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LSC Use Only Number: Action:		UWUCC Use O Number:	$ \begin{array}{ccc}  & & & & \\  & & & & \\  & & & & \\  & & & &$
Date:	CULUM PROPOSAL	Action.  Date:	
o modely w	ide Undergraduate C	COVER SHEET urriculum Committee	<b>3</b>
l. Title/Author of Change Course/Program Title:	Maising		*,
Course/Program Title: Suggested 20 Charact Department:Mati	i MATS	or Elementary tea il-152 Elements of	chers I and II Math I and II
If a course, is it being	Proposed for:		
Liberal St	evision/Approval Only evision/Approval and udies Approval Only ( by the University Ser	Liberal Studies App	roval as been
Approvals  Letter		med Busid	
Department Curriculum		rtment Chairperson	
Conege Curriculum Con		ge Dean *	
Director of Liberal Studie (where applicable)	11040	st (where applicable	
proposed change that all requests for	ust consult with Provo es. Approval by Colle is consistent with lon or resources made as proposal has the sup	ge Dean indicates t g range planning do	hat the cuments,
Timetable			
Date Submitted to LSC:	Semester to be implemented:	Date to be published	
to UWUCC:		in Catalog:	

Part II. Description of Curriculum Change

1. Catalog Description for the revised program.

MA 151 Elements of Mathematics I

3c-01-3sh

Topics included are sets, concepts of logic, mathematical systems, systems of numeration, developing the set of integers, rational numbers, and real numbers.

MA 152 Tigments of Mathematics II

3c-01-3sh

Prerequisite: MA 151

Topics included are sentences in one variable, sentences in two variables, nonmetric geometry, metric geometry, coordinate geometry, introduction to statistics and probability, computers, and calculators.

2. Summary of changes and rationale.

The only proposed change is in the name of these two courses. This name change has been recommended by the Department of Professional Studies because the course is required for a number of studies other than majors in Elementary Education. In particular, Special Education and Hearing Impaired majors take MA 151 and they are certified K - 12. A copy of an agreement between Professional Studies and Mathematics wherein the name change is acceed upon is attached.

# MATHEMATICS EDUCATION COMPONENT FOR THE REVISED UNDERGRADUATE PROGRAM ELEMENTARY EDUCATION April 3, 1990

### MATH REQUIREMENT

All students will be required to take 7 credits or mathematics provided they have not passed an exemption exam. For those not passing an exemption exam, these courses will be MA 151, MA 152, and EL 313. MA 151 will be the Liberal Studies mathematics requirement and MA 152 will be a Liberal Studies elective. MA 151 and MA 152 will be recommended to be taken during the first and second semester of the freshman year.

Any change in delivery or content of those courses will meet with mutual approval of the Mathematics Department and Professional Studies in Education Department.

MA 151 and MA 152 or successful completion of the exemption exam will remain prerequisites for EL 313.

## COURSE TITLES

The Elementary Mathematics Education Committee (EMEC) will propose changing the title of MA 151 and MA 152 to Elements of Mathematics I and Elements of Mathematics II. These courses will remain open to specified education majors only, and will continue to be designed to meet the NCATE, PDE, NCTM, and CUPM recommendations.

### EXEMPTION EXAM

... exemption exam for MA 151 and MA 152 will be administered to an entering freshmen who have declared elementary education as a major.

The exemption exam will be designed to be administered in one 2-hour sitting, and will test the content of both MA 151 and MA 152. A pilot version will be administered by the Mathematics Department in cooperation with the Professional Studies in Education department in Fall, 1990 if possible. Future exams will be administered by the testing department during freshman orientation.

The score which determines exemption from either MA 151 or MA 152 will be a score that is equivalent to a  $\underline{C}$  or better in these courses. This score will be determined by the Elementary Mathematics Education Committee.

For those students who transfer into elementary education, a computerized version of the exemption exam will be available to take at the mutual convenience of the student and a member of the EMEC. Results will be reported immediately to the student and the advisor. The transfer student will have access to information about the content of the exemption exam prior to the administration. The EMEC hopes to have this service available sometime during 1990-91.

Following the first year that the exemption exam is administered, the department of Professional Studies in Education will have access to statistics related to the exam. These statistics could include, but are not limited to, the number of students who have taken the exam and the number of exemptions awarded in MA 151 and/or MA 152.

Certain conditions will exist concerning exemption. If a student passes the exemption exam for MA 151, s/ne may substitute MA 152 to meet the Liberal Studies mathematics requirement. If a student passes the exemption exam for MA 151 and MA 152, s/he will have a choice of a math course commensurate with his/her ability to meet the Liberal Studies requirement. In both situations just described, because of exemption, the student may have three credits to use for a Liberal Studies elective.

#### LACK OF COMPETENCY

A plan will be developed by both departments involved to accommodate those entering freshmen who demonstrate lack of math competency on the exemption exam. A cut-off score will be established for this purpose. Based on additional diagnosis, math development recommendations will be made to the student. These could include a prerequisite math course or tutoring while the student takes MA 151. A joint committee of the EMEC, Professional Studies in Education department, and the Learning Center will be formed to discuss this issue during Fall, 1990.

#### LIAISON

A liaison from each department will be appointed. This liaison will be invited to all meetings pertaining to curriculum issues of MA 151, MA 152, and EL 313.

#### COMMITMENT

The department of Professional Studies in Education and the Mathematics Department are committed to providing the best possible math education experiences for students. These experiences must fulfill NCATE and PDE requirements. When this agreement is accepted, the department of Professional Studies in Education will advise students to ensure that the conditions of this agreement are met. The department of Mathematics is committed to providing an adequate number of sections of the previously mentioned math courses to accommodate students. Further, continuing dialogue between departments will be maintained so that needed adjustments to the program can be made.

Both the department of Professional Studies in Education and department of Mathematics must approve all agreements regarding these courses.

This agreement has been approved by the Department of Mathematics, the Department of Professional Studies in Education, the Dean of Natural Sciences and Mathematics, and the Dean of Education as evidenced by the following signatures.

John Broughton	:
John Broughton, Chair, Mathematics Department	
William J. Cale	
William Cale, Dean, College of Natural Sciences and Mathematics	
Thereina B. Wald	
Edwina Vold, Chair, Professional Studies in Education Department	
Jelen Burt	
John Butzow, Dean, College of Education	
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