

B.S. Mathematics Secondary Teaching Area

2023-24

DEPARTMENT PERSONNEL

Chair

Nicholas Madhiri, Ph.D.

Faculty

Nathanial Adu, Ph.D.

Jonathan Duarte, Ph.D.

Jared Rice, Ph.D.

Gerald Springer, Ph.D.

CONTACT

admissions@swau.edu

nmadhiri@swau.edu

(817) 202-6209

Individuals who teach secondary math often hold a bachelor's degree in mathematics - secondary teaching and an undergraduate secondary teacher certificate or equivalent. The bachelor's degree in mathematics for secondary teaching program will prepare students to teach a wide range of mathematics courses. It includes courses such as algebra, calculus, logic, geometry, linear algebra, statistics and others. Our graduates are qualified for secondary teaching positions in mathematics.

Job Market

Students trained as secondary school teachers of Mathematics will receive the preparation needed to inspire a new generation to pursue a wide range careers in which high-level mathematical skills are crucial. Currently, there is a shortage of graduates with this kind of academic preparation. National interest in STEM (Science, Technology, Engineering and Mathematics) areas has highlighted the need for graduates with this kind of academic preparation.

Job Outlook

Employment of secondary school teachers is expected to grow by seven percent from 2010 to 2020. The employment growth is expected due to declines in student-to-teacher ratios and increases in enrollment. The United States Department of Labor reported that math is one of the subjects lacking qualified teachers in many rural and urban schools, so job prospects is highly favorable for secondary math teachers.

Earnings

The Bureau of Labor Statistics, which is a part of the United States Department of Labor, reports that in May 2018, the median income for secondary school teachers was between \$37,780-\$97,500 per year. Of course, the potential earning of secondary school teachers is affected by geographic location and by educational preparation. And secondary school teachers with advanced degrees have higher earnings



Teaching Certification Program

The following Mathematics major is for teaching certification only. Requirements for certification are listed in the Education section of this *Bulletin*.

You must make formal application for admittance to the Teacher Education Program.

Applications are available at the Education Department office.

Content Area + Teaching Certification

Required Courses

Item #	Title	Credits
MATH 141	Introduction to Probability and Statistics	3
MATH 181	Calculus I	4
MATH 182	Calculus II	4
MATH 283	Calculus III	4
MATH 211	Logic and Set Theory	3
MATH 341	Geometry	3
MATH 361	Introduction to Linear Algebra	3
MATH 431	Abstract Algebra	3
MATH 484	Mathematics Seminar	1
MATH 485	Portfolio	1
	Mathematics Secondary Teaching 6 Hours Upper Division Electives	6
	Sub-Total Credits	35

Sample 4 Year Curriculum

General Education Requirements

To view general education requirements for this major please visit: <https://catalog.swau.edu/core-curriculum-for-a-bachelors-degree>

First Year First Semester

Item #	Title	Credits
MATH 181	Calculus I	4
HIST 111	United States History to 1865	3
	English Composition GE Curriculum Guide	3
RELT 101	Christian Beliefs	3
POLS 211	National and Texas Constitutions	3
	Sub-Total Credits	16

First Year Second Semester

Item #	Title	Credits
MATH 182	Calculus II	4
HIST 112	United States History from 1865	3
	Communication GE Requirement	3
	Fine Arts GE Requirement	3
RELT 201	Bible Study Methods	3
	Sub-Total Credits	16

Second Year First Semester

Item #	Title	Credits
MATH 283	Calculus III	4
MATH 211	Logic and Set Theory	3
ENGL 220	Research Writing	3
	Life and Physical Science GE Requirement	4
UNIV 111	Wellness for Life	2
	Sub-Total Credits	16

Second Year Second Semester

Item #	Title	Credits
MATH 361	Introduction to Linear Algebra	3
	Mathematics Upper Division Electives	3
	Life and Physical Science GE Requirement	4
EDUC 254	Introduction to the Teaching Profession	3
PSYC 220	Human Growth & Development	3
	Sub-Total Credits	16

Third Year First Semester

Item #	Title	Credits
MATH 341	Geometry	3
RELH 230	History of the Seventh-day Adventist Church	3
MATH 431	Abstract Algebra	3
EDUC 312	Educational Psychology	3
EDUC 385	Philosophy of Christian Education	3
	Kinesiology GE Requirement	1
	Sub-Total Credits	16

Third Year Second Semester

Item #	Title	Credits
	Mathematics Upper Division Electives	3
	Mathematics Upper Division Electives	3
EDUC 322	Child and Adolescent Psychology	3
EDUC 326	Learners With Exceptionalities	3
EDUC 350	Digital Literacy Proficiency	3
	Kinesiology GE Requirement	1
	Sub-Total Credits	16

Fourth Year First Semester

Item #	Title	Credits
MATH 141	Introduction to Probability and Statistics	3
MATH 484	Mathematics Seminar	1
	Religion GE Requirement	3
	ENGL 231 or ENGL 232	3
EDUC 418	Legal Foundations of Education	3
EDUC 450	Teaching Methods	3
	Sub-Total Credits	16

Fourth Year Second Semester

Item #	Title	Credits
MATH 485	Portfolio	1
HIST 242	Historical and Political Geography	3
EDUC 434	Classroom Assessment	3
EDUC 436	Classroom Management	3
EDUC 485	Directed Teaching in Secondary School	6
	Sub-Total Credits	16

June 2023

Southwestern Adventist University—Office of Academic Administration