## Electronic Music Composition  MUS 250

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<th>Semester and year:</th>
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<td>Course Number:</td>
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<td>Meeting Times and Locations:</td>
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<tr>
<th>Instructor:</th>
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<tr>
<td>Office Location:</td>
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<tr>
<td>Phone: 201-447-7143</td>
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<tr>
<td>Departmental Secretary: Ms. Barbara Bliss</td>
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<tr>
<td>Office Hours:</td>
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<td>Email Address:</td>
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### Course Description:

MUS 250 builds on skills developed in MUS 151 to advanced students’ ability to create stand-alone electronic music compositions as well as compositions for visual media. Topics covered include MIDI sequencing, synthesis, electronic composition techniques, sampling and synth programming. Students will also be exposed to various forms of MIDI-based music as a basis for composing techniques and will use state of the art music software and hardware to create compositions.

2 lecture hours, 2 lab hours, 3 credits

Prerequisite: MUS 151
Student Learning Objectives:

As a result of meeting the requirements of this course, students will be able to

1) Create electronic-based music compositions using tools such as sequencing software, synthesizers, controllers and virtual instruments, drawing from a wealth of historical and modern electronic compositions, traditions and innovations.

2) Create custom sonic palettes using various forms of synthesis and signal manipulation.

3) Manipulate, sample and edit audio to create musique concrete or musique concrete enhanced compositions

4) Use MIDI editors and score editors to correct and enhance performances and sequences

5) Automate MIDI control messages to enhance fluidity of sequenced performances

6) Compose electronic-based music to enhance visual media such as film/video soundtracks, video games, and multimedia presentations.

7) Experience electronic music creation tools in live performance applications.

Assessment:

In support of the above-mentioned goals, the course will include individual project work, reading assignments, and a mid-term and final exam. Students are strongly encouraged to take an active part in class discussions.

Objectives will be assessed as follows:

1. Students will create and submit a project demonstrating their ability to effectively compose and edit rhythmic-based music using MIDI technology such as virtual drums, tempo grids and quantizing.

2. Students will create and submit a project demonstrating their ability to compose using a variety of virtual instruments presets from software synthesizers to create sample-based music productions.

3. Students will create and submit a project demonstrating their ability to use multiple methods synthesis to create electronically based music productions.

4. Students will create and submit a project demonstrating their ability to produce multi-track mixes using effects processors to augment preset and synthesized sounds.

5. Students will be required to critique the work of other students to help develop critical listening skills and the ability to communicate music production concepts.
Course Content

Electronic Music Composition introduces students to advanced concepts of creating stand-alone electronic music compositions as well as compositions for visual media. Topics covered include methods of synthesis such as: subtractive, additive, granular; synthesizer programming; modulation; compositional techniques such as musique concrete and looping; film/video scoring. Students will also be exposed to various forms of electronic and MIDI-based music as a basis for composing techniques and will use state of the art music software and hardware to create compositions.

Sequencing software including Logic, Live, Reason and Pro Tools may be used as a platform for the concepts taught.

Technological Literacy

Technological literacy is one expectation of this course. Students will be encouraged to use such technology as personal computers, musical keyboards, non-linear music production software and plugins, as well as digital audio interfaces.

Course Texts and/or Other Study Materials

Text and other study materials for this course to be deemed by the individual instructor.

Grading Policy

Criteria for Evaluation: Attendance and participation
A. consistent attendance**
B. quality classroom responses
C. overall demonstration of comprehension of the course material

90-100 = A  86-89 = B+  80-85 = B  76-79 = C+  70 - 75 = C  65-69 = D
E =Unofficial Withdrawal  W =Official Withdrawal  INC=Incomplete  0–64 = F

Any work turned in late from the original due date shall be deducted by one letter grade. Two letter grades shall be deducted after the second week from the due date, and three letter grades after the third week from the original due date. There are no make-up examinations unless approved in advance by the instructor.
Attendance Policy

All students are expected to attend punctually every scheduled meeting of each course in which they are registered. Attendance and lateness policies and sanctions are to be determined by the instructor for each section of each course. These will be established in writing on the individual course outline. The instructor will keep attendance on a regular basis for administrative and counseling purposes.

Students will be evaluated on attendance and participation in class using the following criteria: consistent attendance; evidence of studying text and assignments; completed daily assignments; quality classroom responses.

Bergen Community College Academic Policies

Bergen Community College is committed to academic integrity – the honest, fair and continuing pursuit of knowledge, free from fraud or deception. Please review the college catalogue or student handbook for further information on this topic.

Bergen Community College has adopted an internal grievance procedure to provide for prompt and equitable resolution of complaints alleging any action prohibited by federal regulation implementing Section 504 of the Rehabilitation Act of 1973, as amended, and the Americans with Disabilities Act of 1990. (ADA). Please review the college catalogue for further information on this topic.

Bergen Community College is committed to providing its students and employees with an academic and work environment free from sexual harassment or discrimination. Please review the policy prohibiting sexual harassment in the college catalog.

Please review the statement on acceptable use of BCC technology in the college catalog.

Faculty offer 3 office hours per week, and as requested by students, by appointment. Students are encouraged to seek out their faculty member for academic needs.
Student and Faculty Support Services

All students are encouraged to visit and use the BCC Library. There are particularly excellent electronic references in the area of music available to our students.

Students are encouraged to use the student support services of the college. These services include: the Writing Center, the Tutorial Center, and the Office of Specialized Services.

The Distance Learning Office – for any problems you may have accessing your online courses
Room C-334 201-612-5581
psimms@bergen.edu

Smarthinking Tutorial Service

The Tutoring Center Room L-125 201-447-7908
The Writing Center Room L-125 201-447-7908
The Online Writing Lab (OWL) On Line at: www.bergen.edu/owl
The Office of Specialized Services (for Students with Disabilities) Room S-131 201-612-5270
The Sidney Silverman Library – Reference Desk Room L-226 201-447-7436

Course Outline:

Note to Students: This Course Outline and Calendar is tentative and subject to change, depending upon the progress of the class

Part I: Synthesis

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<thead>
<tr>
<th>Week</th>
<th>Topics covered</th>
<th>Objective(s) met</th>
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| 1    | • Review of general MIDI theory (MIDI protocol, messages and control codes, controllers, etc.)  
      • Review of MIDI sequencing and basic editing  
      • Review of Early Electronic Music History | 1,4,5 |
| 2    | • Compositional approaches  
      • Introduction to software platform  
      • Electronic Music of the 1950s | 1,4,6 |
| 3    | • Advanced Rhythmic concepts  
      • Tools of chosen Software Platform  
      • Electronic Music of the 1960s | 2 |
| 4    | • Modular Synthesis (VCO, VCF, VCA)  
      • Monophonic and Polyphonic Sequencing  
      • Electronic Music of the 1970’s | 2 |
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<tr>
<th>Week</th>
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<th>Objective(s) met</th>
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| 5    | • Subtractive synthesis  
      • Harmonic Series and Harmonic Content  
      • Electronic Music of the 1980s | 2 |
| 6    | • Modulation (AM, FM, RM, LFOs)  
      • Additive synthesis  
      • Instrument Range and Orchestration  
      • Electronic music of the 1990’s | 3 |
| 7    | • Review of concepts from weeks 1-6 | 1-6 |
| 8    | Mid-term exam | 1-6 |

**Part II: Composition techniques and programming**

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<tr>
<th>Week</th>
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<th>Objective(s) met</th>
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| 9    | • Musique Concrete and sampling  
      • Audio Time manipulation  
      • Granular and Wavetable Synthesis | 2,3 |
| 10, 11 | • Electronic composition for visual media  
           • POV, Sound Effects and Music Bed | 6 |
| 12    | • Triggering and Control Voltage  
      • Continuous controllers in Mixing | 3 |
| 13    | • Live applications of electronic music  
      • Current trends in Electronic music | 7 |
| 14    | • Final projects presented and critiqued | 1 |
| 15    | • **FINAL EXAM** | 1-7 |