SFU OFFICE OF THE VICE-PROVOST, LEARNING & TEACHING

Strand Hall 3034
8888 University Drive
Burnaby B.C. Canada V5A 1S6

TEL + 1 778 782 5433
avplt@sfu.ca
SFU.CA/vpacademic/learnteach

MEMORANDUM

ATTENTION: Senate

FROM: Elizabeth Elle, Vice-Chair, Senate Committee on Undergraduate Studies

RE: Course Changes (SCUS 23-57)

DATE: June 2, 2023

Elizabeth Elle

For information:

Acting under delegated authority at its meeting of June 1, 2023, SCUS approved the following curriculum revisions effective Spring 2024.

a. Faculty of Applied Sciences

1. School of Computing Science

(i) Units change for CMPT 295

2. School of Engineering Science

(i) Prerequisite change for ENSC 499

3. School of Sustainable Energy Engineering

(i) Prerequisite change for SEE 300

b. Faculty of Arts and Social Sciences

1. Department of Global Humanities

(i) Course number, description, and equivalent statement change for HUM 433W and 445

c. Faculty of Communication, Art and Technology

1. School for the Contemporary Arts

(i) Title change for CA 247 and 347 *(Fall 2024)*

d. Faculty of Environment

1. Department of Archaeology

(i) Prerequisite change for ARCH 273

e. Faculty of Science

1. Department of Earth Sciences

(i) Description and prerequisite change for EASC 201 and 421

Senators wishing to consult a more detailed report of curriculum revisions may do so on the Senate Docushare repository at https://docushare.sfu.ca/dsweb/View/Collection-12682.

SFU SENATE COMMITTEE ON UNDERGRADUATE STUDIES

COURSE MODIFICATION FORM

COURSE SUBJECT	CMPT	NUMBER	295	TITLE	Introduction to Computer Systems

TYPE OF CHANGES. Please type 'X' for the appropriate revision(s):

Course number	☐	Units	☒	Prerequisite	☐
Title	☐	Description	☐	Equivalent Statement	☐

WORDING/DESCRIPTION EDITS. Indicate deleted or changed text using ~~strike through~~, indicate added or new text using underline. If you need to enter more text than the box allows, drag the endpoint of the text box to make it bigger, as it will not automatically expand. Please review the "Equivalency statements" section under Information about specific course components if changing equivalent statement(s).

Introduction to Computer Systems CMPT 295 ~~(3)~~ (4)

EFFECTIVE TERM AND YEAR FOR CHANGES

Fall, Spring, Summer and year (please enter in textbox)

Spring 2024

RATIONALE (must be included)

We request changing CMPT 295 from a 3-credit course to a 4-credit course to align students' expectations with the workload expected in this course. The course includes 3 hours of weekly lectures and students are required to attend a weekly 1-hour lab. The weekly mandatory lab provides students with hands-on experience and helps them with learning.

There are three reasons that leave CMPT 295 in the unique situation of requiring mandatory labs:

1) CMPT 295 covers multiple abstractions in a single course: C, Assembly, Vectors, and Digital logic. Roughly 3 weeks are dedicated for each segment. Course assignments test different abstractions. and labs are essential to bring the students up to speed. (https://www.cs.sfu.ca/~ashriram/Courses/CS295//syllabus.html).
2) CMPT 295 forms the core for other courses e.g., CMPT 300. We find that concepts such as pointers need hands-on practice to be able to deliver the required outcomes. One fourth to one third of students come into CMPT 295 without a clear understanding of pointers. Nearly half the students have had no practical experience with them.
3) CMPT 295 bridges the gap to computer architecture. To deliver the learning outcomes, it introduces pipeline architecture and digital logic. But there are no other CMPT courses that cover digital logic, and hence we have to introduce multiple labs to cover some of the core concepts in Boolean logic, shifts and bit manipulation operations. We need to introduce a number of practice problems through labs to deliver these concepts.

Programming assignments are a large portion of students' grade, and our experience is that labs help students successfully navigate course outcomes. And when they fail an outcome, it leaves them with feedback on what problems they haven't learned. The following is the current list of labs that students are required to attend:
Lab 0: Intro to Git (used in submitting all assignments)
Lab 1: Pointers in C
Lab 2: Pointers Practice (helps students with Assignment 1)
Lab 3: Logic and Shift practice (background for Assignment 2)
Lab 4: C unions and structs, ISA disassemblers (helpful for Assignment 2)
Lab 5: Emulation (helpful for Assignment 2)
Lab 6: Emulation background, working with RISCV emulator (helpful for Assignment 3 where students write RISC-V programs in emulator)
Lab 7: Dot product walk-through (helps with Assignment 4 on sparse matrices and Neural Nets)
Lab 8: Practice on Cache Design
Lab 9: Vector computing (helpful with Assignment 5)
For the current course offering, please check:
https://www.cs.sfu.ca/~ashriram/Courses/CS295//index.html
Lab list: https://cmpt-295-sfu.github.io/website/labs#labs

SENATE COMMITTEE ON UNDERGRADUATE STUDIES

COURSE MODIFICATION FORM

COURSE SUBJECT	ENSC	NUMBER	499	TITLE	ENGINEERING SCIENCE UNDERGRADUATE THESIS

TYPE OF CHANGES. Please type 'X' for the appropriate revision(s):

Course number	☐	Units	☐	Prerequisite	☒
Title	☐	Description	☐	Equivalent Statement	☐

WORDING/DESCRIPTION EDITS. Indicate deleted or changed text using ~~strike through~~, indicate added or new text using underline. If you need to enter more text than the box allows, drag the endpoint of the text box to make it bigger, as it will not automatically expand. Please review the "Equivalency statements" section under Information about specific course components if changing equivalent statement(s).

Prerequisite: ENSC 498 with a minimum grade of ~~C-~~ Pass

Can be found here:
http://www.sfu.ca/outlines.html?2023/summer/ensc/499/d100
https://www.sfu.ca/students/calendar/2023/summer/courses/ensc/499.html

EFFECTIVE TERM AND YEAR FOR CHANGES
Fall, Spring, Summer and year (please enter in textbox)

Spring 2024

RATIONALE (must be included)

ENSC 498 grading is a pass or fail not a specific grade

SENATE COMMITTEE ON UNDERGRADUATE STUDIES

COURSE MODIFICATION FORM

COURSE SUBJECT SEE **NUMBER** 300 **TITLE** The Business of Engineering

TYPE OF CHANGES. Please type 'X' for the appropriate revision(s):

Course number	☐	Units	☐	Prerequisite	☒
Title	☐	Description	☐	Equivalent Statement	☐

WORDING/DESCRIPTION EDITS. Indicate deleted or changed text using ~~strike through~~, indicate added or new text using underline. If you need to enter more text than the box allows, drag the endpoint of the text box to make it bigger, as it will not automatically expand. Please review the "Equivalency statements" section under Information about specific course components if changing equivalent statement(s).

Economic and entrepreneurial concepts important to engineers who manage projects, run businesses, or need to decide on the most efficient method for accomplishing a task. Topics include: financial accounting and metrics, economic equivalence, rates of return, depreciation, income taxes, project and cost-benefit analyses, capital budgeting, financing methods, risk and uncertainty, business plans. Prerequisite: A minimum of ~~75~~ 65 units OR a minimum of 55 units plus two-term CO-OP work. Students with credit for MSE 300 may not take this course for further credit.

EFFECTIVE TERM AND YEAR FOR CHANGES

Fall, Spring, Summer and year (please enter in textbox)

Spring 2024

RATIONALE (must be included)

Since the equivalent course MSE 300 requires a minimum of 65 units, it would be reasonable to set the same prerequisite for SEE 300, which would encourage student enrollment.

SENATE COMMITTEE ON UNDERGRADUATE STUDIES

COURSE MODIFICATION FORM

COURSE SUBJECT	HUM	NUMBER	433W	TITLE	Italian Films, Italian Humanities

TYPE OF CHANGES. Please type 'X' for the appropriate revision(s):

Course number	☒	Units	☐	Prerequisite	☐
Title	☐	Description	☒	Equivalent Statement	☐

WORDING/DESCRIPTION EDITS. Indicate deleted or changed text using ~~strike through~~, indicate added or new text using underline. If you need to enter more text than the box allows, drag the endpoint of the text box to make it bigger, as it will not automatically expand. Please review the "Equivalency statements" section under Information about specific course components if changing equivalent statement(s).

HUM ~~433W~~ 333W– Italian Films, Italian Humanities (4)

Explores the representation of modern Italian history through the medium of film. HUM ~~433W~~ 333W may be repeated for credit only when a different topic is taught. Prerequisite: 45 units. Students with credit for HIST 433W or HUM 433W may not take this course for further credit.

EFFECTIVE TERM AND YEAR FOR CHANGES

Fall, Spring, Summer and year (please enter in textbox)

Spring 2024

RATIONALE (must be included)

Course number change to lower perceived enrollment barrier for non-HUM majors and to reflect the accessibility of this course to non-HUM students.

SENATE COMMITTEE ON UNDERGRADUATE STUDIES

COURSE MODIFICATION FORM

COURSE SUBJECT	HUM	NUMBER	445	TITLE	Problems in Modern Italian History

TYPE OF CHANGES. Please type 'X' for the appropriate revision(s):

Course number	☒	Units	☐	Prerequisite	☐
Title	☐	Description	☒	Equivalent Statement	☐

WORDING/DESCRIPTION EDITS. Indicate deleted or changed text using ~~strike through~~, indicate added or new text using underline. If you need to enter more text than the box allows, drag the endpoint of the text box to make it bigger, as it will not automatically expand. Please review the "Equivalency statements" section under Information about specific course components if changing equivalent statement(s).

HUM ~~445~~ 345– Problems in Modern Italian History (4)

Examines topics in Italian history and culture through film, literature, primary sources, and/or art. Content may vary from offering to offering. HUM ~~445~~ 345 may be repeated for credit only when a different topic is taught. Prerequisite: 45 units. Students with credit for HIST 445 or HUM 445 may not take this course for further credit.

EFFECTIVE TERM AND YEAR FOR CHANGES

Fall, Spring, Summer and year (please enter in textbox)

Spring 2024

RATIONALE (must be included)

Course number change to lower perceived enrollment barrier for non-HUM majors and to reflect the accessibility of this course to non-HUM students.

SFU SENATE COMMITTEE ON UNDERGRADUATE STUDIES

COURSE MODIFICATION FORM

COURSE SUBJECT CA **NUMBER** 247 **TITLE** Fixed Media Lab

TYPE OF CHANGES. Please type 'X' for the appropriate revision(s):

Course number	☐	Units	☐	Prerequisite	☐
Title	☒	Description	☐	Equivalent Statement	☐

WORDING/DESCRIPTION EDITS. Indicate deleted or changed text using ~~strike through~~, indicate added or new text using underline. If you need to enter more text than the box allows, drag the endpoint of the text box to make it bigger, as it will not automatically expand. Please review the "Equivalency statements" section under Information about specific course components if changing equivalent statement(s).

CA 247 – ~~Fixed Media Lab (3)~~ Creative Electronics Lab I (3)

EFFECTIVE TERM AND YEAR FOR CHANGES
Fall, Spring, Summer and year (please enter in textbox)

Fall 2024

RATIONALE (must be included)

This name change is in combination with CA347's change from "Live Electronics Lab" to "Creative Electronics Lab II". Previously, the two courses – CA247 and CA347 – made distinct separations between fixed media and live music creation; however, we are increasingly blending the two methodologies in the two classes, and it is confusing to the students to have to distinguish between them. Instead, both courses will deal with both methods, with the 3rd year course continuing from the 2nd year course.

SENATE COMMITTEE ON UNDERGRADUATE STUDIES

COURSE MODIFICATION FORM

COURSE SUBJECT CA **NUMBER** 347 **TITLE** Live Electronics Lab

TYPE OF CHANGES. Please type 'X' for the appropriate revision(s):

Course number	☐	Units	☐	Prerequisite	☐
Title	☒	Description	☐	Equivalent Statement	☐

WORDING/DESCRIPTION EDITS. Indicate deleted or changed text using ~~strike through~~, indicate added or new text using underline. If you need to enter more text than the box allows, drag the endpoint of the text box to make it bigger, as it will not automatically expand. Please review the "Equivalency statements" section under Information about specific course components if changing equivalent statement(s).

CA 347 – ~~Live Electronics Lab (3)~~ Creative Electronics Lab II (3)

EFFECTIVE TERM AND YEAR FOR CHANGES
Fall, Spring, Summer and year (please enter in textbox)

Fall 2024

RATIONALE (must be included)

This name change is in combination with CA247's change from "Fixed Media Lab" to "Creative Electronics Lab I". Previously, the two courses – CA247 and CA347 – made distinct separations between fixed media and live music creation; however, we are increasingly blending the two methodologies in the two classes, and it is confusing to the students to have to distinguish between them. Instead, both courses will deal with both methods, with the 3rd year course continuing from the 2nd year course.

SFU SENATE COMMITTEE ON UNDERGRADUATE STUDIES

COURSE MODIFICATION FORM

COURSE SUBJECT ARCH **NUMBER** 273 **TITLE** Archaeology of the New World

TYPE OF CHANGES. Please type 'X' for the appropriate revision(s):

Course number	☐	Units	☐	Prerequisite	☒
Title	☐	Description	☐	Equivalent Statement	☐

WORDING/DESCRIPTION EDITS. Indicate deleted or changed text using ~~strike through~~, indicate added or new text using underline. If you need to enter more text than the box allows, drag the endpoint of the text box to make it bigger, as it will not automatically expand. Please review the "Equivalency statements" section under Information about specific course components if changing equivalent statement(s).

Prerequisite: ~~ARCH 100, 101, or 201~~
Prerequisite: Any one of the following: ARCH 100, ARCH 101, EVSC 100, GEOG 100 or REM 100.

EFFECTIVE TERM AND YEAR FOR CHANGES
Fall, Spring, Summer and year (please enter in textbox)

Spring 2024

RATIONALE (must be included)

The addition of EVSC 100, GEOG 100, and REM 100 would allow students in other disciplines to take ARCH 273 for Indigenous content.

SFU SENATE COMMITTEE ON UNDERGRADUATE STUDIES

COURSE MODIFICATION FORM

COURSE SUBJECT	EASC	NUMBER	201	TITLE	Stratigraphy and Sedimentation

TYPE OF CHANGES. Please type 'X' for the appropriate revision(s):

Course number	☐	Units	☐	Prerequisite	☒
Title	☐	Description	☒	Equivalent Statement	☐

WORDING/DESCRIPTION EDITS. Indicate deleted or changed text using ~~strike through~~, indicate added or new text using underline. If you need to enter more text than the box allows, drag the endpoint of the text box to make it bigger, as it will not automatically expand. Please review the "Equivalency statements" section under Information about specific course components if changing equivalent statement(s).

An introduction to the ~~nature, origin~~ description and interpretation of sedimentary media ~~stratified earth materials~~. Topics include ~~P~~principles of sedimentology, the facies concept and facies analysis, depositional environments, stratigraphy and stratigraphic correlation. ~~lithostratigraphy, biostratigraphy, and chronostratigraphy, sequence stratigraphy, the facies concept.~~

Prerequisite: ~~or Corequisite:~~ EASC ~~210~~ **101** with a grade of C- or better. EASC 210 recommended.

EFFECTIVE TERM AND YEAR FOR CHANGES

Fall, Spring, Summer and year (please enter in textbox)

Spring 2024

RATIONALE (must be included)

EASC 201 content presupposes that students do not have a grounding in sedimentary rocks and stratigraphic principles, and so all introductory concepts are presented in the course. Completion of EASC 101 (the prerequisite for EASC 210) is sufficient for students to successfully complete EASC 201. This change also increases flexibility for students within and outside of the department.

The description changes more clearly articulate existing course content.

COURSE SUBJECT EASC **NUMBER** 421 **TITLE** Volcanology

TYPE OF CHANGES. Please type 'X' for the appropriate revision(s):

Course number	☐	Units	☐	Prerequisite	☒
Title	☐	Description	☒	Equivalent Statement	☐

WORDING/DESCRIPTION EDITS. Indicate deleted or changed text using ~~strike through~~, indicate added or new text using underline. If you need to enter more text than the box allows, drag the endpoint of the text box to make it bigger, as it will not automatically expand. Please review the "Equivalency statements" section under Information about specific course components if changing equivalent statement(s).

An introduction to ~~physical and chemical~~ volcanology through ~~a comprehensive~~ examination of volcanic eruptions and their consequences. ~~The main t~~**T**opics ~~covered are~~ **include** the rheological properties of magmas and lavas, ~~structure of volcanic landforms,~~ eruption dynamics, monitoring and hazard assessment, ~~the~~ emplacement of volcanic deposits, ~~extraterrestrial volcanism~~ and ~~the effects~~ **environmental impacts** of eruptions ~~on the environment~~. ~~Prerequisite: EASC 207.~~ Co/Prerequisite: EASC 301~~. All~~ with a grade of C- or better. **EASC 207 Recommended.**

EFFECTIVE TERM AND YEAR FOR CHANGES

Fall, Spring, Summer and year (please enter in textbox)

Spring 2024

RATIONALE (must be included)

EASC 421 content provides students with the necessary geophysical principles to understand the course content. Completion of EASC 301 is sufficient for students to successfully complete EASC 421. This change also increases flexibility for students wishing to take EASC 421.

Description change more clearly and succinctly articulates existing course content.