TO: PRESIDENT ALBERT W. BROWN
FROM: THE FACULTY SENATE

RE: I. Formal Resolution (Act of Determination)
    II. Recommendation (Urging the fitness of)
    III. Other (Notice, Request, Report, etc.)

SUBJECT: M.A. in Mathematics

M.A. modification in the degree requirements of the M.A in Mathematics. Senator Bretton moved that Paragraph 5, Comprehensive Examination sub-section iv. a 3.8 average have added to it "in all graduate courses." This was seconded and accepted.

Senator Cline moved: "to delete section 5, sub-section iii. - that section that reads: two additional courses, etc." This was defeated.

The committee moved to withdraw Section 5 sub-sections iii and iv. and refer them back to committee and add to section ii after "a thesis, with oral defense." This was accepted and the report was accepted as amended.

TO: THE FACULTY SENATE
FROM: PRESIDENT ALBERT W. BROWN

RE: I. DECISION AND ACTION TAKEN ON FORMAL RESOLUTION

   a. Accepted. Effective Date
   b. Deferred for discussion with the Faculty Senate on
   c. Unacceptable for the reasons contained in the attached explanation

II. III. a. Received and acknowledged
   b. Comment: Accepted with the explicit stipulation that the GRE continue to be required, i.e., approval of the resolution expect for Item #1.

DISTRIBUTION: Vice-Presidents: signature

Others as identified: signature

Distribution Date: 1971

Signed: (President of the College)

Date Received by the Senate: 1971
Re: MODIFICATION OF THE M.A. IN MATHEMATICS DEGREE REQUIREMENTS

April 13, 1972

The Department of Mathematics has approved the following modifications of the requirements for the M.A. in Mathematics degree and hence requests whatever further approval is needed:

1. GRE Scores (required at present)

   Submission of GRE scores is optional. If the student feels that his application to the program, or his application for financial aid, will be enhanced by the scores, he is encouraged to submit them.

2. Language

   Knowledge of a computer language or a foreign language must be demonstrated to the Department of Mathematics. (When the requirement is deemed inappropriate to the student's program, it will be waived by the Graduate Committee.)

3. Program of Study

   Each student will plan a program of study in consultation with his advisors. This written program plan must be approved by the Graduate Committee. (See Advisement Procedures on the next sheet.)

   A program plan must include courses from at least three of the following five regions of mathematics with a minimum of two courses from each of the three chosen regions. At least one of the three regions chosen must be algebra or analysis. The five regions are:

   (see last sheet for course names)

   I. Algebra: 527, 621, 622, 629
   II. Analysis: 556, 558, 651, 652, 653, 659
   III. Geometry and Topology: 533, 535, 536, 631, 636, 637, 638, 639
   IV. Applicable Mathematics and Statistics: 545, 561, 565, 641, 646, 661, 662, 666, 669
   V. Foundations: 512, 515, 516, 612, 614, 617, 619
4. **Advisement Procedures**

Each student will have an advisory committee consisting of the following three members: the student, a faculty member selected by the Graduate Committee, and an additional member selected by the student.

The Graduate Committee will assign a member of the faculty to the student's advisory committee immediately after the student is accepted by the Department into the M.A. Program. The third member of the committee is to be chosen by the student before the end of his first semester in the program.

The advisory committee has the responsibility of submitting a copy of the student's program to the Graduate Committee prior to the end of his first semester in the program. The submitted program must have the approval of each member of the advisory committee. Prior to each subsequent semester, the advisory committee is expected to submit an approved, updated copy of the student's program to the Graduate Committee. This updated copy should note the student's progress to date.

5. **Comprehensive Examination (presently required)**

With the approval of the Graduate Committee, the student may select one of four options to satisfy the comprehensive examination requirement:

1. the comprehensive examination,
2. a thesis, with oral defense,
3. an additional course, selected by the Graduate Committee to demonstrate the candidate's competency,
4. a B average referred back to the Graduate Committee.

Sincerely,

R. Mahoney

For the Graduate Committee
FIVE REGIONS OF MATHEMATICS

<table>
<thead>
<tr>
<th>Region</th>
<th>Courses</th>
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| Algebra                 | 527 Modern Algebra II  
                        | 621 Abstract Algebra I  
                        | 622 Abstract Algebra II  
                        | 629 Topics in Algebra and Number Theory |
| Analysis                | 556 Introduction to Complex Variables  
                        | 558 Introduction to Real Analysis II  
                        | 651 Real Analysis I  
                        | 652 Real Analysis II  
                        | 653 Complex Analysis |
| Geometry and Topology   | 533 Linear Geometry  
                        | 535 Combinatorial Topology  
                        | 536 Introduction to Topology  
                        | 631 Foundations of Geometry*  
                        | 636 Point Set Topology  
                        | 637 Algebraic Topology  
                        | 538-638 Projective and Related Geometries*  
                        | 639 Topics in Geometry and Topology |
| Applicable Mathematics  | 545 Probability and Statistics I*  
                        | 561 Linear Programming*  
                        | 565 Differential Equations  
                        | 641 Mathematical Statistics  
                        | 546-646 Probability and Statistics II*  
                        | 451-551 Methods of Applicable Mathematics I  
                        | 452-552 Methods of Applicable Mathematics II  
                        | 566-666 Numerical Analysis*  
                        | 669 Topics in Applicable Mathematics and Statistics |
| Statistics              | 512 History of Mathematics I  
                        | 515 Set Theory  
                        | 516 Introduction to Mathematical Logic  
                        | 612 History of Mathematics from 1600 AD*  
                        | 614 Foundations of Mathematics  
                        | 617 Mathematical Logic  
                        | 619 Topics in Mathematics for Secondary School Teachers |

* new course
To: President Albert W. Brown
From: John C. Crandall
Subject: M.A. in Mathematics, Resolution for modification thereof dated May 8, 1972

September 29, 1972

I have reviewed the attached Senate Resolution and view it as a desirable modification, not a new program, except for the item which makes the G.R.E. optional. The modifications are desirable in that they provide for more flexibility with control, more options reflecting staff growth, a better advise-ment pattern, and a comprehensive exam/thesis option.

I would recommend approval with the explicit stipulation that the G.R.E. continue to be required, i.e., approval of the resolution except for Item #1.