## Course Calendar Description

Continued study of the terminology and technology of electronic music. Historical development, musique concrète, the "classical" studio, the synthesizer, and computer applications. Survey of the literature with some analysis. Compositional techniques and notation peculiar to electronic music and its real time performance.

### Antirequisite(s):
Music 3695

### Prerequisite(s):
Music 2695A/B, and either Music 2629, or music 1629A/B

### Extra Information:
3 hours, 0.5 course

Please note that prerequisites are no longer automatically checked prior to course registration. It is the responsibility of each student to ensure that he or she has the specified prerequisites. Unless you have either the requisites for this course or written special permission from your Dean to enroll in it, you will be removed from this course and it will be deleted from your record. This decision may not be appealed. You will receive no adjustment to your fees in the event that you are dropped from a course for failing to have the necessary prerequisites.

### Meetings

- **Lecture**: Tuesday 1:30-3:30 CEARP, TC344C
- **Tutorial**: TBD by class TBD by class CEARP, TC344C

### Instructor

Dr. Jason Stanford  
Office Hours: TBD by class schedule survey  
Also by individual appointment

### Graduate Assistant

Aaron Lee  
TC331

### Learning Outcomes

Upon completion of this course students will not only be able to discuss, in detail, technical and technological notions related to the use of technology in music applications, but they will also have gained transferable skills in the application of specific technologies through the creation of original compositions for instruments and/or voices combined with electro-acoustic sound and/or live electro-acoustic sound processing.

Through hands-on practical assignments and projects students will gain a high level of proficiency and technical fluency in utilizing software and hardware within the CEARP studio and in the staging of the year-end electro-acoustic music concert.

Students will gain a deeper understanding of significant electro-acoustic music compositions from the repertoire through listening, discussion, and analysis.
Course Activities

The activities of the course will include active reduced listening, discussion, and analysis of repertoire and recordings, weekly in-class presentations of assignments and work-in-progress, small compositional etudes, one major term compositions of substantial proportions, and the presentation of this major composition live in concert.

Compositions

Most time and energy will be spent on the composition of one major electro-acoustic work, during the term. This substantial composition will include a live performance element. Compositions will be undertaken individually by each student in consultation with the instructor and TA.

For each piece, in addition to all audio files, Pro Tools Sessions, and Max patches, students will submit a bound score (if appropriate) that includes fully notated music for instrumentalists/vocalists, graphics/tablature for real-time MIDI controllers and/or synthesizers, technical details and instructions including: diagrams of staging, control/signal schematics and an explanation of all data and signal processing utilized in the work. The goal of this score is to document for others how to perform your composition in the future.

Electroacoustic Music Concert

Students are required to participate in the setup and sound check for the Electroacoustic Music Concert on Tuesday April 9, 2019 at 6:00pm. Students are also required to participate in the moving of gear from CEARP to PDT, the setup, the sound check, and the dress rehearsal prior to the concert and to also assist in the striking and moving of gear to CEARP after the concert. Moving gear, setup, and dress rehearsal will commence at 8am on the day of the concert in Paul Davenport Theatre. Students will be responsible for promoting the event. This is an all-day activity and will take place from approximately 8am to 10pm.

Studio Time

Each student will be able to reserve at least 2 hours/week of studio time for independent work. Additional studio time can be signed up for on a first come, first served basis. Students can sign-up for time on the TC344C Schedule on OWL. Spontaneous use of CEARP is permitted on a drop-in basis, if you come to CEARP and find booked studio time is not being used, you may use it until such time as the person comes to claim their time. If you are not going to use your studio time, please be considerate to your fellow students and log into OWL and delete the single instance of your time you are not going to use.

Attendance is mandatory (10% of final grade) and will ensure adequate progress in this course. Students are required to sign an attendance sheet for the Tuesday 2-hour lecture and a TBD 1-hour tutorial session each week. Attendance is taken at every meeting, and students are required to initial on the attendance form.
The key to success in this course is **regular work**, if you invest the time, you will understand key concepts and be able to effectively apply these concepts to your own work.

Assignments may be given verbally, or in writing during lectures, and may include quizzes on terminology/comprehension. Some assignments may include a library and/or web research component. Some assignments require students to demonstrate skill and facility in the use of specific hardware and/or software.

**Please do not underestimate the time required to master hardware and software concepts to the point of being able to wield these resources creatively. Progress comes from regular work, from signing-up and utilizing your available time in CEARP. Believe me when I say that you cannot cram in order to demonstrate creative or technical facility through hardware/software.**

### Course Materials and Resources

#### Textbooks
There is no textbook for this course, rather, any readings will be drawn from a variety of different resources, and will be available on course reserve in the Music Library in the Music 3696B course binder, sent to students via email, and/or made available online.

#### Notebooks
There will be a lot of hand-outs for this class, and to keep these hand-outs together, please utilize a 3-ring binder.

In addition to a binder, you will find that a notebook will come in handy to jot down important points from lectures/tutorials, as well as to keep a record of your own technical and creative experiments. Notebooks work best when entries are clearly dated.

A class notebook is an important learning tool, since it will contain:

- Salient points about techniques, methods, musical works, and other concepts presented and discussed during lectures
- Your own proposals and/or objectives – the purpose of your work session in CEARP: what concepts you wish to explore or what goals you wish to attain during each studio session
- observations, thoughts, considerations, hypotheses, conclusions
- results of experimentation: what ideas worked, what ideas did not work, what outcomes were achieved
- new proposals/objectives/hypotheses to test based upon new evidence
- what to try or explore during the next session
- An activity journal of your technical and creative will aid students in troubleshooting and debugging techniques, you will be able to look back and see your charted progress over the course of the semester
Listening List
The listening list for the course will be available on the Mac Pro in the CEARP studio on as uncompressed .WAV audio files.

Hardware and software manuals in PDF format are most often located on the manufacturer’s website, or available as HELP files/tutorial files within the programs themselves.

Storage Media
Unexpected hardware/software failures can and do occur without warning – regular backup of data is mandatory. The University will not be responsible for damaged or lost data. Typical requirements per student may include a selection of the following: USB memory stick (USB3 large capacity – 16-32GB are inexpensive to purchase).

Optional Materials

Software
Most of the practical and creative work of this course is completed using either: the Digital Audio Workstation (DAW) Avid Pro Tools, or in the object-oriented programming environment Max/MSP by Cycling’74.

Although you are not required to purchase either title for the course, as both are available for use in CEARP, it is strongly encouraged that students at least purchase their own license of Max/MSP (even a 4-month subscription will allow you to work independently).

Avid Pro Tools 2018 is available for purchase directly from Avid as either a yearly subscription for $99 US, or a monthly subscription for $9.99 US/month.

Max/MSP is available for purchase at deeply discounted academic pricing ($250 US for the bundle) or you can purchase a 12-month student license for only $59 US, or $9.99 US/month.
https://auth.cycling74.com/purchase#educational

Requirements, Dates, and Evaluation

Compositions will be graded on technical and creative merits. Grading of compositions will take into account the creativity and originality of the project in regards to the treatment of form, structure, register, sonority, etcetera, as well as the level of sophistication and refinement in the use of hardware and software within the composition.

• Term Composition (approximately 7-10 minutes) 50%
• Compositional Etudes, written/aural quizzes, other written assignments, studies, worksheets, if any 40%
• Attendance, Preparation, Participation 10%

Dr. Jason Stanford
jstanfo@uwo.ca
Consultation with the Instructor during the process of composition is a requirement. The Instructor must see sufficient work-in-progress especially as deadlines of the term and concert approach. Students can utilize regular office hours, and additional times are available upon request, subject to the availability of the Instructor.

Late Submission Policy
Late written work, Max/MSP patches, and Pro Tools sessions, will only be accepted under the circumstances listed below.

Compositions will only be accepted after the due dates under extenuating circumstances, including documented medical or compassionate grounds, or if accommodation has been requested and received prior to the due date. Unfortunately, a Term Composition that is submitted late cannot be included on the Electroacoustic Music Concert, the student will lose a very important practical learning opportunity, and as a result, a lower grade.

Notes
1.) The prerequisite for this course is successful completion of Music 2695A/B, and either Music 2629, or music 1629A/B. If you do not meet the prerequisites for this course or obtain special permission from your Dean to enroll then you will be removed from this course and it will be deleted from your record. This decision may not be appealed. You will receive no adjustment to your fees in the event that you are dropped from a course for failing to meet the prerequisites.

2.) Grading scale for all aspects of the course is A+=90-100%, A=80-89%, B=70-79%, C=60-69%, D=50-59%, F=0-49%.

3.) The presentation of curricular materials in this class may occasionally deviate from the timetable of presentation in the provided class schedule as necessary depending on the progress of the class through the course materials. At times, we may dwell longer on certain topics or course materials as necessary. The Course Schedule for Music 2695A 2019 is provided as a general guide through the materials and topics to be covered within this course.

4.) Students are responsible for making up any missed classes or assignments as soon as possible. In order to ensure fairness and consistency for all students, academic accommodation for work representing more than 30% of the student’s overall grade in the course shall be granted only in those cases where there is documentation in the form of a completed and appropriately signed Student Medical Certificate (SMC) indicating that the student was seriously affected by illness and could not reasonably be expected to meet his/her academic responsibilities, or the equivalent documentation for non-medical or compassionate grounds.

Students seeking academic consideration must communicate with their instructors no later than 24 hours after the end of the period covered by either the self-reported absence or SMC, or immediately upon their return following a documented absence, to
clarify how they will be expected to fulfill the academic expectations they may have missed during the absence. Documentation, if required, shall be submitted to the Office of the Associate Dean, Undergraduate (TC210).

Note that the new Self-Reporting Absence Portal may not be used for requesting academic relief for work worth more than 30%, or for Final Exams scheduled during the official examination period. Students are directed to read the full Senate policy on accommodation for medical illness at the following website: https://www.uwo.ca/univsec/pdf/academic_policies/appeals/Academic_Consideration_for_absences.pdf

A pdf copy of a Senate approved Student Medical Certificate (SMC) may be downloaded here: https://www.uwo.ca/univsec/pdf/academic_policies/appeals/medicalform.pdf

5.) In cases where students miss work that is worth 30% or less of the total course grade due to medical illness or compassionate grounds, if an online absence report is submitted using the new Self-Reporting Absence Portal, or if documentation is voluntarily submitted to the Associate Dean’s office and the Associate Dean deems that accommodation is warranted, then the missed assignment(s) or quiz(zes) may be discounted in the calculation of the final grade for the course. If documentation is not submitted voluntarily then the missed assignment(s) or quiz(zes) will receive a grade of zero.

6.) At least three days prior to the deadline for withdrawal from a 1000- or 2000-level course without academic penalty, students will receive assessment of work accounting for at least 15% of their final grade.

7.) Students who are in emotional/mental distress should refer to Mental Health@Western at the following website https://www.uwo.ca/health/mental_wellbeing/ for a complete list of options about how to obtain help.

8.) Students may be excused to observe a religious holy day of their faith without penalty provided they notify the instructor in advance. Students are responsible for material covered in their absence and each student shall be permitted a reasonable amount of time to make up missed work.

9.) If you require academic accommodations because of a disability, please let the instructor know during the first week of classes, and, if you have not done so already, register as soon as possible with Accessible Education (formerly known as Services for Students with Disabilities). You can learn more about the Student Success Centre’s services for accessible education at http://success.uwo.ca/academics/sas/index.html.

10.) Hand in assignments to the instructor at the beginning of class on the day for which the assignment is due. Never leave completed assignments in the faculty mailboxes in the main office nor slide them under the instructor’s door. Acceptance of late assignments
will be at the discretion of the instructor and only if extenuating circumstances prevail; otherwise late assignments will NOT be graded!

11.) Complete assignments neatly using a clear and organized approach within software utilized for each project (Pro Tools or Max8, or both). Max8 patches are to be clearly and neatly organized in a manner that demonstrates signal/control flow. Submitted Pro Tools sessions are to be well-organized, with any extraneous, un-used materials/tracks removed from the final version submitted for assessment by the instructor.

12.) Plagiarism: Complete assignments independently. Submission of work with which you have received help from someone else (other than the course instructor or TA) is an example of plagiarism. Plagiarism is a major academic offence. Scholastic offences are taken seriously and students are directed to read the appropriate policy, specifically, the definition of what constitutes a Scholastic Offence, at the following website: http://www.uwo.ca/univsec/pdf/academic_policies/appeals/scholastic_discipline_undergrad.pdf

13.) The in-class use of electronic devices (other than for accessing OWL materials for this class) is expressly prohibited. Students guilty of disrupting class with electronic devices will be asked to leave the class and will not be permitted to re-enter the class with their device until they can satisfactorily prove to the instructor that their device will no longer be a disruption.

**Studio and Technical Support Policies and Procedures**

Only students enrolled in Music 3696B are permitted to be in CEARP, no other individuals are to be permitted access to CEARP with you. Instrumental musicians who are performing your works (or are participating in a sound recording session for 3696B projects) are permitted in the studio.

Students **must** be respectful and considerate of their fellow colleagues by leaving the studio/lab in a clean and usable condition for the next user, and report any hardware/software technical problems immediately.

***Absolutely*** no food or liquids are allowed in CEARP. Unexpected spills can end the life of an expensive piece of studio hardware while food and crumbs attract insects and rodents.

**Technology**

Please turn off all mobile devices during lectures. Laptops or tablets are only permitted if they are being used as study aids, and if prior accommodation for their use has been requested and granted.

Dr. Jason Stanford
jstanfo@uwo.ca
Logbook
CEARP has a logbook, and you are required to sign-in and sign-out in the logbook every time you use CEARP. The logbook has space for user comments related to the technical operations of the lab. If equipment fails, please:

1) enter general information about the malfunction into the log book
2) report the malfunction by immediately emailing the instructor

While equipment is in service, it is usually unavailable for use, during which time students are expected to pursue related kinds of artistic investigation and experimentation in the studio.

Safety Information
If a small fire starts in the vicinity of TC344C and is no larger than a basketball, turn off the two switches that power the equipment; you may attempt to extinguish the fire with the fire extinguisher or by smothering it. If the fire is not limited to a small area, or if you are unfamiliar or unsure how to use a fire extinguisher, or if you have failed in your attempt to extinguish a small fire, you should get out and stay out. Never enter a room if you suspect a fire inside. Upon detection of smoke and/or fire, follow the R-A-C-E plan:

- Rescue/Remove person(s) from the immediate fire scene/room
- Alert personnel by activating the nearest fire alarm pull station and call 9-1-1
- Confine fire and smoke by closing all doors in the area
- Extinguish a small fire by using portable fire extinguisher or use to escape larger fire

Evacuate the building immediately and, once outside, report to your supervisor, Building Emergency Team, or Emergency Personnel.

The local First-Aid Station (for minor injuries) is located in the Music Library.