SIMON FRASER UNIVERSITY **MEMORANDUM**

Senate

From:

C. MacKenzie, Chair

Mackenje Senate Committee on Undergraduate Studies

Subject:

Curriculum revisions - Faculty of Science: Biological Sciences, Chemistry, Earth Sciences,

Physical Geography, Mathematics, Molecular Biology and Biochemistry, Physics, Statistics,

WOB courses

(SCUS Reference: SCUS 05-29, SCUS 06-01 b)

Date:

February 9, 2006

For information:

Acting under delegated authority at its February 7, 2006 meeting, SCUS approved the following curriculum revisions in the Faculty of Science:

Department of Biological Sciences

Department of Chemistry Department of Earth Sciences Physical Geography Program Department of Mathematics

Department of Molecular Biology and Biochemistry

Department of Physics

Department of Statistics and Actuarial Science

Any Senator wishing to consult the full report of curriculum revisions should contact Bobbie Grant, Senate Assistant at 291-3168 or email bgrant@sfu.ca

For information

Biological Sciences (SCUS 05-29 a, SCUS 06-01 b)

New courses: BISC 111-3 Special Topics: Current Topics in Biology I

BISC 112-3 Special Topics: Current Topics in Biology II

Description changes: BISC 101, 102

Addition of calendar statement Designated Breadth in Science Courses for Non-majors

Deleted courses: BISC 425-3 Biology and Society

MASC 413-3 Biology of Marine Molluscs

<u>Chemistry</u> (SCUS 05-29 b, SCUS 06-01 b)

New course: CHEM 180-3 The Chemistry of Life

Credit hour, vector change: CHEM 236

Deleted course: CHEM 468-3 Special Topics in Physical Chemistry

Earth Sciences (SCUS 05-29 c)

Course changes: EASC 103, 104, 106, 203, 206, 303, 304, 404 New courses: EASC 107-3 Economic Geological Resources

EASC 300-3 Selected Topics in Earth Sciences

EASC 312-3 Stratigraphy

EASC 314-3 Principles of Glaciology

EASC 400-3 Selected Topics in Earth Sciences

EASC 421-3 Volcanology

A waiver of the two-semester time lag for early offering of EASC 107, 312, and 421 was approved.

Physical Geography (SCUS 05-29 d)

Changes to the lower division requirements for the Major program

Mathematics (SCUS 05-29 e)

New courses: MATH 121-3 Mathematical Expeditions

MATH 150-4 Calculus I with Review

MATH 160-3 Mathematics in Action

MATH 178-3 Fractals and Chaos

MATH 197-3 Hitchhiker's Guide to Everyday Math

MATH 348-3 Probabilistic Models in Operations Research

MATH 370-3 The Art and Craft of Problem Solving

MATH 402-4 Industrial Mathematics Project

MACM 409-3 Numerical Linear Algebra and Optimization

MACM 442-3 Cryptography

FAN 099-4 Foundations in Analytical and Quantitative Reasoning

A waiver of the two-semester time lag for early offering of MATH 160 and FAN 099 was approved.

Course changes: MATH 100, 113, 151, 152, 154, 155, 157, 158, 190, 232, 251, 254, 380, 419, 424, 470

Changes to the lower and upper division requirements for the Management and Systems Science Major program

Changes to the lower division requirements for the Applied Mathematics Major and Honors programs

Changes to the lower division requirements for the Mathematics Major and Honors programs

Changes to the Mathematics Minor program

Changes to the lower division requirements for the Mathematics and Computing Science Honors program

Changes to the lower division requirements for the Mathematical Physics Honors program

Changes to the Beginning Level Requirements Calendar entry

Changes to the Open Workshops Calendar entry

Molecular Biology and Biochemistry (SCUS 05-29 f)

New courses:

MBB 310-3 Genes, Biotechnology and Society

MBB 430-3 Mechanisms of Secretory Transport

MBB 444-3 Developmental Neurobiology

A waiver of the two-semester time lag for early offering of MBB 310 and 430 was approved.

Course changes: MBB 309

Changes to the upper division core requirements for the Major and Honors program

Changes to the upper division MBB requirements for the Joint Major program and the Joint

Honors program in Molecular Biology and Biochemistry and Business Administration

Physics (SCUS 05-29 g)

New courses:

PHYS 192-3 Logarithm and Blues

PHYS 433-3 Biological Physics Laboratory

PHYS 347-3 Introduction to Biological Physics

Course changes: PHYS 385, 415

Changes to the requirements for the Applied Physics Major and Honors programs

Changes to the requirements for the Chemical Physics Major and Honors programs

Changes to the requirements for the Mathematical Physics Honors program

Changes to the requirements for the Physics Major and Honors programs

Statistics (SCUS 05-29 h)

Course changes: ACMA 310, 315, 320, 335, 445, STAT 203

New courses: ACMA 465-3 Mathematics of Demography

ACMA 470-3 Property and Casualty Insurance

ACMA 475-3 Theory of Pension

STAT 300-3 Statistics Communication

Changes to the requirements for the Actuarial Science Major and Honors programs

Minor changes to the Admission Information Calendar entry for Actuarial Science

WQB Certified Science Courses (SCUS 05-29 i)