



UNIVERSITY OF CALGARY

Faculty of Arts
School of Creative and Performing Arts
Music

MUSI 653 Projects in Computer Music Programming and Interactivity Winter, 2017

Instructor David Eagle
Office CH-E211A
Tel 220-4658
Email eagle@ucalgary.ca
Office Hours tba & by appointment

Schedule Class: MW 2:00-3:15, AB 657 & AB 605
Independent studio time: 6 hours per week in the Sonic Arts and Telemedia Labs

Creation and performance of multi-channel interactive and acousmatic works, with an emphasis on using new interfaces, programming in *Max* and developing engaging musical/sonic arts projects.

The course comprises:

- advanced studio and computer techniques
- weekly creative work and research
- study of repertoire and software

Topics to be studied in the realization of the creative projects:

- mapping performance gesture to sound
- techniques of sound synthesis, audio processing, sampling, sound spatialization
- user-interface and instrument design in *Max*, *Mira*, *TouchOSC* and *Lemur*
- exploring the potential of *Phidgets* (USB Sensing and Control transducers) in music interfaces
- introduction to graphic notation in *Acousmagraphe* <http://www.inagrm.com/accueil/outils/acousmographe>
- possible use of other audio and video programming software such as *Gen* and *Jitter*
- notation in *NoteAbilityPro* for interactive works with *Max* and OSC messages
- programming and communication with OSC
- programming and use of iPad and/or Android touch surface devices

Grading:	Interactive project 1, due Jan 25	20%
	Analysis and aural score of an acousmatic work, using <i>Acousmagraphe</i> , Feb 1	10%
	Interactive project 2, due March 1	20%
	Analysis of an interactive piece, instrument & electronics, March 8	10%
	NoteAbilityPro and Max etude - OSC and network messages, March 22	10%
	Final Interactive project 3 - acoustic instrument with processing, April 12	30%

Materials: good enclosed headphones, USB memory stick. There is no final exam.

Grading scale:

A+ = 100-96	A = 95-91	A- = 90-86	B+ = 85-81	B = 80-76	B- = 75-71
C+ = 70-67	C = 66-62	C- = 61-58	D+ = 57-54	D = 53-50	F = 49%

Grading scale	<p>For the course as a whole, letter grades should be understood as follows, as outlined in the section F.2 Undergraduate Grading System of the Undergraduate Calendar for 2016-2017:</p> <table border="0"> <thead> <tr> <th>Grade</th> <th>GPA</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>A+</td> <td>4.00</td> <td>Outstanding.</td> </tr> <tr> <td>A</td> <td>4.00</td> <td>Excellent - superior performance, showing comprehensive understanding of subject matter.</td> </tr> <tr> <td>A-</td> <td>3.70</td> <td></td> </tr> <tr> <td>B+</td> <td>3.30</td> <td></td> </tr> <tr> <td>B</td> <td>3.00</td> <td>Good - clearly above average performance with knowledge of subject matter generally complete.</td> </tr> <tr> <td>B-</td> <td>2.70</td> <td></td> </tr> <tr> <td>C+</td> <td>2.30</td> <td></td> </tr> <tr> <td>C</td> <td>2.00</td> <td>Satisfactory - basic understanding of the subject matter.</td> </tr> <tr> <td>C-</td> <td>1.70</td> <td>Receipt of a grade point average of 1.70 may not be sufficient for promotion or graduation. (See individual undergraduate faculty regulations.)</td> </tr> <tr> <td>D+</td> <td>1.30</td> <td></td> </tr> <tr> <td>D</td> <td>1.00</td> <td>Minimal pass - marginal performance; generally insufficient preparation for subsequent courses in the same subject.</td> </tr> <tr> <td>F</td> <td>0</td> <td>Fail - unsatisfactory performance or failure to meet course requirements.</td> </tr> </tbody> </table>	Grade	GPA	Description	A+	4.00	Outstanding.	A	4.00	Excellent - superior performance, showing comprehensive understanding of subject matter.	A-	3.70		B+	3.30		B	3.00	Good - clearly above average performance with knowledge of subject matter generally complete.	B-	2.70		C+	2.30		C	2.00	Satisfactory - basic understanding of the subject matter.	C-	1.70	Receipt of a grade point average of 1.70 may not be sufficient for promotion or graduation. (See individual undergraduate faculty regulations.)	D+	1.30		D	1.00	Minimal pass - marginal performance; generally insufficient preparation for subsequent courses in the same subject.	F	0	Fail - unsatisfactory performance or failure to meet course requirements.
Grade	GPA	Description																																						
A+	4.00	Outstanding.																																						
A	4.00	Excellent - superior performance, showing comprehensive understanding of subject matter.																																						
A-	3.70																																							
B+	3.30																																							
B	3.00	Good - clearly above average performance with knowledge of subject matter generally complete.																																						
B-	2.70																																							
C+	2.30																																							
C	2.00	Satisfactory - basic understanding of the subject matter.																																						
C-	1.70	Receipt of a grade point average of 1.70 may not be sufficient for promotion or graduation. (See individual undergraduate faculty regulations.)																																						
D+	1.30																																							
D	1.00	Minimal pass - marginal performance; generally insufficient preparation for subsequent courses in the same subject.																																						
F	0	Fail - unsatisfactory performance or failure to meet course requirements.																																						
Academic accommodation	<p>Students seeking an accommodation based on disability or medical concerns should contact Student Accessibility Services (SAS); SAS will process the request and issue letters of accommodation to instructors. For additional information on support services and accommodations for students with disabilities, visit ucalgary.ca/access/. Students who require an accommodation in relation to their coursework based on a protected ground other than disability should communicate this need in writing to their Instructor.</p> <p>The full policy on Student Accommodations is available at ucalgary.ca/policies/files/policies/student-accommodation-policy_0.pdf.</p>																																							
Academic integrity, plagiarism	<p>The University of Calgary is committed to the highest standards of academic integrity and honesty. Students are expected to be familiar with these standards regarding academic honesty and to uphold the policies of the University in this respect. Students are referred to the section on plagiarism in the University Calendar (ucalgary.ca/pubs/calendar/current/k-2.html) and are reminded that plagiarism-- Using any source whatsoever without clearly documenting it--is an extremely serious academic offence. Consequences include failure on the assignment, failure in the course and possibly suspension or expulsion from the university. You must document not only direct quotations but also paraphrases and ideas where they appear in your text. A reference list at the end is insufficient by itself. Readers must be able to tell exactly where your words and ideas end and other people's words and ideas begin. This includes assignments submitted in non-traditional formats such as Web pages or visual media, and material taken from such sources. Please consult your instructor or the Student Success Centre (TFDL 3rd Floor) if you have any questions regarding how to document sources.</p>																																							
Student misconduct	<p>ucalgary.ca/pubs/calendar/current/k.html</p>																																							
FOIP	<p>ucalgary.ca/secretariat/privacy</p>																																							
Emergency evacuation	<p>Assembly points for emergencies have been identified across campus. THE PRIMARY ASSEMBLY POINT FOR CRAIGIE HALL IS THE PROFESSIONAL FACULTIES FOOD COURT. For more information, see the University of Calgary's Emergency Management website: ucalgary.ca/emergencyplan/assemblypoints</p>																																							

Internet and electronic communication device	elearn.ucalgary.ca/category/d2l/ucalgary.ca/emergencyplan/emergency-instructions/uc-emergency-app The in-class use of computers may be approved by your Instructor. Cell phones and other electronic communication devices should be silenced or turned off upon entering the classroom. If you violate the Instructor's policy regarding the use of electronic communication devices in the classroom, you may be asked to leave the classroom; repeated abuse may result in a charge of misconduct. No audio or video recording of any kind is allowed in class without explicit permission of the Instructor.
Safewalk	220-5333 anytime. ucalgary.ca/security/safewalk
Students' union and ombudsperson contacts	Student Union: su.ucalgary.ca/about/who-we-are/elected-officials/ Faculty of Arts reps: arts1@su.ucalgary.ca ; arts2@su.ucalgary.ca ; arts3@su.ucalgary.ca ; arts4@su.ucalgary.ca Graduate Student's Association: ucalgary.ca/pubs/calendar/grad/current/graduate-students-association-gsa-grad.html Student Ombudsman: ucalgary.ca/ombuds/contact
Midterm and final examination scheduling	Final examinations may be scheduled at any time during the examination period (12-22 December for Fall 2016 term; 15-26 April for Winter 2017 term); students should therefore avoid making prior travel, employment, or other commitments for this period. If a student is unable to write an exam through no fault of his or her own for medical or other valid reasons, documentation must be provided and an opportunity to write the missed exam may be given. Students are encouraged to review all examination policies and procedures: ucalgary.ca/registrar/exams/deferred_final
Deferrals of exams/ term work	It is possible to request a deferral of term work or final examinations for reasons of illness, accident, family or domestic affliction, or religious obligations. Please check with your advisor if any of these issues make it impossible for you to sit an exam or finish term work by stated deadlines. ucalgary.ca/registrar/exams/deferred_final ucalgary.ca/pubs/calendar/current/g-6.html ucalgary.ca/pubs/calendar/current/g-7.html
SCPA Claim Your Seat Program: Student Guidelines	<ol style="list-style-type: none"> 1. The Claim Your Seat (CYS) program, funded by the Students' Union Quality Money, allows all University of Calgary students to attend on-campus School of Creative and Performing Arts (Dance, Drama and Music) events free of charge. 2. Depending on the performance, there is a limited number of seats available for CYS. There is not a guarantee that tickets will be available for all CYS patrons for every performance, based on audience size, demand, etc. 3. CYS tickets are a privilege. If a student receives a ticket to attend a performance, it is expected that they will respect the value of the admission and attend the performance. 4. Process for students: On the date of the performance, from 45 minutes prior to 15 minutes prior to the performance start time, they arrive to the CYS table next to the Box Office and show their Unicard. If students arrive after 15 minutes prior to the performance start time, they can go to the Box Office and purchase a ticket at the student rate. Students should not go to the Box Office unless they are purchasing a ticket. 5. If students have a course requirement to attend a performance for a specific date, access to the tickets will be communicated by the instructor to University Theatre Services prior to the event. The best guarantee for a free ticket is to arrive early, up to 45 minutes prior to the performance start time. 6. Respect for the Front of House and theatre staff, performers and fellow patrons is an absolute requirement. Failure to comply with this will lead to being asked to leave the venue and could result in the revoking of CYS privileges.
Academic standing	ucalgary.ca/pubs/calendar/current/f.html
Campus security	220-5333. Help phones: located throughout campus, parking lots, and elevators. They connect directly to Campus Security; in case of emergency, press the red button.

Copyright	It is the responsibility of students and professors to ensure that materials they post or distribute to others comply with the Copyright Act and the University's Fair Dealing Guidance for Students. Further copyright information for students is available on the Copyright Office web page (library.ucalgary.ca/copyright).
Faculty of Arts program advising and student information resources	For academic advising, visit the Arts Students' Centre (ASC) for answers about course registration, graduation checks, and the 'big picture' on programs and majors. Drop in at SS102, email at ascarts@ucalgary.ca or call at 403-220-3580. You can also visit the Faculty of Arts website at arts.ucalgary.ca/undergraduate which has detailed information on common academic concerns. For academic success support, such as writing support, peer support, success seminars, and learning support, visit the Student Success Centre on the third floor of the Taylor Family Digital Library (TFDL), email them at success@ucalgary.ca or visit their website at ucalgary.ca/ssc/ for more information or to book an appointment. For enrolment assistance, including registration (add/drop/swap) changes, paying fees, and navigating your Student Centre, contact Enrolment Services at 403-210-ROCK [7625], by email at futurestudents@ucalgary.ca or visit them at the MacKimmie Block 117.
Course outlines for transfer credit	It is possible that you will be asked for copies of this outline for credit transfers to other institutions or for proof of work done. It is the student's responsibility to keep these outlines and provide them to employers or other universities when requested. Please ensure that outlines of all the courses you take are kept in a safe place for your future reference. Departments/Programs do not guarantee that they will provide copies.
Letter of permission	If you wish to study at another institution while registered at the U of C, you must have a letter of permission. You can submit your request through your Student Centre at MyUofC. Students must have the Letter of Permission before they take the course at another school. Failure to prepare may result in no credit awarded and could result in suspension from the faculty.
Undergraduate associations	DUS: Drama Undergraduate Society, CHC 005 uofcdus@gmail.com MUS: Music Undergraduate Society, CHF 219 undmusic@ucalgary.ca