

LSC Use Only
Number: _____
Action: _____
Date: _____

UWUCC Use Only
Number: 91-42
Action: _____
Date: _____

CURRICULUM PROPOSAL COVER SHEET
University-Wide Undergraduate Curriculum Committee

I. Title/Author of Change

Course/Program Title: MA 342 Advanced Mathematics for Applications
Suggested 20 Character Course Title: ADV MATH FOR APLCTNS
Department: Mathematics
Contact Person: Gerald M. Buriok

II. If a course, is it being Proposed for:

- _____ Course Revision/Approval Only
- _____ Course Revision/Approval and Liberal Studies Approval
- _____ Liberal Studies Approval Only (course previously has been approved by the University Senate)

III. Approvals

<u>John H. Steelman</u> Department Curriculum Committee	<u>Gerald M. Buriok</u> Department Chairperson
<u>Alamasty</u> College Curriculum Committee	<u>W. S. Cole</u> College Dean *
_____ Director of Liberal Studies (where applicable)	_____ Provost (where applicable)

*College Dean must consult with Provost before approving curriculum changes. Approval by College Dean indicates that the proposed change is consistent with long range planning documents, that all requests for resources made as part of the proposal can be met, and that the proposal has the support of the university administration.

IV. Timetable

Date Submitted to LSC: _____	Semester to be implemented: _____	Date to be published in Catalog: _____
to UWUCC: _____		

Part II. Description of Curriculum Change

1. The new catalog description for MA 342 is on the following page.

2. The name change is:

<u>Old</u>	<u>New</u>
MA 342 Advanced Calculus for Applications	MA 342 Advanced Mathematics for Applications

3. Justification /Rationale for changes.

The only proposed change is in the name of the course. The current name suggests an overlap in material with MA 421 Advanced Calculus I and MA 422 Advanced Calculus II. In fact, the courses cover very different material. We believe the proposed name will eliminate a potential source of confusion for students.

Prerequisite: MA 241

This course deals with the application of mathematics to problems of science. Emphasis is placed on the three phases of such an application and on the development of skills necessary to carry out each step: (a) translation of the given physical information to a mathematical model; (b) treatment of the model by mathematical methods; (c) interpretation of the mathematical result in physical terms. Topics included are vector calculus, integral theorems, Fourier series, partial differential equations, and the Laplace transformation.