

Music 240 • Digital Audio Synthesis
Course Number: 0158-240-01
Spring 2008
MW 3:30-5:15pm • Education 002

INSTRUCTOR: Jeremy Hunt
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OFFICE HOURS: Weds. 2-3pm
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Course Description and Learning Outcomes:

This course will focus on three areas of digital audio studies: 1) history and analysis 2) theory and techniques 3) creative practice. The relevant *learning outcomes* are as follows:

- Each student will expand their historical understanding of electronic music which will provide a context for the importance of digital audio.
- Each student will gain a firm understanding of the basic theory, techniques, and media of digital audio.
- Each student will develop practical skill in the use of digital audio technologies.

We will achieve these outcomes through lecture, class discussion, and hands-on lab work. The course work to support this will include a midterm paper on a prominent composer or composition, a midterm exam on theoretical concepts, and a final creative project to be determined in consultation with the instructor.

Required Materials:

- 2GB or greater usb 2.0 flash drive
- Blank CDR disks

Any textbooks used will be open source/public domain and available on the internet. Other texts/readings will be online or distributed via pdf files.

Course Schedule:

Please refer to Blackboard for further details on assignments.

MODULE I: History & Analysis

Wed 1/23: Historical overview of the 20th Century

Mon 1/28: Pierre Schaeffer

Wed 1/30: Karlheinz Stockhausen

Mon 2/4: Max Mathews

Wed 2/6: John Chowning

Friday, February 8 - Census Date (last day to drop classes with a refund)

Mon 2/11: Tristan Murail

Wed 2/13: Trevor Wishart

Mon 2/18: President's Day Holiday

Wed 2/20: Recent Composers and Currents

MODULE II: Theory and Technique

Mon 2/25: Foundational concepts

Midterm paper due

Wed 2/27: Foundational concepts/Digital audio media

Mon 3/3: Additive Synthesis

Wed 3/5: Lab work

Mon 3/10: FM Synthesis

Wed 3/12: Lab work

3/17-21: Spring Recess

Mon 3/24: Time domain techniques

Wed 3/26: Lab work

Mon 3/31: Frequency domain techniques

Wed 4/2: Lab work

Mon 4/7: Digital audio file manipulation

Last day to drop classes

Wed 4/9: Lab work

Final project proposals due

Mon 4/14: Review/Midterm prep

Wed 4/16: MIDTERM

MODULE III: Practice

Mon 4/21: Lab work/Project reports

Wed 4/23: Lab work/Project reports

Mon 4/28: Lab work/Project reports

Wen 4/30: Lab work/Project reports

Mon 5/5: Lab work/Project reports

Wed 5/7: Lab work/Project reports

Last day of classes

Wed 5/14 8am: Final Examination/Concert — Final projects due

Grading

Midterm paper	30%
Midterm exam	30%
Final project	30%
Attendance/Participation	10%

Academic Integrity: There is a discussion of USF's Academic Honesty Policy in the *Fogcutter* that all students should be familiar with. Academic Dishonesty includes, but is not limited to:

- Plagiarism—intentionally or unintentionally representing the words or ideas of another person as your own; failure to properly cite references; manufacturing references
- Working with another person when independent work is required
- Submission of the same paper in more than one course without the specific permission of each instructor
- Submitting a paper written by another person or obtained from the internet.

The penalties for violation of the policy may include a failing grade on the assignment, a failing grade in the course, and/or a referral to the Dean and the Committee on Student Academic Honesty. In addition, a letter will be sent to the Associate Dean for Student Academic Services; the letter will remain in your file for two years after you graduate, after which you may petition for its removal.

Students with Disabilities: If you have a disability for which you are or may be requesting an accommodation, you are encouraged to contact both your instructor and Student Disability Services, (SDS) 422-6876 as early as possible in the semester.

Attendance Policies:

A. Absences may affect the final grade. Students who miss more than four classes may be asked to withdraw from the course; if they do not do so, they may be given a failing grade.

B. Exception: When representing the University of San Francisco in intercollegiate competition (e.g., athletics, debate), students shall be excused from classes on the hours or days such competition takes them away from classes. However, such students shall be responsible for advising their professors regarding anticipated absences and for arranging to complete course work for classes, laboratories, and/or examinations missed.

Mission of the Department of Performing Arts at USF:

Our mission is to educate young artists and scholars of the performing arts who are committed to creating a more humane and just society through their craft and scholarly work. We seek to equip students with the theory and praxis to identify and contextualize social inequities, and to participate in self-reflective artistic, academic, personal, and community-based activities that critically and positively shape our culture.