

S. 86-74

# SIMON FRASER UNIVERSITY

## MEMORANDUM

**To:** Senate

**From:** Senate Committee on  
Undergraduate Studies

**Subject:** Department of Mathematics  
and Statistics Curriculum Changes

**Date:** October 15, 1986

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Action undertaken by the Senate Committee on Undergraduate Studies at its meeting of October 14, 1986 gives rise to the following motion:

### **MOTION:**

"That Senate approve and recommend approval to the Board of Governors, as set forth in S.86-74, the proposed recommendation for experience in a Programming Language."

### **FOR INFORMATION:**

Acting under delegated authority at its meeting of October 14, 1986 the Senate Committee on Undergraduate Studies approved

Course revisions including:

MATH 243-3 Change of prerequisites  
MATH 443-3 Change of prerequisites

SIMON FRASER UNIVERSITY  
MEMORANDUM

SCUS 86-26

To: R. Heath,  
Secretary to Senate

From: P. Dobud  
Administrative Assistant  
to the Dean of Science

Subject: Calendar Changes,  
MATHEMATICS Program

Date: October 2, 1986

This is to inform you that the Faculty of Science, in its meeting held on Monday September 29, 1986 has approved the following calendar changes for the MATHEMATICS program. I would appreciate it very much if you would place these motions in the agenda of the next SCUS meeting for consideration and approval.

a) Programming Language requirement.

*"That the following paragraph be added after Minimum grade requirement, page 189 of the 1986-87 calendar:*

**Some experience with a high level programming language is recommended by the beginning of the second year."**

Rationale: (i) The following MATH/MACM courses require or recommend some knowledge of computing: MATH/MACM 216, 243, 308, 309, 316, 343, 360, 401, 402, 408, 416.

(ii) Co-op students in Mathematics frequently need familiarity with programming in their work semesters.

(iii) Out of 7 Universities investigated, 4 require their Mathematics Majors to take a Computing Course.

b) Change in prerequisites for: MATH 243 and MATH 443.

*"That SCUS approves the following changes in prerequisites*

i) **MATH 243-3 : Discrete Mathematics**

FROM: Prerequisites: Any 100 division Mathematics or Computing Science course (except MATH 100, 190 or 191).

TO: Prerequisites: MATH 152 or 155; or MATH 158 with a grade of A or B.

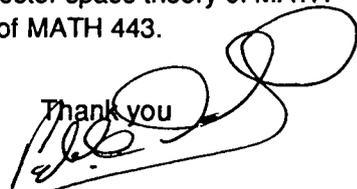
Rationale: Over the years, MATH 243 was upgraded. The material is more difficult now than it used to be. For instance partial fractions, which are part of MATH 152 and 155, are needed now.

ii) **MATH 443-3 : Combinatorial Theory**

FROM: Prerequisites: MATH 243

TO: Prerequisites: MATH 232 and 243."

Rationale: Over the years MATH 443 was upgraded. Vector space theory of MATH 232 is now used in Design Theory and Coding Theory of MATH 443.

Thank you  


cc: Dr. A. R. Freedman, Chairman Department of Mathematics and Statistics

SENATE COMMITTEE ON UNDERGRADUATE STUDIES

COURSE PROPOSAL FORM

Calendar Information

Department: Math.&Stats.  
 Abbreviation Code: MATH Course Number: 243 Credit Hours: 3 Vector: 3-1-0  
 Title of Course: Discrete Mathematics  
 Calendar Description of Course: See Calendar

**Nature of Course**

**Prerequisites (or special instructions):**

Math 152 or 155; or Math 158 with a grade of A or B.

What course (courses), if any, is being dropped from the calendar if this course is approved:

**2. Scheduling**

How frequently will the course be offered?

Semester in which the course will first be offered?

Which of your present faculty would be available to make the proposed offering possible:

Objectives of the Course

**4. Budgetary and Space Requirements (for information only)**

What additional resources will be required in the following areas:

Faculty

Staff

Library

Audio Visual

Space

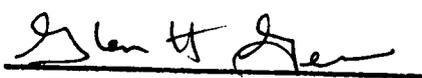
Equipment

**5. Approval**

Date: September 15, 1986.

October 1, 1986

  
Department Chairman

  
Dean

  
Chairman, SCUS

SENATE COMMITTEE ON UNDERGRADUATE STUDIESCOURSE PROPOSAL FORMCalendar Information

Department: Math.&Stats.  
 Abbreviation Code: MATH Course Number: 443 Credit Hours: 4 Vector: 4-0-0  
 Title of Course: Combinatorial Theory

## Calendar Description of Course:

Introduction to combinatorial analysis.

## Nature of Course

## Prerequisites (or special instructions):

Math 232 and Math 243.

What course (courses), if any, is being dropped from the calendar if this course is approved:

2. Scheduling

How frequently will the course be offered?

Semester in which the course will first be offered?

Which of your present faculty would be available to make the proposed offering possible:

Objectives of the Course4. Budgetary and Space Requirements (for information only)

What additional resources will be required in the following areas:

Faculty

Staff

Library

Audio Visual

Space

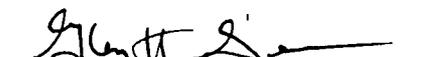
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 Dean

  
 Chairman, SCUS