GRADUATE COUNCIL

PROPOSAL FOR CHANGE IN EXISTING COURSE/PROGRAM

ORIGINATING UNIT: Math

TYPE OF ACTION:

_____ Change in existing course

____X___ Change in existing program

TYPE OF CHANGE REQUESTED:

Number	Title
Description	Prerequisite(s)
Drop course/program	X Program Requirements
Other (specify)	

Semester and Year Change(s) take effect: Fall 2020

Appropriate Computer Abbreviation (30 spaces or less):

DESCRIPTION OF CHANGE – highlight, **bold**, *italics*, or <u>otherwise identify</u> parts that are changed in proposed copy (omit if dropping a course or program):

The proposed change is to add MATH 60853 to the Mathematics MS, Applied Mathematics Option and to change the number of Numerical Analysis from MATH 60543 to MATH 60663.

Present catalog copy:

This track of the MS Program is intended for students planning to use mathematics in careers outside academia. Each student selecting this track will take at least four applied mathematics courses from the list below:

<u>MATH 50613</u>	Partial Differential Equations	3
MATH 50623	Applied Mathematics I	3
MATH 60103	Graph Theory	3
<u>MATH 60543</u>	Numerical Analysis	3

MATH 60553	Modern Fourier Analysis	3
MATH 60603	Game Theory	3
MATH 60613	Differential Equations of Mathematical Physics	3
MATH 60633	Applied Mathematics II	3
MATH 60643	Dynamical Systems and Applications	3

Up to 6 hours of the applied mathematics courses may be substituted with graduate coursework taken in the departments of Biology, Chemistry, Computer Science or Physics & Astronomy, or from Geological Sciences or Environmental Sciences, with approval from the student's graduate advisor in the Department of Mathematics.

Proposed catalog copy:

This track of the MS Program is intended for students planning to use mathematics in careers outside academia. Each student selecting this track will take at least four applied mathematics courses from the list below:

Partial Differential Equations	3
Applied Mathematics I	3
Graph Theory	3
Modern Fourier Analysis	3
Game Theory	3
Differential Equations of Mathematical Physics	3
Applied Mathematics II	3
Dynamical Systems and Applications	3
Numerical Analysis	<mark>3</mark>
Regression & Time Series	<mark>3</mark>
	Partial Differential Equations Applied Mathematics I Graph Theory Modern Fourier Analysis Game Theory Differential Equations of Mathematical Physics Applied Mathematics II Dynamical Systems and Applications Numerical Analysis Regression & Time Series

Up to 6 hours of the applied mathematics courses may be substituted with graduate coursework taken in the departments of Biology, Chemistry, Computer Science or Physics & Astronomy, or from Geological Sciences or Environmental Sciences, with approval from the student's graduate advisor in the Department of Mathematics.

Supporting EVIDENCE OR JUSTIFICATION:

The newly-proposed MATH 60853 Regression & Time Series is an applied mathematics course and so is suitable to satisfy the intent of the current requirements for the Applied Mathematics Option of the MS in Mathematics. The proposed program change therefore provides students with an additional course option while remaining consistent with the existing learning outcomes of the program.

We are also proposing to renumber MATH 60543 Numerical Analysis to MATH 60663 in order for the undergraduate and graduate versions of the course to have consistent numbering.

Explain how the change(s) will affect the current outcomes and assessment mechanisms?

The proposed change will not affect the current program-level outcomes or assessments.

ADDITIONAL RESOURCES REQUIRED:

Faculty: No additional resources are required.

Space: No additional resources are required.

Equipment: No additional resources are required.

Library: No additional resources are required.

Other:

CHANGE IN TEACHING LOAD:

Does this change affect any other units of the University? _____ Yes _X____ No

If yes, submit supporting statement signed by chair of affected unit.

If cross-listed, provide evidence of approval by all curriculum committees appropriate to both the originating and the cross-listed units.

Chair of Originating Unit:

Signature:______

Name:	_Greg Friedman	
Unit:	_Math	

Revised 3/2012