

FACULTY AGENDA ITEM

Date: 3/22/21

Submitted by: Sarah Cook

SUBJECT: Bachelor of Science in Mathematics (Secondary Education Specialization)

Description: This is a proposal to change the BS in Mathematics (Secondary Education Specialization)

Rationale: This will align our BA and BS in Mathematics with Secondary Education Specialization with our B.Ed. in Mathematics Secondary Education.

Financial Implications: None

Proposed Effective Date: *Fall 2021*

Request for Action: Approval through WUBOR

Approved by: *AAC on date*

FAC on date

Faculty Senate on date

Attachments Yes No

COLLEGE OF ARTS AND SCIENCES PROGRAM CHANGE FORM

	Chair's Signature	Recommendation		Review Date
Department	<u>Sarah Cook</u>	<u>Approve</u>		<u>2020-09-04</u>
Division	<u>Seid Adem</u>	<u>Approve</u>		<u>2020-09-11</u>
Dept. of Educ.	<u>N/A</u>			
<small>(If relates to teacher certification program.)</small>				
Dean	<u>Laura Stephenson</u>	<u>Approve</u>		<u>2020-09-14</u>
Curriculum Committee	<u>Rebecca Meador</u>	<u>Approve</u>		<u>2020-10-26</u>
Accepted by CFC	<u>Michaela Saunders</u>	<u>Approve</u>		<u>2020-11-03</u>
CAS Faculty	<u>Michaela Saunders</u>	<u>Approve</u>		<u>2021-03-04</u>
Approved By:	Faculty Senate _____	University Faculty _____		WU Board of Regents _____

Program: Bachelor of Science in Mathematics (Secondary Education Specialization) (CIP: 13.1311)

1. Reason for this program change?

This will align our BA and BS in Mathematics with Secondary Education Specialization with our BEd in Mathematics Secondary Education

2. Complete revised description.

Mathematics (Secondary Education Specialization)
 Statistics (MA 140), Calculus (MA 151, 152, 253), Number Theory and Discrete Math for Middle School and Secondary Teachers (MA 204), Discrete Mathematics (MA 207), Mathematics for Middle and Secondary Teachers (MA 230), Linear Algebra (MA 301), Abstract Algebra (MA 354), Modern Geometry (MA 367), Introduction to Real Analysis I (MA 371), History of Mathematics (MA 381), a minimum of 2 hours of Problem Solving Strategies (MA 380), and at least two of the following:
 Teaching Algebra (MA 316)
 Teaching Trigonometry (MA 317)
 Teaching Statistics (MA 318)
 A third credit hour of Problem Solving Strategies (MA 380)
 Capstone Research (MA 388)
 Students seeking certification to teach mathematics must also be formally admitted to the University's Professional Teacher Education Programs. For admission requirements, see EDUCATION in this catalog.

3. Describe the nature of the proposed change.

We are eliminating the requirement of MA 388 Capstone Research (1 credit hour). Instead, we will include this class as an option in the proposed additional requirement:

Select at least two of the following: (each of these is 1 credit hour)

MA 316

Teaching Algebra

MA 317

Teaching Trigonometry

MA 318

Teaching Statistics

MA 380

Problem Solving Strategies (a third credit hour)

MA 388

Capstone Research

In AY 2018-2019, the Mathematics Department proposed a new Secondary Mathematics program with a Bachelor of Education degree. The approved BEd is a 120 hour degree and includes the same 45 hours of math content as proposed for the BS. When the BEd was submitted, the Math Department intended to also submit changes to the BS so that the math courses for the two degrees would coincide. The change to the BS was not submitted. This change will correct our oversight.

The proposed change will add 1 credit hour to the BS in Secondary Math Education degree. The Math Department does not believe the addition of one hour will prevent students who want a BS in Math Secondary Education from pursuing the degree. Due to BS degree requirements and State requirements for math content and education courses, the BS in Math Secondary Education is necessarily more than 120 hours. Students who choose to pursue the BS are doing so for reasons other than a concern over 120 hours and hence the addition of one more hour will not be a hindrance. Students who are concerned about the number of hours should pursue the 120 hour BEd instead.

Further, the one hour addition to the major was developed due to comments at exit interviews with our Seniors. The students indicated they wanted more opportunities to hone their teaching before graduating. Other students commented on how the Capstone Research and the Problem Solving courses helped them to better understand mathematics, which in turn made them better prepared to teach. These comments encouraged the Math Department to include the additional hour and give the students more flexibility in their course choices.

4. Do you currently have the equipment and facilities to teach the classes within the proposed change.

Yes.

5. Does this change affect any other departments? Yes

Since this is a secondary education specialization, the change does indirectly impact the Education Department. However, none of the proposed course changes are taught in the Education Department.