Cover/Signature Page - Abbreviated Template/Abbreviated Template with Curriculum

Institution Submitting Request: University of Utah
Proposed Title: MS Mathematics Teaching
Currently Approved Title: MS Mathematics (Teaching)
School or Division or Location: College of Science
Department(s) or Area(s) Location: Mathematics Department
Recommended Classification of Instructional Programs (CIP) Code[1] (for new programs): *00.0000*
Current Classification of Instructional Programs (CIP) Code (for existing programs): 27.0101
Proposed Beginning Date (for new programs): *MM/DD/YEAR*
Institutional Board of Trustees' Approval Date: *MM/DD/YEAR*

Proposal Type (check all that apply):

SECTION NO.		ITEM
Regents' General Consent Calendar Items		
R401-5 OCHE Review and Recommendation; Approval on General Consent Calendar		
5.1.1	☐	Minor*
5.1.2	☐	Emphasis*
5.2.1	☐	(CER P) Certificate of Proficiency*
5.2.3	☐	(GCR) Graduate Certificate*
5.4.1	☐	New Administrative Unit
	☐	Administrative Unit Transfer
	☐	Administrative Unit Restructure
	☐	Administrative Unit Consolidation
5.4.2	☐	Conditional Three-Year Approval for New Centers, Institutes, or Bureaus
5.4.3	☐	New Center
	☐	New Institute
	☐	New Bureau
5.5.1	☐	Out-of-Service Area Delivery of Programs
5.5.2	☐	Program Transfer
	☐	Program Restructure
	☐	Program Consolidation
5.5.3	X	Name Change of Existing Programs
5.5.4	☐	Program Discontinuation
	☐	Program Suspension
5.5.5	☐	Reinstatement of Previously Suspended Program
	☐	Reinstatement of Previously Suspended Administrative Unit

*Requires "Section V: Program Curriculum" of Abbreviated Template

Chief Academic Officer (or Designee) Signature:

I certify that all required institutional approvals have been obtained prior to submitting this request to the Office of the Commissioner.

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Signature   Date:

Printed Name:

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[1] CIP codes <u>must</u> be recommended by the submitting institution. For CIP code classifications, please see http://nces.ed.gov/ipeds/cipcode/Default.aspx?y=55.

Section I: Request

It is requested to change the name of the degree program MS Mathematics (Teaching) to MS Mathematics Teaching.

There is no established naming convention for similar degrees offered by Mathematics Departments and Mathematics Education Departments (residing within Colleges of Science) of peer institutions. An informal survey of 19 such institutions revealed that seven offered Masters of Arts in Teaching (MAT) degrees; three offered Master of Arts in Education; three offered Masters of Science in Mathematics Education; three offered a Masters of Science in Mathematics Teaching; one offered a Masters of Arts in Mathematics Teaching; one offered a Masters of Science in Education; one offered a Masters of Mathematics Education. None offered MS Mathematics (Teaching), our current degree designation.

Section II: Need

The course content of this program is Masters-level mathematical pedagogy grounded in Bachelors-level mathematics. It is not Masters-level mathematics. However the current degree name 'MS Mathematics (Teaching)' results in the fact that the U of U diploma that the student receives for completion of the program reads "MS Mathematics".

Thus the current degree name on the diploma is misleading and potentially open to abuse, since the program does not convey, nor is it designed to convey, Masters degree preparation in the field of mathematics itself.

Section III: Institutional Impact

No change

Section IV: Finances

No change

Section V: Program Curriculum
THIS SECTION OF THE TEMPLATE REQUIRED FOR EMPHASES, MINORS, AND CERTIFICATES ONLY

All Program Courses (with New Courses in Bold)
List all courses, including new courses, to be offered in the proposed program by prefix, number, title, and credit hours (or credit equivalences) The total number of courses shown and credit hours should match the required number of credits to be awarded the degree. Use the following format. (Remove these descriptive italics after completing this section of the template.)

Course Prefix and Number	Title	Credit Hours
Required Courses		
Math 6080	Topics in Contemporary Mathematics	3
Math 6090	Advanced Topics in History of Mathematics	3
Math 5150	Mathematics Curriculum and Instruction I	3
Math 5155	Curriculum and Instruction Practicum I	2
Math 5160	Mathematics Curriculum and Instruction II	3
Math 5165	Curriculum and Instruction Practicum II	2
Math 6960	Special Projects	6
	Sub-Total	22
Elective Courses	Student need to choose 14 credits of electives, at least 6 credits need to be taken in the Dept. of Math	
Math 5010	Probability	3
Math 5080	Statistical Inference I	3
Math 5110	Mathematical Biology	3
Math 5215	Applied Fourier Analysis	3
Math 5270	Transformational Geometry	3
Math 5310	Introduction to Modern Algebra	3
Math 5405	Cryptography, Codes and Computational Number Theory	3
Math 5410	Introduction to Ordinary Differential Equations	4
Math 5470	Chaos and Nonlinear Systems	3
Math 5700	Capstone Course in Mathematics	3
Math 5760, 5765	Introduction to Mathematical Finance	3
Math 5820	Science in Mathematics	3
SPED 6012	Inclusive Classroom	3
FCS 5230	Adolescent Psychology	3
SPED 6021	Principles of Assessment and Data Based Decision Making	3
SPED 6022	Principles of Instruction and Behavior Support	3
	Sub-Total	14
	Total Number of Credits	36

Program Schedule

Proposed sequence (program offers flexibility of sequence to students):

Sample schedule

Summer 1

MATH 5900 : Topics in Probability and Statistics (3 CR)

MATH 5270: Transformational Geometry (3 CR)

EDU 6950: Teaching and Learning Middle School Math (3 CR)

Fall 1

MATH 5150/5155: Curriculum and Instruction I (5 CR)

Spring 1

MATH 5160/65: Curriculum and Instruction II (5 CR)

Summer 2

MATH 6080: Topics in Contemporary Mathematics (3 CR)

MATH 6090: History of Mathematics (3 CR)

Fall 2

MATH 6960: Special Projects (2 CR*)

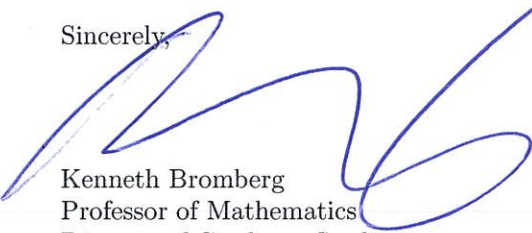MATH 5700: Capstone Course (3 CR)

Spring 2

MATH 6960: Special Projects (4 CR*)

September 29, 2014

To Whom It May Concern,

The Graduate Committee of the Mathematics Department has discussed the proposal to change the name of the Department's Master's degree in teaching from "MS Mathematics (Teaching)" to "MS Mathematics Teaching". The Committee strongly recommends that the proposal be accepted as the new name will more accurately reflect that it is a degree in mathematical pedagogy and not masters level mathematics.

Sincerely,

Kenneth Bromberg
Professor of Mathematics
Director of Graduate Studies