

## OFFICE OF THE ASSOCIATE VICE-PRESIDENT, ACADEMIC

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

July 7, 2017

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MEMORANDUM -		
ATTENTION	Senate	DATE
FROM	Gordon Myers, Chair	PAGES
	Senate Committee on	
RE:	Undergraduate Studies Course Changes (SCUS 17-29)	los
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#### For information:

Acting under delegated authority at its meeting of July 6, 2017 SCUS approved the following curriculum revisions effective Summer 2018.

#### a. Faculty of Communication, Art and Technology

#### 1. Interactive Arts and Technology

(i) Prerequisite and description change for IAT 265 and 267

(ii) Description, prerequisite and equivalent statement change for IAT 343

(iii) Description and equivalent statement change for IAT 344, 432

(iv) Units, description and prerequisite change for IAT 396

(v) Description change for IAT 438

(v) Temporary withdrawal of IAT 403 and 405

#### 2. Publishing

(i) Title change for PUB 201

(ii) Description change for PUB 456

(iii) Deletion of PUB 210

#### **b.** Faculty of Science

### 1. Department of Molecular Biology and Biochemistry

(i) Description change for MBB 441

# SCUS 17-29

SFU	SENATE COMMIT UNDERGRADUATI			CO	URSE MODIFICAT	ION FORM Page 1 of 1
COURSE SU	J <b>BJECT</b> IAT	NUMBER	265	TITLE	Multimedia Prograr Art and Design	nming for
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introduce scripting l	s a variety of p anguages and	authoring environm	nd tech ients is	niques. Practica covered in the c	gn, this course al use of multimedia context of a series of techniques for speci	f

media will be introduced. Assessment will be based on both programming and the expressive use of programs in their case context. Prerequisite: IAT 167 and one of MATH 130, MACM 101, MATH 150, MATH 151, MATH 154, or MATH 157. Students who have completed IAT 267 before Dec. 31 2012 may use IAT 267 as a prerequisite for IAT 265 instead of IAT 167. Quantitative.

#### EFFECTIVE TERM AND YEAR FOR CHANGES

Fall, Spring, Summer and year (please enter in textbox)

SUMMER 2018

#### **RATIONALE** (must be included)

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Calendar clean-up to remove old language as students who took IAT 267 before Dec. 31 2012 have now graduated from the program.

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1000	COURSE SUB	JECT	IAT	NUMBER	267	TITLE Intro Syste	oduction to Technologica ems	l
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<u>specific course components</u> if changing equivalent statement(s).

Introduction to the core technologies and systems used in media-rich interactive environments, including computer hardware, operating systems, input and output technologies, networking and media. The concepts will be examined by working in a high-level media programming environment. Prerequisite: IAT 167 and one of MATH 130, MACM 101, MATH 150, MATH 151, MATH 154, or MATH 157. Students who have completed IAT 265 before Dec. 31, 2012, may use IAT 265 as a prerequisite for IAT 267. Recommended: IAT 265 or other second year programming course.

### **EFFECTIVE TERM AND YEAR FOR CHANGES**

Fall, Spring, Summer and year (please enter in textbox)

SUMMER 2018

#### **RATIONALE** (must be included)

Calendar clean-up to remove old language, as students who took IAT 265 before Dec. 31 2012 have now graduated from the program.

SFU course su		AT NUMBER	343	Page 1 of TITLE Animation
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expand. Please review the "Equivalency statements" section under <u>Information about</u> <u>specific course components</u> if changing equivalent statement(s).

An introduction to techniques for 3D computer animation such as keyframing, performance animation, procedural methods, motion capture, and simulation. The course also includes an overview of story-boarding, scene composition, lighting and sound track generation. The course will explore current research topics in computer animation such as facial animation, behavioral animation, artificial life and interactive systems. Prerequisite: Minimum of 24 units, including MATH 130 or MACM 101 or MATH 150, MATH 151, MATH 154, or MATH 157.or equivalent. Students with credit for IAT 241 may not take this course for further credit.

EFFECTIVE TERM AND YEAR FOR CHANGES

Fall, Spring, Summer and year (please enter in textbox)

SUMMOL 2013

RATIONALE (must be included)

Calendar clean-up to remove old language as IAT 241 is no longer offered, and to use prerequisite language consistent with other sections of the SIAT calendar.

Math 150, Math 154 and Math 157 have been added to clarify the complete list of prerequisite math courses and to ensure the use of consistent language across other sections of the SIAT calendar.

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SFU	SENATE COMMI UNDERGRADUA			COURSE MODIFIC	ATION FORM Page 1 of 1
COURSE SU	IBJECT IA	T NUMBER	432	TITLE Design Evaluation	n
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**WORDING/DESCRIPTION EDITS.** Indicate deleted or changed text using strike through, indicate added or new text using <u>underline</u>. If you need to enter more text than the box allows, drag the endpoint of the text box to make it bigger, as it will not automatically expand. Please review the "Equivalency statements" section under <u>Information about</u> specific course components if changing equivalent statement(s).

Examines evaluation concepts and methods for designers. Introduces a range of evaluation approaches including informal usability studies, lab experiments, field studies, and analytically-based evaluations. Students will explore techniques for feedback including usability tests, observation, interviews, heuristic reviews, and discursive evaluations. Underlying concepts of evaluation including scientific experimentation, ethnography, phenomenology, and aesthetics will be discussed. Students will learn how to design and implement appropriate evaluation studies for a range of design projects. Prerequisite: Completion of 63 units. Recommended: IAT 201 and 235. <u>Students with</u> credit for IAT 332 may not take this course for further credit.

**EFFECTIVE TERM AND YEAR FOR CHANGES** Fall, Spring, Summer and year (please enter in textbox)

SUMMER 2018

**RATIONALE** (must be included)

Calendar clean-up to remove old language as IAT 332 is no longer offered.

November 2016

COURSE SI	J <b>BJECT</b> IA	T NUMBER	396-3	TITLE North Europe Field School: Design Inquiry
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Fall, Spring, Summer and year (please enter in textbox)

SUMMER 2018

#### **RATIONALE** (must be included)

SIAT currently has two field schools. italiaDesign (12 credits) and North Europe Field School in Design (NEFSD) currently known as dutchDesign (9 credits). Due to the organic nature of their development over time, each field school is a separate and distinct entity. They are offered in alternate years and currently share a common pedagogic approach, yet there is a disparity in the number of course credits awarded for each program. The School would like to see parity between the two programs to ensure consistency across the field school courses.

November 2016

# IAT 396-6 North Europe Field School: Design Inquiry Course change rationale presented to the SIAT UCC in April 2015 Authors: R. Taylor & B. Berry (2015) C. Gibson (2017)

### **Rationale:**

SIAT currently has two field schools. italiaDesign (12 credits) and North Europe Field School in Design (NEFSD) currently known as dutchDesign (9 credits). Due to the organic nature of their development over time, each field school is a separate and distinct entity. They are offered in alternate years and currently share a common pedagogic approach, yet there is a disparity in the number of course credits awarded for each program. The School would like to see parity between the two programs to ensure consistency across the field school courses. This submission provides brief context explaining the credit load disparity, and provides a rationale for correcting the 3-credit imbalance by strengthening the academic rigor of the dutchDesign program.

#### **History:**

In 2003 italiaDesign was proposed and approved as a 9-credit program. It included a preparatory course (3 credits winter) and an infield course (6 credits summer). In 2005 a post field course (3 credits) was added in the fall which allowed students to synthesize findings into a reporting structure (papers, video documentation, interviews, websites).

The dutchDesign program was piloted in 2011, approved in 2012 and implemented as a full field school in 2013. During 2014 SIAT expressed the need to compress the dutchDesign program to reduce resource requirements (time) for faculty primarily during the early proposal process. The dutchDesign program was refined and submitted to SCIA (Senate Committee on International Activities). It was designed to commence in January and end in July, without a fourth course in fall term, *but with the need for a final synthesizing course*. The new compressed format reduced faculty requirements for time, and enabled students to complete their SIAT requirements in a timely manner.

In summer 2014 the italiaDesign field school was "compressed" to end in July rather than December, once again reducing faculty time requirements and leading to faster completion by SIAT students. It is intended that italiaDesign will now operate in the compressed format in future, ending in summer term, not fall, offering 12 credits.

The new compressed format of both programs requires students to complete the same number of hours of course work and the same course requirements in the same time-frame, yet *variances remain in the number and distribution of credits awarded to each program as shown in the table below:* 

	Preparatory for the Field (course 1)	In Field (course 2)	Synthesis Post Field (course 3)
italiaDesign	3 credits	6 credits	3 credits
dutchDesign	3 credits	3 credits	3 credits

To insure clarity and to provide the best possible experience for faculty and students who are involved in either field school, it is time to fully align these two field schools by addressing the imbalance in credits awarded during the "in-field" component of the NEFSD.

# Bringing dutchDesign into Alignment with italiaDesign

Since 2010, the dutchDesign program developed and delivered rich content and a valuable student learning field-based experience. Adjustments and refinements have led to improvements resulting in a better program and more meaningful learning for the students who fulfill the field school requirements.

The dutchDesign program is designed to address four key inter-related "pillars" of learning: (i) technical skills; (ii) individual and team skills; (iii) design thinking and (iv) deep understanding of context in relation to design. The initial program offerings placed more emphasis on the first two pillars than on the latter. Through evaluation and assessment, it became clear that all four "pillars" are fully required for students to achieve the intended outcomes of the program.

Thus enhancing and integrating all four pillars into future dutchDesign offerings provides the rationale for increasing the credit count from 3 to 6 credits during the in-field experience.\_The *pedagogic refinements* reflecting the deeper integration of the four "pillars" are included in a detailed description of assignment revisions (Appendix 1) and a revised IAT396 course outline with refined course outcomes for IAT 396 (Appendix 2)). *Three specific changes are proposed that will result in students' deeper integration and strengthening of design thinking capabilities:* 

- 1. Addition of a "design thinking and contextual thinking synthesis project" and a refined grading scheme to accommodate this new assignment.
- 2. Addition of a 6 week in-field journal writing project that requires students to integrate reflections on their own learning, experiences and progress while engaging scholarly materials. Assigned readings in the field of "Design Thinking" from the North American and European perspective will provide the scholarly structure by which students will be asked to rigorously reflect on their insights and personal, professional and team growth within the specific context of the country(ies) of study in a given year (in 2015: Netherlands, Belgium, France).
- 3. Addition of a final writing component to add a layer of breadth to the program and complement the assessed video reportage. This new component will require students to move from analysis to synthesis, and toward integrative thinking. The groundwork of this project is already in place, and assessed in the preparatory spring semester course (IAT 395), and is currently followed up substantively in the final course of the NEFSD program (IAT 397: Design Synthesis).

# Appendix 1: Further details supporting the pedagogical rationale for a 3-credit change

#### Enhancing Design Thinking and Professional Identity Development as a Novice Designer

The rationale and description of the additional written components listed above are detailed in this section.

- 1. Design Thinking and Contextual Synthesis Project: This will integrate the four pillars of the program skills + individual/team + design thinking + context.
  - a. The skills component will ask students to reflect how the skills they are learning in-field are contributing to their integrative thinking and practices.
  - b. The individual/team component asks students to reflect first on how the field school is impacting the individual and their thinking and world-view but also, how the excellence and diversity of the team is impacting them. Students may also be invited to identify their own contributions to the team.
  - c. The written component will enhance students' capacities in design thinking and context. The written component will ask how is it evident that they have an increasing confidence and understanding of their field and practice as emerging designers and creatives. How have the interviews with world-class designers impacted their thinking? While a substantive amount of the fieldwork is team-based, students are called up to learn independently and to take ownership for their own learning as well as the learning of others. In supporting students as they discover their development requirements, we anticipate an increase in student leadership and student responsibility.
- 2. The six-week journal will have four milestones:
  - a. Compare and contrast two approaches to design thinking in the North American and European frames of mind, and examine assumptions of each; to support students' initial thoughts as to their relative merits and how they personally align. An examination of readings on the centrality of context in relation to effective design in the contemporary world will be included.
  - b. Describe and reflect upon the exposure to world-class designers and how this changes their perceptions and theoretical assumptions, and how context is a source of changing perceptions and can be understood from these interviews and the study as a whole. What is the difference that context creates? Is the student able to describe the context of the foreign country of study?
  - c. Consider how the field school team is impacting their thinking and discourse on practice.
  - d. Integration of experiences through a final paper that revisits and expands on the assigned readings on design thinking and design context, that poses new and original synthetic questions, and a personal statement of professional intentions and values.
- 3. Final Writing Component:
  - a. In addition, students will be required to prepare twice-weekly blog posts that reflect a sense of real-time experiential learning which can be shared with the group in-field and others outside the group. Because of the changed emphasis within the evaluation and grading schema, this writing component will equal 40% of the course grade, reflecting the importance of pillars 3 and 4.

Further, other projects in the course that are engaged individually will ask for this material to inform the aesthetic and conceptual structures they propose in their submitted media projects. The media projects will continue to assess artful production, skill performance and

"getting beyond cultural surfaces" and this material adds a further depth and component of synthetic thought and approach.

Design thinking and understanding of "context" of design are key elements of this field school. Both are different in the North American and Northern European situations. The readings on design thinking and context will utilize sophisticated publication in the U.S.A (IDEO) and in the Netherlands (Philips Design), to assist students to examine and consider variances and influences in these two schools of thought and design practice. This material will deepen the writing project from mere "reflection" to one of scholarship.

The conceptual framework is that "design thinking and context" goes beyond theory into practice and synthetic thinking abilities for the emergent designer/student, moving in a natural design process from divergent thinking (analysis) to convergent thinking (synthesis) that causes the practitioner to be able to use, do and make, and not just think about design. The process of design and the outcomes in North America and the Netherlands are not the same. Students will be required to consider the reasons why beyond a formal analysis level. The project will require the student to reflect substantively on their own design learning to explore their emergent practice and prepare a dossier of evidentiary work (the portfolio).

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#### FACULTY OF COMMUNICATION, ART AND TECHNOLOGY

School of Interactive Arts + Technology

Simon Fraser University Surrey 250 – 13450 102<sup>nd</sup> Avenue, Surrey, BC Canada V3T 0A3 TEL 778.782.8131 FAX 778.782.7478 chantal\_gibson@sfu.ca www.siat.sfu.ca

MEMORAND	UM		
ATTENTION	Stuart Poyntz, FCAT UCC Chair	DATE	Tuesday April 18, 2017
FROM	Chantal Gibson, SIAT UCC Chair	PAGES	1
RE:	SIAT Items for Approval April FCAT UCC		

Dear Stuart,

Kindly place the following item on the agenda for the next FCAT UCC meeting Friday April 21st.

1. Program Memo: Temporary withdrawal of IAT403 and IAT405 from the Calendar

If you require further information, please contact me at <u>Chantal\_gibson@sfu.ca</u>. I look forward to seeing you at the meeting.

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November 2016

SFU	SENATE COMMITTEE ON UNDERGRADUATE STUDIES	EXISTING COURSE DELETION FORM 1 of 1 page
COURSE SUBJECT	PUB NUMBER 210	TITLE Writing to Purpose: University-level Skills and
RATIONALE (must be	included)	
PUB 210 is replac	ed by PUB 210W	
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Publishing Program	 m.	
(From Senate and	Academic Services Office: There i	s no program impact list for this course.)
5. Lastly ple	ase conduct a course impact analysis v	which reviews the effect of a course number change and/or

5. Lastly, please conduct a course impact analysis, which reviews the effect of a course number change and/or course deletion on course prerequisites. For instructions on how to do a course impact analysis, please visit <u>our</u> page and click on "deleting a course" and review Step 2. Course Impact Analysis.

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