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MEMORANDUM

ATTENTION Senate
FROM Elizabeth Elle, Vice-Chair
Senate Committee on Undergraduate
Studies
RE: New Course Proposals

DATE September 16, 2022

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For information:

Acting under delegated authority at its meeting of September 15, 2022 SCUS approved the following curriculum revision effective Summer 2023.

a. Faculty of Applied Sciences (SCUS 22-51)

1. School of Computing Science

- (i) New Course Proposal: CMPT 493-6, Digital Media Practicum

b. Faculty of Science

1. Department of Mathematics (SCUS 22-53)

- (i) New Course Proposals:

- FAN X91-2, Foundations of Analytical and Quantitative Reasoning I
- FAN X92-2, Foundations of Analytical and Quantitative Reasoning II

2. Department of Molecular Biology and Biochemistry (SCUS 22-54)

- (i) New Course Proposals:

- MBB 445-3, Advanced Microbial Pathogenesis

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>.

COURSE SUBJECT NUMBER

COURSE TITLE LONG — for Calendar/schedule, no more than 100 characters including spaces and punctuation

COURSE TITLE SHORT — for enrollment/transcript, no more than 30 characters including spaces and punctuation

CAMPUS where course will be normally taught: Burnaby Surrey Vancouver Great Northern Way Off campus

COURSE DESCRIPTION — 50 words max. Attach a course outline. Don't include WQB or prerequisites info in this description box.

The design and implementation of interactive digital media systems using modern processes and tools. Projects are provided by external clients or vetted entrepreneurial pitches and are developed by interdisciplinary teams composed of one CMPT 493 student and multiple Master of Digital Media students.

REPEAT FOR CREDIT YES NO Total completions allowed Within a term? YES NO**LIBRARY RESOURCES**

NOTE: Senate has approved (S.93-11) that no new course should be approved by Senate until funding has been committed for necessary library materials. Each new course proposal must be accompanied by the email that serves as proof of assessment. For more information, please visit www.lib.sfu.ca/about/overview/collections/course-assessments.

RATIONALE FOR INTRODUCTION OF THIS COURSE

This course gives students the opportunity to take part in a semester long digital media project in a multi-disciplinary team. Projects are for external clients. Students are expected to gain experience in a number of competencies related to participation in the project. These include: the design process; self-awareness; time management; articulation and teamwork. In addition, students will practice technical skills learned in their Computing Science courses. The exact nature of the technical requirements varies considerably between projects though all relate to digital media of some sort and most use Unity as the development platform.

The practicum has been offered since Summer 2016 as two three-credit Special Research Projects (CMPT 415 and CMPT 416) which is less than ideal. As we expect to continue to offer the practicum in partnership with the Centre for Digital Media it seems appropriate to create a unique course number.



SCHEDULING AND ENROLLMENT INFORMATION

Effective term and year (e.g. FALL 2016) Summer 2023

Term in which course will typically be offered [X] Spring [X] Summer [] Fall

Other (describe) []

Will this be a required or elective course in the curriculum? [] Required [X] Elective

What is the probable enrollment when offered? Estimate: 5

UNITS Indicate number of units: 6

Indicate no. of contact hours: [] Lecture [] Seminar [] Tutorial [] Lab 6 Other; explain below

OTHER

Practicum entails working on a project approximately two days a week.

FACULTY

Which of your present CFL faculty have the expertise to offer this course?

Any - while SFU faculty member supervises students, CDM faculty supervise the project team and are the primary contacts for the students.

WQB DESIGNATION

(attach approval from Curriculum Office)

n/a

PREREQUISITE AND / OR COREQUISITE

CMPT 275 or CMPT 276, at least 80 credit hours, CGPA and UDGPA over 3.0, enrolled in any CS major program. Participation in the practicum is competitive and an application must be submitted to the Undergraduate Chair by a defined due date announced each semester.



EQUIVALENT COURSES [For more information on equivalency, see Equivalency Statements under [Information about Specific Course components.](#)]

1. SEQUENTIAL COURSE [is not hard coded in the student information management system (SIMS).]

Students who have taken (*place relevant course(s) in the blank below (ex: STAT 100)*) **first** may not then take this course for further credit.

2. ONE-WAY EQUIVALENCY [is not hard coded in SIMS.]

(*Place relevant course(s) in the blank below (ex: STAT 100)*) will be accepted in lieu of this course.

3. TWO-WAY EQUIVALENCY [is hard coded and enforced by SIMS.]

Students with credit for (*place relevant course(s) in the blank below (ex: STAT 100)*) may not take this course for further credit.

Does the partner academic unit agree that this is a two-way equivalency? YES NO

Please also have the partner academic unit submit a course change form to update the course equivalency for their course(s).

4. SPECIAL TOPICS PRECLUSION STATEMENT [is not hard coded in SIMS.]

FEEES

Are there any proposed student fees associated with this course other than tuition fees? YES NO

COURSE - LEVEL EDUCATIONAL GOALS (OPTIONAL)



RESOURCES

List any outstanding resource issues to be addressed prior to implementation: space, laboratory equipment, etc:

n/a

OTHER IMPLICATIONS

Final exam required YES NO

Criminal Record Check required YES NO

OVERLAP CHECK

Checking for overlap is the responsibility of the Associate Dean.

Each new course proposal must have confirmation of an overlap check completed prior to submission to the Faculty Curriculum Committee.

Name of Originator

John Edgar

COURSE SUBJECT NUMBER **COURSE TITLE LONG** — for Calendar/schedule, no more than 100 characters including spaces and punctuation**COURSE TITLE SHORT** — for enrollment/transcript, no more than 30 characters including spaces and punctuation**CAMPUS** where course will be normally taught: Burnaby Surrey Vancouver Great Northern Way Off campus**COURSE DESCRIPTION** — 50 words max. Attach a course outline. Don't include WQB or prerequisites info in this description box.

An in-depth look at mathematical reasoning, problem solving and math study skills. Develops students' math study skills, confidence in their quantitative abilities, and to learn how understanding mathematics is both one of the keys to mastering other disciplines, and useful in everyday situations. Topics include language and notation of mathematics.*

REPEAT FOR CREDIT YES NO Total completions allowed Within a term? YES NO**LIBRARY RESOURCES**

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RATIONALE FOR INTRODUCTION OF THIS COURSE

Designed for SFU's Indigenous University Preparation Pathway (IUPP; formerly Indigenous University Preparation Programme) cohort offerings whereby FAN X99-4 is delivered through two two-unit courses over two academic terms. First with completion of FAN X91 (2 units) followed by FAN X92 (2 units). FAN X91 delivers the first half of the curriculum of FAN X99. FAN X92 delivers the second half of the curriculum of FAN X99.

Grading Basis: Grade.

*Description is from the FAN X99 Academic Calendar/Course Catalogue:

Designed for students who need to upgrade their mathematical background in preparation for SFU Q courses. Also recommended for students who wish to refresh skills after several years away from mathematics. An in-depth look at what mathematics is; mathematical reasoning, problem solving and math study skills. Review of fundamental topics and concepts of mathematics and their real-world applications. This course aims to develop students' math study skills, confidence in their quantitative abilities, and to learn how understanding mathematics is both one of the keys to mastering other disciplines, and useful in everyday situations. Students who have taken, have received transfer credit for, or are currently taking any MATH class numbered 100 or higher may not take FAN X99 without the permission from the Department of Mathematics. Students who receive a grade less than C on their first attempt may re-enroll.



SCHEDULING AND ENROLLMENT INFORMATION

Effective term and year (e.g. FALL 2016) Summer 2023

Term in which course will typically be offered [] Spring [] Summer [x] Fall

Other (describe) []

Will this be a required or elective course in the curriculum? [] Required [x] Elective

What is the probable enrollment when offered? Estimate: 30

UNITS

Indicate number of units: Two (2)

Indicate no. of contact hours: [] Lecture [4] Seminar [] Tutorial [] Lab [] Other; explain below

OTHER

The class is taught via interactive problem solving sessions lead by the instructor.

FACULTY

Which of your present CFL faculty have the expertise to offer this course?

Dr. Veselin Jungic, Dr. Sophie Burrill, Dr. Petra Menz, Dr. Joanna Niezen

WQB DESIGNATION

(attach approval from Curriculum Office)

[]

PREREQUISITE AND / OR COREQUISITE

REQ-students who have taken, have received transfer credit for, or are currently taking any MATH class may not take FAN X91 for credit without the permission from the Department of Mathematics.



EQUIVALENT COURSES [For more information on equivalency, see Equivalency Statements under [Information about Specific Course components.](#)]

1. SEQUENTIAL COURSE [is not hard coded in the student information management system (SIMS).]

Students who have taken *(place relevant course(s) in the blank below (ex: STAT 100))* **first** may not then take this course for further credit.

Students who have taken any MATH course numbered 100 or higher or FAN X92 or FAN X99 first may not then take this course for further credit

2. ONE-WAY EQUIVALENCY [is not hard coded in SIMS.]

(Place relevant course(s) in the blank below (ex: STAT 100)) will be accepted in lieu of this course.

3. TWO-WAY EQUIVALENCY [is hard coded and enforced by SIMS.]

Students with credit for *(place relevant course(s) in the blank below (ex: STAT 100))* may not take this course for further credit.

Does the partner academic unit agree that this is a two-way equivalency? YES NO

Please also have the partner academic unit submit a course change form to update the course equivalency for their course(s).

4. SPECIAL TOPICS PRECLUSION STATEMENT [is not hard coded in SIMS.]

FEES

Are there any proposed student fees associated with this course other than tuition fees? YES NO

COURSE – LEVEL EDUCATIONAL GOALS (OPTIONAL)



RESOURCES

List any outstanding resource issues to be addressed prior to implementation: space, laboratory equipment, etc:

OTHER IMPLICATIONS

Final exam required YES NO

Criminal Record Check required YES NO

OVERLAP CHECK

Checking for overlap is the responsibility of the Associate Dean.

Each new course proposal must have confirmation of an overlap check completed prior to submission to the Faculty Curriculum Committee.

Name of Originator

JF Williams, Chair, UCC MATH (jfwillia@sfu.ca) / Mar-y-paz Rivera, IAUPP (iaupp@sfu.ca)

COURSE SUBJECT NUMBER **COURSE TITLE LONG** — for Calendar/schedule, no more than 100 characters including spaces and punctuation**COURSE TITLE SHORT** — for enrollment/transcript, no more than 30 characters including spaces and punctuation**CAMPUS** where course will be normally taught: Burnaby Surrey Vancouver Great Northern Way Off campus**COURSE DESCRIPTION** — 50 words max. Attach a course outline. Don't include WQB or prerequisites info in this description box.

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REPEAT FOR CREDIT YES NO Total completions allowed Within a term? YES NO**LIBRARY RESOURCES**

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RATIONALE FOR INTRODUCTION OF THIS COURSE

Designed for SFU's Indigenous University Preparation Pathway (IUPP; formerly Indigenous University Preparation Programme cohort offerings whereby FAN X99-4 is delivered through two two-unit courses over two academic terms. First with completion of FAN X91 (2 units) followed by FAN X92 (2 units). FAN X91 delivers the first half of the curriculum of FAN X99. FAN X92 delivers the second half of the curriculum of FAN X99.

Grading Basis: Grade.

*Description is from the FAN X99 Academic Calendar/Course Catalogue:

Designed for students who need to upgrade their mathematical background in preparation for SFU Q courses. Also recommended for students who wish to refresh skills after several years away from mathematics. An in-depth look at what mathematics is; mathematical reasoning, problem solving and math study skills. Review of fundamental topics and concepts of mathematics and their real-world applications. This course aims to develop students' math study skills, confidence in their quantitative abilities, and to learn how understanding mathematics is both one of the keys to mastering other disciplines, and useful in everyday situations. Students who have taken, have received transfer credit for, or are currently taking any MATH class numbered 100 or higher may not take FAN X99 without the permission from the Department of Mathematics. Students who receive a grade less than C on their first attempt may re-enroll.



SCHEDULING AND ENROLLMENT INFORMATION

Effective term and year (e.g. FALL 2016) Summer 2023

Term in which course will typically be offered [checked] Spring [] Summer [] Fall

Other (describe) []

Will this be a required or elective course in the curriculum? [] Required [checked] Elective

What is the probable enrollment when offered? Estimate: 30

UNITS Indicate number of units: Two (2)

Indicate no. of contact hours: [] Lecture [4] Seminar [] Tutorial [] Lab [] Other; explain below

OTHER

The class is taught via interactive problem solving sessions lead by the instructor.

FACULTY

Which of your present CFL faculty have the expertise to offer this course?

Dr. Veselin Jungic, Dr. Sophie Burrill, Dr. Petra Menz, Dr. Joanna Niezen

WQB DESIGNATION

(attach approval from Curriculum Office)

[]

PREREQUISITE AND / OR COREQUISITE

REQ-FANX91 with a grade of at least a C. Students who have taken, have received transfer credit for, or are currently taking any MATH class may not take FAN X92 for credit without the permission from the Department of Mathematics.



EQUIVALENT COURSES [For more information on equivalency, see Equivalency Statements under [Information about Specific Course components.](#)]

1. SEQUENTIAL COURSE [is not hard coded in the student information management system (SIMS).]

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Students who have taken any MATH course numbered 100 or higher first may not then take this course for further credit

2. ONE-WAY EQUIVALENCY [is not hard coded in SIMS.]

(Place relevant course(s) in the blank below (ex: STAT 100)) will be accepted in lieu of this course.

3. TWO-WAY EQUIVALENCY [is hard coded and enforced by SIMS.]

Students with credit for *(place relevant course(s) in the blank below (ex: STAT 100))* may not take this course for further credit.

Students who have taken FAN X99 may not take this course for further credit.

Does the partner academic unit agree that this is a two-way equivalency? YES NO

Please also have the partner academic unit submit a course change form to update the course equivalency for their course(s).

4. SPECIAL TOPICS PRECLUSION STATEMENT [is not hard coded in SIMS.]

FEES

Are there any proposed student fees associated with this course other than tuition fees? YES NO

COURSE – LEVEL EDUCATIONAL GOALS (OPTIONAL)



RESOURCES

List any outstanding resource issues to be addressed prior to implementation: space, laboratory equipment, etc:

OTHER IMPLICATIONS

Final exam required YES NO

Criminal Record Check required YES NO

OVERLAP CHECK

Checking for overlap is the responsibility of the Associate Dean.

Each new course proposal must have confirmation of an overlap check completed prior to submission to the Faculty Curriculum Committee.

Name of Originator

JF Williams, Chair, UCC MATH (jfwillia@sfu.ca) / Mar-y-paz Rivera, IAUPP (iaupp@sfu.ca)

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RATIONALE FOR INTRODUCTION OF THIS COURSE



SCHEDULING AND ENROLLMENT INFORMATION

Effective term and year (e.g. FALL 2016) Summer 2023

Term in which course will typically be offered [] Spring [] Summer [x] Fall

Other (describe) []

Will this be a required or elective course in the curriculum? [] Required [x] Elective

What is the probable enrollment when offered? Estimate: 50

UNITS Indicate number of units: 3

Indicate no. of contact hours: 3 Lecture [] Seminar 1 Tutorial [] Lab [] Other; explain below

OTHER

[]

FACULTY

Which of your present CFL faculty have the expertise to offer this course?

Lisa Craig, Mark Brockman, Amy Lee

WQB DESIGNATION

(attach approval from Curriculum Office)

[]

PREREQUISITE AND / OR COREQUISITE

Prerequisite: MBB 328 and either MBB 326 or HSCI 326, all with a minimum grade of C.



EQUIVALENT COURSES [For more information on equivalency, see Equivalency Statements under [Information about Specific Course components.](#)]

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4. SPECIAL TOPICS PRECLUSION STATEMENT [is not hard coded in SIMS.]

FEES

Are there any proposed student fees associated with this course other than tuition fees? YES NO

COURSE – LEVEL EDUCATIONAL GOALS (OPTIONAL)



RESOURCES

List any outstanding resource issues to be addressed prior to implementation: space, laboratory equipment, etc:

none

OTHER IMPLICATIONS

Final exam required YES NO

Criminal Record Check required YES NO

OVERLAP CHECK

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Name of Originator

Ingrid Northwood