BAIN MUSC 540/(737)  
(Advanced) Projects in Computer Music  

SYLLABUS  

Subject to Change

Instructor  
Dr. Reginald Bain, Professor  
Composition and Theory  
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Office: Music Building, R227  
Office Hours: MWF 1-2 p.m., and by appointment

Term  
Spring 2020

Facilities  
Computer Music Studio B: Music Building, R011  
Experimental Music Studio (xMUSE): Music Building, R039

Course Website  
http://in.music.sc.edu/fs/bain/vc/musc540/  
Quick access via: reginaldbain.com

Course Description  
Directed study in computer music composition/performance or research. (Offered every spring term)

Prerequisites and Permission  
MUSC 336 Introduction to Computer Music or equivalent experience. Permission of instructor is required.

Learning Outcomes  
Students will typically learn how to:  
• Compose/perform electronic music  
• Work in a project studio environment  
• Prepare an electronic composition/performance for presentation in a concert  
• Produce various aspects of an electronic music concert including lighting, tech., publicity, etc.  
• Develop an individualized program of creative activity/research in consultation with the instructor  
• Participate in a group program of creative activity/research  
• Keep a journal of artistic/technical considerations and developments  
• Work in areas of specialization such as algorithmic composition, computational music theory/analysis, computer-aided composition, computer-assisted instruction, real-time interactive composition/performance, sonification, etc.  
• Collaborate with students in other fields including scientists, filmmakers, visual artists, etc.  
• Program using advanced environments for composition such as Max, PureData (Pd), Csound, SuperCollider, etc.  
• Use communication protocols and hardware associated with music production  
• Prepare a final presentation  
• Write a final report of activities  
• Etc.

Required Texts, Hardware and Software  
Required texts, hardware and software will be discussed during the planning phase of the course and will be established at (or shortly after) the first project meeting. For most projects, the hardware and software necessary to execute a project will be available in Computer Music Studio B.
Course Requirements

- This is NOT a traditional class with a fixed number of regular class meetings. Rather, it is a TBA class in which students are expected to attend 100% of a limited number of scheduled meetings, lectures, rehearsals, concerts, etc.

- Students must execute a solo project and group project as described below.

- Students taking the course for 3 credit hours are expected to spend on average 3-5 hours per week on course-related activities such as: reading, research, planning, meetings, lectures, rehearsals, concerts, working in the studio, composing, programming, editing, recording, etc.

- Solo and group project requirements will vary depending on the individual student’s background (technological and artistic) and level of study (MUSC 540 or 737). Exact requirements will be established in writing during the planning phase of the course.

- Students typically get as much out of a directed study as they put into it. Success begins with 100% attendance. As such, you must make your instructor aware of any potential conflicts with the course activities listed below at the beginning of the course. Excused absences due to a previously scheduled class or professional conflict will be granted on a case-by-case basis at the beginning of the term. In the case of illness or emergency, be sure to e-mail the instructor as soon as possible to keep him informed of the situation.

SOLO PROJECT

SOLO PROJECT PROPOSAL

**Due:** Last day of classes, previous term

**Electronic Composition:** The solo project for BM, MM, and DMA composers is typically an electronic music composition. Compositions are typically realized using programs such as Reason, Logic, Live, ProTools, Max, Csound, SuperCollider, etc. All of these programs are available in Studio B. Students are highly encouraged to utilize programs they own so they will have access to these tools after the course ends and can begin the process of building an advanced home studio for electronic composition. For composition majors, an e-mail stating “I want to compose a piece using X software” will suffice for the project proposal.

**Other Project Types:** During the previous semester’s advisement/open registration period, prospective MUSC 540 students must submit a project proposal to the instructor. The proposal may be submitted as informal e-mail message (ca. 100-150 words). The instructor will evaluate the student’s proposal and let the student know if he/she is a good match for the course. Project acceptance is based on considerations such as the student’s major, performance in MUSC 336, technical background, merit of the proposal, the project’s appropriateness for execution in our computer music facilities, etc. The instructor will provide feedback regarding the feasibility of the proposed project and suggest alternative avenues for exploration as necessary. If the project is deemed acceptable, the instructor will help the student refine the proposal as necessary via an e-mail exchange. When the proposal is finished, the instructor will grant the student permission to register for the course via e-mail.

**Initial Meeting: Project Plan Development**

**Due:** First 2 full weeks of the term

The student must schedule an initial meeting with the instructor via e-mail. This meeting must take place during the first two full weeks of the term. At this initial meeting, the student and instructor will work together to draft a provisional solo project plan for the semester. The plan will normally include the following sections: (1) a research/creative activity statement, (2) a list of project goals, (3) a description of the project’s significance and methodology, (4) a time frame for completion of the project’s components, and (5) a list deliverable items that will be completed by the end of the term (e.g., a live performance, a recording of a completed composition, software, etc.). Over the course of the next week, the student will prepare a project plan document (typed, double spaced) that includes the 5 sections listed above and e-mail it to the instructor as an attachment (.docx preferred). With permission of the instructor, the solo project plan document may be amended over the course of the term. The requirements for the group project (see below) will also be discussed at this initial meeting.

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1 MUSC 540 is a required course for the BM Composition degree. MUSC 540 & 737 also serve as the main technology elective option for the MM & DMA Composition degrees. As such, these students receive priority registration.
Required Solo Project Meetings and Final Project Presentation

All students must schedule and attend the following required solo project meetings: (1) the initial project plan development meeting in Weeks 1-2 discussed above; (2) a midterm project meeting in Weeks 6-9 where end-of-term deliverables are established; (3) a final project meeting in Weeks 12-14 where the student presents finished (or nearly finished) work to the instructor. The student is expected to maintain weekly contact with the instructor via e-mail (e.g., asking questions, sending brief status reports, etc.). The student is also expected to reply to all instructor e-mails in a timely fashion (i.e., within one or two business days). When the student is ready to share work in progress (e.g., has a significant amount of work to share for comment, requires help, reaches an impasse of any kind, etc.), the student should request a meeting with the instructor via e-mail. Depending on the type of solo project, attendance at concerts, rehearsals, concerts, group meetings, on-campus lectures, etc. may also be required. So the student will have time to fine-tune the project as per the instructor’s suggestions during final exam week, all final project meetings must take place on or before the last day of classes: Mon., April 27. All work for the course is due by Wed., May 6, at 12 noon.

The instructor will remind the student (via e-mail) to schedule the required meetings above. However, once the reminder goes out it is the student’s responsibility to follow through on scheduling the appointment. Students must be prepared present completed work at the required meetings. Failure to follow through on the guidelines above will be factored into the student’s grade.

GROUP PROJECT

Mutational Music Project

The group project for Spring 2020 will be an interdisciplinary collaboration with DUDYCHA BIOL 599 Chords and Codons. This unique beyond-the-classroom experience will focus on research/creative activity that lies at the intersections of genetics and sonification. It is part of the Mutational Music Project, the broader impact component of Dr. Jeff Dudycha’s National Science Foundation (NSF) grant Mutational variance of the transcriptome and the origins of phenotypic plasticity (NSF award #1556645).

MUSC 540/737 and BIOL 599 students will team up to create mutational music projects. The scientific end of the project will be designed by the BIOL 599 students. MUSC 540/737 students will function as consultants on the musical/technical end of the project. Dr. Dudycha will direct the biologists in all matters of biology, and Dr. Bain will direct the biologists and composers in all matters of music technology. BIOL 599 meets MW 2:20-3:35 pm, in Coker Life Sciences (CLS), R202. For your information, the biology students are meeting on Mon. 1/13, Wed. 1/15, Wed. 1/22, Mon. 1/27, Wed. 1/29 & Mon. 2/3 to attend introductory lectures designed to help them develop ideas for their projects. You are welcome to attend these lectures, but attendance is not required. The biologists and composers will come together for the first time on:

FIRST GROUP MEETING
Wed., Feb. 5, 2:20-3:35 pm
Coker Life Science (CLS), Room 202

Please reserve Wed., Feb. 5, 2:20-3:35 pm in your schedule. The other group meetings will take place throughout the term at mutually convenient times for all group members (e.g., scheduled via a Doodle poll). The biologists will make their final presentations in Computer Music Studio B (Music Building, R011) on Mon., April 20, Wed., April 22, or Mon., April 27. Your project will be presented on one of these three days.

Class-Produced Concert

We will produce a concert of selected works during the following event:

DISCOVER UofSC COMPUTER MUSIC
Fri., April 17, 2020
School of Music, R210, 2:30-4:00 pm

If you have a conflict with this date/time, you must let the instructor know about it at the initial project meeting. Students will participate in the concert’s production in one of the following ways: (1) compose a work for the concert, (2) perform a work on the concert, or (3) assist with the concert’s production: e.g., equipment setup, lighting, sound, hall management, publicity, etc. Setup for the concert takes place from 1-2:15 pm. Tear-down will take place from 4-5 pm. Please reserve Fri, April 17, 1-5 pm in your schedule.
**Final Report and Other Deliverables**

**Due**: Wed., May 6, at noon in my SOM box

**Final Report Guidelines**

Whereas the first half of the term normally focuses on reading, compositional planning/sketching, composing, tutorials, programming, research, and the like, the second half of the term normally focuses on the execution and presentation of the project. In lieu of a public performance, students composing an electroacoustic composition may submit the completed composition on CD-R along with printed track information and program notes. For all other solo project types, deliverables and appropriate submission formats for those deliverables, will be established at the midterm project meeting.

All students must submit a final paper/project report.

**Undergraduate students**: 5-10 typed, double-space pages  
**Graduate students**: 8-12 typed, double-spaced pages

The final report should describe the final solo and group projects in all matters of detail and document the student’s creative/technical process over the course of the term. It should also document the student’s participation in the group project work. Up to 30% of the report may be dedicated to personal reflection and assessment of the solo project and group work. The details of the final report will depend on the type of project executed and thus will be discussed at the midterm and/or final project meetings.

**Informal Journal**

In order to document the creative/technical processes employed in the project and make the final report easier to write, it is highly recommended that each student keep an informal journal of every work session.

**Academic Integrity**

The Carolinian Creed is available online at [https://www.sa.sc.edu/creed/](https://www.sa.sc.edu/creed/). The university’s honor code is available online at: [http://www.sc.edu/policies/ppm/staf625.pdf](http://www.sc.edu/policies/ppm/staf625.pdf). It is expected that all students will follow these guidelines for student conduct.

**Learners with Special Needs**

Students with a documented disability must register with the Student Disability Resource Center (SDRC). SDRC will provide me with an official letter that sets forth your accommodations. I will work with you and with the SDRC to make sure all accommodations are met. For more information call (803) 777-6142 or visit [http://www.sa.sc.edu/sds/](http://www.sa.sc.edu/sds/).

**Grading Scale**

- A: 90-100  
- A-: 89-89.5  
- B+: 84-89  
- B: 79-84  
- B-: 74-79  
- C+: 69-74  
- C: 65-69  
- C-: 60-64  
- D+: 59-60  
- D: 54-60  
- D-: 59-54  
- F: 0-59

**Grade Distribution and Evaluation Criteria**

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<thead>
<tr>
<th>Solo Project – 40%</th>
<th>Group Project – 30%</th>
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<tr>
<td>• Scheduled, attended, and prepared for the required project meetings</td>
<td>• Promptly interacted with collaborators to set up group meetings and complete assigned work</td>
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<tr>
<td>• Submitted the required project plan, project plan updates, and progress reports in a timely fashion</td>
<td>• Attended group meetings</td>
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<tr>
<td>• Met the goals set forth in the project plan</td>
<td>• Significantly contributed to group discussions and work</td>
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<tr>
<td>• Artistic quality (and quantity) of the project</td>
<td>• Fulfilled assigned duties within the group</td>
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<td>• Technical mastery displayed by the project</td>
<td>• Other considerations: leadership, creativity, personal initiative, unique contribution to work, hard work, etc.</td>
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<td>• Consistent work effort displayed throughout the term</td>
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| • Kept the instructor informed regarding project developments | **Final Report – 30%**  
See the guidelines above |
| • Followed up on instructor suggestions |   |
| • Other considerations: public performance, recording produced, score produced; supporting document produced, etc. |   |

*Any necessary modifications to these distributions will be established at the initial project meeting.*