

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

MEMORANDUM —			
ATTENTION	Senate	DATE	February 3, 2017
FROM	Wade Parkhouse, Acting Chair Senate Committee on	PAGES	1/2
	Undergraduate Studies	i i	$\sum_{i=1}^{n}$
RE:	Program Changes (SCUS 17-08)		Vallause

#### For information:

Acting under delegated authority at its meeting of February 2, 2017 SCUS approved the following curriculum revisions effective Fall 2017.

#### a. Beedie School of Business (SCUS 17-08a)

- (i) GPA Program changes to the
  - Business Certificates
    - o Business Analytics and Decision Making
    - o Business Technology Management
    - o Corporate Environmental and Social Sustainability
    - Innovation and Entrepreneurship
    - International Experiential Learning
  - Molecular Biology and Biochemistry and Business Administration Joint Honours
  - Business Major Bachelor of Business Administration
  - Business and Communication Joint Major Bachelor of Arts or Bachelor of Business Administration
  - Business and Economics Joint Major Bachelor of Arts or Bachelor of Business Administration
  - Business and Geography Joint Major Bachelor of Arts or Bachelor of Business Administration
  - Business and Psychology Joint Major Bachelor of Arts or Bachelor of Business Administration
  - Information Systems in Business Administration and Computing Science Joint Major

     Bachelor of Business Administration or Bachelor of Science
  - Business Honours Bachelor of Business Administration
  - Mechatronic System Engineering and Business Double Degree Program Major
  - Business Grade Requirements

- Beedie School of Business Undergraduate Program Policies, Non-Majors' Access to Business Courses
- (ii) Lower Division requirement changes to the Marketing Concentration and International Business Concentration
  - Major Business Bachelor of Business Administration, Mechatronic Systems Engineering and Business Double Degree Program Bachelor of Applied Science and Bachelor of Business Administration
  - o Honours Business Bachelor of Business Administration
  - Joint Major Business and Economics Bachelor of Arts or Bachelor of Business Administration Interactive Arts and Technology and Business Bachelor of Arts or Bachelor of Business Administration Interactive Arts and Technology and Business Bachelor of Science
  - Joint Honours Business and Economics Bachelor of Arts or Bachelor of Business Administration

(iii) Lover Division requirement changes to the Business Minor, Beedie School of Business b. Faculty of Science (SCUS 17-08b)

1. Department of Statistics and Actuarial Science

(i) Requirement changes to the STAT major, minor and honours pergenses

2. Department of Biomedical Physiology and Kinesiology

(i) Change in continuance GPA for BIF and KIN Majors from 2.2 to 2.5

- 3. Department of Molecular Biology and Biochemistry
  - (i) Requirement changes to the Molecular Biology and Biochemistry and Computing Science Joint Major and Joint Honours programs

12 n c 3

15 78 3



#### Calendar Entry Change Name of Program or Name of Faculty Business Certificates

Rationale for change:

Beedie wishes to adopt an upper-division course access & graduation requirement of a Business GPA of 2.30 or greater. This will also be the minimum GPA requirement for internal transfer admission.

By adopting a Business-specific GPA, it is expected that Beedie will be better able to advise students on courses relevant to the program and monitor students' progress. This is also consistent with many other SFU programs as research suggests that discipline-specific courses are much more relevant to the success of a student's all-over progress.

Effective term and year: Fall 2017

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

Business Analytics and Decision Making Certificate Business Technology Management Certificate Corporate Environmental and Social Sustainability Certificate Innovation and Entrepreneurship Certificate International Experiential Learning Certificate

**Calendar Change: "**to" and "from" sections are not required. All deletions should be crossed out as follows: sample. All additions should be marked by a **bold**.

### Grade Requirements

In addition to normal university grade point average requirements, the Beedie School of Business requires a minimum 2.40 2.30 overall SFU Business course cumulative grade point average (CGPA) for entry into all 300 and 400 division business courses.



Calendar Entry Change Name of Program or Name of Faculty MBB – BUS Joint

Rationale for change:

Beedie wishes to adopt an upper-division course access & graduation requirement of a Business GPA of 2.30 or greater. This will also be the minimum GPA requirement for internal transfer admission.

By adopting a Business-specific GPA, it is expected that Beedie will be better able to advise students on courses relevant to the program and monitor students' progress. This is also consistent with many other SFU programs as research suggests that discipline-specific courses are much more relevant to the success of a student's all-over progress.

Effective term and year: Fall 2017

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

Molecular Biology and Biochemistry and Business Administration Joint Honours

**Calendar Change:** "to" and "from" sections are not required. All deletions should be crossed out as follows: sample. All additions should be marked by a **bold**.

### Grade Requirements

For entry and continuance, the following grade point averages will be used for the Beedie School of Business:

minimum 3.00 cumulative grade point average minimum 3.00 cumulative upper division grade point average minimum 3.00 grade point average for upper division BUS and BUEC courses minimum 3.00 cumulative grade point average on all BUS and BUEC courses

For graduation, students must also meet the required minimum GPAs in accordance with the University and both the Beedie School of Business and Molecular Biology and Biochemistry. This includes achieving a minimum cumulative grade point average of 3.0, and an upper division grade point average of 3.0.

April 2016





**Course Access** 

In addition to normal university grade point average requirements, the Beedie School of Business requires a minimum 2.30 overall SFU Business course grade point average for entry into all 300 and 400 division business courses.



#### Calendar Entry Change Name of Program or Name of Faculty Business Major Grade Requirements

Rationale for change:

Beedie wishes to adopt an upper-division course access & graduation requirement of a Business GPA of 2.30 or greater. This will also be the minimum GPA requirement for internal transfer admission.

By adopting a Business-specific GPA, it is expected that Beedie will be better able to advise students on courses relevant to the program and monitor students' progress. This is also consistent with many other SFU programs as research suggests that discipline-specific courses are much more relevant to the success of a student's all-over progress.

Effective term and year: Fall 2017

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

Business Major – Bachelor of Business Administration Business and Communication Joint Major – Bachelor of Arts or Bachelor of Business Administration Business and Economics Joint Major – Bachelor of Arts or Bachelor of Business Administration Business and Geography Joint Major – Bachelor of Arts or Bachelor of Business Administration Business and Psychology Joint Major – Bachelor of Arts or Bachelor of Business Administration Information Systems in Business Administration and Computing Science Joint Major – Bachelor of Business Administration or Bachelor of Science

**Calendar Change:** "to" and "from" sections are not required. All deletions should be crossed out as follows: sample. All additions should be marked by a **bold**.

### Grade Requirements

In addition to normal university grade point average requirements, the Beedie School of Business requires a minimum 2.40 2.30 overall SFU Business course cumulative grade point average (CGPA) for entry into all 300 and 400 division business courses.



# A minimum 2.30 overall SFU Business course grade point average is required for graduation from a Business major, joint major, or double degree program.



#### Calendar Entry Change Name of Program or Name of Faculty Business Honours

Rationale for change:

Beedie wishes to adopt an upper-division course access & graduation requirement of a Business GPA of 2.30 or greater. This will also be the minimum GPA requirement for internal transfer admission.

By adopting a Business-specific GPA, it is expected that Beedie will be better able to advise students on courses relevant to the program and monitor students' progress. This is also consistent with many other SFU programs as research suggests that discipline-specific courses are much more relevant to the success of a student's all-over progress.

Effective term and year: Fall 2017

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

Business Honours – Bachelor of Business Administration

**Calendar Change:** "to" and "from" sections are not required. All deletions should be crossed out as follows: sample. All additions should be marked by a **bold**.

### **Course Access**

In addition to normal university grade point average requirements, the Beedie School of Business requires a minimum 2.40 2.30 overall SFU Business course cumulative grade point average (CGPA) for entry into all 300 and 400 division business courses.

#### Calendar Entry Change Name of Program or Name of Faculty Business-Mechatronics Double Degree

Rationale for change:

Beedie wishes to adopt an upper-division course access & graduation requirement of a Business GPA of 2.30 or greater. This will also be the minimum GPA requirement for internal transfer admission.

By adopting a Business-specific GPA, it is expected that Beedie will be better able to advise students on courses relevant to the program and monitor students' progress. This is also consistent with many other SFU programs as research suggests that discipline-specific courses are much more relevant to the success of a student's all-over progress.

Effective term and year:

Fall 2017

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

Mechatronic Systems Engineering and Business Double Degree Program Major

**Calendar Change:** "to" and "from" sections are not required. All deletions should be crossed out as follows: sample. All additions should be marked by a **bold**.

#### Grade Requirements

A grade of C- or better in prerequisite courses is required to register in mechatronic systems engineering courses.

In addition to normal university grade point average requirements, the Beedie School of Business requires a minimum 2.30 overall SFU Business course grade point average for entry into all 300 and 400 division business courses.

A minimum 2.30 overall SFU Business course grade point average is required for graduation from a Business Major, Joint Major, or Double Degree program.



#### Calendar Entry Change Name of Program or Name of Faculty Business Grade Requirements

Rationale for change:

Beedie wishes to adopt an upper-division course access & graduation requirement of a Business GPA of 2.30 or greater. This will also be the minimum GPA requirement for internal transfer admission.

By adopting a Business-specific GPA, it is expected that Beedie will be better able to advise students on courses relevant to the program and monitor students' progress. This is also consistent with many other SFU programs as research suggests that discipline-specific courses are much more relevant to the success of a student's all-over progress.

Effective term and year: Fall 2017

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

**Business Grade Requirements** 

http://www.sfu.ca/students/calendar/2017/spring/faculties-research/faculty-business.html

**Calendar Change:** "to" and "from" sections are not required. All deletions should be crossed out as follows: sample. All additions should be marked by a **bold**.

#### Grade Requirements

In addition to normal university grade point average requirements, the Beedie School of Business requires a minimum 2.40 2.30 overall SFU Business course cumulative grade point average (CGPA) for entry into all 300 and 400 division business courses.

A minimum 2.30 overall SFU Business course grade point average is required for graduation from a Business major, joint major, or double degree program.

A minimum grade point average of 2.00 calculated on all courses applied towards the certificate is required for graduation from a business certificate.

A minimum grade point average of 2.00 calculated on all courses applied towards the



minor is required for graduation from a business minor program.

The required minimum overall SFU Business course grade point average for entry into all 300 and 400 division business minor courses is 2.00.



#### Calendar Entry Change Name of Program or Name of Faculty Non-Business Student Course Access

Rationale for change:

Beedie wishes to adopt an upper-division course access & graduation requirement of a Business GPA of 2.30 or greater. This will also be the minimum GPA requirement for internal transfer admission.

By adopting a Business-specific GPA, it is expected that Beedie will be better able to advise students on courses relevant to the program and monitor students' progress. This is also consistent with many other SFU programs as research suggests that discipline-specific courses are much more relevant to the success of a student's all-over progress.

Effective term and year: Fall 2017

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

Beedie School of Business Undergraduate Program Policies, Non-Majors' Access to Business Courses

http://www.sfu.ca/students/calendar/2017/fall/faculties-research/faculty-business.html

**Calendar Change:** "to" and "from" sections are not required. All deletions should be crossed out as follows: sample. All additions should be marked by a **bold**.

Non-Majors' Access to Business Courses 300 AND 400 DIVISION BUS COURSE ENROLLMENT RESTRICTIONS

Students other than those accepted into a program in business administration may complete selected 300 and 400 division business administration courses contingent upon

- space available on the day before the term begins
- meeting the prerequisites for the requested course
- required minimum overall SFU Business course GPA of 2.30
- recommended minimum cumulative grade point average of 2.67

April 2016



Registration in BUS 360W is limited to students who are approved in a business major, joint major, honours, or joint honours program.

Additionally, **O**nly business students admitted to the Accounting concentration will be permitted to enroll in upper division (300- and 400-level) accounting courses required for this concentration (with the exception of BUS 320).

Only students admitted to the Business minor will be permitted to enroll in upper division Business Minor courses (BUS 311, 340, 341, and 401).



#### Calendar Entry Change Name of Program or Name of Faculty Marketing Concentration

Rationale for change:

This new marketing course was approved in December 2016 by Beedie's UCC. It provides an additional option at the 400-level for students pursuing a marketing concentration.

Effective term and year: Fall 2017

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

#### Major

Business Bachelor of Business Administration

Mechatronic Systems Engineering and Business Double Degree Program Bachelor of Applied Science and Bachelor of Business Administration

#### Honours

Business Bachelor of Business Administration

#### Joint Major

Business and Economics Bachelor of Arts or Bachelor of Business Administration Interactive Arts and Technology and Business Bachelor of Arts or Bachelor of Business Administration

Interactive Arts and Technology and Business Bachelor of Science

#### Joint Honours

Business and Economics Bachelor of Arts or Bachelor of Business Administration

**Calendar Change:** "to" and "from" sections are not required. All deletions should be crossed out as follows: sample. All additions should be marked by a **bold**.

#### Marketing

For this concentration, students complete all of

BUS 343 - Introduction to Marketing (3) BUS 345 - Marketing Research (4) BUS 347 - Consumer Behavior (3) and three of

BUS 441 - Web Analytics (3) BUS 455 - Product & Brand Management (3)



- 1	
	BUS 443 - New Product Development and Design (3)
	BUS 444 - Business to Business Marketing (3)
	BUS 445 - Customer Analytics (3)
	BUS 446 - Marketing Strategy (4)
	BUS 447 - Global Marketing Management (3)
	BUS 448 - Integrated Marketing Communications (4)
	BUS 449 - Ethical Issues in Marketing (3)
	BUS 459 - Services Marketing (3)
	BUS 490 - Selected Topics in Business Administration (3) **
	BUS 491 - Selected Topics in Business Administration (3) **
	BUS 492 - Selected Topics in Business Administration (3) **
	BUS 493 - Selected Topics in Business Administration (3) **
	BUS 494 - Selected Topics in Business Administration (3) **
	BUS 495 - Selected Topics in Business Administration (3) **
	BUS 496 - Selected Topics in Business Administration (5) **
	** When offered as a selected topics course in Marketing.



#### Calendar Entry Change Name of Program or Name of Faculty International Business Concentration

Rationale for change:

Reducing the number of courses required for the IB concentration will make it more accessible for students to complete, and more likely to be paired with another concentration.

Effective term and year:

Fall 2017

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

#### Major

Business Bachelor of Business Administration

Mechatronic Systems Engineering and Business Double Degree Program Bachelor of Applied Science and Bachelor of Business Administration

#### Honours

Business Bachelor of Business Administration

#### Joint Major

Business and Economics Bachelor of Arts or Bachelor of Business Administration Interactive Arts and Technology and Business Bachelor of Arts or Bachelor of Business Administration

Interactive Arts and Technology and Business Bachelor of Science

#### Joint Honours

Business and Economics Bachelor of Arts or Bachelor of Business Administration

**Calendar Change:** "to" and "from" sections are not required. All deletions should be crossed out as follows: sample. All additions should be marked by a **bold**.

International Business For this concentration, students complete BUS 346 - International Business (3) and <del>four three</del> of BUS 418 - International Financial Management (3) BUS 430 - Cross-Cultural Management (3)

BUS 431 - Business with East Asian Countries (3)

BUS 432 - International Human Resource Management (3)



BUS 434 - Foreign Market Entry (3) BUS 435 - Management of International Firms (3) BUS 447 - Global Marketing Management (3) BUS 490 - Selected Topics in Business Administration (3) \*\* BUS 491 - Selected Topics in Business Administration (3) \*\* BUS 492 - Selected Topics in Business Administration (3) \*\* BUS 493 - Selected Topics in Business Administration (3) \*\* BUS 494 - Selected Topics in Business Administration (3) \*\* BUS 495 - Selected Topics in Business Administration (3) \*\* BUS 496 - Selected Topics in Business Administration (3) \*\* Other 400 division courses deemed to have significant international business relevance may, with prior faculty permission, be substituted for the above courses. These may be offered in another faculty. A course substitution for international business cannot be used for any other concentration.

Students concentrating in international business are strongly advised to consider combining it with another business concentration.

\*\* When offered as a selected topics course in International Business



#### Calendar Entry Change Name of Program or Name of Faculty Business Minor, Beedie School of Business

Rationale for change:

Legal and ethical considerations create risks for businesses, and these risks must be understood, avoided, minimized or managed. A practical understanding of law and ethics has thus become a critical element in any business. Having said this, while students majoring in business have access to and are required to take both Bus 393-Commercial law and Bus 303-Business Ethics, students in the Business Minor program are not required to take these courses nor do they have the same access or priority for registering in these courses. Moreover, most students in the Minor program do not want to take two additional courses to extend their education in the Minor program. Thus, many graduate from the Minor program without any grounding in the very important areas of business law and ethics. This is most unfortunate as grounding in business law and ethics is, arguably, as important as any of the mandatory or required courses in the Minor program.

Effective term and year:

Fall 2017

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

**Calendar Change:** "to" and "from" sections are not required. All deletions should be crossed out as follows: sample. All additions should be marked by a **bold**.

Program Requirements Lower Division Requirements

Students complete all of

BUS 200 - Business Fundamentals (3) **BUS 233 – Introduction to Business Law & Ethics (3)** BUS 237 - Introduction to Business Technology Management (3) BUS 251 - Financial Accounting I (3) BUS 272 - Behavior in Organizations (3) ECON 103 - Principles of Microeconomics (4) and one of\*

ECON 105 - Principles of Macroeconomics (4) ENGL 111W - Literary Classics in English (3)



ENGL 112W - Literature Now (3) ENGL 113W - Literature and Performance (3) ENGL 114W - Language and Purpose (3) ENGL 115W - Literature and Culture (3) ENGL 199W - Introduction to University Writing (3) PHIL 100W - Knowledge and Reality (3) PHIL 105 - Critical Thinking (3) PHIL 120W - Moral Problems (3) WL 101W - Writing About Literature (3) WL 103W - Pre-Modern World Literature (3) WL 104W - Modern World Literature (3) \* any one of these courses may be replaced by any three unspecified transfer units in English or in ENGL-Writing at the 100- or 200-level.



#### Calendar Entry Change Name of Program or Name of Faculty: STATISTICS MAJOR, FACULTY OF SCIENCE

Rationale for change:

- 1. ACMA 210 is a challenging course that is a gateway to the ACMA program. Students who do poorly in this course often end up in a STAT program. Although they might perform reasonably in their STAT program, their "program GPA" (i.e., their GPA in all STAT, MATH, MACM, and ACMA courses, which we use as a basis for our continuation requirement) may be heavily influenced by their poor grade in ACMA 210. We thus would like to give students the option of excluding ACMA 210 from their program GPA for the purposes of assessment for continuation.
- 2. Instructions for admission to the STAT minor should appear on the STAT minor page.

Effective term and year: 1181

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

STAT major

**Calendar Change:** "to" and "from" sections are not required. All deletions should be crossed out as follows: sample. All additions should be marked by a **bold**.

# Admission Requirements

Students may be admitted by direct entry on their university application, or by application to the Department of Statistics, after they have been admitted. <del>Students wishing to do a statistics minor must apply to the department.</del>

Visit <u>http://www.stat.sfu.ca/undergrad/undergrad admission/undergrad admission stat.ht</u> <u>ml</u> to view admission <del>and continuation</del> requirements.

# **GPA Required for Continuation**

To continue in the program, students must maintain at least a 2.25 grade point average in MATH, STAT, MACM and ACMA courses (excluding ACMA 210 if doing so results in a higher GPA).

February 2016



#### Calendar Entry Change Name of Program or Name of Faculty: STATISTICS MINOR, FACULTY OF SCIENCE

Rationale for change:

Our admission requirements should be listed in our STAT minor calendar entry.

Effective term and year: 1181

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

STAT minor

**Calendar Change:** "to" and "from" sections are not required. All deletions should be crossed out as follows: sample. All additions should be marked by a **bold**.

## **Admission Requirements**

Students wishing to do a statistics minor must apply to the department. Visit <u>http://www.stat.sfu.ca/undergrad/undergrad admission/undergrad admission s</u> <u>tat.html</u> to view admission requirements.



#### Calendar Entry Change Name of Program or Name of Faculty: STATISTICS HONOURS, FACULTY OF SCIENCE

Rationale for change:

- 1. ACMA 210 is a challenging course that is a gateway to the ACMA program. Students who do poorly in this course often end up in a STAT program. Although they might perform reasonably in their STAT program, their "program GPA" (i.e., their GPA in all STAT, MATH, MACM, and ACMA courses, which we use as a basis for our continuation requirement) may be heavily influenced by their poor grade in ACMA 210. We thus would like to give students the option of excluding ACMA 210 from their program GPA for the purposes of assessment for continuation.
- 2. Instructions for admission to the STAT minor should appear on the STAT minor page.

Effective term and year: 1181

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

STAT honours

**Calendar Change:** "to" and "from" sections are not required. All deletions should be crossed out as follows: sample. All additions should be marked by a **bold**.

# Admission Requirements

Students may be admitted by <del>direct entry on their university application, or by</del> application to the Department of Statistics, after they have been admitted. <del>Students applying for a statistics</del> minor must apply to the department.

Visit <u>http://www.stat.sfu.ca/undergrad/undergrad admission/undergrad admission stat.ht</u> <u>ml</u> to view for admittance admission and continuation-requirements.

# **GPA Required for Continuation**

To continue in the program, students must maintain at least a 3.00 grade point average (GPA) in MATH, STAT, MACM and ACMA courses (excluding ACMA 210 if doing so results in a higher GPA).

Department of Biomedical Physiology & Kinesiology Simon Fraser University Calendar | Spring 2017 Biomedical Physiology & Kinesiology Majors BACHELOR OF SCIENCE

#### **Continuance Requirement**

After a student has completed 24 credits, a Science cumulative grade point average (CGPA) of not less than <u>2.50</u> <del>2.20</del> is required for continuance in the major. Students whose Science CGPA falls below <u>2.50</u> <del>2.20</del>, will be sent a warning letter and if <u>at the</u> <u>end of in</u> the subsequent term the Science CGPA is less than <u>2.50</u> <del>2.20</del> these students shall be withdrawn from the BIF or KIN Major. Students who have completed 90 or more units and whose Science CGPA <u>falls</u> fall below a <u>2.50</u> <del>2.20</del>, but are at a minimum of <u>is</u> <u>at least 2.00</u>, will be allowed to complete their Biomedical Physiology or Kinesiology major. Students must achieve a minimum of a C- grade in all required courses.

WHEN .

#### Revision to Molecular Biology and Biochemistry and Computing Science Joint Major

John Edgar

December 2016

#### Description

Remove CMPT 320 as a program requirement and add CMPT 405 as a requirement.

#### Rationale

CMPT 320 (Social Implications of a Computerized Society) was removed as a requirement for the Computing Science Major and Honours programs (approved by Senate: S-16-41). This change is intended to bring the joint major into line with the major program. CMPT 405 is to be added as a required course (rather than a permitted elective) as its content is considered important to students in this program.

### **Program Requirements**

#### **Upper Division Requirements**

Students complete 44-46 units, including all of

CMPT 307 - Data Structures and Algorithms (3) <del>CMPT 320 - Social Implications - Computerized Society (3)</del> CMPT 354 - Database Systems I (3) <u>CMPT 405 - Design and Analysis of Computing Algorithms (3)</u> CMPT 441 - Computational Biology (3) MBB 308 - Molecular Biology Laboratory (3) MBB 331 - Molecular Biology (3) MBB 342 - Introductory Genomics and Bioinformatics (3) STAT 302 - Analysis of Experimental and Observational Data (3)

and one of

CMPT 376W - Technical Writing and Group Dynamics (3) MBB 309W - Biochemistry Laboratory (4)

and at least two of

CMPT 305 - Computer Simulation and Modelling (3) CMPT 310 - Artificial Intelligence Survey (3) CMPT 340 - Biomedical Computing (3) CMPT 361 - Introduction to Computer Graphics (3) MACM 316 - Numerical Analysis I (3) MBB 321 - Intermediary Metabolism (3)

and at least three of

CMPT 405 - Design and Analysis of Computing Algorithms (3) CMPT 413 - Computational Linguistics (3) CMPT 419 - Special Topics in Artificial Intelligence (3) CMPT 454 - Database Systems II (3) MBB 438 - Human Molecular Genetics (3) MBB 441 - Bioinformatics (3) MBB 461 - Comparative Genomics (3) MBB 462 - Human Genomics (3) MBB 463 - Forensic Genomics (3)

Students may be required to take an additional elective course to bring their upper division total to 45 units.

**Revision to Molecular Biology and Biochemistry and Computing Science Joint Honours** 

John Edgar

December 2016

#### Description

Remove CMPT 320 as a program requirement.

#### Rationale

CMPT 320 (Social Implications of a Computerized Society) was removed as a requirement for the Computing Science Major and Honours programs (approved by Senate: S-16-41). This change is intended to bring the Joint Honors into line with the Honors program. CMPT 405 is to be added as a required course (rather than a permitted elective) as its content is considered important to students in this program.

### **Program Requirements**

### **Upper Division Requirements**

Students complete a total of 54-55 units, including all of

CMPT 307 - Data Structures and Algorithms (3)

CMPT 320 - Social Implications - Computerized Society (3)

CMPT 354 - Database Systems I (3)

CMPT 405 - Design and Analysis of Computing Algorithms (3)

CMPT 441 - Computational Biology (3)

MBB 308 - Molecular Biology Laboratory (3)

MBB 331 - Molecular Biology (3)

MBB 342 - Introductory Genomics and Bioinformatics (3)

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

and one of

CMPT 376W - Technical Writing and Group Dynamics (3) MBB 309W - Biochemistry Laboratory (4)

and at least two of

CMPT 305 - Computer Simulation and Modelling (3)

CMPT 310 - Artificial Intelligence Survey (3) CMPT 340 - Biomedical Computing (3) CMPT 361 - Introduction to Computer Graphics (3) MACM 316 - Numerical Analysis I (3) MBB 321 - Intermediary Metabolism (3)

and at least three of

CMPT 405 - Design and Analysis of Computing Algorithms (3)

CMPT 413 - Computational Linguistics (3)

CMPT 419 - Special Topics in Artificial Intelligence (3)

CMPT 454 - Database Systems II (3)

MBB 438 - Human Molecular Genetics (3)

MBB 441 - Bioinformatics (3)

MBB 461 - Comparative Genomics (3)

MBB 462 - Human Genomics (3)

MBB 463 - Forensic Genomics (3)

and six additional 400 division computing science units and six research related MBB units which are fulfilled by completing MBB 496-6