

SIMON FRASER UNIVERSITY

S.79-87

MEMORANDUM

Senate

From Senate Committee on

Undergraduate Studies

Subject Changes in Science Curricula
Requirements Resulting From
Mathematics Curricula Changes

Date 1979-09-13

Action taken by SCUS in its meeting of 11 September, 1979 gives rise to the following motion.

MOTION

That Senate approve, and recommend approval to the Board of Governors, changes in curriculum requirements in the Faculty of Science resulting from curriculum revision in Mathematics and specified in paper S79-87 :

Science Departments and Programs - Effects from changes in Mathematics, subject to Mathematic changes being approved

i) Biochemistry

1. Change to Major Program
2. Change to Honors Program
3. BICH 403-3, Physical Chemistry, prerequisite change

ii) Biophysics

1. Change to Major Program
2. Change to Honors Program

iii) Chemistry

1. Change to Major Program
2. Change to Honors Program

iv) Chemical Physics

1. Change to Major Program
2. Change to Honors Program

v) Mathematical Physics

1. Change to Honors Program

vi) Physics

1. Change to Major Program
2. Change to Honors Program
3. Prerequisite changes for:

PHYS 211-3, 221-3, 325-3, 344-3, 345-3, 355-3, 384-3,
385,3, 413-3, 425-3, 484-3, NUSC 485-3

W. R. Bich

SIMON FRASER UNIVERSITY

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MEMORANDUM

SCUS 79-25

JUL 25 1979

To: H. M. Evans
Registrar
Changes in other courses and programmes
Subject: resulting from Mathematics Curriculum
Revisions.

From: N. Heath
Assistant to the Dean of Science
Date: 1979 07 18
OFFICE
DEAN DESK

If the Mathematics Curriculum revisions proposed by the Faculty of Science receive approval, consequential changes will be necessary in several other Science programmes and courses. These are given in detail on the attached pages in the following sequence;

Biochemistry - Major Program
Honors Program
Prerequisite for BICH 403-3

Biophysics - Major Program
Honors Program

Chemistry - Major Program
Honors Program

Chemical Physics
- Major Program
Honors Program

Mathematical Physics
- Honors Program

Physics - Major Program
Honors Program
- Prerequisite changes for PHYS 211-3, 221-3, 325-3,
344-3, 345-3, 355-3, 384-3, 385-3, 413-3, 425-3, 484-3
NUSC 485-3

NH/rcw


N. Heath

SIMON FRASER UNIVERSITY

MEMORANDUM

| | | |
|------------------------------------|------|----------------------|
| Dr. C.L. Kemp | From | A.M. Unrau |
| Biological Sciences Dept. | | Chemistry Department |
| Subject Biochem. Math Requirements | Date | 29 June 1979 |

The Biochemistry Committee has considered the above in light of the present structure of Math courses. The Math requirements for Biochemistry will now read as follows:


Biochem. Majors program:

Math 151-3, 152-3, 310-3 (9 hours)
(Math 251-3 is recommended)

Honors Program:

Math 151-3, 152-3, 251-3, 310-3 (12 hrs.)

(See p. 386 of the 79-80 Calendar for current requirements)

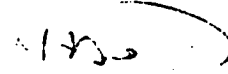


A.M. Unrau

AMU:SB

P.S. The prerequisites of BICH 403-3, Physical Biochemistry, include MATH 253-4. This should be changed to MATH 310-3. The full statement should then read:

PHYS 121-3 (or PHYS 102-3), MATH 310-3 and BICH 301-3. BICH 413-2 will ordinarily be taken concurrently, but may be taken subsequent to BICH 403-3.


N. Heath for A.M. Unrau

SIMON FRASER UNIVERSITY

MEMORANDUM

o H. M. Evans

SCUS

Subject Biophysics Program Revisions

From N. Heath

Assistant to the Dean of Science

Date 1979 07 19

To accomodate the changes in the Mathematics curriculum, the following changes in the Biophysics Major and Honors programs were approved by the Faculty of Science and are submitted to SCUS and Senate for consideration and approval.

Major Program (see p. 390-392 in the '79-'80 Calendar)

Lower division Mathematics requirements:

MATH 151-3, 152-3 (or MATH 154-3, 155-3)
251-3, 252-3.

Upper division requirements:

no change

Advising Lists - Theoretical and Physical Aspects of Biophysics
MATH 232-3, 361-3, 415-3

Reference note (c) to be added after CHEM 361-3 (see below)

Honors Program (see pp. 392 - 393 in the '79-'80 calendar)

Lower division Mathematics requirements:

- as for Major program.

Upper division requirements:

no change

Advising Lists: Theoretical and Physical Aspects of Biophysics

MATH 232-3, 361-3, 415-3, 418-3 (e), 438-3

Reference to note (c) to be added after CHEM 361-3. (see below)

Notes for Major and Honors Programs.

- (a) Students not having the necessary Grade 12 high school prerequisites will be required to take additional first year courses to obtain entry into the Program.

cont. on page 2...

Notes for Major and Honors Programmes cont.

- (b) PHYS 345-3. The requirement for PHYS 344-3 as a prerequisite can be waived with permission of the Department if CHEM 261-3 has already been taken. PHYS 385-3 is recommended.
- (c) CHEM 361-3. MATH 232-3 is recommended.
- (d) Whichever was not taken in the core program.
- (e) Has as a prerequisite either MATH 314-3 or PHYS 384-3.

NH/rcw



N. Heath

MEMORANDUM

Chairman, Faculty Undergraduate

Curriculum Committee

Subject: Mathematics Requirements for Chemistry Students

From: Dr. J. Walkley, Chairman, Departmental Undergraduate Studies Committee
Department of Chemistry
Date: June 21, 1979

Math. requirements for the Chemistry Program: -

Majors Students

Math. 151-3; 152-3; 251-3; 310-3; plus one of
Math. 232-3; Math 252-3


Total 15 cr. hrs.

Honours Students

Math. 151-3; 152-3; 232-3; 251-3; 310-3; plus
one of Math 252-3; 316-3

Total 18 cr. hrs.

Math. 252-3 is recommended for students intending to take
Physics 221-3.



J. Walkley

JW:lv

Registrar's Note: - For Math. read MATH

SIMON FRASER UNIVERSITY

MEMORANDUM

o H. M. Evans
SCUS
Subject Revised Mathematics requirements
Chemical Physics Programs.

From N. Heath
Assistant to the Dean of Science
Date 1979 07 20

To accomodate the changes in the Mathematics curriculum, the following changes in the Chemical Physics Major and Honors programs were approved by the Faculty of Science and are submitted to SCUS and Senate for consideration and approval.

Honors Program

OLD Math requirements.

Lower Levels: 151-3, 152-3, 232-3, 253-4
Upper Levels: 310-3, 312-4, (or 431-4)

NEW Math requirements.

Lower Levels: 151-3, 152-3, 232-3 251-3, 252-3
Upper Levels: 310-3

Majors Program

Same as above NEW requirements.

(see pp. 405-406 of the '79-'80 Calendar)

NH/rcw


N. Heath

SIMON FRASER UNIVERSITY

MEMORANDUM

H. M. Evans
SCUS
Subject MATHEMATICAL PHYSICS (HONORS)
DEGREE REQUIREMENTS

From N. Heath
Assistant to the Dean of Science
Date 1979 07 19

The Faculty of Science has approved the following revisions to the Mathematics requirements in the MAPH Honors program. (see pp. 424-425 in the '79-'80 Calendar)

Lower Division Requirements

MATH 151-3, 152-3, 232-3, 242-3, 251-3, 252-3

Upper Division Requirements

MATH 310-3, 313-3, 320-3, 322-3, 361-3, 418-3

Two of the following: MATH 416-3(e), 466-4, 467-3, 468-4, 469-4, 470-4, 471-4

Three of the following: A) MATH 316-3, 387-3(b), 415-3(c), 419-3(c), 424-3

B) MATH 425-3, 426-3, 438-3, 439-3, 444-3(d)

with at least one course from each of groups A and B.

Physics and Computing Science Requirements - unchanged

NOTES

- b) requires MATH 272-3
- c) MATH 314-3 recommended
- d) MATH 425-3 required
- e) MATH 316-3 required

NH/rcw


N. Heath

SIMON FRASER UNIVERSITY

MEMORANDUM

Mr. N. Heath
Dean of Science Office

From.....R. F. Frindt.....
Physics Department

Subject.....

Date.....1979-06-13.....

The new Physics-Math. requirements are:

Phys. Majors: M151-3, 152-3, 251-3, 252-3, 232-3, 310-3
plus one other math. course numbered 316
or greater.

Phys. Honors: M151-3, 152-3, 251-3, 252-3, 232-3, 310-3,
322-3 plus two more courses numbered 316 or
greater.

R Frindt

R. F. Frindt

RFF/ml

Registrar's Note: - For M read MATH
For Phys. read PHYS

SIMON FRASER UNIVERSITY

MEMORANDUM

To: N. Heath
 Dean of Science Office

Subject: Revised Prerequisites for Physics Courses

From: K.S. Viswanathan
 Physics

Date: 1979 05 20

The physics department recommends that the Faculty Undergraduate Curriculum Committee accept the following prerequisite structure for the undergraduate physics courses.

| Course | Proposed Pre- or Corequisite | Old Pre- or Corequisite |
|---|---|---|
| Phys 211-3 [Mechanics] | Phys 121-3 (or Phys 102-3). M251-3 must precede or be taken concurrently | Phys 121-3 /or M253-4. must precede or be taken concurrently |
| Phys 221-3 [E & M] | Phys 121-3 (or Phys 102-3), M251-3. M252-3 is a recommended corequisite. | Phys 121-3 /or P102-3. M253-4 must precede or be taken concurrently |
| Phys 325-3 [Relativity and Electromagnetism] | Phys 221-3, M252-3. M310-3 must precede or be taken concurrently | Phys 221-3. M312-4 must precede or be taken concurrently |
| Phys 344-3 [Thermal Phys] | Phys 121-3. M251-3. | Phys 121-3. M253-4 must precede or be taken concurrently |
| Phys 345-3 [Statistical Physics] | No change. | Phys 344-3 /or Chem 261-3. Phys 385 is a recommended prerequisite |
| Phys 355-3 [Optics] | Phys 221-3, M252-3. | Phys 221-3, M253-4. |
| Phys 384-3 [Math Phys] | Phys 211-3 /or M263-4, Phys 221-3, M252-3, M310-3. | Phys 221-3, M232-3. M253-4 and either M310-3 or M312-4. |
| Phys 385-3 [Quantum Physics] | Phys 211-3 /or M263-4. Phys 221-3, M252-3. M310-3 must precede or be taken concurrently | Phys 211-3 /or M263-4. Phys 221-3. M310-3 must precede or be taken concurrently |

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Registrar's Note: For M read MATH
 For Phys read PHYS

| Course | Proposed Pre- or Corequisite | Old Pre- or Corequisite |
|---------------------------------|---|---|
| Phys 413-3 [Classical Mech.] | Phys 384-3 OR Phys 211-3 /or M263-4. Phys 221-3, M252-3, M310-3 and M322-3 or permission of instructor. | Phys 211-3 and Phys 384-3 OR Phys 211-3, M310-3 and M312-4. |
| Phys 415-3 [Q.M.] | Phys 385-3 and either Phys 384-3 or M314-3 and M419-3. | Phys 385-3 and either Phys 384-3 or M420-4. |
| Phys 425-3 [E.M.] | Phys 325-3 and either Phys 384-3 or M314-3. | Phys 325-3 and either Phys 384-3 or M420-4. |
| Phys 465-3 [S.S.] | No change. | Phys 385-3. |
| Phys 484-3 | Phys 384-3 or permission of instructor. | Phys 384-3, M310-3, M312-4. |
| NuSc 485 | Phys 385-3. It is recommended that Phys 415-3 precede or be taken concurrently | |

R. F. Lindt, for

K.S. Viswanathan

KSV/jam