FAU
FLORIDA ATLANTIC UNIVERISTY

New Combined Degree Program Request

UUPC Approval _____

UGPC Approval _____

UFS Approval _____

Banner Posted _____

Catalog_____

New Combined Degree Program Request

Proposed Program: _BA or BS, concentration in Math with MS in Math_ CIP:_____ Effective Date (Term/Year): _Fall_/_2020_ (e.g. Fall/2020)

Proposed Combined Program Information	Undergraduate	Graduate
Degree Level (e.g. B.A., B.S., M.A., M.S., etc.)	B.A. or B.S.	M.S.
Program Name (e.g. Physics, Engineering, etc.)	Liberal Arts and Sciences Biological and Physical Sciences	Mathematics
College	Wilkes Honors College	Schmidt College of Science
Department	NA	Mathematical Sciences
Program Description (provide a brief description of the program, including thesis or non-thesis option)	The combined program is offered in partnership with the Wilkes Honors College. The B.A. or the B.S. degree is completed at the Wilkes Honors College, the MS degree is completed in the Department of Mathematical Sciences, Schmidt College of Science. For the Master's degree, both thesis and non-thesis options are available.	

Curriculum Requirements

GPA Requirements: Departments must establish a minimum undergraduate GPA for students to be admitted to a combined program. *Note: Please attach explanation.*

GPA of 3.0 in upper-division and graduate courses

List courses to be shared: Up to twelve (12) credit hours of graduate courses (5000 level or above course work) may be shared between the graduate and undergraduate degree for a combined program. *Note: Please attach explanation:*
- *Academic justification for shared credits and catalog language*
- *List the undergraduate course that will be replaced by graduate courses.*

Faculty Submitting Request	Name	Signature	Email	Date
	Yuan Wang	*Yuan Wang*	ywang@fau.edu	2/18/2020

Approved by

Department Chair: _____

College Dean: _William David Kalie_

College Curriculum Chair: _Christopher Beetle_ 2020.03.06 11:38:07 -05'00'

UUPC Chair: _____

Undergraduate Studies Dean: _____
(Note: Forward approved form to UGPC@fau.edu)

UGPC Chair: _____

UGC Chair: _____

Graduate College Dean: _____

UFS President: _____

Provost: _____

Date

2/25/20

March 9, 2020

_____

_____

_____

_____

_____

_____

_____

_____

Email this form and syllabus to mjenning@fau.edu seven business days before the UUPC meeting.

For questions, contact the Graduate College at ugpc@fau.edu

Academic Justification

The Wilkes Honors College (WHC) and the Department of Mathematical Sciences propose a combined program, where the BA degree in Liberal Arts and Sciences; or the BA or BS in Biological and Physical Sciences; is completed at the Wilkes Honors College, and the MS degree in Mathematics is completed in the Department of Mathematical Sciences, Schmidt College of Science.

Background information:

- The degree programs listed in this proposal are all offered currently.
- Neither new courses nor additional resources are required.

Justification:

The combined program is expected to help retain the best and brightest of our own students, as well as recruit talented students to the bachelor's programs. There have been bright and ambitious students who took graduate courses in mathematics while completing their bachelor's degrees. The combined program will entice such students to complete the MS degree at FAU. Some students may also be persuaded to continue towards a doctoral education in a STEM field.

The MS program in mathematics, which is more theoretical in nature, will be suitable for students who want to continue to doctoral study in mathematics and to pursue academic careers in mathematics.

Admission requirements:

Students should complete their BA or BS degrees with Concentration in Mathematical Sciences or Mathematics. In addition, students are required to have completed MAS 4107 Linear Algebra 2 and STA 4442 Probability and Statistics 1. The GPA requirement is 3.0 for upper division and graduate courses.

Courses to be shared by the BS and MS programs:

The four graduate courses to be shared by the BS and MS programs will be part of the MS curriculum. Covering higher level material, the graduate courses are also suitable substitutions for upper-division electives and required courses for the undergraduate curriculum.

Catalog Description

Bachelor of Arts with Major in Liberal Arts and Sciences, with Concentration in Mathematical Sciences; or Bachelor of Arts or Bachelor of Science with Major in Biological and Physical Sciences, with Concentration in Mathematics; to Master of Science Degree with Major in Mathematics

The combined program is offered in partnership with the Wilkes Honors College (WHC). The B.A. or the B.S. degree is completed at the Wilkes Honors College, the MS degree is completed in the Department of Mathematical Sciences, Schmidt College of Science.

The combined degree program is 150 credits: 120 credits for the undergraduate degree and 30 for the master's degree, with a maximum of 12 credits of graduate coursework used to satisfy both degrees. Once admitted into the program, students shall follow the suggested course sequence. The baccalaureate degree will be conferred before the master's degree.

Students must maintain a GPA of 3.0 in upper-division and graduate courses. Students interested in this program should consult with the undergraduate and graduate advisors before taking upper-division mathematics coursework to ensure that their coursework will apply toward the combined degree. Students must take the GRE and apply for admission to candidacy by the end of their junior year.

All courses not approved by the Florida Statewide Course Numbering System that will be used to satisfy requirements will be evaluated individually on the basis of content and will require a catalog course description and a copy of the syllabus for assessment.

The Bachelor's Curriculum:

Students must complete the requirements of the B.A. or the B.S. degree with concentration in Mathematical Sciences or Mathematics from the Wilkes Honors College. In addition, students must complete MAS 4107 Linear Algebra 2 and STA 4442 Probability and Statistics 1.

Twelve graduate credits from the Department of Mathematical Sciences can be counted toward both the Bachelor's degree and the MS degree.

Four Graduate courses to be shared between the Bachelor's degree and the M.S. degree (12 credits):

Take at least two of the core courses:		
Introductory Analysis 1	MAA 5228	3
Introductory Analysis 2	MAA 5229	3
Introductory Abstract Algebra 1	MAS 5311	3
Introductory Abstract Algebra 2	MAS 5312	3
Take two more courses at the 5000 or 6000 from the Mathematical Sciences Department approved by the departmental graduate committee.		

The 12 graduate credits can either be counted as upper-division math electives or as a substitute for a required course as follows:

MAA 5228 can be used to substitute for MAA 4200
MAS 5312 can be used to substitute for MAS 4301
MAS 5145 can be used to substitute for MAS 4107

MS Curriculum:

Students complete all requirements of the MS degree with major in Mathematics.