

Program Change Request

A deleted record cannot be edited

Program Deactivation Proposal

Date Submitted: 01/28/21 10:55 am

Viewing: **SMTHMA : Secondary Mathematics,**

Master of Arts

Last approved: 05/23/19 10:05 am

Last edit: 02/18/21 9:00 am

Changes proposed by: markj

Catalog Pages Using
this Program

[Mathematical Sciences \(MASC\)](#)

[Secondary Mathematics \(SMTH\)](#)

End Catalog

Fall 2021

No new students
admitted after:

In Workflow

1. ARSC Dean Initial
2. GRAD Dean Initial
3. Provost Initial
4. Director of Program Assessment and Review
5. Registrar Initial
6. Institutional Research
7. MASC Chair
8. ARSC Curriculum Committee
9. ARSC Dean
10. Global Campus
11. Provost Review
12. University Course and Program Committee
13. Graduate Committee
14. Faculty Senate
15. Provost Final
16. Provost's Office-- Documentation sent to System Office
17. Higher Learning Commission
18. Board of Trustees
19. ADHE Final
20. Provost's Office-- Notification of Approval
21. Registrar Final
22. Catalog Editor Final

Approval Path

1. 01/28/21 11:01 am
Jeannie Hulen
(jhulen): Approved
for ARSC Dean
Initial
2. 01/28/21 11:54 am
Jim Gigantino
(jgiganti): Approved
for GRAD Dean
Initial
3. 02/01/21 7:57 am
Terry Martin
(tmartin): Approved
for Provost Initial
4. 02/01/21 11:22 am
Alice Griffin
(agriffin): Approved
for Director of
Program
Assessment and
Review
5. 02/08/21 3:31 pm
Lisa Kulczak
(lkulcza): Approved
for Registrar Initial
6. 02/08/21 3:44 pm
Gary Gunderman
(ggunderm):
Approved for
Institutional
Research
7. 02/08/21 3:46 pm
Mark Johnson
(markj): Approved
for MASC Chair
8. 02/11/21 4:36 pm
Ryan Cochran
(rcc003): Approved

for ARSC Curriculum
Committee

9. 02/11/21 4:44 pm

Jeannie Hulen
(jhulen): Approved
for ARSC Dean

10. 02/12/21 10:13 am

Suzanne Kenner
(skenner): Approved
for Global Campus

11. 02/12/21 1:24 pm

Terry Martin
(tmartin): Approved
for Provost Review

History

1. Mar 20, 2017 by
Gina Daugherty
(gdaugher)
2. Mar 20, 2017 by
Gina Daugherty
(gdaugher)
3. May 23, 2019 by
Mark Johnson
(markj)

Spring 2021

Allow students in
program to complete
through:

Number of students
still enrolled:

4

Courses Deleted as a
result of this action:

MATH 5013 MATH 5033 MATH 504V MATH 5053 MATH 507V

How will students in
the deleted program

be accommodated?

Students currently enrolled are expected to graduate by Summer 2021.

How will funds from
the deleted program
be reallocated?

%funds_reallocate.eshtml%

Deactivation
attachments

[4x_smthma-deletion-ltrofnotification_02262021.pdf](#)

Justification for this
request

Program is unviable.

Submitter:	User ID: gdaugher	Phone: 57456
Program Status	Active	
Academic Level	Graduate	
Type of proposal	Major/Field of Study	
Are you adding a concentration?	No	
Are you adding or modifying a track?	No	
Are you adding or modifying a focused study?	No	
Effective Catalog Year	Fall 2021	
College/School Code	Fulbright College of Arts and Sciences (ARSC)	
Department Code	Department of Mathematical Sciences (MASC)	
Program Code	SMTHMA	
Degree	Master of Arts	
CIP Code	13.1311 - Mathematics Teacher Education.	
Program Title	Secondary Mathematics, Master of Arts	
Program Delivery		
Method	Online/Web-based	

Is this program interdisciplinary?

No

Does this proposal impact any courses from another College/School?

No

What are the total hours needed to complete the program? 30

On-line/Web-based Information

Reason for offering Web-based Program
n/a

Maximum Class Size for Web-based Courses n/a

Course delivery mode

Method(s)
Online

Class interaction mode

Method(s):
E-mail

Percent Online
100% with No Required Campus Component

Provide a List of Services Supplied by Consortia Partners or Outsourced Organization
n/a

Estimate Costs of the Program over the First 3 Years n/a

List Courses Taught
by Adjunct Faculty

Upload
Memorandum of
Understanding Forms
(if required)

Program Requirements and Description

Requirements

Requirements for the Master of Arts Degree with a Major in Secondary Mathematics: This program is designed for secondary school teachers of mathematics. It requires 30 semester hours of graduate work.

Prospective candidates for the Master of Arts degree in secondary mathematics are expected to have earned a baccalaureate degree or equivalent with a major in a mathematical science (mathematics, statistics, operations research, or computer science), engineering, or a physical science, and credit in courses equivalent to [MATH 2564](#), [MATH 3083](#), [MATH 3113](#), and [MATH 3773](#).

The program has four components in which to earn a minimum of 30 semester hours of credit:

Graduate course work in mathematics content and content-based pedagogy. At least 12 hours of credit in graduate course work specifically designed for preparation for teaching secondary mathematics. The content will include probability and statistics, algebra, geometry, and advanced calculus with connections to secondary school mathematics. At least one of the courses must be in probability and statistics; one in algebra; and one in advanced calculus. These courses are to be selected from:

MATH 5013	Abstract Algebra with Connections to School Mathematics	3
MATH 5023	Geometry with Connections to School Mathematics	3
MATH 5033	Advanced Calculus with Connections to School Mathematics Teaching	3
MATH 5053	Probability & Statistics with Connections to School Mathematics	3
MATH 504V	Special Topics for Teachers	1-6

Other graduate mathematics or statistics courses may be used in place of these courses with the approval of the student's committee.

Independent study and research in mathematics or mathematics education. Up to six hours of credit is available in independent study and research under the direction of mathematical sciences faculty. The results will be evidenced by a report roughly equivalent to a master's thesis.

Advanced work in professional teacher preparation. Up to six hours of credit in [MATH 507V](#) is available for advanced work in preparation for teaching AP calculus, AP statistics, International Baccalaureate (IB) mathematics, or for achieving National Board Certification in (Adolescence and Young Adulthood) Mathematics. Other professional development activities with quality control features similar to those of the AP, IB, and

National Board programs may be presented for consideration for credit. All such work must be sanctioned by the sponsoring organizations.

Graduate courses in education. Up to six hours of credit is available in graduate courses in education. The student's committee must approve the courses. Recommended courses include:

CIED 6013	Curriculum Theory, Development, and Evaluation	3
CIED 6043	Analysis of Teacher Education	3
CIED 6053	Curriculum and Instruction: Learner Assessment and Program Evaluation	3

Other graduate courses in education may be used in place of these courses with the approval of the student's advisory committee.

If allowed by Graduate School rules, credit previously earned may be applied to the requirements for this degree with the approval of the student's advisory committee.

Each person receiving the Master of Arts degree in secondary mathematics must pass a written examination in three of the following areas: probability and statistics; algebra; geometry; advanced calculus; and mathematics education. No student will be allowed to take the examination more than three times. Candidates will also present a portfolio describing the body of work with samples of their work as students and explanations of connections to secondary school mathematics.

Students should also be aware of Graduate School requirements with regard to [master's degrees](#).

Are Similar Programs available in the area?

No

Estimated Student Demand for Program n/a

Scheduled Program 2021-2022

Review Date

Program Goals and Objectives

Program Goals and Objectives

There is an emphasis on further strengthening abstract and conceptual tools, exposing the student to a wide variety of mathematical topics, and preparing the student to bring mathematical thought to the lower-level classroom. To this end the student should:

- 1) Be able to frame abstract arguments and produce mathematical proofs.
- 2) Demonstrate an understanding of a variety of advanced topics, such as advanced calculus and abstract algebra, connecting them to the secondary school curriculum.
- 3) Demonstrate an ability to articulate the context and meaning of these topics.
- 4) Write, analyze and communicate in a lucid and critical manner.

Learning Outcomes

Learning Outcomes

- 1) Demonstrate computational competence in analysis, algebra, statistics and other areas of mathematics relevant to the secondary mathematics curriculum.
- 2) Demonstrate understanding of the conceptual frameworks and underlying structure of these topics; clearly demonstrate an ability to construct mathematical proofs.
- 3) Relate these subject areas to applications in the natural or social sciences, engineering, or other areas of mathematics at a level appropriate to the secondary mathematics curriculum.
- 4) Write, analyze and communicate in a lucid and critical manner, particularly in a manner appropriate for the secondary mathematics classroom.
- 5) Have a sense of the broader mathematical culture.

Upload attachments

Reviewer Comments

Alice Griffin (agriffin) (02/18/21 9:00 am): Inserted approval dates and renamed document to match BOT naming convention.