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MEMORANDUM

ATTENTION

FROM

Senate
Wade Parkhouse, Chair
Senate Committee on
Undergraduate Studies
Program Changes

DATE

PAGES

May 8, 2020
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RE:

For information:

Acting under delegated authority at its meeting of May 7, 2020 SCUS approved the following curriculum revisions effective Spring 2021.

a. Faculty of Applied Sciences (SCUS 20-41)

1. School of Computing Science

- (i) Lower division requirement changes to the Computing Science Dual Degree Major program
- (ii) Lower division requirement changes to the Computing Science and Linguistics Joint Major program
- (iii) Lower division requirement changes to the Computing Science Bachelor of Science or Bachelor of Arts program and the Computing Science Honours program (Bachelor of Science or Bachelor of Arts)

b. Faculty of Arts and Social Sciences (SCUS 20-42)

1. Faculty of Arts and Social Sciences

- (i) Change to the Faculty of Arts and Social Sciences Degree requirements

2. Department of Humanities

- (i) Requirement changes to the:
 - Humanities Major
 - English and Humanities Joint Major
 - French and Humanities Joint Major
 - History and Humanities Joint Major
 - Humanities and Gender, Sexuality, and Women's Studies Joint Major
 - Philosophy and Humanities Joint Major
 - Humanities Minor
 - Humanities Extended Minor

- Certificate in Medieval and Renaissance Studies
- Certificate in Religious Studies
- Certificate in Hellenic Studies

c. Faculty of Environment (SCUS 20-43)

1. School of Environmental Science

- (i) Upper and lower division requirement changes to the Environmental Science Major and Honours programs

2. Department of Geography

- (i) Upper division requirement changes to the BA Human Geography Major and Honours programs
- (ii) Upper division requirement changes to the Global Environmental Systems Major and Honours programs
- (iii) Lower division requirement changes to the BSc Physical Geography Honours programs
- (iv) Program requirement changes to the Urban Studies Certificate

d. Faculty of Science (SCUS 20-44)

1. Department of Biomedical Physiology and Kinesiology

- (i) Upper division requirement changes to the Behavioural Neuroscience Major and Honours programs
- (ii) Upper division requirement changes to the Kinesiology Major and Honours programs
- (iii) Upper division requirement changes to the Biomedical Physiology Major, Honours and Minor programs

2. Department of Statistics and Actuarial Science (effective Fall 2020)

- (i) Upper division requirement changes to the Actuarial Science Major and Honours

3. Data Science Program (effective Fall 2020)

- (i) Upper division requirement changes to the Data Science Major and Honours programs

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>.

Name of Program or Name of Faculty Computing Science
Rationale for change: cmpt 105W becomes a core course for CS programs, as it is a prerequisite for the required course cmpt 376W (starting Fall 2020). We want to make this explicit for CS DDP Major, by replacing PHIL 120W with cmpt 105W in the LD requirements.
Effective term and year: Spring 2021
The following program(s) will be affected by these changes: Computing Science Dual 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**.

Program Requirements Lower Division Requirements Foundational Courses CMPT 120 - Introduction to Computing Science and Programming I (3) MATH 151 - Calculus I (3) MATH 152 - Calculus II (3) MATH 240 - Algebra I: Linear Algebra (3) PHIL 120W - Moral Problems (3) CMPT 105W - Social Issues and Communication Strategies in Computing Science (3)



Calendar Entry Change Computing Science and Linguistics Joint Major

Rationale for change:

CMPT 376W will have CMPT 105W as a prerequisite, starting Fall 2020. We need to make CMPT 105W explicitly required in the programs where CMPT 376W is required. The Linguistics Department was consulted on this change, and are OK with it.

Effective term and year:

Spring 2021

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

Computing Science and Linguistics Joint 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**.

Program Requirements

Lower Division Requirements

Computing Science Requirements

Students complete at least 21 units, including either all of

CMPT 120 - Introduction to Computing Science and Programming I (3)

CMPT 125 - Introduction to Computing Science and Programming II (3)

CMPT 127 - Computing Laboratory (3)

or both of

CMPT 130 - Introduction to Computer Programming I (3)

CMPT 135 - Introduction to Computer Programming II (3)

and all of

CMPT 105W - Social Issues and Communication Strategies in Computing Science (3)



CMPT 225 - Data Structures and Programming (3)
CMPT 276 - Introduction to Software Engineering (3)
CMPT 295 - Introduction to Computer Systems (3)
MACM 101 - Discrete Mathematics I (3)
MACM 201 - Discrete Mathematics II (3)

Name of Program or Name of Faculty Computing Science
Rationale for change: CMPT 376W will have CMPT 105W as a prerequisite from Fall 2020, and so CMPT 105 W becomes a required LD course for the program. We make this explicit with the proposed modification to the CS program requirements.
Effective term and year: Spring 2021
The following program(s) will be affected by these changes: Computing Science Bachelor of Science or Bachelor of Arts Computing Science Honours (Bachelor of Science or Bachelor of Arts)

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**.

Lower Division Requirements Students must complete the courses listed below. It is suggested that students complete a recommended schedule of courses within the first two years. Students complete all of CMPT 105W - Social Issues and Communication Strategies in Computing Science (3) <u>CMPT 120 - Introduction to Computing Science and Programming I (3)</u> <u>CMPT 125 - Introduction to Computing Science and Programming II (3)</u> <u>CMPT 127 - Computing Laboratory (3)</u> <u>CMPT 225 - Data Structures and Programming (3)</u> <u>CMPT 276 - Introduction to Software Engineering (3)</u> <u>CMPT 295 - Introduction to Computer Systems (3)</u> <u>MACM 101 - Discrete Mathematics I (3)</u> <u>MACM 201 - Discrete Mathematics II (3)</u>



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MEMORANDUM

ATTENTION	Wade Parkhouse, Chair Senate Committee on Undergraduate Studies	DATE 8 April 2020
FROM	Catherine Murray, Chair Faculty of Arts and Social Sciences Undergraduate Curriculum Committee	PAGES 2
RE:	FASSUCC- FASS Program Modification	

The FASS Undergraduate Curriculum Committee met on February 13, 2020 and discussed the changes to the degree requirements proposed by the Registrar's office.

FASS has decided to put forward additional formulations in its own FASS Degree requirements to further clarify the Faculty's expectations in relation to the overall cumulative grade point average and upper division CGPA. All Committee members have had the opportunity to discuss the changes during the meeting and then to vote on the final calendar language change in an online vote held in March 2020 (March 5-13; and March 23-27): the motion was administered by online poll and email to all FASS units (25) together with the proposed Program template; it passed unanimously with an 80% participation rate and majority; no FASS UCC member has voted against.

Please place this item on the agenda for the next SCUS meeting.

Sincerely,

Catherine Murray, PhD.
Professor and Associate Dean,
Undergraduate Programming, Learning and Teaching, Student Experience
Faculty of Arts and Social Sciences

CM:ws

Name of Program or Name of Faculty Faculty of Arts and Social Sciences (FASS)
Rationale for change: Clarification of Program GPA Requirements for students graduating with a Bachelor of Arts Degree. Introduction of a Faculty-level degree requirement to ensure a 2.0 minimum Program GPA in each subject that is a major, a joint major, a minor, or an extended minor.
Effective term and year: Spring 2021
The following program(s) will be affected by these changes: All FASS Bachelor of Arts degrees.

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**.

Faculty of Arts and Social Sciences Degree Requirements For all Bachelor of Arts (BA) programs, students complete 120 units, which includes • at least 60 units that must be completed at Simon Fraser University • at least 45 upper division units, of which at least 30 upper division units must be completed at Simon Fraser University • at least 65 units (including 21 upper division units) in Faculty of Arts and Social Sciences courses • satisfaction of the writing, quantitative, and breadth requirements • an overall cumulative grade point average (CGPA) and upper division CGPA of at least 2.0, and minimum a program (major, joint major, extended minor, minor) CGPA and upper division CGPA of at least 2.0 across all units attempted in each subject that is a major, a joint major, a minor, or an extended minor. FASS Departments may define specific requirements for their respective programs.
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Calendar Entry Change HUMANITIES

Rationale for change:

Merger between the Department of Humanities and the Hellenic Studies Program; all courses with the HS acronym will become HUM courses, some HS and HUM courses will be deleted or modified in the process to streamline the course offering of the new unit.

Effective term and year: Spring 2021

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

Humanities Major - HUMMAJ

English and Humanities Joint Major - HUMJMA

French and Humanities Joint Major - HUMJMA

History and Humanities Joint Major - HUMJMA

Humanities and Gender, Sexuality, and Women's Studies Joint Major - HUMJMA

Philosophy and Humanities Joint Major - HUMJMA

Humanities Minor - HUMMIN

Humanities Extended Minor - HUMEMI

Certificate in Medieval and Renaissance Studies - CMREN

Certificate in Religious Studies - CRELS

Certificate in Hellenic Studies - CHS

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**.

PROPOSED

HUM MAJOR (HUMMAJ)

Lower Division Requirements

Students complete 18 lower division units including

HUM 101W - Introduction to the Humanities (3)

and two of

HUM 102W - Classical Mythology (3)

HUM 105 - Many Europes: Ancient, Medieval, Early Modern (3)

HUM 110 - The Greek World (3)

HUM 130 - Introduction to Religious Studies (3)

and one of

~~HUM 201 – Great Texts: Ancient World to Renaissance (3)~~

HUM 202 - Great Texts: ~~Renaissance to Modernity~~ **in the Humanities** (3)

HUM 203 - Great Texts: Asian Thought and Literature (3)

HUM 204 - Great Religious Texts (3)

HUM 222 - Cross-Cultural Perspectives on Art (3)

HUM 231 – Daily Life in Ancient Greece and Rome (3)

and two further lower division humanities courses

Upper Division Requirements

Students complete 32 units in upper division humanities*

~~*with humanities advisor prior approval, students may substitute one humanities-related upper division course from another academic unit towards the upper division humanities requirement. The same course may not be used toward more than one program (honours, joint honours, major, joint major, minor or extended minor). See <http://www.humanities.sfu.ca/about> for a definition of humanities-related subjects.~~

ENGL AND HUM JOINT MAJOR (HUMJMA)

Humanities Lower Division Requirements

Students complete 15 units including

HUM 101W - Introduction to the Humanities (3)

and one of

HUM 102W - Classical Mythology (3)

HUM 105 - Many Europes: Ancient, Medieval, Early Modern (3)

HUM 110 – The Greek World (3)

HUM 130 – Introduction to Religious Studies (3)

and one of

~~HUM 201 – Great Texts: Ancient World to Renaissance (3)~~

HUM 202 - Great Texts: ~~Renaissance to Modernity~~ **in the Humanities** (3)

HUM 203 - Great Texts: Asian Thought and Literature (3)

HUM 204 – Great Religious Texts (3)

HUM 222 – Cross-Cultural Perspectives on Art (3)



HUM 231 – Daily Life in Ancient Greece and Rome (3)

and two further lower division humanities courses.

Humanities Upper Division Requirements

Students complete 20 units in upper division humanities courses.

The following courses are recommended.

HUM 305 - Medieval Studies (4)

HUM 307 - Carolingian Civilization (4)

HUM 311 - Italian Renaissance Humanism (4)

HUM 312W - Renaissance Studies (4)

HUM 321W - The Humanities and Critical Thinking (4)

HUM AND FRENCH MAJOR (HUMJMA)

Lower Division Requirements

Humanities

Students complete 15 units including

HUM 101W - Introduction to the Humanities (3)

and one of

HUM 102W - Classical Mythology (3)

HUM 105 - Many Europes: Ancient, Medieval, Early Modern (3)

HUM 110 - The Greek World (3)

HUM 130 - Introduction to Religious Studies (3)

and one of

~~HUM 201 – Great Texts: Ancient World to Renaissance (3)~~

HUM 202 - Great Texts: ~~Renaissance to Modernity~~ **in the Humanities** (3)

HUM 203 - Great Texts: Asian Thought and Literature (3)

HUM 204 - Great Religious Texts (3)

HUM 222 - Cross-Cultural Perspectives on Art (3)

HUM 231 – Daily Life in Ancient Greece and Rome (3)

and two further lower division humanities courses.



Upper Division Requirements

Humanities

Students complete 20 units in upper division humanities courses.

Recommended

HUM 307 - Carolingian Civilization (4)

HUM 311 - Italian Renaissance Humanism (4)

HUM AND HIST JOINT MAJOR (HUMJMA)

Lower Division Requirements

Humanities

Students complete 15 units including

HUM 101W - Introduction to the Humanities (3)

and one of

HUM 102W - Classical Mythology (3)

HUM 105 - Many Europes: Ancient, Medieval, Early Modern (3)

HUM 110 - The Greek World (3)

HUM 130 - Introduction to Religious Studies (3)

and one of

~~HUM 201 - Great Texts: Ancient World to Renaissance (3)~~

~~HUM 202 - Great Texts: Renaissance to Modernity~~ **in the Humanities (3)**

HUM 203 - Great Texts: Asian Thought and Literature (3)

HUM 204 - Great Religious Texts (3)

HUM 222 - Cross-Cultural Perspectives on Art (3)

HUM 231 - Daily Life in Ancient Greece and Rome (3)

and two further lower division humanities courses.

Upper Division Requirements

Humanities

Students complete 20 units in upper division humanities courses. The following courses are



recommended.

HUM 302W - The Golden Age of Greece: An Integrated Society (4)

HUM 303 - The Latin Humanist Tradition (4)

HUM 305 - Medieval Studies (4)

HUM 307 - Carolingian Civilization (4)

HUM 311 - Italian Renaissance Humanism (4)

HUM 312W - Renaissance Studies (4)

HUM AND GSWs JOINT MAJOR (HUMJMA)

Lower Division Requirements

Humanities

Students complete 15 units including

HUM 101W - Introduction to the Humanities (3)

and one of

HUM 102W - Classical Mythology (3)

HUM 105 - Many Europes: Ancient, Medieval, Early Modern (3)

HUM 110 - The Greek World (3)

HUM 130 - Introduction to Religious Studies (3)

and one of

~~HUM 201 - Great Texts: Ancient World to Renaissance (3)~~

~~HUM 202 - Great Texts: Renaissance to Modernity in the Humanities (3)~~

HUM 203 - Great Texts: Asian Thought and Literature (3)

HUM 204 - Great Religious Texts (3)

HUM 222 - Cross-Cultural Perspectives on Art (3)

HUM 231 - Daily Life in Ancient Greece and Rome (3)

and two further lower division humanities courses.

Humanities Upper Division Requirements

Students complete a total of 20 units in upper division humanities courses and the following are recommended.

HUM 320 - Cross-Cultural Philosophy in the Humanities (4)

HUM 321W - The Humanities and Critical Thinking (4)



HUM 325 - The Humanities and the Natural World (4)

PHILO AND HUM JOINT MAJOR (HUMJMA)

Lower Division Requirements

Humanities

Students complete 15 units including

HUM 101W - Introduction to the Humanities (3)

and one of

HUM 102W - Classical Mythology (3)

HUM 105 - Many Europes: Ancient, Medieval, Early Modern (3)

HUM 110 - The Greek World (3)

HUM 130 - Introduction to Religious Studies (3)

and one of

~~HUM 201 - Great Texts: Ancient World to Renaissance (3)~~

HUM 202 - Great Texts: ~~Renaissance to Modernity~~ **in the Humanities** (3)

HUM 203 - Great Texts: Asian Thought and Literature (3)

HUM 204 - Great Religious Texts (3)

HUM 222 - Cross-Cultural Perspectives on Art (3)

HUM 231 - Daily Life in Ancient Greece and Rome (3)

and two further lower division humanities courses.

Humanities Upper Division Requirements

Students complete 20 units in upper division humanities courses.

Recommended

HUM 320 - Cross-Cultural Philosophy in the Humanities (4)

HUM 321W - The Humanities and Critical Thinking (4)

HUM MINOR (HUMMIN)

Lower Division Requirements



Students complete nine lower division units including

HUM 101W - Introduction to the Humanities (3)

and one of

~~HUM 201 - Great Texts: Ancient World to Renaissance (3)~~

HUM 202 - Great Texts: ~~Renaissance to Modernity~~ **in the Humanities** (3)

HUM 203 - Great Texts: Asian Thought and Literature (3)

HUM 204 - Great Religious Texts (3)

HUM 222 - Cross-Cultural Perspectives on Art (3)

HUM 231 - Daily Life in Ancient Greece and Rome (3)

and one further lower division Humanities course.

Upper Division Requirements

Students complete 16 units in upper division humanities courses. See HUM courses.

HUM EXTENDED MINOR (HUMEMI)

Students may qualify for a BA with an extended minor in humanities plus one other extended minor, or may use the extended minor in combination with other programs in other degrees.

Lower Division Requirements

Students complete 18 lower division units including

HUM 101W - Introduction to the Humanities (3)

and two of

HUM 102W - Classical Mythology (3)

HUM 105 - Many Europes: Ancient, Medieval, Early Modern (3)

HUM 110 - The Greek World (3)

HUM 130 - Introduction to Religious Studies (3)

and one of

~~HUM 201 - Great Texts: Ancient World to Renaissance (3)~~

HUM 202 - Great Texts: ~~Renaissance to Modernity~~ **in the Humanities** (3)

HUM 203 - Great Texts: Asian Thought and Literature (3)

HUM 204 - Great Religious Texts (3)

HUM 222 - Cross-Cultural Perspectives on Art (3)

HUM 231 – Daily Life in Ancient Greece and Rome (3)

and two further lower division humanities courses.

Upper Division Requirements

Students complete 16 units in upper division humanities courses. See HUM courses

MEDIEVAL AND RENAISSANCE STUDIES CERTIFICATE (CMREN)

Program Requirements

With prior approval from the advisor, students may complete other relevant courses that do not appear in the following list. Students are responsible for fulfilling any of the following courses' prerequisites.

Students complete a minimum of 30 units, including at least three of

HIST 220 - Late Medieval and Renaissance Europe (3)
 HUM 103 - The Invention of the Book: Alphabets, Papyrus, Parchment, and Print (3)
 HUM 105 - Many Europes: Ancient, Medieval, Early Modern (3)
~~HUM 201 – Great Texts: Ancient World to Renaissance (3)~~
 HUM 211 - Art and Literature of the Italian Renaissance (3)
 HUM 219 - The Early Middle Ages (3)

and two of

HUM 305 - Medieval Studies (4)
 HUM 307 - Carolingian Civilization (4)
 HUM 311 - Italian Renaissance Humanism (4)
 HUM 312W - Renaissance Studies (4)
 HIST 402 - Renaissance Italy (4)

and 13 units chosen from

ENGL 201 - Medieval Literature (3)
 ENGL 300 - Old English (4)
 ENGL 304 - Studies in Medieval Literature (4)
 ENGL 306 - Chaucer (4)
 ENGL 310 - Studies in Early Modern Literature to 1660 (4)
 ENGL 311 - Early Shakespeare (4)
 ENGL 313 - Late Shakespeare (4)
 FREN 341 - Survey of French Literature to 1600 (3) **



HIST 249 - Classical Islamic Civilization (3)
HIST 288 - History of Christianity to 1500 (3)
HUM 101W - Introduction to the Humanities (3)
HUM 161 - Latin I (3)
HUM 162 - Latin II (3)
HUM 349: Rome after Rome: The Byzantine Middle Ages from the end of Antiquity to the Crusades (4)

** when topics are appropriate; consult with the advisor

RELIGIOUS STUDIES CERTIFICATE (CRELS)

Program Requirements

Students complete a total of at least 30-31 units, 13-14 of which are earned by completing the four required courses. The remaining units are selected from the elective list. Students are responsible for meeting the prerequisite requirements for courses used toward the certificate.

Required Courses

Students complete 13-14 units including both of

HUM 130 - Introduction to Religious Studies (3)
HUM 330 - Religions in Context (4)

and two of

ARCH 226 - The Prehistory of Religion: Shamans, Sorcerers and Saints (3)
HUM 204 - Great Religious Texts (3)
HUM 331 - Special Topics in Asian Religious Traditions (4)

Elective Courses

Students complete a total of 17 units, chosen from

GA 202 - Studies in Asian Cultures (3) *
GA 302 - Selected Topics in Chinese Studies (3) *
GA 303 - Selected Topics in Japanese Studies (3) *
GA 400 - Selected Topics in Global Asia (3) *
HIST 220 - Late Medieval and Renaissance Europe (3)
HIST 249 - Classical Islamic Civilization (3)
HIST 288 - History of Christianity to 1500 (3)
HIST 320 - European Reformation (4)
HIST 352 - Religion and Politics in Modern Iran (4)



HIST 388 - Religion and Globalization (4)
HIST 404 - Problems in Early Modern England (4)
HIST 439 - Catholicism in Early Modern Europe (4)
HIST 468W - Problems in the History of Religion (4)
HIST 469 - Islamic Social and Intellectual History (4)
HUM 102W - Classical Mythology (3)
HUM 203 - Great Texts: Asian Thought and Literature (3) *
HUM 219 - The Early Middle Ages (3)
HUM 232 – The Religions of Ancient Greece and Rome (3)
HUM 305 - Medieval Studies (4) *
HUM 307 - Carolingian Civilization (4)
HUM 332 - Mythology in Context (4)
HUM 350 - Special Topics: Great Figures in the Humanistic Tradition (4) *
HUM 375 - The Woodsworth Seminar (4) *
SA 322 - Religion and Society (SA) (4)
SA 323 - Symbol, Myth and Meaning (A) (4)

* when topics are appropriate; consult with the advisor; other courses with appropriate content may be counted with prior approval of the advisor.

HELLENIC STUDIES CERTIFICATE (CHS)

Program Requirements

Students must complete 19 units, including one upper division course chosen from the following.

Lower Division Courses

GRK 191 - Modern Greek for Beginners Level I (3)
GRK 192 - Modern Greek for Beginners Level II (3)
GRK 291 - Modern Greek Intermediate Level I (3)
GRK 292 - Modern Greek Intermediate Level II (3)
HUM 110 HS 100 - The Greek World (3)
HUM HS 150 - Warfare in the Hellenic World: From Plato to NATO (3)
HUM 220 HS 201 - Rome: From Republic to Empire (3)
HUM HS 209 - Heroic Greek Tales: From the Trojans to Frankenstein (3)
HUM 226 HS 216 - War and Society (3)
HUM HS 231 - Daily Life in Ancient Greece and Rome (3)
HUM HS 232 - The Religions of Ancient Greece and Rome (3)
HUM HS 275 - From Alexander to the Caesars: The Hellenic and Roman Worlds to the end of Antiquity (3) *
HUM HS 276 - Social, Economic, and Political History of the Mediterranean (3) *
HUM HS 277 - History of Greek Civilization (3) *
HUM HS 278 - The Greeks in the Ottoman Empire (3) *

HUM HS 279 - Greece in the 20th Century (3) *
HUM HS 280 – War in the Balkans and the Making of the 21st Century (3) **
 HUM 102W – Classical Mythology (3)
 HUM 151 – Ancient Greek I (3)
 HUM 152 – Ancient Greek II (3)
~~HUM 201 – Great Texts: Ancient World to Renaissance (3)~~

Upper Division Courses

Students must complete at least one course from the following

ARCH 312 – Greek Art and Archaeology (4) or **HUM 314 HS 312** – Greek Art and Archaeology (4)
 ARCH 313 – Roman Art and Archaeology (4) or **HUM HS 313** – Roman Art and Archaeology (4)
 HIST 304 – Alexander the Great and the Quest for World Empire (4) or **HUM 304 – Alexander the Great and the Quest for World Empire (4)**
~~HS 307 – Selected Topics in Hellenic Studies (4) *~~
HUM HS 359 - Constructing the Nation State in Greece, the Balkans, and the Mediterranean (4) *
 HUM HS 364 - Traveller, Diplomatic, and Media Narratives in Greece, the Balkans and the Mediterranean (4) *
~~HS 422 – Greece, 1935–1944: Occupation and Resistance (4) *~~
HUM HS 441 - Women, Property, and the Law in the Mediterranean (4) *
HUM HS 460 - Themes in Byzantine History (4) *
 HUM 302W - The Golden Age of Greece: An Integrated Society (4)
HUM 309 – Literatures and the Arts Across Cultures (4)**

* These courses are also available with a HIST designation. Either **HUM HS** or HIST designation can be used towards the certificate.

**** When topics are appropriate. Consult with the advisor.**

~~** This course is also available with an IS designation. Either HUM HS or IS designation can be used towards the certificate.~~

Calendar Entry Change School of Environmental Science

Rationale for change:

The changes are to allow the major and honours programs to be accredited by the College of Applied Biology so that students can receive Registered Professional Biologist (RPBio) designation upon graduation, and to differentiate the concentration from the Ecology, Evolution and concentration in Biological Sciences.

Effective term and year: Spring 2021

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

Environmental Science Major, Applied Biology Concentration
Environmental Science Honours, Applied Biology Concentration

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**.

Environmental Science Major

Applied Biology Concentration

LOWER DIVISION REQUIREMENTS

Students complete all of

BISC 101 - General Biology (4)

BISC 102 - General Biology (4)

~~BISC 202 - Genetics (3)~~

BISC 204 - Introduction to Ecology (3)

BISC 205 - Principles of Physiology (3)

CHEM 121 - General Chemistry and Laboratory I (4)

CHEM 122 - General Chemistry II (2)

CHEM 126 - General Chemistry Laboratory II (2)

~~CHEM 215 - Introduction to Analytical Chemistry (4)~~

CHEM 281 - Organic Chemistry (4)

EASC 101 - Dynamic Earth (3)

EVSC 100 - Introduction to Environmental Science (3)

EVSC 201W - Environmental Science in Practice (4)

GEOG 111 - Earth Systems (3)

MBB 201 - Biochemistry of the Cell (3)

REM 100 - Global Change (3)

And one of

GEOG 253 – Introduction to Remote Sensing (3)

GEOG 255 – Geographic Information Science I (3)

and one of

MATH 150 - Calculus I with Review (4)

MATH 151 - Calculus I (3)

MATH 154 - Calculus I for the Biological Sciences (3)

and one of

MATH 152 - Calculus II (3)

MATH 155 - Calculus II for the Biological Sciences (3)

and one of

PHYS 101 - Physics for the Life Sciences I (3)

PHYS 120 - Mechanics and Modern Physics (3)

and one of

PHYS 102 - Physics for the Life Sciences II (3)

PHYS 121 - Optics, Electricity and Magnetism (3)

and one of

STAT 201 - Statistics for the Life Sciences (3)

STAT 270 - Introduction to Probability and Statistics (3)

UPPER DIVISION REQUIREMENTS

Students complete all of

~~BISC 316 – Vertebrate Biology (4)~~

~~BISC 337 – Plant Biology (4)~~

EVSC 300 - Seminar in Environmental Science (3)

EVSC 305 - Methods in Environmental Science (4)

EVSC 400 - Environmental Science Capstone (4)

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

~~GEOG 316 – Global Biogeochemical and Water Cycles (4)~~

~~REM 311 – Applied Ecology and Sustainable Environments (3)~~

~~REM 445 – Environmental Risk Assessment (4)~~

and one of

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

~~STAT 305 – Introduction to Biostatistical Methods for Health Sciences (3)~~

and two of

REM 319 - Environmental and Planning Law (3)

REM 320W - Ethics and the Environment (3)

REM 321 - Ecological Economics (4)

REM 356W - Environmental Policy (3)

and two from the following

~~BISC 300 – Evolution (3)~~

~~BISC 306 – Invertebrate Biology (4)~~

~~BISC 309 – Conservation Biology (3)~~

~~BISC 326 – Biology of Algae and Fungi (3)~~

~~BISC 366 – Plant Physiology (3)~~

~~BISC 407 – Population Dynamics (3)~~

~~BISC 414 – Limnology (3)~~

~~BISC 420 – Community Ecology (3)~~

~~REM 412 – Environmental Modeling (4)~~

~~REM 471 – Forest Ecosystem Management (4)~~

~~STAT 403 – Intermediate Sampling and Experimental Design (3)~~

And two of

BISC 407 – Population Dynamics (3)

BISC 412 – Aquatic Ecology (3)

BISC 414 – Limnology (3)

BISC 420 – Community Ecology (3)

GEOG 315 – World Ecosystems (4)

GEOG 316 – Global Biogeochemical and Water Cycles (4)

And two of

BISC 309 – Conservation Biology (3)

BISC 413 – Fisheries Ecology (3)

BISC 435 – Introduction to Pest Management (3)

REM 311 – Applied Ecology (3)

REM 375 – Ecology and Conservation of Coastal BC (3)

REM 423 – Methods in Fisheries Assessments (4)

REM 445 – Environmental Risk Assessment (3)

REM 471 – Forest Ecosystems Management (3)

And one of

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 one of

EASC 305 – Quantitative Methods for Earth Sciences (3)

GEOG 352 – Spatial Analysis (4)

GEOG 353 – Advanced Remote Sensing (4)

GEOG 355 – Geographical Information Science II (4)

GEOG 356 – 3D Geovisualization (4)

REM 412 – Environmental Modeling (3)

REM 423 – Methods in Fisheries Assessment (4)

STAT 403 – Intermediate Sampling and Experimental Design (3)

And one of

BISC 306 – Invertebrate Biology (4)

BISC 309 – Conservation Biology (3)

BISC 316 – Vertebrate Biology (4)

BISC 317 – Insect Biology (3)

BISC 326 – Biology of Algae and Fungi (3)

BISC 337 – Plant Biology (4)

BISC 407 – Population Dynamics (3)

BISC 412 – Aquatic Ecology (3)

BISC 413 – Fisheries Ecology (3)

BISC 414 – Limnology (3)

BISC 420 – Community Ecology (3)

BISC 435 – Introduction to Pest Management (3)

GEOG 315 – World Ecosystems (4)

GEOG 316 – Global Biogeochemical and Water Cycles (4)

REM 311 – Applied Ecology and Sustainable Environments (3)

REM 375 – Ecology and Conservation of Coastal BC (3)

REM 423 – Methods in Fisheries Assessments (4)

REM 471 – Forest Ecosystems Management (3)

Environmental Science Honours

Applied Biology Concentration

LOWER DIVISION REQUIREMENTS

Students complete all of

BISC 101 - General Biology (4)

BISC 102 - General Biology (4)

~~BISC 202 - Genetics (3)~~

BISC 204 - Introduction to Ecology (3)

BISC 205 - Principles of Physiology (3)

CHEM 121 - General Chemistry and Laboratory I (4)

CHEM 122 - General Chemistry II (2)

CHEM 126 - General Chemistry Laboratory II (2)

~~CHEM 215 - Introduction to Analytical Chemistry (4)~~

CHEM 281 - Organic Chemistry (4)

EASC 101 - Dynamic Earth (3)

EVSC 100 - Introduction to Environmental Science (3)

EVSC 201W - Environmental Science in Practice (4)

GEOG 111 - Earth Systems (3)

MBB 201 - Biochemistry of the Cell (3)

REM 100 - Global Change (3)

And one of

GEOG 253 - Introduction to Remote Sensing (3)

GEOG 255 - Geographic Information Science I (3)

and one of

MATH 150 - Calculus I with Review (4)

MATH 151 - Calculus I (3)

MATH 154 - Calculus I for the Biological Sciences (3)

and one of

MATH 152 - Calculus II (3)

MATH 155 - Calculus II for the Biological Sciences (3)

and one of

PHYS 101 - Physics for the Life Sciences I (3)

PHYS 120 - Mechanics and Modern Physics (3)

and one of

PHYS 102 - Physics for the Life Sciences II (3)

PHYS 121 - Optics, Electricity and Magnetism (3)

and one of

STAT 201 - Statistics for the Life Sciences (3)

STAT 270 - Introduction to Probability and Statistics (3)

UPPER DIVISION REQUIREMENTS

Students complete all of

~~BISC 316 - Vertebrate Biology (4)~~

~~BISC 337 - Plant Biology (4)~~

EVSC 300 - Seminar in Environmental Science (3)

EVSC 305 - Methods in Environmental Science (4)

EVSC 400 - Environmental Science Capstone (4)

EVSC 489 - Environmental Science Thesis I (4)

EVSC 490W - Environmental Science Thesis II (4)

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

~~GEOG 316 - Global Biogeochemical and Water Cycles (4)~~

~~REM 311 - Applied Ecology and Sustainable Environments (3)~~

~~REM 445 - Environmental Risk Assessment (4)~~

and one of

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

~~STAT 305 - Introduction to Biostatistical Methods for Health Sciences (3)~~

and two of

REM 319 - Environmental and Planning Law (3)

REM 320W - Ethics and the Environment (3)

REM 321 - Ecological Economics (4)

REM 356W - Environmental Policy (3)

and two from the following

~~BISC 300 - Evolution (3)~~

~~BISC 306 - Invertebrate Biology (4)~~

~~BISC 309 - Conservation Biology (3)~~

~~BISC 326 - Biology of Algae and Fungi (3)~~

~~BISC 366 - Plant Physiology (3)~~

~~BISC 407 - Population Dynamics (3)~~

~~BISC 414 - Limnology (3)~~

~~BISC 420 – Community Ecology (3)~~
~~REM 412 – Environmental Modeling (4)~~
~~REM 471 – Forest Ecosystem Management (4)~~
~~STAT 403 – Intermediate Sampling and Experimental Design (3)~~

And two of

BISC 407 – Population Dynamics (3)
BISC 412 – Aquatic Ecology (3)
BISC 414 – Limnology (3)
BISC 420 – Community Ecology (3)
GEOG 315 – World Ecosystems (4)
GEOG 316 – Global Biogeochemical and Water Cycles (4)

And two of

BISC 309 – Conservation Biology (3)
BISC 413 – Fisheries Ecology (3)
BISC 435 – Introduction to Pest Management (3)
REM 311 – Applied Ecology (3)
REM 375 – Ecology and Conservation of Coastal BC (3)
REM 423 – Methods in Fisheries Assessments (4)
REM 445 – Environmental Risk Assessment (3)
REM 471 – Forest Ecosystems Management (3)

And one of

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 one of

EASC 305 – Quantitative Methods for Earth Sciences (3)
GEOG 352 – Spatial Analysis (4)
GEOG 353 – Advanced Remote Sensing (4)
GEOG 355 – Geographical Information Science II (4)
GEOG 356 – 3D Geovisualization (4)
REM 412 – Environmental Modeling (3)
REM 423 – Methods in Fisheries Assessment (4)
STAT 403 – Intermediate Sampling and Experimental Design (3)

And one of

BISC 306 – Invertebrate Biology (4)
BISC 309 – Conservation Biology (3)
BISC 316 – Vertebrate Biology (4)
BISC 317 – Insect Biology (3)

BISC 326 – Biology of Algae and Fungi (3)
BISC 337 – Plant Biology (4)
BISC 407 – Population Dynamics (3)
BISC 412 – Aquatic Ecology (3)
BISC 413 – Fisheries Ecology (3)
BISC 414 – Limnology (3)
BISC 420 – Community Ecology (3)
BISC 435 – Introduction to Pest Management (3)
GEOG 315 – World Ecosystems (4)
GEOG 316 – Global Biogeochemical and Water Cycles (4)
REM 311 – Applied Ecology and Sustainable Environments (3)
REM 375 – Ecology and Conservation of Coastal BC (3)
REM 423 – Methods in Fisheries Assessments (4)
REM 471 – Forest Ecosystems Management (3)

Calendar Entry Change

Name of Program or Name of Faculty – Department of Geography

Rationale for change: GEOG 365 – Race, Resistance and Urban Space is a newly created course within the department. This change is intended to allow for the course’s articulation within the Human Geography major and honours programs.
Effective term and year: Spring 2021
The following program(s) will be affected by these changes: BA Human Geography Major and 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**.

Human Geography Major (...) Upper Division Requirements (...) Society & Space (choose 3) GEOG 312 - Geography of Natural Hazards (4) GEOG 325 - Geographies of Consumption (4) GEOG 327 - Geography of Tourism (4) GEOG 365 - Race, Resistance and Urban Space (4) GEOG 377 - Environmental History (4) GEOG 382 - World on the Move (4) GEOG 386 - Health Geography (4) GEOG 387 - Geography and Gender (4) GEOG 432 - Problems in Environmental History (4) GEOG 486 - Health Care Geographies (4) Urbanization & Urbanism (choose 3) GEOG 324 - Geography of Transportation (4) GEOG 362W - Geography of Urban Built Environments (4) GEOG 363 - Urban Planning and Policy (4) GEOG 364 - Cities and Crisis (4) GEOG 365 - Race, Resistance and Urban Space (4) GEOG 385 - Food and the City (4) GEOG 424 - Cities, Transportation, Infrastructure (4) GEOG 442 - A World of Cities (4) GEOG 449 - City and Environment (4) (...)
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Human Geography Honours

(...)

Upper Division Requirements

(...)

Society & Space (choose 3)

GEOG 312 - Geography of Natural Hazards (4)

GEOG 325 - Geographies of Consumption (4)

GEOG 327 - Geography of Tourism (4)

GEOG 365 - Race, Resistance and Urban Space (4)

GEOG 377 - Environmental History (4)

GEOG 382 - World on the Move (4)

GEOG 386 - Health Geography (4)

GEOG 387 - Geography and Gender (4)

GEOG 432 - Problems in Environmental History (4)

GEOG 486 - Health Care Geographies (4)

GEOG 492 - Advanced Theory and Methods for Human Geographers (4)

Urbanization & Urbanism (choose 3)

GEOG 324 - Geography of Transportation (4)

GEOG 362W - Geography of Urban Built Environments (4)

GEOG 363 - Urban Planning and Policy (4)

GEOG 364 - Cities and Crisis (4)

GEOG 365 - Race, Resistance and Urban Space (4)

GEOG 385 - Food and the City (4)

GEOG 424 - Cities, Transportation, Infrastructure (4)

GEOG 442 - A World of Cities (4)

GEOG 449 - City and Environment (4)

(...)

Name of Program or Name of Faculty Department of Geography
Rationale for change: GEOG 365 – Race, Resistance and Urban Space is a newly created course within the department. This change is intended to allow for the course’s articulation within the Global Environmental Systems major and honours programs.
Effective term and year: Spring 2021
The following program(s) will be affected by these changes: Global Environmental Systems Major and Honours programs

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**.

Global Environmental Systems Major (...) Upper Division Requirements (...) Socio-economic and Political Systems (choose one) ARCH 389 - Ethnoecology (3) GEOG 321 - Geographies of Global Capitalism (4) GEOG 322W - World Resources (4) GEOG 325 - Geographies of Consumption (4) GEOG 327 – Geography of Tourism (4) GEOG 362W - Geography of Urban Built Environments (4) GEOG 363 - Urban Planning and Policy (4) GEOG 365 - Race, Resistance and Urban Space (4) GEOG 377 - Environmental History (4) GEOG 381W - Territory, Power, State (4) GEOG 382 - World on the Move (4) GEOG 386 - Health Geography (4) GEOG 387 - Geography and Gender (4) GEOG 423 - Capitalist Natures (4) GEOG 432 - Problems in Environmental History (4) GEOG 449 - City and Environment (4) GSWS 314 - Race, Class and Gender (4)
--

REM 319 - Environmental and Planning Law (3)
 REM 321 - Ecological Economics (4)
 REM 350 - Sustainable Energy and Materials Management (4)
 REM 356W - Environmental Policy (3)
 REM 454 - Water Security (4)
 (...)

Global Environmental Systems Honours

(...)

Upper Division Requirements

(...)

Socio-economic and Political Systems (choose one)

ARCH 389 - Ethnoecology (3)
 GEOG 321 - Geographies of Global Capitalism (4)
 GEOG 322W - World Resources (4)
 GEOG 325 - Geographies of Consumption (4)
 GEOG 327 - Geography of Tourism (4)
 GEOG 362W - Geography of Urban Built Environments (4)
 GEOG 363 - Urban Planning and Policy (4)
GEOG 365 - Race, Resistance and Urban Space (4)
 GEOG 377 - Environmental History (4)
 GEOG 381W - Territory, Power, State (4)
 GEOG 382 - World on the Move (4)
 GEOG 386 - Health Geography (4)
 GEOG 387 - Geography and Gender (4)
 GEOG 423 - Capitalist Natures (4)
 GEOG 432 - Problems in Environmental History (4)
 GEOG 449 - City and Environment (4)
 GSWS 314 - Race, Class and Gender (4)
 REM 319 - Environmental and Planning Law (3)
 REM 321 - Ecological Economics (4)
 REM 350 - Sustainable Energy and Materials Management (4)
 REM 356W - Environmental Policy (3)
 REM 454 - Water Security (4)
 (...)

Calendar Entry Change

Name of Program or Name of Faculty: BSc Physical Geography Honours

Faculty of Environment

Rationale for change:

STAT 205 is being removed as it is not listed as an approved course for Professional Geoscientist certification.

GEOG 355 (Geographic Information Science II) is being added to the Geoscience stream as the course was mistakenly overlooked when the BSc PG Honours program was recently revised.

Effective term and year:

Spring 2021

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

BSc Physical Geography 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.

Physical Geography Honours

Bachelor of Science

Program Requirements

A total of 120 units is required, of which 60 must be at the upper division.

Lower Division Requirements

(...)

and one of

GEOG 251 - Quantitative Geography (3)**

STAT 201 - Statistics for the Life Sciences (3)

~~STAT 205 - Introduction to Statistics (3)~~

STAT 270 - Introduction to Probability and Statistics (3)

(...)

Upper Division Requirements

(...)

Geoscience Stream

Students must complete a minimum of 44 units, including all of

GEOG 310 - Physical Geography Field Course (4)

GEOG 311 - Hydrology (4)

GEOG 312 - Geography of Natural Hazards (4)

GEOG 313 - River Geomorphology (4)

GEOG 316 - Global Biogeochemical and Water Cycles (4)

GEOG 317 - Soil Science (4)

GEOG 412W - Glacial Processes and Environments (4)

and three (12 units) of the following, including at least one (4 units) from Physical Geography (GEOG 31x or 41x courses) and including at least one (4 units) from GIScience (GEOG 35x or 45x courses)

GEOG 314 - The Climate System (4)

GEOG 351 - Multimedia Cartography (4)

GEOG 352 - Spatial Analysis (4)

GEOG 353 - Advanced Remote Sensing (4)

GEOG 355 - Geographical Information Science II (4)

GEOG 356 - 3D Geovisualization (4)

GEOG 411 - Advanced Hydrology (4)

GEOG 414 - Climate Change (4)

GEOG 417 - Advanced Soil Science (4) or GEOG 417W - Advanced Soil Science (4)

GEOG 451 - Spatial Modeling (4)

GEOG 453 - Theoretical and Applied Remote Sensing (4)

GEOG 455 - Theoretical and Applied GIS (4)

GEOG 457 - Geovisualization Interfaces (4)

(...)

Calendar Entry Change

Name of Program or Name of Faculty: Urban Studies Certificate (Geography, in collaboration with Political Science & Sociology/Anthropology).

Rationale for change:

- 1) The current version requires a large number of units. The revised version reduces the required units to make it less onerous and more attractive to students.
- 2) The revisions also include a number of urban courses were not included in the Certificate in the past.

Effective term and year: Spring 2021

The following program(s) will be affected by these changes:
Urban Studies 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**.

Urban Studies

Certificate

(...)

Program Requirements

Students will complete ~~eight~~ courses totaling ~~26 to 31~~ **18-23** units. ~~Of the eight, no~~ No more than four **courses** may be in any one department. Substitutions may be approved on a case-by-case basis by the advisor in consultation with members of the Steering Committee or the Undergraduate Studies Committee Chair in the Department of Geography.

(...)

and ~~five~~ **four** of the following (without duplicating any 2XX courses taken above)

GEOG 261 - Encountering the City (3)

GEOG 264 - Canadian Cities (3)

GEOG 324 - Geography of Transportation (4)

GEOG 362 - Geography of Urban Built Environments (4)

GEOG 363 - Urban Planning and Policy (4)

GEOG 364 - Cities and Crisis (4)

GEOG 365 - Race, Resistance and Urban Space (4)

GEOG 382 - World on the Move (4)

GEOG 385 - Food and the City (4)

GEOG 424 - Cities, Transportation, Infrastructure (4)

GEOG 442 - A World of Cities (4)

GEOG 449 - City and Environment (4)

GERO 401 - Environment and Aging (3)

GSWS 204 - Sex and the City (3)

HIST 372 - City Life (4)

HSCI 403 - Health and the Built Environment (3)

HUM 340 - Great Cities in Their Time (4)

PLAN 200 - Introduction to Planning (3)

PLAN 300 - Methods for Planning Analysis (4)

PLAN 400 - Planning Theory and Policy Analysis (4)

POL 252 - Local Democracy and Governance (3)

POL 354 - Comparative Metropolitan Governance (4)

POL 454 - Urban Public Policy Making (4)

POL 458 - Selected Topics in Local and Urban Governance (4)

POL 463 - Diversity in Cities (4)

POL 497 - Experiential Learning in Political Science (4)

SA 201W - Anthropology and Contemporary Life (A) (4)

SA 364 - Urban Communities and Cultures (SA) (4)

REM 355 - Sustainable Transportation Management (3)

REM 381 - Building Sustainable Communities: Concepts and Cases (4)

REM 481 - Sustainable Communities Leadership Lab (4)

SD 381 - Building Sustainable Communities: Concepts and Cases (4)

SD 401 - Sustainable Development Goals Studio (4)

SD 481 - Sustainable Communities Leadership Lab (4)

Calendar Entry Change

Biomedical Physiology and Kinesiology and Psychology

Rationale for change: Upcoming changes to neuroscience faculty at SFU will allow incorporation of appropriate new courses into program requirements. Additional courses will provide more options to students for program completion.

Underlined change approved at Senate for Fall 2020 calendar.

Effective term and year: Spring 2021

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

Behavioural Neuroscience Major

Behavioural Neuroscience 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**.

Upper Division Requirements

...

Biomedical Physiology and Kinesiology

...

and six additional units from the following

BPK 415 - Neural Control of Movement (3)

BPK 447 – Neuroplasticity (3)

BPK 420 Selected Topics in Biomedical Physiology and Kinesiology I (3) ^

BPK 421 Selected Topics in Biomedical Physiology and Kinesiology II (3) ^

BPK 422 Selected Topics in Biomedical Physiology and Kinesiology III (3) ^

BPK 423 Selected Topics in Biomedical Physiology and Kinesiology IV (3) ^

BPK 446 - Neurological Disorders (3)

BPK 448 - Rehabilitation of Movement Control (3)

^ Topic must be relevant to Behavioural Neuroscience.

and three additional units selected from the following

BISC 405 - Neurobiology (3)

BPK 304W - Inquiry and Measurement in Biomedical Physiology and Kinesiology (3)

BPK 336 - Histology (3)
 BPK 407 - Human Physiology Laboratory (3)
 BPK 415 - Neural Control of Movement (3) *
BPK 447 – Neuroplasticity (3)*
BPK 420 Selected Topics in Biomedical Physiology and Kinesiology I (3) ^*
BPK 421 Selected Topics in Biomedical Physiology and Kinesiology II (3) ^*
BPK 422 Selected Topics in Biomedical Physiology and Kinesiology III (3) ^*
BPK 423 Selected Topics in Biomedical Physiology and Kinesiology IV (3) ^*
 BPK 446 - Neurological Disorders (3) *
 BPK 448- Rehabilitation of Movement Control (3) *
 BPK 496 - Directed Study Literature (3) ^or BPK 498 - Directed Study Experiential (3)^

*if not counted above

^ Topic must be relevant to Behavioural Neuroscience.

Calendar Entry Change Biomedical Physiology and Kinesiology

Rationale for change: New courses appropriate to the Kinesiology Major and Honours Programs should be listed in the program specific electives.
Effective term and year: Spring 2021
The following program(s) will be affected by these changes: Kinesiology Major Kinesiology 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**.

Upper Division Requirements ... Active Health and Rehabilitation Concentration ... and four of ... BPK 408W - Cellular Physiology Laboratory (3) BPK 411 – Advanced Topics in Vascular Physiology (3) BPK 412 - Molecular Cardiac Physiology (3) BPK 415 - Neural Control of Movement (3) BPK 417 - Obesity, Adipocyte Function and Weight Management (3) BPK 420 - Selected Topics in Biomedical Physiology and Kinesiology I (3) ^ BPK 421 - Selected Topics in Biomedical Physiology and Kinesiology II (3) ^ BPK 422 - Selected Topics in Biomedical Physiology and Kinesiology III (3) ^ BPK 423 - Selected Topics in Biomedical Physiology and Kinesiology IV (3) ^ BPK 426 - Functional Human Neuroanatomy (3) BPK 431 - Integrative Cancer Biology (3) BPK 432 - Physiological Basis of Temperature Regulation (3) BPK 443 - Advanced Exercise Prescription (3) BPK 444 - Cardiac Disease: Pathophysiology and Assessment (3) BPK 445 - Advanced Cardiac Rehabilitation (3) BPK 446 - Neurological Disorders (3) BPK 447 – Neuroplasticity (3) BPK 448 - Rehabilitation of Movement Control (3) ...
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Calendar Entry Change Biomedical Physiology and Kinesiology

Rationale for change: New courses relevant to Biomedical Physiology Major and Honours programs should be added to program specific lists.
Effective term and year: Spring 2021
The following program(s) will be affected by these changes: Biomedical Physiology Major Biomedical Physiology 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**.

Upper Division Requirements

...

and four or five of List B

...

BPK 402 - Mechanical Behavior of Biological Tissues (3)

BPK 411 – Advanced Topics in Vascular Physiology (3)

BPK 412 - Molecular Cardiac Physiology (3)

BPK 415 - Neural Control of Movement (3)

BPK 417 - Obesity, Adipocyte Function and Weight management (3)

BPK 420 - Selected Topics in Biomedical Physiology and Kinesiology I (3) *

BPK 421 - Selected Topics in Biomedical Physiology and Kinesiology II (3) *

BPK 422 - Selected Topics in Biomedical Physiology and Kinesiology III (3) *

BPK 423 - Selected Topics in Biomedical Physiology and Kinesiology IV (3) *

BPK 426 - Functional Human Neuroanatomy (3)

BPK 431 - Integrative Cancer Biology (3)

BPK 432 - Physiological Basis of Temperature Regulation (3)

BPK 444 - Cardiac Disease: Pathophysiology and Assessment (3)

BPK 446 - Neurological Disorders (3)

BPK 447 – Neuroplasticity (3)

BPK 448 - Rehabilitation of Movement Control (3)

...

Calendar Entry Change Biomedical Physiology and Kinesiology

Rationale for change: New courses relevant to the Biomedical Physiology Minor should be added to the program specific list.
Effective term and year: Spring 2021
The following program(s) will be affected by these changes: Biomedical Physiology 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**.

Upper Division Requirements

...

and two of

(note that some classes may require additional pre-requisites):

...

BPK 402 - Mechanical Behavior of Biological Tissues (3)

BPK 411- Advanced Topics in Vascular Physiology (3)

BPK 412 - Molecular Cardiac Physiology (3)

BPK 415 - Neural Control of Movement (3)

BPK 420 - Selected Topics in Biomedical Physiology and Kinesiology I (3) *

BPK 421 - Selected Topics in Biomedical Physiology and Kinesiology II (3) *

BPK 422 - Selected Topics in Biomedical Physiology and Kinesiology III (3) *

BPK 423 - Selected Topics in Biomedical Physiology and Kinesiology IV (3) *

BPK 426 - Functional Human Neuroanatomy (3)

BPK 431 - Integrative Cancer Biology (3)

BPK 432 - Physiological Basis of Temperature Regulation (3)

BPK 444 - Cardiac Disease: Pathophysiology and Assessment (3)

BPK 446 - Neurological Disorders (3)

BPK 447 - Neuroplasticity (3)

BPK 448 - Rehabilitation of Movement Control (3)

...

Calendar Entry Change

Name of Program or Name of Faculty – Faculty of Science

Rationale for change: Number change of MATH 310 (UD) to MATH 260 (LD)
Effective term and year: Fall 2020
The following program(s) will be affected by these changes: Actuarial Science 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**.

<u>Upper Division Requirements</u> Students complete the following courses: (...) and four of <u>ACMA 360W - Actuarial Communication (3)</u> <u>BUS 312 - Introduction to Finance (4)</u> <u>BUS 315 - Investments (4)</u> <u>ECON 302 - Microeconomic Theory II: Strategic Behavior (4)</u> <u>ECON 305 - Intermediate Macroeconomic Theory (4)</u> <u>MACM 316 - Numerical Analysis I (3)</u> <u>MATH 309 - Continuous Optimization (3)</u> <u>MATH 310 - Introduction to Ordinary Differential Equations (3)</u> <u>STAT 341 - Introduction to Statistical Computing and Exploratory Data Analysis - R (2)</u> <u>STAT 342 - Introduction to Statistical Computing and Exploratory Data Analysis - SAS (2)</u> <u>STAT 350 - Linear Models in Applied Statistics (3)</u> <u>STAT 380 - Introduction to Stochastic Processes (3)</u> <u>STAT 440 - Learning from Big Data (3)</u> <u>STAT 445 - Applied Multivariate Analysis (3)</u> <u>STAT 450 - Statistical Theory (3)</u> <u>STAT 452 - Statistical Learning and Prediction (3)</u>
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STAT 460 - Bayesian Statistics (3)
STAT 475 - Applied Discrete Data Analysis (3)
STAT 485 - Applied Time Series Analysis (3)
(...)

Calendar Entry Change

Name of Program or Name of Faculty – Faculty of Science

Rationale for change:
Number change of MATH 310 (UD) to MATH 260 (LD)
Effective term and year: Fall 2020
The following program(s) will be affected by these changes:
Actuarial Science 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**.

<u>Upper Division Requirements</u> <u>Students complete the following courses:</u> (...) and three of <u>ACMA 360W - Actuarial Communication (3)</u> <u>BUS 312 - Introduction to Finance (4)</u> <u>BUS 315 - Investments (4)</u> <u>ECON 302 - Microeconomic Theory II: Strategic Behavior (4)</u> <u>ECON 305 - Intermediate Macroeconomic Theory (4)</u> <u>MACM 316 - Numerical Analysis I (3)</u> <u>MATH 309 - Continuous Optimization (3)</u> <u>MATH 310 - Introduction to Ordinary Differential Equations (3)</u> <u>STAT 341 - Introduction to Statistical Computing and Exploratory Data Analysis - R (2)</u> <u>STAT 342 - Introduction to Statistical Computing and Exploratory Data Analysis - SAS (2)</u> <u>STAT 350 - Linear Models in Applied Statistics (3)</u> <u>STAT 380 - Introduction to Stochastic Processes (3)</u> <u>STAT 440 - Learning from Big Data (3)</u> <u>STAT 445 - Applied Multivariate Analysis (3)</u> <u>STAT 452 - Statistical Learning and Prediction (3)</u> <u>STAT 460 - Bayesian Statistics (3)</u> <u>STAT 475 - Applied Discrete Data Analysis (3)</u> <u>STAT 485 - Applied Time Series Analysis (3)</u>
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Calendar Entry Change

Name of Program or Name of Faculty – Faculty of Science

Rationale for change: Number change of MATH 310 (UD) to MATH 260 (LD)
Effective term and year: Fall 2020
The following program(s) will be affected by these changes: Data Science 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**.

<u>Upper Division Recommended Courses</u> <u>BUS 345 - Marketing Research (4)</u> <u>BUS 362 - Business Process Analysis (4)</u> <u>BUS 437 - Decision Analysis in Business (3)</u> <u>BUS 440 - Simulation in Management Decision-making (4)</u> <u>CMPT 308 - Computability and Complexity (3)</u> <u>CMPT 310 - Artificial Intelligence Survey (3)</u> <u>CMPT 322W - Professional Responsibility and Ethics (3)</u> <u>CMPT 373 - Software Development Methods (3)</u> <u>CMPT 376W - Technical Writing and Group Dynamics (3)</u> <u>CMPT 405 - Design and Analysis of Computing Algorithms (3)</u> <u>CMPT 417 - Intelligent Systems (3)</u> <u>CMPT 419 - Special Topics in Artificial Intelligence (3)</u> <u>CMPT 470 - Web-based Information Systems (3)</u> <u>MACM 316 - Numerical Analysis I (3)</u> <u>MATH 310 - Introduction to Ordinary Differential Equations (3)</u> <u>MATH 343 - Applied Discrete Mathematics (3)</u> <u>MATH 345 - Introduction to Graph Theory (3)</u> <u>STAT 342 - Introduction to Statistical Computing and Exploratory Data Analysis - SAS (2)</u> <u>STAT 445 - Applied Multivariate Analysis (3)</u> <u>STAT 475 - Applied Discrete Data Analysis (3)</u> <u>STAT 485 - Applied Time Series Analysis (3)</u>
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Calendar Entry Change

Name of Program or Name of Faculty - Faculty of Science

Rationale for change: Number change of MATH 310 (UD) to MATH 260 (LD)
Effective term and year: Fall 2020
The following program(s) will be affected by these changes: Data Science 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**.

Mathematics Concentration Requirements (...) Upper Division Requirements (...) MATHEMATICS Students complete one of <u>MATH 308 - Linear Optimization (3)</u> <u>MATH 309 - Continuous Optimization (3)</u> and one of <u>MACM 409 - Numerical Linear Algebra: Algorithms, Implementation and Applications (3)</u> <u>MATH 310 - Introduction to Ordinary Differential Equations (3)</u> <u>MATH 320 - Introduction to Analysis II (3)</u> <u>MATH 340 - Algebra II: Rings and Fields (3)</u> <u>MATH 343 - Applied Discrete Mathematics (3)</u> <u>MATH 345 - Introduction to Graph Theory (3)</u> <u>MATH 348 - Probabilistic Models in Operations Research (3)</u>

And

MATH 402W - Operations Research Clinic (4)

and

one additional 400-level MATH course

(...)

Open Concentration Requirements

(...)

Upper Division Requirements

(...)

Students must complete 9 additional units from this list

BUS 345 - Marketing Research (4)

BUS 362 - Business Process Analysis (4)

BUS 437 - Decision Analysis in Business (3)

BUS 440 - Simulation in Management Decision-making (4)

CMPT 308 - Computability and Complexity (3)

CMPT 310 - Artificial Intelligence Survey (3)

CMPT 322W - Professional Responsibility and Ethics (3)

CMPT 373 - Software Development Methods (3)

CMPT 376W - Technical Writing and Group Dynamics (3)

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

CMPT 417 - Intelligent Systems (3)

CMPT 419 - Special Topics in Artificial Intelligence (3)

CMPT 470 - Web-based Information Systems (3)

MACM 316 - Numerical Analysis I (3)

~~MATH 310 - Introduction to Ordinary Differential Equations (3)~~

MATH 343 - Applied Discrete Mathematics (3)

MATH 345 - Introduction to Graph Theory (3)

STAT 342 - Introduction to Statistical Computing and Exploratory Data Analysis - SAS (2)

STAT 445 - Applied Multivariate Analysis (3)

STAT 475 - Applied Discrete Data Analysis (3)

STAT 485 - Applied Time Series Analysis (3)

(...)