| 8888 University | TEL: | avpacaddasfu.ca |
| :--- | :--- | :--- |
| Drive, Burnaby, | 778.782 .6654 | www.sfu.ca/vpacademic |
| BC | FAX: |  |
| Canada V5A 1S6 | 778.782 .5876 |  |


| memorandum |  |  |  |
| :--- | :--- | :--- | :--- |
| attention | Senate | date | February 8, 2019 |
| from | Wade Parkhouse, Chair | Pages | $1 / 2$ |
|  | Senate Committee on |  |  |
| RE: | Undergraduate Studies |  |  |

## For information:

Acting under delegated authority at its meeting of February 7, 2019 SCUS approved the following curriculum revisions effective Fall 2019.

## a. Faculty of Science (REVISED SCUS 19-05)

## 1. Department of Earth Sciences

(i) Upper division requirement changes to the Earth Sciences Major and Honours programs
(ii) Requirement changes to the Earth Sciences Certificate program

## 2. Faculty of Communication, Art and Technology (SCUS 19-10)

1. School for the Contemporary Arts
(i) Lower division requirement changes to the Art, Performance and Cinema Studies Major and Honours programs' Art and Performance Studies and Cinema Studies streams
(ii) Lower division requirement changes to the Art, Performance and Cinema Studies Minor program
(iii) Lower division requirement changes to the Visual Arts Major, Extended Minor and Honours Programs
$1 \mid \mathrm{Page}$

## c. Faculty of Environment (SCUS 19-11)

1. Department of Geography
(i) Upper and lower division requirement changes to the BENV Global Environmental Systems Major

## d. Faculty of Science (SCUS 19-12)

1. Department of Biomedical Physiology and Kinesiology
(i) Requirement changes to the Behavioural Neuroscience Major and Honours programs (Summer 2019)
(ii) Admission procedure changes to:

- Biomedical Physiology Major and Minor program
- Kinesiology Major and Minor program
(iii) Admission requirement changes to the Biomedical Physiology Major and Minor programs

2. Department of Statistics and Actuarial Science
(i) Requirement changes to the STAT Major and Honours program

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.

## Calendar Entry Change <br> Name of Program or Name of Faculty: Earth Sciences Major/Honours

| Rationale for change: <br> Addition of SCI 301 Science Communication: An Introduction as an upper division elective <br> for our Majors students |
| :--- |
| Effective term and year: <br> Fall 2019 |
| The following program(s) will be affected by these changes: |
| EASC 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.

```
Upper Division Requirements
GEOLOGY STREAM
Students who choose this stream will complete a minimum of 45 units, including
all of
EASC 301 - Igneous Petrology (3)
EASC 302 - Sedimentary Petrology (3)
EASC 306 - Field Geology II (3)
EASC 308 - Field Geology III (3)
EASC 309 - Global Tectonics (3)
EASC 310W - Paleontology (3)
EASC 311 - Metamorphic Petrology (3)
and at least one of
EASC 304 - Hydrogeology (3)
EASC 313 - Introduction to Soil and Rock Engineering (3)
EASC 403 - Quaternary Geology (3)
and at least }21\mathrm{ units chosen from
EASC 300-Selected Topics in Earth Sciences (3)
```

EASC 304 - Hydrogeology (3)
EASC 305 - Quantitative Methods for the Earth Sciences (3)
EASC 307 - Applied Geophysics (3)
EASC 312 - Stratigraphy (3)
EASC 313 - Introduction to Soil and Rock Engineering (3)
EASC 314 - Principles of Glaciology (3)
EASC 315W - Geochemistry of Natural Waters (3)
EASC 317 - Global Geophysics (3)
EASC 400 - Selected Topics in Earth Sciences (3)
EASC 401 - Mineral Deposits (3)
EASC 402 - Sedimentology (3)
EASC 403 - Quaternary Geology (3)
EASC 404 - Structural Geology II (3)
EASC 405 - Water, Environment, and Climate Change (3)
EASC 408 - Regional Geology of Western Canada (3)
EASC 410 - Groundwater Contamination and Transport (3)
EASC 411 - Terrain Analysis (3)
EASC 413 - Resource Geotechnics (3)
EASC 415 - Groundwater Modelling (3)
EASC 416 - Field and Lab Techniques in Hydrogeology (3)
EASC 420 - Petroleum Geology (3)
EASC 421 - Volcanology (3)
EASC 491 - Directed Readings (1) *
EASC 492 - Directed Readings (2) *
EASC 493 - Directed Readings (3) *
GEOG 313 - River Geomorphology (4)
GEOG 355 - Geographical Information Science II (4)
SCI 301 - Science Communication: An Introduction (3)

## ENVIRONMENTAL GEOSCIENCE STREAM

Students who choose this stream will complete a minimum of 45 units, including
all of

EASC 304 - Hydrogeology (3)
EASC 306 - Field Geology II (3)
EASC 308 - Field Geology III (3)
EASC 313 - Introduction to Soil and Rock Engineering (3)
EASC 315W - Geochemistry of Natural Waters (3)
EASC 403 - Quaternary Geology (3)
and at least one of

```
EASC 301 - Igneous Petrology (3)
EASC 302 - Sedimentary Petrology (3)
EASC 309 - Global Tectonics (3)
EASC 310W - Paleontology (3)
```

and a minimum of at least 24 units (with a maximum of 12 units from GEOG) chosen from
EASC 300 - Selected Topics in Earth Sciences (3)
EASC 301 - Igneous Petrology (3)
EASC 302 - Sedimentary Petrology (3)
EASC 305 - Quantitative Methods for the Earth Sciences (3)
EASC 307 - Applied Geophysics (3)
EASC 309 - Global Tectonics (3)
EASC 310W - Paleontology (3)
EASC 311 - Metamorphic Petrology (3)
EASC 312 - Stratigraphy (3)
EASC 314 - Principles of Glaciology (3)
EASC 317 - Global Geophysics (3)
EASC 400 - Selected Topics in Earth Sciences (3)
EASC 401 - Mineral Deposits (3)
EASC 402 - Sedimentology (3)
EASC 404 - Structural Geology II (3)
EASC 405 - Water, Environment, and Climate Change (3)
EASC 408 - Regional Geology of Western Canada (3)
EASC 410 - Groundwater Contamination and Transport (3)
EASC 411 - Terrain Analysis (3)
EASC 413 - Resource Geotechnics (3)
EASC 415 - Groundwater Modelling (3)
EASC 416 - Field and Lab Techniques in Hydrogeology (3)
EASC 420 - Petroleum Geology (3)
EASC 421 - Volcanology (3)
EASC 491 - Directed Readings (1) *
EASC 492 - Directed Readings (2) *
EASC 493 - Directed Readings (3) *
GEOG 311 - Hydrology (4)
GEOG 313 - River Geomorphology (4)
GEOG 314 - The Climate System (4)
GEOG 316 - Global Biogeochemical and Water Cycles (4)
GEOG 317 - Soil Science (4)
GEOG 352 - Spatial Analysis (4)
GEOG 353 - Advanced Remote Sensing (4)
GEOG 355 - Geographical Information Science II (4)
GEOG 412W - Glacial Processes and Environments (4)

## SCI 301 - Science Communication: An Introduction (3)

Calendar Entry Change<br>Name of Program or Name of Faculty: Earth Sciences Major/Honours

## Rationale for change:

Addition of SCI 301 Science Communication: An Introduction as an upper division elective for our Honours students

## Effective term and year:

Fall 2019
The following program(s) will be affected by these changes:
EASC 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
GEOLOGY STREAM
Students who choose this stream will complete a minimum of 48 units, including all of
EASC 301 - Igneous Petrology (3)
EASC 302 - Sedimentary Petrology (3)
EASC 306 - Field Geology II (3)
EASC 308 - Field Geology III (3)
EASC 309 - Global Tectonics (3)
EASC 310W - Paleontology (3)
EASC 311 - Metamorphic Petrology (3)
EASC 499 - Honours Thesis (6)
and at least one of
EASC 304 - Hydrogeology (3)
EASC 313 - Introduction to Soil and Rock Engineering (3)
EASC 403 - Quaternary Geology (3)
and at least 18 units chosen from
EASC 300 - Selected Topics in Earth Sciences (3)
EASC 304 - Hydrogeology (3)
EASC 305 - Quantitative Methods for the Earth Sciences (3)
```

```
EASC 307 - Applied Geophysics (3)
EASC 312 - Stratigraphy (3)
EASC 313 - Introduction to Soil and Rock Engineering (3)
EASC 314 - Principles of Glaciology (3)
EASC 315W - Geochemistry of Natural Waters (3)
EASC 317-Global Geophysics (3)
EASC 400-Selected Topics in Earth Sciences (3)
EASC 401 - Mineral Deposits (3)
EASC 402 - Sedimentology (3)
EASC 403 - Quaternary Geology (3)
EASC 404 - Structural Geology II (3)
EASC 405 - Water, Environment, and Climate Change (3)
EASC 408 - Regional Geology of Western Canada (3)
EASC 410-Groundwater Contamination and Transport (3)
EASC 411 - Terrain Analysis (3)
EASC 413 - Resource Geotechnics (3)
EASC 415 - Groundwater Modelling (3)
EASC 416 - Field and Lab Techniques in Hydrogeology (3)
EASC 420 - Petroleum Geology (3)
EASC 421 - Volcanology (3)
EASC 491 - Directed Readings (1) *
EASC 492 - Directed Readings (2) *
EASC 493 - Directed Readings (3) *
GEOG 313 - River Geomorphology (4)
GEOG 355 - Geographical Information Science II (4)
SCI 301 - Science Communication: An Introduction (3)
```


## ENVIRONMENTAL GEOSCIENCE STREAM

Students who choose this stream will complete a minimum of 48 units, including all of
EASC 304 - Hydrogeology (3)
EASC 306 - Field Geology II (3)
EASC 308 - Field Geology III (3)
EASC 313 - Introduction to Soil and Rock Engineering (3)
EASC 315W - Geochemistry of Natural Waters (3)
EASC 403 - Quaternary Geology (3)
EASC 499 - Honours Thesis (6)
and at least one of
EASC 301 - Igneous Petrology (3)
EASC 302 - Sedimentary Petrology (3)

```
EASC 309 - Global Tectonics (3)
EASC 310W - Paleontology (3)
```

and a minimum of at least 21 units (with a maximum of 12 units from GEOG) chosen from
EASC 300 - Selected Topics in Earth Sciences (3)
EASC 301 - Igneous Petrology (3)
EASC 302 - Sedimentary Petrology (3)
EASC 305 - Quantitative Methods for the Earth Sciences (3)
EASC 307 - Applied Geophysics (3)
EASC 309 - Global Tectonics (3)
EASC 310W - Paleontology (3)
EASC 311 - Metamorphic Petrology (3)
EASC 312 - Stratigraphy (3)
EASC 314 - Principles of Glaciology (3)
EASC 317 - Global Geophysics (3)
EASC 400 - Selected Topics in Earth Sciences (3)
EASC 401 - Mineral Deposits (3)
EASC 402 - Sedimentology (3)
EASC 404 - Structural Geology II (3)
EASC 405 - Water, Environment, and Climate Change (3)
EASC 408 - Regional Geology of Western Canada (3)
EASC 410 - Groundwater Contamination and Transport (3)
EASC 411 - Terrain Analysis (3)
EASC 413 - Resource Geotechnics (3)
EASC 415 - Groundwater Modelling (3)
EASC 416 - Field and Lab Techniques in Hydrogeology (3)
EASC 420 - Petroleum Geology (3)
EASC 421 - Volcanology (3)
EASC 491 - Directed Readings (1) *
EASC 492 - Directed Readings (2) *
EASC 493 - Directed Readings (3) *
GEOG 311 - Hydrology (4)
GEOG 313 - River Geomorphology (4)
GEOG 314 - The Climate System (4)
GEOG 316 - Global Biogeochemical and Water Cycles (4)
GEOG 317 - Soil Science (4)
GEOG 352 - Spatial Analysis (4)
GEOG 353 - Advanced Remote Sensing (4)
GEOG 355 - Geographical Information Science II (4)
GEOG 412W - Glacial Processes and Environments (4)
SCI 301 - Science Communication: An Introduction (3)

Calendar Entry Change
Name of Program or Name of Faculty: Earth Sciences Certificate
Rationale for change: Simplification and clarification of certificate requirements.
Effective term and year:
Fall 2019
The following program(s) will be affected by these changes:
EASC 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.

## CERTIFICATE

This program provides both part-time and full-time students with the opportunity to understand the fundamentals of earth sciences Earth Sciences without necessarily specializing in earth sciences Earth Sciences.

Minimum Grade Requirement
Students enrolled in this certificate program must have a grade of C- or better in all prerequisite and required courses.

Program Requirements
Students complete
EASC 101 - Dynamic Earth (3)
and at least 21 units from
Any 100, 200, 300 or 400 division EASC course
SCI 301 - Science Communication: An Introduction
Students wishing to enroll in Earth Sciences courses must obtain a $C$-grade or better in prerequisite all courses.

Program Requirements
This certificate requires completion of at least 24 units of required course work and electives as follows

```
EASC 101-Dynamic Earth (3)
and one of
EASC 106-Earth Through Time (3)
EASC 210-Historical Geology (3)
and at least }18\mathrm{ units selected from
EASC 103 - The Rise and Fall of the Dinosaurs (3)
EASC 104-Geohazards Earth in Turmoil (3)
EASC 107-Economic Geological Resources (3)
EASC 108-Exploring the Solar System (3)
EASC 206-Field Geology I (2)*
EASC 209W Environmental Geoscience (4)
REM 100-Global Change (3)
and any other 200,300 or 400 division EASC course.
* Students considering taking EASC 206 Field Geology I must take EASC 210 Historical
Greology.
```


## Earth Sciences

## CERTIFICATE

This program provides both part-time and full-time students with the opportunity to understand the fundamentals of Earth Sciences without necessarily specializing in Earth Sciences.

## Minimum Grade Requirement

Students enrolled in this certificate program must have a grade of C- or better in all required courses.

## Program Requirements

Students complete
EASC 101 - Dynamic Earth (3)
and at least 21 units selected from
Any 100, 200, 300 or 400 division EASC course
SCI 301 - Science Communication: An Introduction (3)

## Calendar Entry Change

Name of Program or Name of Faculty
Art, Performance and Cinema Studies Major Program, School for the Contemporary Arts
Rationale for change:
Course code changes:
Modification of CA 167 to CA 117
Modification of CA 168 to CA 117
Addition of W designation to CA 210
Effective term and year:
Fall 2019
The following program(s) will be affected by these changes:

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

Students complete 132 units including the program requirements as specified below.
Lower Division Requirements for Both Streams
Students in both streams complete a total of 27 units including all of:
CA 137 - The History and Aesthetics of Cinema II (3)
CA 168118 - Visual Art and Culture II (3)
CA 186 - Art and the Moving Image (3)
CA 210W - Artworks, Theories, Contexts (3)

## Art and Performance Studies Stream

## Lower Division Requirements

In addition to the lower division courses required for both streams, students in the Art and Performance Studies stream must complete:
CA 167117 - Visual Art and Culture I (3)
Plus six units from below:
CA 136 - The History and Aesthetics of Cinema I (3)
CA 140 - Music after 1900 (3)
CA 227 - History of Dance: From the 20th Century to the Present (3)
CA 228W - Dance Aesthetics (3)
CA 235 - Experimental Film and Video (3)

```
CA 257W - Context of Theatre I (3)
HUM 211 - Art and Literature of the Italian Renaissance (3)
And six units from below:
CA 120 - Introduction to Dance Forms: Contemporary and Popular (3)
CA 129 - Movement Fundamentals (3)
CA 150 - Introduction to Acting (3)
CA 160 - Introductory Studio in Visual Art I (3)
CA 170 - Introduction to Production Technology (3)
CA 243 - Gamelan I (3)
CA 285 - Interdisciplinary Studio - Composition/Collaboration (3)
SA 245-Cultures and Images (A) (4)
...
```


## Cinema Studies Stream

## Lower Division Requirements

```
In addition to the lower division courses required for both streams, students in the Cinema Studies stream must complete:
CA 136 - The History and Aesthetics of Cinema I (3)
One of:
CA 235 - Experimental Film and Video (3) ***
CA 236 - Cinema in Canada (3)
CA 237 - Selected Topics in Film and Video Studies (3) ***
And one of:
CA 140 - Music after 1900 (3)
CA 167117 - Visual Art and Culture I (3)
CA 227 - History of Dance: From the 20th Century to the Present (3)
CA 228W - Dance Aesthetics (3)
CA 257W - Context of Theatre I (3)
HUM 211 - Art and Literature of the Italian Renaissance (3)
Plus six units from below:
CA 120 - Introduction to Dance Forms: Contemporary and Popular (3)
CA 129 - Movement Fundamentals (3)
CA 150 - Introduction to Acting (3)
CA 160 - Introductory Studio in Visual Art I (3)
CA 170 - Introduction to Production Technology (3)
CA 238W - Screenwriting I (3)
CA 243 - Gamelan I (3)
CA 285 - Interdisciplinary Studio - Composition/Collaboration (3)
SA 245 - Cultures and Images (A) (4)
*** Cannot be repeated for credit within the degree requirements
```


## Calendar Entry Change

Name of Program or Name of Faculty
Art, Performance and Cinema Studies Honours Program, School for the Contemporary Arts

| Rationale for change: |
| :--- |
| Course code changes: |
| Modification of CA 167 to CA 117 |
| Modification of CA 168 to CA 117 |
| Addition of W designation to CA 210 |
| Effective term and year: <br> Fall 2019 |

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

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

Students complete 132 units including the program requirements as specified below.
Lower Division Requirements for Both Streams
Students in both streams complete a total of 27 units including all of:
CA 137 - The History and Aesthetics of Cinema II (3)
CA 168118 - Visual Art and Culture II (3)
CA 186 - Art and the Moving Image (3)
CA 210W - Artworks, Theories, Contexts (3)

## Art and Performance Studies Stream

## Lower Division Requirements

In addition to the lower division courses required for both streams, students in the Art and
Performance Studies stream must complete:
CA 167117 - Visual Art and Culture I (3)
Plus six units from below:
CA 136 - The History and Aesthetics of Cinema I (3)
CA 140 - Music after 1900 (3)
CA 227 - History of Dance: From the 20th Century to the Present (3)
CA 228W - Dance Aesthetics (3)

CA 235 - Experimental Film and Video (3)
CA 257W - Context of Theatre I (3)
HUM 211 - Art and Literature of the Italian Renaissance (3)
And six units from below:
CA 120 - Introduction to Dance Forms: Contemporary and Popular (3)
CA 129 - Movement Fundamentals (3)
CA 150 - Introduction to Acting (3)
CA 160 - Introductory Studio in Visual Art I (3)
CA 170 - Introduction to Production Technology (3)
CA 243 - Gamelan I (3)
CA 285 - Interdisciplinary Studio - Composition/Collaboration (3)
SA 245 - Cultures and Images (A) (4)

## Upper Division Requirements

Students are encouraged to plan in advance, as some upper division courses may not be offered each year. Students who wish to complete upper division courses must make sure they have the disciplinary prerequisites and should be aware that studio courses may have limited enrolments.
Students complete a minimum of 40 units from the list below, including a minimum 12 units within CA:
CMNS 334 - Cultural Policy (4)
CA 312 - Selected Topics in Art and Culture Studies (3) *
CA 314 - Readings in the History of Art and Culture (3) *
CA 317 - Introduction to Performance Studies (4)
CA 319W - Critical Writing in the Arts (3)
CA 335 - Introduction to Film Theory (4)
CA 337 - Intermediate Selected Topics in Film and Video Studies (4)
CA 341 - World Music (3)
CA 359 - Selected Topics in Theatre (3)
CA 389 - Selected Topics in the Fine and Performing Arts II (3)
CA 401 - Directed Studies (Theory/History) (3)
CA 406 - Internship in Contemporary Arts II (4)
CA 412W - Advanced Seminar in Art and Culture Studies (4) *
CA 414 - Advanced Topic in the History of Art and Culture (3) *
CA 436 - Advanced Seminar in Film and Video Studies (4)
CA 485 - Interdisciplinary Collaboration in Contemporary Arts (5)
CA 489 - Interdisciplinary Project in Contemporary Arts (5)
GSWS 431 - Local Sex on Global Screen (4)
HUM 309 - Literatures and the Arts Across Cultures (4)
HUM 311 - Italian Renaissance Humanism (4)
HUM 385 - Selected Topics in European Studies (4)
HUM 422 - The Humanities and the Critique of Culture (4)
SA 460 - Special Topics in Sociology and Anthropology I (SA) (4)
Other CA courses can be substituted for courses on this list with permission from area.

* may be completed more than once for credit if the topic changes.


## Cinema Studies Stream

## Lower Division Requirements

In addition to the lower division courses required for both streams, students in the Cinema Studies stream must complete:
CA 136 - The History and Aesthetics of Cinema I (3)
One of:
CA 235 - Experimental Film and Video (3) ***
CA 236 - Cinema in Canada (3)
CA 237 - Selected Topics in Film and Video Studies (3) ***
And one of:
CA 140 - Music after 1900 (3)
CA 167117 - Visual Art and Culture I (3)
CA 227 - History of Dance: From the 20th Century to the Present (3)
CA 228W - Dance Aesthetics (3)
CA 257 W - Context of Theatre I (3)
HUM 211 - Art and Literature of the Italian Renaissance (3)
Plus six units from below:
CA 120 - Introduction to Dance Forms: Contemporary and Popular (3)
CA 129 - Movement Fundamentals (3)
CA 150 - Introduction to Acting (3)
CA 160 - Introductory Studio in Visual Art I (3)
CA 170 - Introduction to Production Technology (3)
CA 238W - Screenwriting I (3)
CA 243 - Gamelan I (3)
CA 285 - Interdisciplinary Studio - Composition/Collaboration (3)
SA 245 - Cultures and Images (A) (4)
*** Cannot be repeated for credit within the degree requirements

## Upper Division Requirements

Students are encouraged to plan in advance, as some upper division courses may not be offered each year. Students who wish to complete upper division courses must make sure they have the disciplinary prerequisites and should be aware that studio courses may have limited enrolments.
Students must complete a minimum of 40 units, including all of:
CA 335 - Introduction to Film Theory (4)
CA 337 - Intermediate Selected Topics in Film and Video Studies (4) *
CA 436 - Advanced Seminar in Film and Video Studies (4) *
Remaining units can be drawn from the list below:
CMNS 310 - Media and Modernity (4)
CMNS 322 - Documentary Media (4)
CMNS 334 - Cultural Policy (4)

ENGL 376 - Special Studies (4) +
ENGL 383 - Studies in Popular Literature and Culture (4) +
ENGL 484W - Topics in Media, Culture and Performance (4)
ENGL 486W - Topics in Gender, Sexuality and Literature (4) +
CA 308 - Contemporary Arts Field School I (Theory/History) (4) **
CA 312 - Selected Topics in Art and Culture Studies (3) **
CA 314 - Readings in the History of Art and Culture (3) +
CA 317 - Introduction to Performance Studies (4)
CA 319W - Critical Writing in the Arts (3)
CA 337 - Intermediate Selected Topics in Film and Video Studies (4) *
CA 338W - Screenwriting II (3)
CA 389 - Selected Topics in the Fine and Performing Arts II (3) **
CA 401 - Directed Studies (Theory/History) (3)
CA 406 - Internship in Contemporary Arts II (4)
CA 408 - Contemporary Arts Field School III (Theory/History) (4) **
CA 412W - Advanced Seminar in Art and Culture Studies (4) +
CA 414 - Advanced Topic in the History of Art and Culture (3) +
CA 436 - Advanced Seminar in Film and Video Studies (4) *
CA 485 - Interdisciplinary Collaboration in Contemporary Arts (5)
CA 489 - Interdisciplinary Project in Contemporary Arts (5)
FREN 352 - French and Francophone Cultures through Films and/or Media Texts (3) **
FREN 452 - Topics in French and Francophone Cultures or Cinemas (3)**
GSWS 401 - Research Project (5)
HIST 433W - Italian Films, Italian Histories (4)
HUM 309 - Literatures and the Arts Across Cultures (4)
HUM 311 - Italian Renaissance Humanism (4)
HUM 385 - Selected Topics in European Studies (4)
HUM 422 - The Humanities and the Critique of Culture (4)
SA 460 - Special Topics in Sociology and Anthropology I (SA) (4)
Other CA courses can be substituted for courses on this list with permission from area.

* Can be repeated as an elective if the topic of the course changes.
** Only when the topic is cinema/media/theory of relevance; prior approval required.
+ Can be repeated as an elective if the topic of the course changes. Only when the topic is cinema/media/theory of relevance; prior approval required.


## Calendar Entry Change <br> Name of Program or Name of Faculty

Art, Performance and Cinema Studies Minor Program, School for the Contemporary Arts

```
Rationale for change:
Course code changes:
Modification of CA 167 to CA 117
Modification of CA 168 to CA 117
Addition of W designation to CA 210
Effective term and year:
Fall 2019
The following program(s) will be affected by these changes:
```

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 complete a minimum of 15 units, including all of
CA 117167 - Visual Art and Culture I (3)
CA 118168 - Visual Art and Culture II (3)
CA 186 - Art and the Moving Image (3)
CA 210W - Artworks, Theories, Contexts (3) and one of

CA 136 - The History and Aesthetics of Cinema I (3)
CA 137 - The History and Aesthetics of Cinema II (3)

## Calendar Entry Change

Name of Program or Name of Faculty
Visual Arts Major Program, School for the Contemporary Arts

```
Rationale for change:
Course code changes:
Modification of CA 167 to CA }11
Modification of CA 168 to CA }11
Addition of W designation to CA }21
Effective term and year:
Fall 2019
The following program(s) will be affected by these changes:
```

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 complete a minimum of 39 units including:
Three core courses below:
CA 149 - Sound (3)
CA 186 - Art and the Moving Image (3)
CA 285 - Interdisciplinary Studio - Composition/Collaboration (3)
Plus one additional CA history course outside their major.
and all of
CA 160 - Introductory Studio in Visual Art I (3)
CA 161 - Introductory Studio in Visual Art II (3)
CA 117167 - Visual Art and Culture I (3)
CA 118168 - Visual Art and Culture II (3)
CA 210W - Artworks, Theories, Contexts (3)
CA 260 - Studio in Visual Art I (3)
CA 261 - Studio in Visual Art II (3)
...
```

Calendar Entry Change<br>Name of Program or Name of Faculty<br>Visual Arts Extended Minor Program, School for the Contemporary Arts

| Rationale for change: |
| :--- |
| Course code changes: |
| Modification of CA 167 to CA 117 |
| Modification of CA 168 to CA 117 |
| Addition of W designation to CA 210 |
| Effective term and year: <br> Fall 2019 |
| The following program(s) will be affected by these changes: |

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 complete a minimum of 30 units including:
CA 160-Introductory Studio in Visual Art I (3)
CA 161 - Introductory Studio in Visual Art II (3)
CA 117167 - Visual Art and Culture I (3)
CA 118168 - Visual Art and Culture II (3)
CA 186 - Art and the Moving Image (3)
CA 210W - Artworks, Theories, Contexts (3)
CA 260 - Studio in Visual Art I (3)
CA 261 - Studio in Visual Art II (3)
...
```

Calendar Entry Change<br>Name of Program or Name of Faculty<br>Visual Arts Honours Program, School for the Contemporary Arts

| Rationale for change: |
| :--- |
| Course code changes: |
| Modification of CA 167 to CA 117 |
| Modification of CA 168 to CA 117 |
| Addition of W designation to CA 210 |
| Effective term and year: |
| Fall 2019 |
| The following program(s) will be affected by these changes: |

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 complete a minimum of 39 units including:
Three core courses below:

CA 149 - Sound (3)
CA 186 - Art and the Moving Image (3)
CA 285 - Interdisciplinary Studio - Composition/Collaboration (3)
Plus one additional CA history course outside their major.
and all of
CA 160 - Introductory Studio in Visual Art I (3)
CA 161 - Introductory Studio in Visual Art II (3)
CA 117167 - Visual Art and Culture I (3)
CA 118168 - Visual Art and Culture II (3)
CA 210W - Artworks, Theories, Contexts (3)
CA 260 - Studio in Visual Art I (3)
CA 261 - Studio in Visual Art II (3)

## Calendar Entry Change Department of Geography

Rationale for change:

1. To add Indigenous-focused and Environmental Justice courses to the requirements of all GES majors.
2. To add a required course in each of the three "areas" of upper division courses (biophysical systems, social and political systems, and data and methods). The rationale for this is three-fold. First, these three courses all provide a foundational education in global environmental systems at an upper division level: they address the climate system, geographic-spatial information data and analysis, and global environmental politics. Second, as Geography is responsible for the program, and for assessing it's capacity to meet the program's educational goals, these 3 core upper division courses will enable us to assess the programs performance relative to its educational goals, as is now expected of all SFU programs. Third, the GES program is necessarily extremely broad in scope and course choices, covering material from climate science to cultural geography, and it is quite likely that students could move through the program without developing any sense of a "cohort" of interested peers. This should help address that problem.
3. While not sacrificing the broad range of experience and knowledge the B.Env. degrees are intended to provide, to streamline what is a quite complicated program by getting rid of hidden prequisites that are not part of the program, but were built into some of the course options in the both lower and upper divisions. We have also attempted to make the flow through the program more straightforward, by maintaining and in some cases expanding course choice, thus improving flexibility for students.

Effective term and year: Fall 2019
The following program(s) will be affected by these changes:
BENV Global Environmental Systems 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

Students complete 120 units, as specified below. Additional upper division units will be required to total a minimum of 45 upper division units.

## Lower Division Requirements

Complete all of:
GEOG 100 - Our World: Introducing Human Geography (3)
GEOG 111 - Earth Systems (3)
GEOG 214 - Weather and Climate (3)
GEOG 215 - Biogeography (3)
GEOG 255 - Geographical Information Science I (3)
REM 100 -Global Change (3)
REM 221 - Systems Thinking and the Environment (3)
GEOG 266W - Geography in Practice
and one of:
GEOG 104 - Climate Change, Water and Society (3)
REM 100 - Global Change (3)
EVSC 100 - Introduction to Environmental Science (3)
and one of:
GEOG 251 - Quantitative Geography (3)
STAT 201 - Statistics for the Life Sciences (3)
STAT 203 - Introduction to Statistics for the Social Sciences (3)
STAT 205 - Introduction to Statistics (3)
STAT 270 - Introduction to Probability and Statistics (3)
Choose 1 of:
ARCH 131 - Human Origins (3)
BISC 101 -General Biology (4)
BISC 102 -General Biology (4)
HSCI 100-Human Biology (3)
Choose 1 of:

BISC 204 - Introduction to Eeology (3)
EVSC 100 - Introduction to Environmental Science (3)
GEOG 215 - Biogeography (3)
and one of:
ARCH 286 - Cultural Heritage Management (4)FNST 101 - Introduction to First Nations Studies (3)FNST 286 - Indigenous Peoples and British Columbia: An introduction (3)
and one of
GEOG 221 - Economic Worlds (3)
GEOG 241 - People, Place, Society (3)
GEOG 261 - Encountering the City (3)
Upper Division Requirements
Complete all of
GEOG 314 - The Climate System (4)
GEOG 355 - Geographical Information Science II (4)
GEOG 389W - Nature and Society (4)
Biophysical Systems (ehoose 3) (choose two)
ARCH 388 - Geoarchaeology (5)
GEOG 213 - Introduction to Geomorphology (3)
GEOG 311 - Hydrology (4)
GEOG 312 - Geography of Natural Hazards (4)
GEOG 313 - River Geomorphology (4)
GEOG 314 - The Climate System (4)
GEOG 315 - World Ecosystems (4)
GEOG 316 - Global Biogeochemical and Water Cycles (4)
GEOG 317 - Soil Science (4)
GEOG 411 - Advanced Hydrology (4)
GEOG 412W - Glacial Processes and Environments (4)
GEOG 414 - Climate Change
GEOG 417 or 417W - Advanced Soil Science
REM 370 - Global Resource Issues in Oceanography (3)
REM 375 - Ecology and Conservation of Coastal BC (3)
REM 471 - Forest Ecosystem Management (3)
Socio-economic and Political Systems (eheose 3) (choose one)
ARCH 363 -Landseape Arehaeology ( 3 )
ARCH 365-Archaeological Perspectives on Human Ecology (3)
ARCH 389 Ethnoecology (3)
GEOG 321 - Geographies of Global Capitalism (4)
GEOG 322W - World Resources (4)
GEOG 325 - Geographies of Consumption (4)
GEOG 362W - Geography of Urban Built Environments (4)
GEOG 363 - Urban Planning and Policy (4)
GEOG 377 - Environmental History (4)

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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 389W Nature and Society (4)
GEOG 423 - Capitalist Natures (4)
GEOG-428-World Forests (4)
GEOG 432 - Problems in Environmental History (4)
GEOG 449 - City and Environment (4)
GSWS 314 - Race, Class and Gender (4)
POL 346 - International Organization (4)
POL 452W - Energy Policy (4)
REM 319 - Environmental Law (3)
REM 321 - Ecological Economics (4)
REM 350 - Sustainable Energy and Materials Management (4)
REM-356356W - Institutional Arrangements for Sustainable Environmental Management (3)
REM 454 - Water Security (3)
SA 371 - The Environment and Society (SA) (4)
SD 401 - Sustainable Development Goals Studio (4)
Environmental Justice (choose one)
ENV320W - Ethics and the Environment (3)
FNST 433-Indigenous Environmental Justice and Activism (4)
GEOG 328 - Labour Geographies (4)
GEOG 385 - Food and the City (4)
REM 407 Indigenous Governance and Resource Relationships (4)
Data Acquisition, Analysis and Modeling (ehoose3) (choose two)
ARCH 285-Arehaeological Science (4)
EVSC 305 - Methods in Environmental Science (3)
GEOG 253 - Introduction to Remote Sensing (3)
GEOG 310 - Physical Geography Field Course (4)
GEOG 352 - Spatial Analysis (4)
GEOG 353 - Advanced Remote Sensing (4)
GEOG 414 - Climate Change (4)
GEOG 451 - Spatial Modeling (4)
GEOG 453 - Theoretical and Applied Remote Sensing (4)
GEOG 455W - Theoretical and Applied GIS (4)
GEOG 457 - Geovisualization Interfaces (4)
REM 311-Applied Ecology and Sustainable Environments (3)
REM 412 - Environmental Modeling (3)
Communication (choose one)
CMNS 342 - Seience and Public Policy: Risk Communication (4)
CMNS 349 - Environment, Media and Communication (4)
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## GEOG 351 - Multimedia Cartography (4)

GEOG 356-3D Geovisualization (4)
SA 315-New Information Technology and Society
Capstone Experience (choose one)
ENV-495-Environmental Capstone-(4)
GEOG 411 - Advanced Hydrology (4)
GEOG 412W - Glacial Processes and Environments (4)
GEOG 414 - Climate Change (4)
GEOG 417 or 417W - Advanced Soil Science (4)
GEOG 421 - Geographical Political Economy
GEOG 423 - Capitalist Natures (4)
GEOG 432 - Problems in Environmental History (4)
GEOG 440 - Property, Land, Society (4)
GEOG 442 - A World of Cities (4)
GEOG 449 - City and Environment (4)
GEOG 451 - Spatial Modeling (4)
GEOG 453 - Theoretical and Applied Remote Sensing (4)
GEOG 455W - Theoretical and Applied GIS (4)
GEOG 457 - Geovisualization Interfaces (4)
GEOG 497 - International Field Study (5)
In-speciat-eases,-the-Director may approve-substitutes for the eapstone,-such as ENV 491.
(Direeted Study in Envirenment):
Fhree-Two lower division courses (ARCH 285 , GEOG 213 and GEOG 253) can be used to satisfy seme of specific upper division requirements of this major;. but do not eount These courses do not count toward the 45 upper division units required to graduate towards the graduation-requirement $0 f 45$ upper division wnits. Additional courses may be required to satisfy WQB requirements, may necessitate additional classes for some students, but although the interdisciplinary major-such-as Global Environmental Systems major already includes numerous several courses that meet Quantitative requirements.

## Calendar Entry Change <br> Biomedical Physiology and Kinesiology and Psychology

$$
\begin{aligned}
& \text { Rationale for change: Students wishing to complete a Behavioural Neuroscience Honours thesis } \\
& \text { need either BPK 304W or PSYC } 301 \text { as a prerequisite depending on if they are doing their } \\
& \text { honours in PSYC or BPK. Students should receive credit for these courses within their major or } \\
& \text { honours program. }
\end{aligned}
$$

Effective term and year: Summer 2019
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 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 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
PSYCHOLOGY
...
and at least }11\mathrm{ units selected from the following
```

PSYC 301 - Intermediate Research Methods and Data Analysis (4)

SENATE COMMITTEE ON

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PSYC 303 - Perception (3)
PSYC 325 - Learning and Memory (3)
PSYC 330 - Attention (3)
PSYC 383-Psychopharmacology (3)
PSYC 386 - Laboratory in Behavioral Neuroscience (4)
PSYC 387- Human Neuropsychology (3)
PSYC 388- Biological Rhythms and Sleep (3)
PSYC 389-Emotion and Motivation (3)
PSYC 480 - Advanced Topics in Biological Psychology (4)
PSYC 491 - Advanced Topics in Psychology (4)*
PSYC 493-Directed Studies (3)*
PSYC 494-Directed Studies (3)*
PSYC 495 - Directed Studies (3) *
*Topic must be relevant to Behavioural Neuroscience
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## Calendar Entry Change <br> Biomedical Physiology and Kinesiology

Rationale for change: Application forms are now available only in a digital format online.
Effective term and year: Fall 2019
The following program(s) will be affected by these changes:
Biomedical Physiology Major
Biomedical Physiology Minor
Kinesiology Major
Kinesiology 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.

[^0]
## Calendar Entry Change <br> Biomedical Physiology and Kinesiology

Rationale for change: Additional Chemistry and BPK courses are part of the biomedical physiology minor program and should be included in the list.
Effective term and year: Fall 2019
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.

Biomedical Physiology Minor
Admission Requirements
Admission Requirements
Applicants are selected based on an admission grade point average (GPA) calculated over these five required courses, together with any of the following courses.

- BISC 102-4 General Biology
- CHEM 122-2 General Chemistry II
- CHEM 126-2 General Chemistry Laboratory II
- CHEM 281-4 Organic Chemistry I
- BPK 205-3 Introduction to Human Physiology
- BPK 207-3 Sensorimotor Control and Learning
- MBB 222-3 Molecular Biology and Biochemistry
- MBB 231-3 Cellular Biology and Biochemistry
and one of
- CHEM 282 - Organic Chemistry II (2)
- CHEM 283-Organic Chemistry IIb (3)


## Calendar Entry Change <br> Biomedical Physiology and Kinesiology

Rationale for change: Additional Chemistry courses are part of the biomedical physiology major program and should be included in the list.
Effective term and year: Fall 2019
The following program(s) will be affected by these changes:
Biomedical Physiology 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.

```
Biomedical Physiology Major
Admission Requirements
Internal Transfer
Applicants are selected based on an admission grade point average (GPA) calculated over these
five required courses, together with any of the following courses.
BISC 102-4 General Biology
BISC 202-3 Genetics
CHEM 122-2 General Chemistry II
CHEM 126-2 General Chemistry Laboratory II
CHEM 281-4 Organic Chemistry I
BPK 201-3 Biomechanics
BPK 205-3 Introduction to Human Physiology
BPK 207-3 Sensorimotor Control and Learning
MBB 222-3 Molecular Biology and Biochemistry
MBB 231-3 Cellular Biology and Biochemistry
And one of
CHEM 282-2 Organic Chemistry II
CHEM 283-3 Organic Chemistry IIb
...
```


## Calendar Entry Change <br> Name of Program or Name of Faculty: Statistics Major, Faculty of Science

## Rationale for change:

- Clarification of procedures around prerequisites
- Removal of confusing wording about course types

Effective term and year: Fall 2019
The following program(s) will be affected by these changes:
Statistics 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.

## Courses for Further Credit

Once a STAT course has been completed with a grade of C- or higher, STAT courses that are prerequisites to this course may not be taken for further credit without permission of the department.

No student may complete, for further credit, any course offered by the Department of Statistics and Actuarial Science that is a prerequisite for a course that the student has already completed with a grade of $C$ - or higher without permission of the department.
[...]

## Gredit for Statistics Gourses

There are three kinds of STAT courses:
Breadth-Science course (STAT 100)
Service courses (STAT 201, 203, 205, 302, 305, 310, 311, 403)
Mainstream courses (STAT 240, 270, 285, 300W, 330, 341, 342, 350, 380, 410, 430, 440,
$445,450,452,460,475,4857$

## Calendar Entry Change

Name of Program or Name of Faculty: Statistics Honours, Faculty of Science
Rationale for change:

- Clarification of procedures around prerequisites
- Removal of confusing wording about course types

Effective term and year: Fall 2019

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

## Courses for Further Credit

Once a STAT course has been completed with a grade of C- or higher, STAT courses that are prerequisites to this course may not be taken for further credit without permission of the department.

No student may complete, for further credit, any course offered by the Department of Statistics and Actuarial Science that is a prerequisite for a course that the student has already completed with a grade of $C$ - or higher without permission of the department.
[...]

## Gredit for Statistics Courses

There are three kinds of STAT courses:
Breadth-Science course (STAT 100)
Service courses (STAT 201, 203, 205, 302, 305, 310, 311, 403)
Mainstream courses (STAT 240, 270, 285, 300W, 330, 341, 342, 350, 380, 410, 430, 440,
$445,450,452,460,475,485\}$


[^0]:    Application Procedure
    Students should complete a program approval form available at the biomedical physiology and kinesiology general office available on the Biomedical Physiology and Kinesiology website and submit it to the academic advisor by June 1 for fall term approval, October 1 for spring term approval, or February 1 for summer term approval.
    http://www.sfu.ca/bpk/undergrad program/forms.htm|

