




OFFICE OF THE ASSOCIATE VICE-PRESIDENT, ACADEMIC

8888 University Drive, TEL: 778.782.4636 avpcio@sfu.ca
Burnaby, BC FAX: 778.782.5876 www.sfu.ca/vpacademic
Canada V5A 1S6

MEMORANDUM

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| ATTENTION | Senate | DATE | October 14, 2016 |
| FROM | Wade Parkhouse, Acting Chair Senate Committee on Undergraduate Studies | PAGES | 1/1 |
| RE: | Faculty of Science (SCUS 16-37) | |  |

For information:

Acting under delegated authority at its meeting of October 13, 2016 SCUS approved the following curriculum revisions effective Summer 2017.

1. Department of Biological Sciences

- (i) Program requirement changes to the Ecology, Evolution and Conservation Stream



FACULTY OF SCIENCE
Dean of Science

SCUS 16-37

TASC II 9900
8888 University Drive,
Burnaby, BC
Canada V5A 1S6

TEL 778.782.4590
FAX 778.782.3424

sfu.ca/science

MEMORANDUM

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|-----------|--|------|--------------------|
| ATTENTION | Senate Committee for Undergraduate Studies, SFU | DATE | September 22, 2016 |
| FROM | Carl Lowenberger, Chair, Science UCC | | |
| RE: | Submission of Undergraduate Curriculum Business from the Faculty of Science for inclusion on the Agenda of the October 2016 SCUS Meeting | | |

Biology

Motion 1: BISC EEC Stream –To approve the changes to the EEC stream program requirements, as outlined in the attached document. (Errors found in original document passed at April 2016 SCUS)

Biological Sciences has recently caught an error in a document that BISC brought to UCC back in March, and SCUS in April, 2016. In brief, they made a series of changes (course additions, changes, deletions) to their Ecology, Evolution, and Conservation (EEC) stream program requirements. Attached is a corrected version which requires 8 courses as outlined "and two or more elective courses (six or more units) chosen from any upper division undergraduate BISC courses". The April 2016 SUCS version specified "three or more elective courses..." which would have increased the total number of courses for the stream. Biology's intention was to change the course options, but keep the total number constant.

Rationale for change:

The proposed changes include the addition of a W-based methods course in EEC, and the replacement of Animal Ecology (BISC 304W) and Plant Ecology (BISC 404W) with a single Community Ecology and Macroecology (BISC 420) course. These changes provide a stronger program, from both a methodological and conceptual framework. In addition, the proposed changes meet the College of Applied Biology accreditation requirements. This will be of benefit to graduates who wish to register as a Professional Biologist (RPBio designation), and further distinguishes our EEC stream from other programs at SFU.

Effective term and year: Spring 2017

The following program(s) will be affected by these changes:

Biological Sciences Major; Ecology, Evolution, and Conservation Stream
Biological Sciences Honours; Ecology, Evolution, and Conservation Stream

Calendar Change

Ecology, Evolution and Conservation Stream

Students who choose this stream will complete both:

~~STAT 302 - Analysis of Experimental and Observational Data (3)~~

~~BISC 360W - Techniques in Ecology and Evolution (3)~~

and at least one additional organismal course from:

BISC 306 - Invertebrate Biology (4)

BISC 316 - Vertebrate Biology (4)

BISC 317 - Insect Biology (3)

BISC 326 - Biology of Algae and Fungi (3)

BISC 337 - Plant Biology (4)

and at least one of the following applied course from:

~~BISC 304W - Animal Ecology (3)~~

~~BISC 404W - Plant Ecology (3)~~

BISC 308 - Environmental Toxicology: An Ecological Perspective (3)

BISC 309 - Conservation Biology (3)

BISC 413 - Fisheries Ecology (3)

BISC 435 - Introduction to Pest Management (3)

and at least two conceptual courses from:

BISC 410 - Behavioral Ecology (3)

BISC 407 - Population Dynamics (3)

BISC 420 - Community Ecology and Macroecology (3)

BISC 422 - Population Genetics (3)

BISC 440W - Biodiversity (3)

and ~~four~~ of at least two additional stream electives from:

BISC 308 - Environmental Toxicology: An Ecological Perspective (3)

BISC 309 - Conservation Biology (3)

BISC 407 - Population Dynamics (3)

BISC 410 - Behavioral Ecology (3)

BISC 413 - Fisheries Ecology (3)

BISC 414 - Limnology (3)

~~BISC 419 - Wildlife Biology (3)~~

BISC 420 - Community Ecology and Macroecology (3)

BISC 422 - Population Genetics (3)

BISC 434 - Paleoecology and Palynology (3)

BISC 435 - Introduction to Pest Management (3)

BISC 440W - Biodiversity (3)

BISC 441 - Evolution of Health and Disease (3)

BISC 445 - Environmental Physiology of Animals (3)

BISC 473 - Special Topics in Ecology, Evolution and Conservation (3)

BISC 474 - Special Topics in Ecology, Evolution and Conservation (3)

~~BISC 475 - Special Topics in Biology (3)~~

BISC 497W - Undergraduate Research: Writing Intensive (3)

BISC 498 - Undergraduate Research I (3)

BISC 499 - Undergraduate Research II (3)

~~and two elective courses (six units) chosen from any upper division undergraduate BISC courses.~~ Courses from other units at Simon Fraser University such as the Faculty of Environment and MASC courses may count as options toward ~~this~~ these stream electives, subject to approval by the department. ~~Normally no more than two courses from other units and no more than three research intensive courses (BISC 490, 491, 492, 497W, 498, or 499) may be used to satisfy stream requirements and additional upper division biology course requirements.~~ Students complete a total of five lab courses (which may include one of BISC 497W, 498, 499) among their upper division courses.