## GRADUATE COUNCIL

## PROPOSAL FOR CHANGE IN EXISTING COURSE/PROGRAM

## ORIGINATING UNIT: Mathematics

TYPE OF ACTION:
$\qquad$ Change in existing course
$\qquad$ X $\qquad$ Change in existing program

TYPE OF CHANGE REQUESTED:

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

Current CIP Code (programs only): 27.0101
Does the change require a new or change in CIP Code: $\qquad$ Yes $\qquad$ No

If yes, what is the proposed new CIP code?
*for reference please visit: https://nces.ed.gov/ipeds/cipcode/resources.aspx?y=56
Semester and Year Change(s) take effect: Fall 2020

Is the program already considered TCU STEM? Yes
Does the change include a request to be a TCU STEM program? No
Appropriate Computer Abbreviation (30 spaces or less):

DESCRIPTION OF CHANGE - highlight, bold, italics, or otherwise identify parts that are changed in proposed copy (omit if dropping a course or program):

The proposed change is to add MATH 60883 to the Mathematics MS, Applied Mathematics

## Present catalog copy:

(Note: this catalog copy is based on changes already approved by Graduate Council this semester but not yet reflected in the published catalog)

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:

| MATH 50613 | Partial Differential Equations | 3 |
| :--- | :--- | :--- |
| MATH 50623 | Applied Mathematics I | 3 |
| MATH 60103 | Graph Theory | 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 |
| MATH 60663 | Numerical Analysis | 3 |
| Math 60853 | Regression \& Time Series | 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:

| MATH 50613 | Partial Differential Equations | 3 |
| :--- | :--- | :--- |
| MATH 50623 | Applied Mathematics I | 3 |
| MATH 60103 | Graph Theory | 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 |
| MATH 60663 | Numerical Analysis | 3 |
| Math 60853 | Regression \& Time Series | 3 |
| Math 60883 | Predictive Modeling | 3 |
| Up to 6 hours of the applied mathematics courses may be substituted with graduate coursework taken in the <br> departments of Biology, Chemistry, Computer Science or Physics \& Astronomy, or from Geological Sciences or <br> Environmental Sciences, with approval from the student's graduate advisor in the Department of Mathematics |  |  |

## Supporting EVIDENCE OR JUSTIFICATION:

The newly-proposed MATH 60883 Predictive Modeling 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.

## 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? $\qquad$ Yes $X$ $\qquad$ 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:


Revised 12/2019

