



**UNIVERSITY OF CALGARY**  
**FACULTY OF ARTS**  
**SCHOOL OF CREATIVE AND PERFORMING ARTS- MUSIC**  
**MUSI 753.1 Advanced Projects in Computer Music: Sonic Design.**  
**Session: Winter 2014**

<b>INSTRUCTOR OFFICE PHONE EMAIL OFFICE HOURS</b>	Christopher Haworth CH-E211B 403-220-7892 <a href="mailto:chaworth@ucalgary.ca">chaworth@ucalgary.ca</a> TBA and by appointment
<b>CLASS TIME &amp; LOCATION</b>	Class times: Thurs 1:00 - 2:45, Fri 2:30 - 4:45 Lab: TBA Location: Telemedia Arts Lab, Sonic Arts Lab, Integrated Media Arts Lab
<b>TEXT(S)</b>	
<b>SUPPLEMENTAL TEXTS (not for purchase)</b>	Blauert, Jens. 1997. <i>Spatial Hearing: The Psychophysics of Human Sound Localization</i> . Cambridge, Mass [u.a.: MIT Press. Cipriani, Alessandro, and Maurizio Giri. 2013. <i>Electronic Music and Sound Design: Theory and Practice with Max and MSP. Vol. 1 Vol. 1</i> . Rome: ConTempoNet. Di Scipio, Agostino. 1995. "Inseparable Models of Materials and of Musical Design in Electroacoustic and Computer Music*." <i>Journal of New Music Research</i> 24 (1): 34–50. Moore, Brian C. J. 2012. <i>An Introduction to the Psychology of Hearing</i> . Bingley: Emerald. Roads, Curtis. 2004. <i>Microsound</i> . Cambridge, Mass.: MIT Press. Roads, Curtis, and John Strawn. 1995. <i>The Computer Music Tutorial</i> . Cambridge, Mass.: MIT Press. Xenakis, Iannis. 1992. <i>Formalized Music</i> . Stuyvesant, NY: Pendragon Press.
<b>PREREQUISITES</b>	Familiarity with fundamental concepts in digital audio and audio programming
<b>COURSE DESCRIPTION AND OBJECTIVES</b>	<p>This sonic arts course is designed to equip students with the technical and conceptual skills necessary to produce their own compositions using advanced sound synthesis and signal processing techniques. Students will be introduced to Gen, a powerful addition to Max/MSP that brings 'low level' audio programming into the Max visual programming environment. The aim is to foster an integrated technical-creative approach to your own works, and this will be showcased in a final project derived from one of the themes in class.</p> <p>Regular assignments / tests <span style="float: right;">30%</span></p>

	<p>Midterm project and presentation 20%</p> <p>Final project and presentation (including paper, ca 2000 words) 40%</p> <p>Class preparation and participation 10%</p> <p>Important dates:</p> <p>Midterm: week beginning 24<sup>th</sup> February</p> <p>Final paper due: 4pm April 4<sup>th</sup></p> <p>Final projects and presentations: Week beginning April 7<sup>th</sup></p>
<b>COURSE CONTENT</b>	<p>Topics will include:</p> <ol style="list-style-type: none"> <li>1) perception of sound in space, spatial composition</li> <li>2) techniques for sound spatialization</li> <li>3) physical modelling</li> <li>4) nonstandard synthesis</li> <li>5) direct timbre design and microsound composition</li> <li>6) network acoustics</li> <li>7) interactivity</li> </ol>
<b>ASSESSMENTS (INCLUDING APPROPRIATE GRADING SCHEME)</b>	<p>A+ = 100-96</p> <p>A = 95-91</p> <p>A- = 90-86</p> <p>B+ = 85-81</p> <p>B = 80-76</p> <p>B- = 75-71</p> <p>C+ = 70-67</p> <p>C = 66-62</p> <p>C- = 61-58</p> <p>D+ = 57-54</p> <p>D = 53-50</p> <p>F = 49%</p>
<b>FACULTY OF ARTS PROGRAM ADVISING AND STUDENT INFORMATION RESOURCES</b>	<ul style="list-style-type: none"> <li>• Have a question, but not sure where to start? The new Faculty of Arts Program Information Centre (PIC) is your information resource for everything in Arts! Drop in at SS102, call us at 403-220-3580 or email us at <a href="mailto:picarts@ucalgary.ca">picarts@ucalgary.ca</a>. You can also visit the Faculty of Arts website at <a href="http://arts.ucalgary.ca/undergraduate">http://arts.ucalgary.ca/undergraduate</a> which has detailed information on common academic concerns.</li> <li>• For program planning and advice, contact the Student Success Centre at (403) 220-5881 or visit them in their new space on the 3<sup>rd</sup> Floor of the Taylor Family Digital Library.</li> <li>• For registration (add/drop/swap), paying fees and assistance with your Student Centre, contact Enrolment Services at (403) 210-ROCK [7625] or visit them at the MacKimmie Library Block.</li> </ul>

<b>ACADEMIC ACCOMMODATION</b>	<a href="http://www.ucalgary.ca/access">http://www.ucalgary.ca/access</a>
<b>FOIP</b>	<a href="http://www.ucalgary.ca/secretariat/privacy">http://www.ucalgary.ca/secretariat/privacy</a>
<b>ACADEMIC STANDING</b>	<a href="http://www.ucalgary.ca/pubs/calendar/current/f.html">http://www.ucalgary.ca/pubs/calendar/current/f.html</a>
<b>CAMPUS SECURITY</b>	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.
<b>COURSE OUTLINES FOR TRANSFER CREDIT</b>	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 <b>student's</b> 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.
<b>DEFERRALS OF EXAMS/TERM WORK</b>	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.
<b>EMERGENCY EVACUATION</b>	<a href="http://www.ucalgary.ca/emergencyplan/assemblypoints">http://www.ucalgary.ca/emergencyplan/assemblypoints</a>
<b>LETTER OF PERMISSION</b>	If you wish to study at another institution while registered at the UofC, 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 <b>before</b> they take the course at another school. Failure to prepare may result in no credit awarded and could result in suspension from the faculty.
<b>PLAGIARISM</b>	Using any source whatsoever without clearly documenting it is a serious academic offense. For details see the University of Calgary Calendar. 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 Writing Centre (SS110) if you have any questions regarding how to document sources.
<b>SAFEWALK</b>	<b>220-5333 anytime.</b> <a href="http://www.ucalgary.ca/security/safewalk">http://www.ucalgary.ca/security/safewalk</a>
<b>STUDENT MISCONDUCT</b>	<a href="http://www.ucalgary.ca/pubs/calendar/current/k.html">http://www.ucalgary.ca/pubs/calendar/current/k.html</a>
<b>STUDENT UNION CONTACT</b>	Faculty of Arts reps: <a href="mailto:arts1@su.ucalgary.ca">arts1@su.ucalgary.ca</a> , <a href="mailto:arts2@su.ucalgary.ca">arts2@su.ucalgary.ca</a> , <a href="mailto:arts3@su.ucalgary.ca">arts3@su.ucalgary.ca</a> , <a href="mailto:arts4@su.ucalgary.ca">arts4@su.ucalgary.ca</a>
<b>UNDERGRADUATE ASSOCIATIONS</b>	DUS: Drama Undergraduate Society CH C 005 <a href="mailto:dusuofc@hotmail.com">dusuofc@hotmail.com</a> MUS: Music Undergraduate Society CH F 219 UofC Mus Group on Facebook PIVOT: Dance Undergraduate Society CH E 211 <a href="mailto:pivot@ucalgary.ca">pivot@ucalgary.ca</a>