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MEMORANDUM

 **ATTENTION** Senate **DATE** January 24, 2024
FROM Dilson Rassier, Provost and Vice-President Academic, and Chair, SCUP **PAGES** 1
RE: Full Program Proposal for the Certificate in Sound (SCUP 24-02)

At its meeting on January 24, 2024, SCUP reviewed and approved the Full Program Proposal for the Certificate in Sound. This program does not require Ministry approval.

Motion: That Senate approve and recommend to the Board of Governors the Full Program Proposal for the Certificate in Sound within the Faculty of Communication, Art and Technology.

C: Arne Eigenfeldt



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MEMORANDUM

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| ATTENTION | Senate Committee on University Priorities | DATE | December 8, 2023 |
| FROM | Peter Hall, Chair Senate Committee on Undergraduate Studies | PAGES | 1/1 |
| RE: | Faculty of Communication, Art and Technology (SCUS 23-103) | | |

Action undertaken by the Senate Committee on Undergraduate Studies at its meeting of December 7, 2023, gives rise to the following recommendation:

Motion

That SCUP approves the Full Program Proposal for the Certificate in Sound in the Dean’s Office within the Faculty of Communication, Art and Technology.

The relevant documentation for review by SCUP is attached.



SIMON FRASER UNIVERSITY
ENGAGING THE WORLD

Certificate In Sound

Full Program Proposal

October 2023

Faculty of Communication, Art and Technology

1. Executive Summary

a) An overview of the institution's history, mission, and academic goals:

As Canada's engaged university, Simon Fraser University is defined by its dynamic integration of innovative education, cutting-edge research and far-reaching community engagement. SFU was founded in 1965 with a mission to bring an interdisciplinary approach to learning, embrace bold initiatives, and engage with communities near and far. Today SFU is consistently ranked amongst Canada's top comprehensive universities and is one of the world's leading teaching and research institutions.

The FCAT Certificate in Sound will build on this history and develop a unique qualification that will enable students to engage in interdisciplinary discovery while developing competencies that enable them to prepare for post-university life.

The proposed certificate aims to support SFU's vision and mission by offering students opportunities to earn a credential for their expanded study of sound, demonstrating an interdisciplinary approach reflecting both breadth and depth of understanding of a topic that is of increasing importance within the job market of creative industries. This certificate builds on FCAT's existing Certificate in Digital Journalism in that it will offer a second avenue of exploration into creative technologies.

b) Credential to be awarded:

Certificate in Sound

c) Location of program:

Burnaby (CMNS), Surrey (IAT), and Vancouver (SCA) campuses, based on course offerings.

d) Faculty offering the proposed new program:

The Certificate in Sound will be managed by the Dean's Office of the Faculty of Communication, Arts and Technology, similar to the existing Certificate in Digital Journalism.

e) Anticipated program start date:

September 2024

f) Anticipated completion time:

The 18 units required to complete this certificate will be fulfilled through existing core courses from the Faculty of Communication, Art and Technology. These units work in complement with existing major and minor programs in FCAT, and so, with planning, this certificate should not extend the time to graduation.

It would be possible to complete the required courses in two terms; however, we recognise that accessing the required courses outside their schools may require one or two extra terms during a student's regular progression in their major or minor.

g) Summary of the proposed program

- **Aims, goals, and objectives:**

All three schools in FCAT – Communications, Contemporary Arts, and Interactive Arts and Technology – each have several courses in sound, taught from their unique perspectives. This certificate hopes to encourage students in the individual schools who are interested in sound to take courses offered by the other schools within the faculty and receive a more interdisciplinary grounding in the study. Furthermore, it also hopes to attract students from outside the faculty to take a variety of courses within our schools.

The School of Communication houses SFU's **Sonic Research Studio** which contains a wealth of archival materials in **soundscape studies** and **acoustic ecology**, along with cutting-edge research in **soundscape composition**, **sonification for social change**, **documentary sound production**, and **cultural studies of sound** and music.

The School for the Contemporary Arts offers a **Music and Sound Major**, focusing on the exploration of **sound as a creative artist**. The program offers a unique, interdisciplinary experience and the opportunity to collaborate on film, dance, theatre, and visual art projects.

The School of Interactive Arts and Technology students learn about **sound design** and **audio engineering** as it relates to film and multimedia projects, **user experience design**, and **video games**.

Students will be required to take one lower-level sound course (CA149), and one lower-level course from each of the three schools (in each case choosing from a list of two, none of which require prerequisites), and two upper-level sound courses (from a list of nine), one of which must be from a school outside of their major.

- **Contribution to the mandate and strategic plan of the institution:**

We are proposing this certificate in response to:

- Student interest in innovative education and post-graduate transition planning;
- Student interest in taking courses outside their school but in their faculty (as shown in FCAT's recent survey for its upcoming Strategic Plan);
- Student interest in creative technologies through social media and other digital formats;
- Faculty strength in the areas of sound studies, sound creation, and sound in media;
- University priorities, including the provision for opportunities for interdisciplinary discovery;
- Labour market opportunities across the creative technologies sector in the Lower Mainland; and,
- The demonstrated need for employees who combine literacy with new technologies and theoretical knowledge in art, design and communication.

Engaging Students: encourages FCAT students to discover the variety of methods of investigating sound. Provide them with a broader understanding of sound in culture, creation, and media.

Engaging Research: prepare students to engage in sound research more inclusively. Research in sound within the faculty is broad, and encouraging a more interdisciplinary understanding of sound for students as potential researchers and research assistants will be of direct benefit to faculty research.

Engaging Communities: existing courses in sound within the faculty investigate its understanding across several communities: soundscape studies in Communications studies sound in its environment and community; creative sound artists in Contemporary Arts often work directly with artistic communities in Vancouver; sound and media students in SIAT similarly work with art and design communities in and out of the SFU community.

The study of sound in its various instances in FCAT can be considered within the emerging field of **creative technologies**, itself a field of research and learning as new technology transformed creative endeavours in the areas of media and entertainment, fashion, advertising and public relations, music and audio design, and so on. Creative technology education focuses on the development of theoretical knowledge and technical skills in the areas of design, communication, art and technology. It is an interdisciplinary and transdisciplinary field distinguished by the ways researchers, practitioners, artists and others combine technical knowledge with competencies in symbolic design, creation, and circulation. Creative technologies are now integral to citizen engagement and drive employment opportunities in a range of areas across the not-for-profit, government and private sectors.

Since its inception, FCAT has been a leading site for learning, research and program development in the field of creative technologies. The undergraduate Certificate in Sound will contribute to this reputation and offer students across FCAT and SFU the opportunity to pursue interdisciplinary discovery while acquiring a unique credential in the Lower Mainland at a time when the field of sound is undergoing significant change.

- **Linkages between program outcomes and curriculum design:**

The School of Communication houses SFU's Sonic Research Studio which contains a wealth of archival materials in soundscape studies and acoustic ecology, along with cutting-edge research in soundscape composition, sonification for social change, documentary sound production (audio documentaries, interviews, podcasts), and cultural studies of sound and music.

The School for the Contemporary Arts is renowned for its innovative and experimental approach to music through its focus on composition; the music and sound program offers students a unique, interdisciplinary experience and the opportunity to collaborate on film, dance, theatre, and visual art projects during the course of their degree.

Students in the School of Interactive Arts and Technology learn about sound design and audio engineering as it relates to film and multimedia projects, user experience design, and video games. Researchers in SIAT also engage in sound-based research practices including generative music created by AI.

- **Potential areas/sectors of employment for graduates or opportunities for further study:**

The Certificate in Sound is designed to expose students to the diverse fields of research and practice regarding sound. Possible sectors of employment may include but are not limited to: sound design for film and new media; sound studies research; creative use for artistic productions of music, gallery installation, dance, theatre, new media, and film; journalism; support occupations in broadcasting; social media marketing and delivery.

- **Delivery methods:**

Since the program is based on existing courses, the standard delivery methods already in place will be used. It should be noted that several of the courses in the Certificate are currently offered through online delivery: CA140, CA142, CA149, and CA386.

- **Program strengths:**

The Certificate in Sound will stand as a unique program in undergraduate curriculum at Simon Fraser University and in the Faculty of Communication, Art and Technology. The Certificate takes advantage of areas within the FCAT schools which have individually proven successful, unique, and internationally recognised: this Certificate will bring together the three unique perspectives and allow students to discover alternative perspectives from outside their school's vantage point.

Implementing the certificate will allow FCAT to further its goal of interdisciplinarity in program development and in graduating professionals who are innovative and adept with new technologies and new mediums, allowing them to lead in the creative and communication sectors.

- **Level of support and recognition:**

As per SFU's transfer credit procedures, student may transfer from BC colleges or universities to enrol in the certificate program.

The Appendix includes letters from the five directors of FCAT's schools/ programs.

- **Related programs:**

The Faculty of Communication, Art and Technology is unique in Canadian universities for its interdisciplinary focus, and this is very evident in how sound is taught in its three schools.

The School of Communication teaches sound from the perspective of soundscape composition, sonification for social change, and cultural studies of sound and music. The School for the Contemporary Arts focuses on the exploration of sound as a creative artist. The School of Interactive Arts and Technology students learn about sound design and audio engineering as it relates to film and multimedia projects, user experience design, and video games.

While other universities in Canada may offer similar programs to FCAT's individual schools, no single university offers a diverse perspective on sound research as SFU's Faculty of Communication, Art and Technology, nor one in which sound forms an integral component of the

University of Toronto

- Bachelor's degrees in Book and Media Studies; Cinema Studies; Media, Journalism and Digital Cultures; and Communication, Culture, Information, and Technology.

University of British Columbia

- Bachelor's degrees in Film Production; Film Studies; Media Studies; and Music.

Concordia University

- Bachelor's degrees in Communication and Cultural Studies; Communication Studies; Film Studies; and Intermedia.

York University

- Bachelor's degrees in Cinema & Media Studies; Communication & Media Studies; Communications; and Digital Media.

Two local institutions offer two-year programs with a focus only on music, rather than the broader investigation of sound offered through FCAT.

Capilano University

- Music Diploma
 - A two-year program with a focus on music theory, performance, and jazz. No courses directly in *sound* nor exploration of sound outside a jazz perspective.

Douglas College

- Bachelor of Music

- A two-year program with a focus on music theory, performance, and music technology. No courses directly in *sound* nor exploration of sound outside a traditional music perspective.

Vancouver Community College

- Bachelor of Applied Music
 - A two-year program with a focus on music theory, performance, and collaboration. No courses directly in *sound* nor exploration of sound outside a commercial music perspective.

Vancouver Film School

- Diploma
 - A one-year program with a focus on Sound Design for Visual Media. Industry-focused and professional training for work within the film and game industry. No courses directly in *sound* nor exploration of sound outside a commercial music perspective.

h) Contact information:

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2. Curriculum/Program Content

2.1. Program structure

Students must complete a minimum of 18 units, including core and elective courses in sound at SFU.

Students who wish to complete upper-division courses must make sure they have the prerequisites and should be aware that some courses may have limited enrolments.

The program structure will require students to take one required course (3) and at least one lower-level course in sound across all three schools for a minimum of nine (9) units, and two upper-level courses (6 units), including one from outside their major. None of the lower-level courses have prerequisites, while the upper-level courses have minimum unit counts or the available lower-level sound courses as prerequisites.

Students will complete

CA 149 Sound (3)

and one of

CA 142 Music Appreciation in the 21st Century (3)

CA 140 Contexts in Creative Music and Sound Practice (3)

and one of

CMNS 226 Digital Media Communication Techniques (3)

CMNS 258 History of Sound in Media (3)

and one of

IAT 100 Digital Image Design (3)

IAT 202 New Media Images (3)

Elective Courses

Students will complete two of, one of which is outside their major:

- CA 344 Thinking and Writing About Sound (3)
- CA 315 Sound Art: History and Concepts (4)
- CA 341 Music and Culture (3)
- CA 386 Film Music; An Overview of the Relationship between Music and Moving Pictures (3)
- CMNS 314 Audio Media Analysis (4)
- CMNS 353 Listening, Culture and Society
- IAT 340 Sound Design (3)
- IAT 344 Moving Images (4)
- IAT 443 Interactive Video (4)
- PUB 448 Publishing and Social Change: Tech, Texts, and Revolution (4)

2.2. Core courses

CA 149 Sound (3)

- Introduction to acoustics, psychoacoustics, sound synthesis, audio sampling and signal processing, and sound production in general as relating to music, film sound, radio, new media, art installations and live performance. Quantitative. **Prerequisite: none**

CA 140 Contexts in Creative Music and Sound Practice (3)

- Looks at the issues involved in being a creative musical artist in the 21st century. Topics include historical context, race and gender, the role and influence of politics, music and identity, appropriation, art music, functional music, and hybrid practices. May be of particular interest to students in other departments. Breadth-Humanities. **Prerequisite: none**

CA 142 Music Appreciation in the 21st Century (3)

- 21st Century Music Appreciation aims to develop a critical ear and advanced listening skills. The course will take a post-modern approach to appreciation in that it will present a diversity of music from many cultures, styles, and periods in an effort to discover similarities, differences, and defining characteristics. **Prerequisite: none** Breadth-Humanities.

CMNS 226 Digital Media Communication Techniques (3)

- This course introduces students to a variety of digital media communication technologies and techniques, including image and sound capturing and manipulation, Internet-based publishing and research, digitizing, editing and archiving. Design and management tasks involved in communicating using digital media are also introduced, including audio and video editing and processing, data integrity management, file structuring and packaging, and

work presentation. **Prerequisite: Nine CMNS units with a minimum grade of C-.**

CMNS 258 History of Sound in Media (3)

- An introduction to audio representation technology and a survey of the history of major sound-based media, including a discussion of the way sound design conventions have developed over time. Students both analyze sound in media and create audio-based applied projects. Specific techniques of field recording, interviewing, editing, sound processing, multi-tracking, and basic digital audio techniques will be explored using the school's studio facilities. Breadth-Humanities/Social Sciences. **Prerequisite: none**

IAT 100 Digital Image Design (3)

- This is a project-based course that introduces the theory and hands-on practice of art and design in digital media. As the introductory course in IAT, this course teaches the core fundamental principles in 2D visual design, sequential and animation design. Students learn the fundamentals of digital photography and vector image creation. The theory is contextualized in contemporary new media design practice and is broadly applicable across disciplines. Breadth-Humanities. **Prerequisite: none**

IAT 202 New Media Images (3)

- Explores the computational nature of technology as applied to contemporary art and design. It is a studio-based, media production course that explores new forms of art and design that are mediated by or modeled after computing processes as opposed to transforming or digitizing existing forms. **Prerequisite: IAT 100 with a minimum grade of C- and a minimum of 21 units.** Breadth-Humanities.

Elective Courses

CA 344 Thinking and Writing About Sound (3)

- An in-depth investigation of selected social, political, philosophical, and theoretical issues associated with contemporary music and the sonic arts. Topics such as sound and technology, popular music and the mass media, or critical issues in non-western and Indigenous music might also be considered. This course can be repeated for credit. **Prerequisite: CA 140 or permission of instructor**

CA 315 Sound Art: History and Concepts (4)

- This lecture course investigates sound art as an interdisciplinary practice that draws its history and concepts from contemporary visual art, installation art, performance art, experimental music, and their various confluences. We will study historical precedents of experimental sound work as well as think critically and creatively about the themes and concerns that inform contemporary practices. Prerequisite: 45 units. **Prerequisite: 45 units**

CA 341 Music and Culture (3)

- The relationship of music and culture, with emphasis on traditional and contemporary music in Asia, Africa, the Middle East, Latin America and the Caribbean, and Indigenous cultures of North America. Specific cultural areas may be selected for intensive study in any particular term. May be of particular interest to students in other departments. **Prerequisite: 45 units**

CA 386 Film Music; An Overview of the Relationship between Music and Moving Pictures (3)

- This course examines the role of music in the viewer's experience of moving pictures. Beginning with the early 1900s, the lectures will introduce important composers, directors, films, genres and historical periods. Specific films and other works will be analyzed. **Prerequisite: 60 credit hours**

CMNS 314 Topics in Media Production & Aesthetics (4)

- Topics on the cultural production of acoustic, visual, and/or multimodal communication. Explores cultural contexts of media production, media artifacts, media perceptions, and alternative media practices. Topics include: advertising, film, gaming, radio, television, and questions of representation in media professions. This course can be repeated once for credit (up to a maximum of two times). **Prerequisite: 17 CMNS units with a minimum grade of C- or 45 units with a minimum CGPA of 2.00.**

CMNS 353 Topics in Science, Technology and Society (4)

- Often run as “Listening, Culture and Society”. Examination of the emergence and shaping of information and communication technologies and science in the digital age. Explores new media and social change between everyday life, social institutions, and various enterprises. Emphasis is placed on social context and relations of power. This course can be repeated once for credit if second topic is different (up to a maximum of two times). **Prerequisite: 17 CMNS units with a minimum grade of C- or 45 units with a minimum CGPA of 2.00**

IAT 340 Sound Design (3)

- Introduction to theory and practice of sound design. Explores sound's relationship to moving images, installation, performance, video games, user interfaces and Web sites. Includes audio production, post-production, mixing and mastering, beginning programming for digital signal processing, sound synthesis and sound interaction. **Prerequisite: Completion of 24 units. Recommended: IAT 202 New Media Images.**

IAT 344 Moving Images (4)

- Reviews and consolidates the fundamentals of digital video production, including camera and composition skills, the role of sound, lighting, and continuity and montage editing. Students will review and analyze works from traditional cinema and from contemporary digital video. The course will reinforce fundamental skills and extend the student's abilities to use a range of digital production, post-production, and presentation techniques. **Prerequisite: Minimum of 48 units and IAT 202 with a minimum grade of C-.**

IAT 443 Interactive Video (4)

- An intermediate level investigation of interactivity explored through media, in the context of current display technologies relevant to Interactive Arts and Design. Examines recombinant, computational and compositional structures related to image, sound and video. Students explore video within technologies ranging from cell phones and mobile locative media, and handheld and wearable devices, to 3D immersive virtual and/or networked environments, video art installations, multiple scales of display technology, and responsive spaces. Students will design, produce and critically appraise work. **Prerequisite: Completion of 60 units, including IAT 344 with a minimum grade of C-.**

PUB 448 Publishing and Social Change: Tech, Texts, and Revolution (4)

- This seminar explores the history of publishing and revolutions - democracy, science, abolition, feminism - as well as how students can use publishing techniques and skills to advocate for social and political issues in which they are engaged. **Prerequisite: 60 units.**

2.3. Existing and new courses

No new courses are required for the Certificate in Sound.

2.4. Curriculum and program goals

This certificate hopes to encourage students in the individual schools who are interested in sound to take courses offered by the other schools within the faculty and receive a more interdisciplinary grounding in the study. Furthermore, it also hopes to attract students from outside the faculty to take a variety of courses within our schools.

2.5. Work experience/field/practicum placement

Work experience/practicum term is not required.

3. Program Resources

3.1. Target audience and enrolment plan

The target audience for the Certificate in Sound are FCAT students currently taking or considering taking existing sound courses within their school.

Enrolment data for the lower-level core courses is as follows:

| | CA 149 | CA 140 | CA 142 | CMNS 226 | CMNS 258 | IAT 100 | IAT 202 |
|--------|-----------|-----------|-----------|-------------|-------------|------------|------------|
| 23-24* | 640 | 92 | 387 | 64 | 34 | 267 | 94 |
| 22-23 | 867 | 147 | 441 | 37 | 73 | 438 | 210 |
| 21-22 | 517 | 147 | 416 | 37 | 35 | 473 | 177 |
| 20-21 | 337 | 190 | 440 | 70 | 33 | 464 | 189 |
| 19-20 | 311 | 105 | 314 | 71 | 36 | 466 | 231 |

* only partial data available for this year

As some of these courses are Breath courses, enrolment includes non-FCAT students.

Recruitment for the Certificate in Sound will focus on three potential target groups:

- SFU students in declared FCAT Major and Minor programs, including those in the FCAT Double Minor;
- Undeclared SFU students;

- Secondary School students, as part of FCAT's ongoing recruitment into our major and minor programs.

3.2. Resources

No additional resources are required for this program. As shown in the table from 3.1, some current lower-division courses are already equipped to accept large enrolments; others (i.e. CMNS courses) are able and looking forward to handling increased enrolments. No additional sections will be required, nor will it require adjustments to the teaching or administrative loads of department faculty or staff. The only significant change will be for the departmental and faculty-level advisors, who will need to learn about the new certificate and its possibilities for students; however, advising capacity already exists to support students pursuing the existing Certificate in Digital Journalism so impact will be minimal on advisors.

4. Program Review and Academic/Administrative Oversight

The certificate will be assessed during the mandated mid-term and 7-year cycle external reviews.

5. Program Consultation

The Faculty consulted with curriculum representatives from all of FCAT's schools and programs, and the Dean's Advisory Council throughout the NOI and FPP process and before submission to committees for approval. FCAT also met with SFU's University Curriculum and Institutional Liaison.

6. Evidence of Student Interest

To gauge student interest in the Certificate in Sound, FCAT sent out a survey to all undergraduate students registered in an FCAT Major, Minor, or Double Minor Program. Students were asked to rate their degree of interest in accessing a certificate program that focused on Sound.

The results of the survey indicate a significant degree of student interest. 70 students have responded as of November 1 2019.

Questions asked:

- 1) Have you taken any courses in sound within your school?

Yes: 69%

No: 31%

2) Have you taken any courses in sound outside of your school within FCAT?

Yes: 23%

No: 77%

3) The following are being considered as possible courses within the Certificate. Have you taken any of these courses:

CA149: 56%

CA 140: 20%

CA 142: 24%

CMNS 226: 11%

CMNS 258: 18%

IAT 100: 36%

IAT 202: 20%

CMNS 314: 13%

other courses: < 8%

4) A certificate at SFU consists of mainly lower division courses of between 18-30 units, and are recognition of a specialisation within your degree. Would you be interested in completing a Certificate in Sound?

Yes: 51%

No: 9%

Maybe, but not eight¹ courses: 36%

Yes, but not interested in the courses: 4%

From these results, we can gather that:

1. FCAT students are generally taking courses in sound within their school (69%), but not in other schools (77%);
2. A majority of students polled (56%) have already taken the required lower-level courses (CA149), and between 11-36% have already taken other lower-level courses in sound;
3. A majority of students polled (51%) indicated they are interested in the certificate;
4. A significant percentage (36%) are interested in the certificate if it requires fewer courses (please see footnote on the previous page).

¹ Please note that the Certificate originally proposed 24 units, and the survey asked if students would be interested in a certificate that required eight courses; because of the answer to question 4, we have lowered the number to 18 units, or six courses.

7. Appendices

7.1. Calendar Entry

Certificate in Sound

Certificate:

The certificate provides a credential to acknowledge an interdisciplinary grounding in the study of sound through its study in all three schools within FCAT.

Admission Requirements:

A student in any faculty at SFU may declare this certificate through the Faculty of Communication, Art and Technology. Normal university grade point average requirements apply for entry into all FCAT courses.

Program Requirements:

Students must complete a minimum of 18 units, including core and elective courses in sound at SFU. Units applied to one certificate may be applied also to major or minor programs of a bachelor's degree under the normal regulations governing those programs but may not be applied to another Simon Fraser University certificate or diploma.

Students who wish to complete upper-division courses must make sure they have the prerequisites and should be aware that some courses may have limited enrolments.

Core Courses:

Students will complete:

CA 149 Sound (3)

and one of:

CA 140 Contexts in Creative Music and Sound Practice (3)

CA 142 Music Appreciation in the 21st Century (3)

and one of:

CMNS 226 Digital Media Communication Techniques (3)

CMNS 258 History of Sound in Media (3)

and one of:

IAT 100 Digital Image Design (3)

IAT 202 New Media Images (3)

Elective Courses

Students will complete two of, one of which must be outside their major:

CA 344 Thinking and Writing About Sound (3)

CA 315 Sound Art: History and Concepts (4)

CA 341 Music and Culture (3)

CA 386 Film Music; An Overview of the Relationship between Music and Moving Pictures (3)

CMNS 314 Topics in Media Production & Aesthetics (4)

CMNS 353 Topics in Science, Technology and Society (4)

IAT 340 Sound Design (3)

IAT 344 Moving Images (4)

IAT 443 Interactive Video (4)

PUB 448 Publishing and Social Change: Tech, Texts, and Revolution (4)

7.2. Letters of support from FCAT Chairs/Directors