8888 University Drive, Burnaby, BC
Canada V5A 1S6

TEL: 778.782.4636
FAX: 778.782.5876
avpcio@sfu.ca
www.sfu.ca/vpacademic

MEMORANDUM
attention

FROM
Senate
date
January 7, 2011
Bill Krane, Chair
PAGES
$1 / 1$
Senate Committee on Undergraduate Studies
RE:
Faculty of Communication, Art and Technology (SCUS 11-02)


## For information:

Acting under delegated authority at its meeting of January 6, 2011, SCUS approved the following curriculum revisions effective Fall 2011:

1. School for the Contemporary Arts (SCUS 11-02b)
(i) Vector changes in FPA studio courses

## 2. School of Interactive Arts and Technology (SCUS 11-02c)

(i) New Course Proposal IAT 103W-3, Design Communication and Collaboration
(ii) New Course Proposal: IAT 167-3, Digital Games: Genre, Structure, Programming and Play
(iii) Pre-requisite changes for IAT 265, 267
(iv) SIAT Degree requirement changes for:

- IAT Major and Honours (BA and BSc)
- IAT Joint Major (BA and BS)

Senators wishing to consult a more detailed report of curriculum revisions may do so on the Web at $\mathrm{http}: / / \mathrm{www} . \mathrm{sfu} . \mathrm{ca} /$ senate/Senate agenda.html following the posting of the agenda. If you are unable to access the information, please call 778-782-3168 or email shelley gair@sfu.ca.

FACULTY OF COMMUNICATION, ART AND TECHNOLOGY

SCUS 11-02b

## MEMO

| Office of the Dean | TO: | Bill Krane, Chair <br> Senate Committee on Undergraduate Studies |
| :--- | :--- | :--- |
| TASC2 8800 <br> 8888 University Drive <br> Burnaby BC <br> V5A 1S6 | FROM: | DD Kugler, Chair <br> T 778-782-8790 <br> F778-782-8789 <br> www.fcat.sfu.ca <br> fcatinfo@sfu.ca$\quad$ RE: |

On December 9, 2010, the Faculty of Communication, Art and Technology Undergraduate Curriculum Committee approved the following curricular revisions passed by the School for the Contemporary Arts UCC on November 19, 2010:

- Vector changes, from lecture to studio, in 21 FPA courses

Would you please place these items on the agenda of the next


## Senate Committee on

 Undergraduate studies
## COURSE CHANGE/DELETION FORM

Existing Course Numbers and Titles (2l in total):
FPA 104-3 - Music Fundamentals
FPA 130-4 - Fundamentals of Film
FPA 131-4 - Filmmaking I
FPA 145-3 - Introduction to Music Composition and Theory
FPA 147-3 - Introduction to Electroacoustic Music
FPA 170-3 - Introduction to Production Technology
FPA 171-3 - Introduction to Stage/Production Management
FPA 230-5 - Filmmaking II
FPA 231-5 - Filmmaking III
FPA 232-3 - Film Sound
FPA 233-2 - The Techniques of Film
FPA 245-3-Music Composition I
FPA 246-3 - Music Composition II
FPA 247-3 - Electroacoustic Music I
FPA 248-3 - Conducting I
FPA 270-3 - Production Ensemble 1
FPA 271-3 - Production Ensemble II
FPA 272-3 - Production Practicuḿ I
FPA 273-3 - Production Practicum II
FPA 289-3 - Selected Topics in the Fine and Performing Arts
FPA 290-3 - Video Production I

Please check appropriate revision(s):
Course Number: Credit Hours: $\qquad$ Title:
Description: ___ Prerequisite:


Course deletion: $\qquad$
FROM: Lecture

TO: Studio
FPA 104-3 - Music Fundamentals
Students develop basic musical skills including sight singing, rhythm and simple composition.
/ FPA 130-4 Fundamentals of Film
Hands-on film production, special equipment and facilities
FPA 131-4 Filmmaking I

Hands-on film production, special equipment and facilities
FPA 145-3 - Introduction to Music Composition and Theory Introductory music composition utilizing computer music lab, students create compositions and have them performed. All musical composition classes are studio and involve creation, performance, and collaboration.

FPA 147-3 Introduction to Electroacoustic Music
Uses computer music lab with specialized software and hardware, students create compositions for performance by computers.

FPA 170-3 - Intro to Production Technology
Hands-on assignments in the production of theatre, dance, and music events. Students work directly on Contemporary Arts performance projects.

FPA 171-3 - Intro to Stage/Production Management
Hands-on practical experience in the organization and management of performances.
FPA 230-5 Filmmaking II
Hands-on film production, special equipment and facilities
FPA 231-5 Filmmaking III
Hands-on film production, special equipment and facilities
FPA 232-3 Film Sound
Hands-on audio production, special equipment and facilities
FPA 233-2 The Techniques of Film
Covers the technical aspects of basic 16 mm . production skills: camera, lighting, sound, editing, lab processes. Hands-on film production, special equipment and facilities.

FPA 245-3-Music Composition I
All musical composition classes are studio and involve creation, performance, and collaboration.

FPA 246-3 - Music Composition II
All musical composition classes are studio and involve creation, performance, and collaboration.

FPA 247-3 Electroacoustic Music I
Uses computer music lab with specialized software and hardware, students create compositions for performance by computers.

FPA 248 - Conducting I
Students learn techniques of orchestral conducting and perform music conducted by their colleagues.

FPA 270-3 Production Ensemble 1
Hands-on. Students involved in all aspects of performance technical support and production.

FPA 271-3 Production Ensemble II
Hands-on. Students involved in all aspects of performance technical support and production.
FPA 272-3 Production Practicum 1
Hands-on. Students involved in all aspects of performance technical support and production.
FPA 273-3 Production Practicum II
Hands-on. Students involved in all aspects of performance technical support and production.
FPA 289 Selected Topics in the Fine and Performing Arts
Is usually a studio course. In 1107 it is a studio course in African drumming and dance.
FPA 290-3 Video Production I
Hands-on video production, special equipment and facilities

If Title Change, indicate:
a) Long Title for calendar/schedule: max. 100 characters, including spaces/punctuation:
b) Short Title for enrollment/transcript: max. 30 characters, including spaces/punctuation:

RATIONALE:
These $\mathbf{2 1}$ Contemporary Arts (FPA) classes are listed as Lecture when in fact they all function as Studio classes. Each of these courses require special facilities and equipment, and individualized instruction.

## If this course replicates the content of a previously approved course to the extent that students should not receive credit for both courses, this should be noted in the prerequisite.

$\qquad$

| Office of the Dean | TO: | Bill Krane, Chair <br> Senate Committee on Undergraduate Studies |
| :---: | :---: | :---: |
| TASC2 8800 |  |  |
| 8888 University Drive | FROM: | DD Kugler, Chair |
| Burnaby BC |  | Faculty of Communication, Art and Technology |
|  |  | Undergraduate Curriculum Committee |
| T 778-782-8790 |  |  |
| F 778-782-8789 | RE: | Curricular Revisions: SIAT |
| www.fcat.sfu.ca |  |  |
| fcatinfo@sfu.ca | DATE: | December 21, 2010 |

On November 18, 2010, the Faculty of Communication, Art and Technology Undergraduate Curriculum Committee approved the following curricular revisions passed by the School of Interactive Arts \& Technology UCC on November 10/15, 2010:

- IAT BA - Degree requirement and calendar changes
- IAT BSc-Degree requirement and calendar changes
- IAT BA Honours - Degree requirement and calendar changes
- IAT BSc Honours. Degree requirement and calendar changes
- IAT/BBA JMA BA - Degree requirement and calendar changes
- IAT/BBA JMA BSc- Degree requirement and calendar changes
- IAT/CMNS JMA BA - Degree requirement and calendar changes
- IAT/CMNS JMA BSc- Degree requirement and calendar changes
- "IAT 265-Prerequisite change
- IAT 267-Prerequisite change
- IAT $103 W$-New Course Proposal



# Interactive Arts and Technology Bachelor of Arts Major Program 

## Lower Division Requirements

## FROM

Students complete 12 units of approved first year course work showing evidence of breadth, communication, teamwork and project skills. The Tech0ne program, eonsisting of TECH 101 W , TECH 106, TECH 114 and TECH 124, with a suitable thoice of electives, meets these requirements by design. Students who have not completed TechOne should consult with a SIAT advisor. Core Courses

SIAT lower division core requirements are as follows.
Students complete all of -
CMPT 120-3 Into. to Computing Science and Programming I or equivalent*
IAT 100-3 Systems of Media Representations
IAT 102-3 Graphic Design
IAT 201-3 Intro. to Human Computer Interaction and Cognition or equivalent*
IAT 202-3 New Media Images
IAT 222-3 Interactive Arts'
IAT 233-3 Spatial Design
IAT 235-3 Information Design or equivalent
IAT 265-3 Multimedia Programming for Art and Design (or other approved second year programming course)*
IAT 267-3 Introduction to Technological Systems*
*these courses or their equivalents must have a science designation Additional Requirements

Students in this BA program will also complete both of

* IAT 206-3 Media Across Cultures (or equivalent)
* MATH 130-3 Geometry for Computer Graphics (or equivalent)


## T0

# Interactive Arts and Technology Bachelor of Arts Major Program 

## Lower Division Requirements

## The first year of a degree in Interactive Arts and Technology is TechOne, which is comprised of CMPT 166, IAT 100, 102, 103W, 106, 167, and either MATH 130 (BA) or MACM 101 (BSC). Students who have not completed TechOne should consult with a SIAT advisor. <br> Core Courses

SIAT lower division core requirements are as follows.
Students complete all of
CMPT 166-3 - An Animated Introduction to Programming (or an equivalent introductory programming course such as CMPT 120, 125, 126, or 128)
IAT 100-3 Systems of Media Representations
IAT 102-3 Graphic Design
IAT 103W - Design Communication and Collaboration
IAT 106 - Spatial Thinking and Communicating
IAT 167 - Digital Games: Genre, Structure, Programming and PlayIAT 201-3
Intro. to Human Computer Interaction and Cognition or equivalent*
IAT 202-3 New Media Images
IAT 222-3 Interactive Arts
IAT 233-3 Spatial Design
IAT 235-3 Information Design or equivalent
IAT 265-3 Multimedia Programming for Art and Design (or other approved second year programming course)*
IAT 267-3 Introduction to Technological Systems*

> *these courses or their equivalents must have a science designation Additional Requirements "

Students in this BA program will also complete both of

[^0]
# Interactive Arts and Technology Bachelor of Science, Major Program 

## FROM:

## Lower Division Requirements

Students complete 12 tuits of approved first year course work showing evidence of breadth, communication, teamwork and project skills. The Tech0ne program, consisting of TECH 101 W, TECH 106 , TECH 114 and TECH 124 , with a suitable thoice of electives, meets these requirements by design. Students who have not completed TechOne should consult with a SIAT advisor.
Core Courses
SIAT lower division core requirements are as follows.

Students complete all of
CMPT 120-3 Into to Compiting Science and Programming Ior equivalent*
IAT 100-3 Systems of Media Representations
IAT 102-3 Graphic Design
IAT 201-3 Intro. to Human Computer Interaction and Cognition or equivalent*
IAT 202-3 New Media Images
IAT 222-3 Interactive Arts
IAT 233-3 Spatial Design
IAT 235-3 Information Design or equivalent
IAT 265-3 Multimedia Programming for Art and Design (or other approved second year programming course)*
IAT 267-3 Introduction to Technological Systems*
*these courses or their equivalents must have a science designation
Additional Requirements
Students in this BA program will also complete

* MACM 101-3 Discrete Mathematics I (or equivalent)
plus one additional three-unit lower division science course from computing science, engineering science, kinesiology, mathematics, statistics, or physics


## T0:

## Lower Division Requirements

The first year of a degree in Interactive Arts and Technology is TechOne, which includes the first year coursework listed in the lower division core. Students who have not completed TechOne should consult with a SIAT advisor. Core Courses

SIAT lower division core requirements are as follows.
Students complete all of
CMPT 166-3 - An Animated Introduction to Programming or an equivalent
introductory programming course (including CMPT 120, 125, 126, or 128) *
IAT 100-3 Systems of Media Representations
IAT 102-3 Graphic Design
IAT 103W - Design Communication and Collaboration
IAT 106 - Spatial Thinking and Communicating
IAT 167 - Digital Games: Genre, Structure, Programming, and Play
IAT 201-3 Intro. to Human Computer Interaction and Cognition or equivalent*
IAT 202-3 New Media Images
IAT 222-3 Interactive Arts
IAT 233-3 Spatial Design
IAT 235-3 Information Design or equivalent
IAT 265-3 Multimedia Programming for Art and Design (or other approved second
year programming course)*
IAT 267-3 Introduction to Technological Systems*
*these courses or their equivalents must have a science designation
Additional Requirements
Students in this BSc program will also complete

* MACM 101-3 Discrete Mathematics I (or equivalent)
plus one additional three-unit lower division science course from computing
science, engineering science, kinesiology, mathematics, statistics, or physics
science, engineering science, kinesiology, mathematics, statistics, or physics


## Interactive Arts and Technology Bachelor of Arts Honours Program FROM

## Lower Division Requirements

 teamwork und project shith. The TechOne progriam, comsisting of TECH 1H1W, TECH 10G, TECH H4
 not completed TechOne should consult with a SIAT advisor.

## Core Courses

SIAT lower division core requirements are as follows.
Students complete all of
ENTPT 120 3 Into. to Computing Science ind Prosfumming Iorequivalen*
IAT 100-3 Systems of Media RepresentationsIAT 102-3 Graphic Design
IAT 201-3 Intro. to Human Computer Interaction and Cognition or equivalent*
IAT 202-3 New Media Images
IAT 222-3 Interactive Arts
IAT 233-3 Spatial Design
IAT 235-3 Information Design or equivalent
IAT 265-3 Multimedia Programming for Art and Design (or other approved second year programming course)*
IAT 267-3 Introduction to Technological Systems*
*these courses or their equivalentṣ must have a science designation

## TO

Lower Division Requirements<br>The first year of a degree in Interactive Arts and Technology is TechOne, which is comprised of CMPT 166, IAT $100,102,103 \mathrm{~W}, 106,167$, and either MATH 130 (BA) or MACM 101 (BSC). Students who have not completed TechOne should consult with a SIAT advisor.

## Core Courses

SIAT lower division core requirements are as follows.
Students complete all of
CMPT 166-3 - An Animated Introduction to Programming (or an equivalent introductory programming course such as CMPT 120, 125, 126, or 128)* IAT 100-3 Systems of Media Representations IAT 102-3 Graphic Design
IAT 103W - Design Communication and Collaboration
IAT 106 - Spatial Thinking and Communicating
IAT 167 - Digital Games: Genre, Structure, Programming and Play
IAT 201-3 Intro. to Human Computer Interaction and Cognition or equivalent*
IAT 202-3 New Media Images

IAT 222-3 Interactive Arts
IAT 233-3 Spatial Design
IAT 235-3 Information Design or, equivalent
IAT 265-3 Multimedia Programming for Art and Design (or other approved second year programming course)*
IAT 267-3 Introduction to Technological Systems*
*these courses or their equivalents must have a science designation

# Interactive Arts and Technology Bachelor of Science Honours Program FROM 

## Lower Division Requirements

 teamwork and project tills. The Techone program, comisting of TECH 10HW, TECH 10G, TECH HH and TECH 124, with suitable chuee elective. meet theserequirementsy desion. Students who have not completed TechOne should consult with a SIAT advisor.

## Core Courses

SIAT lower division core requirements are as follows.
Students complete all of
CMPT 120 - 3 Into. to Computing Seience and Programming Ior equivalent
IAT 100-3 Systems of Media Representations
IAT 102-3 Graphic Design
IAT 201-3 Intro. to Human Computer Interaction and Cognition or equivalent*
IAT 202-3 New Media Images
IAT 222-3 Interactive Arts
IAT 233-3 Spatial Design
IAT 235-3 Information Design or equivalent
IAT 265-3 Multimedia Programming for Art and Design (or other approved second year programming course)*
IAT 267-3 Introduction to Technological Systems*
*these courses or their equivalents must have a science designation

## TO

## Lower Division Requirements

The first vear of a degree in Interactive Arts and Technology is TechOne, which is comprised of CMPT 166, IAT 100, 102, 103W, 106, 167, and either MATH 130 (BA) or MACM 101 (BSC). Students who have not completed TechOne should consult with a SIAT advisor.

## Core Courses

SIAT lower division core requirements are as follows.
Students complete all of
CMPT 166-3 - An Animated Introduction to Programming (or an equivalent introductory programming course such as CMPT 120, 125, 126, or 128)*
IAT 100-3 Systems of Media Representations
IAT 102-3 Graphic Design
IAT 103W - Design Communication and Collaboration
IAT 106 - Spatial Thinking and Communicating
IAT 167 - Digital Games: Genre, Structure, Programming and Play
IAT 201-3 Intro. to Human Computer Interaction and Cognition or equivalent*

IAT 202-3 New Media Images
IAT 222-3 Interactive Arts
IAT 233-3 Spatial Design
IAT 235-3 Information Design or equivalent
IAT 265-3 Multimedia Programming for Art and Design (or other approved second year programming course)*
IAT 267-3 Introduction to Technological Systems*
*these courses or their equivalents must have a science designation

# Interactive Arts and Technology and Business Administration Bachelor of Arts or Bachelor of Business Administration Joint Major Program FROM 

## Program Requirements

Students complete 120 units, as specified below.
Lower Division Requirements
Interactive Arts and Technology
Students complete all of

- EMAP 120-3 Introduction to Computing Science-and Programming I
- IAT 100-3 Systems of Media Representation
- IAT 102-3 Graphic Design
- IAT 201-3 Human-Computer Interaction and Cognition
- IAT/CMPT 265-3 Multimedia Programming for Art and Design
and one of
- IAT 222-3 Interactive Arts
- IAT 235-3 Information Design
and one of
- MACM 101-3 Discrete Mathematics I (for BSc degree)


## TO

## Program Requirements

Students complete 120 units, as specified below.
Lower Division Requirements
Interactive Arts and Technology
Students complete all of

- CMPT 166-3 - An Animated Introduction to Programming or an equivalent introductory programming course (including CMPT 120, 125, 126, or 128 )
- IAT 100-3 Systems"of Media Representation
- IAT 102-3 Graphic Design
- IAT 201-3 Human-Computer Interaction and Cognition
- IAT/CMPT 265-3 Multimedia Programming for Art and Design
and one of
- IAT 222-3 Interactive Arts
- IAT 235-3 Information Design
and one of
- MACM 101-3 Discrete Mathematics I (for BSc degree)


# Interactive Arts and Technology and Business Administration Bachelor of Science Joint Major Program FROM 

## Program Requirements

Students complete 120 units, as specified below.

## Lower Division Requirements

Interactive Arts and Technology
Students complete all of
2-EMMPT 120-3 Introduction to Computing-Science and Programming I

- IAT 100-3 Systems of Media Representation
- IAT 102-3 Graphic Design
- IAT 201-3 Human-Computer Interaction and Cognition
- IAT/CMPT 265-3 Multimedia Programming for Art and Design
and one of
- IAT 222-3 Interactive Arts
- IAT 235-3 Information Design
and one of
- MACM 101-3 Discrete Mathematics I (for BSc degree)


## TO

## Program Requirements

Students complete 120 units, as specified below.

## Lower Division Requirements

Interactive Arts and Technology
Students complete all of

- CMPT 166-3 - An Animated Introduction to Programming or an equivalent introdúuctory programming course (including CMPT 120, 125, 126, or 128)
- IAT 100-3 Systems of Media Representation
- IAT 102-3 Graphic Design
- IAT 201-3 Human-Computer Interaction and Cognition
- IAT/CMPT 265-3 Multimedia Programming for Art and Design and one of
- IAT 222-3 Interactive Arts
- IAT 235-3 Information Design
and one of
- MACM 101-3 Discrete Mathematics I (for BSc degree)


# Communication and Interactive Arts and Technology Bachelor of Arts Joint Major Program FROM 

## Program Requirements

Students complete 120 units, as specified below.
Lower Division Requirements
Interactive Arts and Technology
Students complete all of

- EMAPT 120-3 Introduction to Computing Science and Programming I
- IAT 100-3 Systems of Media Representation
- IAT 102-3 Graphic Design
- IAT 201-3 Human-Computer Interaction and Cognition
- IAT/CMPT 265-3 Multimedia Programming for Art and Design
and one of
- IAT 222-3 Interactive Arts
- IAT 235-3 Information Design
and one of
- MACM 101-3 Discrete Mathematics I (for BSc degree)


## TO

## Program Requirements

Students complete 120 units, as specified below.

## Lower Division Requirements

Interactive Arts and Technology
Students complete all of

- CMPT 166-3 - An Animated Introduction to Programming or an equivalent introductory programming course (including CMPT 120. 125,126 , or 128)
- IAT 100-3 Systems of Media Representation
- IAT 102-3 Graphic Design
- IAT 201-3 Human-Computer Interaction and Cognition
- IAT/CMPT 265-3 Multimedia Programming for Art and Design
and one of
- IAT 222-3 Interactive Arts
- IAT 235-3 Information Design
and one of
- MACM 101-3 Discrete Mathematics I (for BSc degree)


# Communication and Interactive Arts and Technology Bachelor of Science Joint Major Program 

## FROM

## Program Requirements

Students complete 120 units, as specified below.

## Lower Division Requirements

Interactive Arts and Technology
Students complete all of
2-EAAPT 120 3-Introduction to Computing Science and Programming I

- IAT 100-3 Systems of Media Representation
- IAT 102-3 Graphic Design
- IAT 201-3 Human-Computer Interaction and Cognition
- IAT/CMPT 265-3 Multimedia Programming for Art and Design
and one of
- IAT 222-3 Interactive Arts
- IAT 235-3 Information Design
and one of
- MACM 101-3 Discrete Mathematics I (for BSc degree)


## TO

## Program Requirements

Students complete 120 units, as specified below.

## Lower Division Requirements

Interactive Arts and Technology
Students complete all of

- CMPT 166-3 - An Animated Introduction to Programming or an equivalent introductory programming course (including CMPT 120 , 125, 126, or 128)
- IAT 100-3 Systems of Media Representation
- IAT 102-3 Graphic Design
- IAT 201-3 Human-Computer Interaction and Cognition
- IAT/CMPT 265-3 Multimedia Programming for Art and Design
and one of
- IAT 222-3 Interactive Arts
- IAT 235-3 Information Design
and one of
- MACM 101-3 Discréte Mathematics I (for BSc degree)

```
Senate Committee on Undergraduate studies
```


## COURSE CHANGE/DELETION FORM

Existing Course Number: IAT 265

Existing Title: Multimedia Programming for Art and Design

Please check appropriate revision(s):
Course Number: ___ Credit Hours: ___ Title: ___
Description: ___ Prerequisite: __x_ Vector: (Lect/Sem/Tut/Lab)
Course deletion: $\qquad$
FROM:
Prerequisite: CMPT 120 (or equivalent first programming course). Students with credit for IART 206, 207 and 208 may not take this course for further credit. Students will receive credit for one of, but not both of, CMPT 265 and IAT 265. Quantitative.

TO: (change shown in bold/underline)
Prerequisite: 18 units, including CMPT 166 (or equivalent first programming course such as CMPT 120, 125, 126, or 128). Students with credit for IART 206, 207 and 208 may not take this course for further credit. Students will receive credit for one of, but not both of, CMPT 265 and IAT 265. Quantitative.

If Title Change, indicate:
a) Long Title for calendar/schedule: max. 100 characters, including spaces/punctuation:
b) Short Title for enrollment/transcript: max. 30 characters, including spaces/punctuation:

## RATIONALE:

CMPT 166 has been developed as an introductory programming course better suited to Interactive Arts and Technology students than the existing CMPT 120. While it is expected the majority of IAT students will enroll in CMPT 166, some may take CMPT 120 at colleges or elsewhere because it has more articulation agreements in place.

If this course replicates the content of a previously approved course to the extent that students should not receive credit for both courses, this should be noted in the prerequisite.

Effective term and year: . Fall 2011

Senate Committee on Undergraduate studies

## COURSE CHANGE/DELETION FORM

Existing Course Number: IAT 267

Existing Title: Intro to Technological Systems

Please check appropriate revision(s):
Course Number: $\qquad$ Title:
Description: ___ $\qquad$ Vector: $\qquad$
(Lect/Sem/Tut/Lab)
Course deletion: $\qquad$
FROM:
Prerequisite: CMPT 120 (or equivalent first programming course). Recommended: IAT 265 or other second year programming course.This course is equivalent to CMPT 267; students with credit for CMPT 267 may not take this course for further credit.

TO: (change shown in bold/underline)
Prerequisite: 18 units, including CMPT 166 (or equivalent first programming course such as CMPT 120, 125, 126, or 128), Recommended: IAT 265 or other second year programming course. This course is equivalent to CMPT 267; students with credit for CMPT 267 may not take this course for further credit.

If Title Change, indicate:
a) Long Title for calendar/schedule: max. 100 characters, including spaces/punctuation:
b) Short Title for enrollment/transcript: max. 30 characters, including spaces/punctuation:

## RATIONALE:

CMPT 166 has been developed as an introductory programming course better suited to Interactive Arts and Technology students than the existing CMPT 120. While it is expected the majority of IAT students will enroll in CMPT 166, some may take CMPT 120 at colleges or elsewhere because it has more equivalencies.

## If this course replicates the content of a previously approved course to the extent that students should not receive credit for both courses, this should be noted in the prerequisite. 1

## COURSE TITLE

LONG - for Calendar/schedule no more than 100) characters including spaces and punctuation Design Communication and Collaboration

## AND

SHORT - for enrollment/transcript, no more than 30 characters including spaces and punctuation
Design Commun. \& Collab.

## CREDITS

Indicate number of credits for: Lecture 3
$\qquad$
$\qquad$ Seminar_ Tutorial $\qquad$ Lab $\qquad$
COURSE DESCRIPTION (FOR CALENDAR). 3-4 LINES MAXIMUM. ATTACH A COURSE OUTLINE TO THIS PROPOSAL. Teaches essential skills for negotiating first-year course work successfully. Covers the principles, practice and understanding of effective communication, research, critical thinking, and teamwork with a focus on issues central to the practice of IAT as a profession. Presents opportunities to practice and develop interpersonal skills and make that expertise transferable to the workplace.

## PREREQUISITE

Writing.
Students with credit for TECH 101W may not take this course for further credit.

## COREQUISITE

## SPECIAL INSTRUCTIONS

That is, does this course replicate the content of a previously-approved course to such an extent that students should not receive credit for both courses.? If so, this should be noted in the prerequisiite.

## COURSES(S) TO BE DELETED IF THIS COURSE IS APPROVED

NOTE: APPROPRIATE DOCUMENT FOR DELETION MUST BE SUBMITTED TO SCUS

## TECH 101W

## RATIONALE FOR INTRODUCTION OF THIS COURSE

IAT 103W is to replace TECH 101W as the required first year (TechOne) writing course for IAT.
This course is a minor modification to provide information related to IAT content, with a very similar course outline and the same instructor (Chantal Gibson) leading development and delivery.

## SENATE COMMITTEE ON

NEW COURSE PROPOSAL
UNDERGRADUATE STUDIES

## SCHEDULING AND ENROLLMENT INFORMATION

Indicate effective ternm and year course would first be offered and planned frequency of offering thereafter:
Fall 2011, and at least twice per year.
(NOTE:There is a two-term wait for implementation of any new course.)
Indicate if there is a waiver required: $\square$ YES $\square$ NO Will this be a required or elective course in the curriculum: $\square$ Required $\square$ Elective What is the probable enrollment when offered? Estimate $75-100 /$ term

Which of your present CFL faculty have the expertise to offer this course?
Gibson, Filimowicz, Hennessy, Bowes

Are there any proposed student fees associated with this course other than tuition fees?

(If yes, attach mandatory supplementary fee approval'form.)

## RESOURCE IMPLICATIONS

NOTE: Senate has approved (S.93-11) that no new course should be approved by Senate until funding has been committed for necessary library materials. Each new course proposal must be accompanied by a library report and, if appropriate, confirmation that funding arrangements have been addressed.

Campus where course will be taught $\qquad$

Library report status $\qquad$

Provide details on how existing instructional resources will be redistributed to accommodate this new course. For example, will another course be eliminated or will the frequency of offering of other courses be reduced; are there changes in pedagogical style or class sizes that allow for this additional course offering?

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

Articulation agreement reviewed?

## OTHER IMPLICATIONS

```
SENATE COMMITTEE ON
NEW COURSE PROPOSAL
UNDERGRADUATE STUDIES
3 Of 3 Pages
```


## APPROVALS

1 Departmental approval indicates that the Department or School has approved the content of the course, and has consulted with other Departments/Schoets/Fagulties regarding proposed course content and overlap issues.


Dean or designate
Date

LIST which other Departments, Schools and Faculties have been consulted regarding the proposed course content, including overlap issues. Attach documentary evidence of responses.
$\qquad$
$\qquad$
$\qquad$
$\qquad$

Other Faculties approval indicated that the Dean(s) or Designate of other Faculties AFFECTED by the proposed new course support(s) the approval of the new course:
$\qquad$
3 SCUS approval indicates that the course has been approved for implementation subject, where appropriate, to financial issues being addressed.

COURSE APPROVED BY SCUS (Chair of SCUS):
$\qquad$
APPROVAL IS SIGNIFIED BY DATE AND APPROPRIATE SIGNATURE.

1

# COURSE NUMBER IAT 167-3 <br> COURSE TITLE <br> LONG - for Calendar/schedule, no more than 100 characters including spaces and punctuation 

Digital Games: Genre, Structure, Programming and Play

## AND

SHORT - for enrollment/transcript, no more than 30 characters including spaces and punctuation
Digital Games

## CREDITS

Indicate number of credits for: Lecture $2 \quad$ Seminar $0 \quad$ Tutorial $\underline{1}$

COURSE DESCRIPTION (FOR CALENDAR). 3-4 LINES MAXIMUM. ATTACH A COURSE OUTLINE TO THIS PROPOSAL. Introduces game genres, structures, and programming methods basic to developing games. Students learn how games are designed and how to program the underlying patterns that facilitate play and engagement. Issues of user interface, skills and competition are discussed as are principles of compelling entertainment for players

## PREREQUISITE

CAPT 166 (or equivalent first programming course such as CMPT 120, 125, 126, or 128). Students who have obtained credit for, or are currently enrolled in, a CMPT course at the 200 level . or higher, or IAT 265 or 267 may not take this course for further credit.

## COREQUISITE

## None

## SPECIAL INSTRUCTIONS

That is, does this course replicate the content of a previously-approved course to such an extent that students should not receive credit for both courses.? If so, this should be noted in the prerequisite.

COURSES(S) TO BE DELETED IF THIS COURSE IS APPROVED
NOTE: APPROPRIATE DOCUMENT FOR DELETION MUST BE SUBMITTED TO SCUS


#### Abstract

RATIONALE FOR INTRODUCTION OF THIS COURSE SIAT's recent curriculum review (by faculty, students, alumni, and industry) revealed unanimous agreement to strengthen students' technical skills. There is strong interest by students and faculty to expand game making instruction. This course will be the second of a required two course sequence starting with CMPT 166. By combining video game history and design with programming, it will help students develop technical skill in the context of contemporary video game culture and industry, drawing in students who might otherwise be programming averse. This course will be part of the SIAT-based TechOne starting in Fall 2011.


## SCHEDULING AND ENROLLMENT INFORMATION

Indicate effective term and year course would first be offered and planned frequency of offering thereafter:
Spring 2012, at minimum once per year.
(NOTE:There is a two-term wait for implementation of any new course.)
Indicate if there is a waiver required: $\square$ YES $\quad$ NO Will this be a required or elective course in the curriculum? $\square$ Required $\square$ Elective
What is the probable enrollment when offered? Estimate $150-200 / \mathrm{yr}$
Which of your present CFL faculty have the expertise to offer this course?
Shaw, Bartram, Seif El Nasr, Pasquier, Neustaedter, Yang, Serban, DiPaola, Woodbury

Are there any proposed student fees associated with this course other than tuition fees? $\quad \square$ YES $\quad \square$ NO
(If yes, attach mandatory supplementary fee approval form.)

## RESOURCE IMPLICATIONS

NOTE: Senate has approved (S.93-11) that no new course should be approved by Senate until funding has been committed for necessary library materials. Each new course proposal must be accompanied by a library report and, if appropriate, confirmation that funding arrangements have been addressed.

Campus where course will be taught Surrey

Library report status

Provide details on how existing instructional resources will be redistributed to accommodate this new course. For example, will another course be eliminated or will the frequency of offering of other courses be reduced; are there changes in pedagogical style or class sizes that allow for this additional course offering?
This course will be offered using existing SIAT funds

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

Course will use standard SIAT (Surrey) computing labs.

Articulation agreement reviewed? $\square_{\mathrm{YES}}$NO

Not applicable
OTHER IMPLICATIONS

SENATE COMMITTEE ON
NEW COURSE PROPOSAL
UNDERGRADUATE STUDIES

## APPROVALS

1 Departmental approval indicates that the Department or School has approved the content of the course, and has consulted with other Departments/Schools/Faculties regarding proposed course content and overlap issues.

| John Bowes | Nov 17, 2010 |
| :--- | :---: |
| Chair, Department/School | Date |
| Don Kugler | Date |

2 Faculty approval indicates that all the necessary course content and overlap concerns have been resolved, and that the Faculty/School/Department commits to providing the required Library funds.
Dean or designate

Date

LIST which other Departments, Schools and Faculties have been consulted regarding the proposed course content, including overlap issues. Attach documentary evidence of responses.

The School of Computing Science, in particular the Software Systems major at the Surrey campus.

Other Faculties approval indicated that the Dean(s) or Designate of other Faculties AFFECTED by the proposed new course support(s) the approval of the new course:
$\qquad$
3 SCUS approval indicates that the course has been approved for implementation subject, where appropriate, to financial issues being addressed.

COURSE APPROVED BY SCUS (Chair of SCUS):
$\qquad$
APPROVAL IS SIGNIFIED BY DATE AND APPROPRIATE SIGNATURE.

## IAT 167-3-Digital Games: Genre, Structure, Programming and Play

## COURSE DESCRIPTION:

Introduces game genres, structures, and programming methods basic to developing games. Students learn how games are designed and how to program the underlying patterns that facilitate play and engagement . Issues of user interface, skills and competition are discussed as are principles of compelling entertainment for players.

This is a second programming course that covers practical programming concepts in the context of game development. The course introduces game mechanics or systems and programming methods basic to game development. Students learn how games are structured and designed, and how to program the underlying methods that facilitate play and engagement. Issues of user interface, skills and competition are discussed as are principles of compelling entertainment for players.

Students will be introduced to these key ideas through event-driven object oriented programming. The course will use the 2D programming tool Flash Actionscript to design and develop games of complexity similar to 2D casual digital games. An important aspect of this course is a consideration of the cultural and social place of digital games in culture, and an introduction to aspects of game design.

## COURSE OBJECTIVES:

The course consists of several learning objectives. Students should demonstrate ability to:

- Understand the fundamental concepts and components concerned with the representation and processing of 2D game imagery and animation.
- Understand the fundamentals of game mechanics and interaction game design.
- Develop a simple 2D game through game development cycle: design, implementation, testing, and iteration on this cycle to develop a successful game.
- Program a simple 2D game using tools used in class, thus demonstrating understanding of basic programming principles of
- Variables
- Conditionals
- Loops
- Data structures
- Event-driven programming, including handling of user input, handling of collision detection events, etc.
- Understand and design user interfaces and environments, thus showing understanding of basic color theory and visual design.
- Situate their game design within the context of current game genre and game culture.


## DELIVERY METHOD:

Computing concepts are introduced as needed for game mechanics, image manipulation, animation, narrative delivery, and event handling. The course is based on unit sequences which build in programming complexity.

## The units will be as follows:

- Weeks 1-3: Introduction to Games and Culture, Game Mechanics, Genre, programming constructs (variables, events, input, etc.)
- Weeks 4-6: Introduction to Serious Games and educational games, animation through sprites, game process (testing and iteration) and documentation
- Weeks 7-10: Platform game: manipulation of imagery, space representation and movement, inventory management, basics of game systems: collision systems, inventory systems, interaction design and feedback systems to the users
- Weeks 11-13: Platform game 2: rotations of images, dynamic manipulation of HUD (Heads up Display) as an indication of tension


## EVALUATION:

Assignments (individual): 40\%

- Memory Game: 5\%
- Brain Game: $10 \%$
- Platformer: $10 \%$
- Platformer 2: $15 \%$

Quizzes (in-class): 10\%
Midterm exam 20\%
Final Exam: 30\%

## Required Text:

Ernest Adams. Fundamentals of Game Design. New Riders, 2009.

## Reference Texts:

## For Game Maker:

Nanu Swamy and Naveena Swamy. Basic Game Design \& Creation for Fun \& Learning, Charles River Media, 2006.

For Flash 3:
Gary Rosenzweig. ActionScript 3.0 Game Programming University. Que, 2007.
For Multiplayer Flash games:
Jobe Makar. ActionScript for Multiplayer Games and Virtual Worlds. New Riders, 2009.
Other:
Tracy Fullerton. Game Design Workshop, Second Edition: A Playcentric Approach to Creating Innovative Games. Morgan Kaufmann, 2008.
Jesse Schell. The Art of Game Design. Morgan Kaufmann, 2008.
Steve Swink. Game Feel: A Game Designer's Guide to Virtual Sensation. Morgan Kaufmann, 2008.

Joshua Noble. Flex 3 Cookbook: Code-Recipes, Tips, and Tricks for RIA Developers. O'Reilly Media, 2008.


[^0]:    * IAT 206-3 Media Across Cultures (or equivalent)
    * MATH 130-3 Geometry for Computer Graphics (or equivalent)

