

B.S.ED. IN MATHEMATICS

College of Education and Social Work

Curriculum

Code	Title	Credits
GENERAL EDUCATION REQUIREMENTS (http://catalog.wcupa.edu/undergraduate/general-education-requirements/)		
Academic Foundations		
	First Year Experience requirement	4
	English Composition requirement	6-7
	Mathematics requirement	3-4
	Interdisciplinary requirement	3
	Diverse Communities requirement	3
	Ethics requirement	3
Distributed Disciplinary Foundations		
	Science requirement	6-8
	Behavioral & Social Science requirement	6
	Humanities requirement ¹	6
	Arts requirement	3
ADDITIONAL BACCALAUREATE REQUIREMENTS (http://catalog.wcupa.edu/undergraduate/general-education-requirements/)		
University Requirements		
	Writing Emphasis requirement	9
	Speaking Emphasis requirement	9
Degree Requirements		
	Capstone requirement	1-15
MAJOR REQUIREMENTS		
Education Core Courses ²		
EDF 300	Democracy and Education	3
EDP 280	Developmental and Psychological Perspectives in Education	3
EDA 103	Foundations of Special Education	3
EDA 303	Special Ed: Processes/Procedures for General Educators	2
EDR 347	Literacy Development and Secondary Students with Disabilities in Inclusive Classrooms	3
LAN/ENG 382	Teaching English Language Learners PK-12	3
ERM 355	Ethical and Effective Assessment for Learning 7-12	3
SED 100	An Exploration of Secondary Education	3
SED 200	Learning Environments and Field Experience in Secondary Schools	3
SED 300	Principles of Teaching and Technology in the Secondary Classroom	3
Mathematics Education Requirements ²		
SED 350	Techniques of Teaching Middle School Mathematics	3
SED 354	Techniques of Teaching Secondary School Mathematics	3
SED 356	Advanced Perspectives of High School Mathematics I	3
SED 357	Advanced Perspectives of High School Mathematics II	3
Mathematics Requirements ²		

MAT 161	Calculus I	4
MAT 162	Calculus II	4
MAT 200	The Nature of Mathematics	3
MAT 261	Calculus III	4
MAT 311	Linear Algebra	3
MAT 411	Algebra I	3
MAT 421	Mathematical Statistics I	3
MAT 441	Real Analysis I	3
Mathematics - Education Core & Electives ²		
MAT 331	Foundations of Geometry	3
MAT 343	Differential Equations	3
MAT 401	History of Mathematics	3
6 credits selected from upper-division (300 level or higher mathematics courses; at least one course in applied mathematics)		6
Cognate Requirements ²		
PHY 170	Physics I	4
CSC 141	Computer Science I	3
Capstone Requirement ²		
SED 411	Student Teaching Sec - 1st Half ³	6
SED 412	Student Teaching Sec - 2nd Half ³	6
Total Minimum Credits Required		127

¹ A LIT course is required for this program.

² Courses must be passed with a grade of C- or better

³ This course fulfills the Capstone requirement.

All students seeking a B.S.Ed. must formally apply for Teacher Candidacy (see Educator Preparation Programs (<http://catalog.wcupa.edu/undergraduate/education-social-work/educator-preparation-programs/>) in this catalog). Only those students who achieve Teacher Candidacy will be eligible to enroll in SED 350.

Sample Course Plan

To track their individual degree progress, students are advised to access their Degree Progress Report (DPR) via myWCU regularly. For more information, visit wcupa.edu/DegreeProgressReport (<http://wcupa.edu/degreeprogressreport/>).

The following is a sample suggested course sequence for this program; course offerings and availability are not guaranteed. Students should consult their academic advisor with any questions.

Course	Title	Credits
Year One		
Semester One		
MAT 161	Calculus I	4
CSC 141	Computer Science I	3
WRT 120	Effective Writing I	3
FYE 100X	First Year Experience	4
Humanities Gen Ed (LIT)		3
Credits		17
Semester Two		
MAT 162	Calculus II	4
MAT 200	The Nature of Mathematics	3
SED 100	An Exploration of Secondary Education	3
EDP 280	Developmental and Psychological Perspectives in Education	3
WRT 2XX	200-Level WRT Course	3
Credits		16

Year Two		
Semester Three		
MAT 261	Calculus III	4
MAT 311	Linear Algebra	3
PHY 170	Physics I	4
EDF 300	Democracy and Education	3
EDA 103	Foundations of Special Education	3
Credits		17
Semester Four		
MAT 343	Differential Equations	3
MAT 441	Real Analysis I	3
SED 200	Learning Environments and Field Experience in Secondary Schools	3
SED 356	Advanced Perspectives of High School Mathematics I	3
EDA 303	Special Ed: Processes/Procedures for General Educators	2
Behavioral & Social Science Gen Ed		3
Credits		17
Year Three		
Semester Five		
MAT 411	Algebra I	3
SED 300	Principles of Teaching and Technology in the Secondary Classroom	3
SED 350	Techniques of Teaching Middle School Mathematics	3
SED 357	Advanced Perspectives of High School Mathematics II	3
ERM 355	Ethical and Effective Assessment for Learning 7-12	3
Credits		15
Semester Six		
MAT 331	Foundations of Geometry	3
MAT 421	Mathematical Statistics I	3
SED 354	Techniques of Teaching Secondary School Mathematics	3
LAN 382	Teaching English Language Learners PK-12	3
or		
ENG 382	or Teaching English Language Learners PK-12	
EDR 347	Literacy Development and Secondary Students with Disabilities in Inclusive Classrooms	3
Behavioral & Social Science Gen Ed		3
Credits		18
Year Four		
Semester Seven		
SED 411	Student Teaching Sec - 1st Half ¹	6
SED 412	Student Teaching Sec - 2nd Half ¹	6
Credits		12
Semester Eight		
MAT 401	History of Mathematics	3
MAT XXX	Applied Math Elective	3
MAT XXX	Math Elective	3
Arts Gen Ed		3
Humanities Gen Ed		3
Credits		15
Total Credits		127

¹ Field course. Clearances required.