Elements of Geography.....	3
GEOG 304 Human Geography .....	3
WOMEN 399 Global Women's Issues.....	3

<b>Health and Well Being</b>	<b>4-6 hours</b>
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

<b>Human Heritage</b>	<b>6 hours</b>
<i>(Select one from two of the following three categories)</i>	
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 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.