

MS-461 Computer Music Composition & Analysis

Instructor	Dr. Richard Boulanger	Mailbox FB-75
Tel. 617-747-2485	Office : B10, 150 Mass Ave	Office Hrs:
Course Chair	Kurt Biederwolf	
Description	This course explores a wide variety of avant-garde and alternative approaches to composition. Acousmatic computer music masterworks in a wide variety of genres such as: Ambient, Minimal, Glitch, SoundObject, SoundScape, SoundCollage, Algorithmic, and Serial, are analyzed and modeled in a series of portfolio compositions that are critiqued in class and then featured in a public concert at semester's end.	
Course Objective	Through reading, listening, analysis, and composition, the student will discover new ways to hear the musical nature inherent in all sound and learn to organize sound into very personal, powerful and original works of audio art. The goal is to hear differently, think differently, write differently and in so doing develop a more unique musical vocabulary and a more original musical voice.	
Required text	<i>see list attached</i>	
Homework, Quizzes, projects and Out-of-class Preparation	Weekly projects will be required. In order to maintain satisfactory standing in this class, approximately four hours per week of out-of-class preparation are recommended.	
Student Portfolio Requirements	Each student will submit the following projects: 1. Ambient - a composed Soundscape (Underscore) in the style of AphexTwin and Eno/Budd 2. Minimal - inspired by the music of Steve Reich 3. Composed Collage - in the style of Varese's Poeme Electronique 4. SoundObject - A Complex "Fused" Microtonal Sound/Drone that Evolves according to Fibonacci Principles and reveals this Geometry (Inspired by Xenakis - Concrete PH and Truax's RiverRun)	
Midterm Exam	«midterm»	
Final Exam	«final»	
Grading	General information on grading is contained in the Student Handbook. If an assignment, quiz, or exam is missed, a grade of F will be entered and averaged. The mark "I" (Incomplete) will only be available in emergency situations; see Student Handbook for policy.	
Grading Criteria	A (90-100) Superior, Exceptional; control of course material enables excellent production. B (80-89) Good; grasp of material enables above-average production. C (70-79) Average; assimilation of material enables acceptable production. D (60-69) Below Average; exposure to material enables poor, but passable production. F (below 60) Not Passing; assimilation of material insufficient to demonstrate acceptable productive capacity.	
Final Grade Determination	Your final grade will be determined by considering the following components at the indicated weights: <u>20%</u> Attendance <u>60%</u> Weekly projects <u>20%</u> Participation	
Attendance Policy	No unexcused absences are permitted. If your unexcused absence occurs before the "W" deadline (see below), the instructor may withdraw you from the course. If your absence occurs after this deadline, a course grade of F may result. Withdrawal is not automatic. It is ultimately your responsibility to initiate withdrawal proceedings prior to the "W" deadline. In case of doubt, ask the instructor or the Counseling Center.	
Deadline for Course Withdrawal	«W», 5PM - neither the instructor nor the student may initiate a "W" after that date	

MS-461 Computer Music Composition & Analysis

Topical Course Outline

Creative Concepts

- Form – The Silent Language (Fibonacci, Lucas, and other Sacred Geometries)
- Modeling Life Forms as SoundForms
- How Time Passes – Controlling the Flow
- Mind Models – Adapting and Inventing New Musical Forms
- SoundMass, Intersecting Planes/Textures, Crystal and Mobile Forms (after Varese)
- Composition Systems (Serialism and other Formalisms)
- Composing as Process vs. Composing as Product
- The TAO of Music – Aelotoric and Chance Sound encounters and Happenings
- Essential Ambiguity – Multiple Levels of “Meaning” and Design in Music
- “Composing” Ambient Music
- Composing as Minimal MiniWork (as versus MasterWork – modeled on Reich)
- Composing a SoundObject (Sound Design as Music Composition)
- Composing a SoundScape (A Narrative Collection of SoundObjects)
- Composing a Serial (or Other Mathematically Designed) Microtonal Work

Technical Concepts

- Compositional Techniques – Minimalism, Serialism, Fibonacci, Collage, Chance
- Microtonal Studies – The Pierce Scale
- Hearing the “Composition” in Sound – Deep Listening (Oliveros/Cage Philosophy Applied Commercially)
- Contemporary Analysis Methods – Cope’s Vector Analysis Approach

MS-461 Computer Music Composition & Analysis

REQUIRED TEXT - none

RECOMMENDED TEXT - 7 books

Audio Culture: Readings in Modern Music

by Christoph Cox & Daniel Warner

ISBN-10: 0826416152

ISBN-13: 978-0826416155

The Fundamentals of Sonic Arts and Sound Design

by Tony Gibbs

ISBN-10: 2940373493

ISBN-13: 978-2940373499

Electric Sound: The Past and Promise of Electronic Music

by Joel Chadabe

ISBN-10: 0133032310

ISBN-13: 978-0133032314

New Directions in Music

by David Cope

ISBN-10: 1577661087

ISBN-13: 978-1577661085

Divine Proportion: Phi In Art, Nature, and Science

by Priya Hemenway

SBN-10: 1402735227

ISBN-13: 978-1402735226

Fractals in Music: Introductory Mathematics for Musical Analysis Second Edition

by Charles Madden

ISBN-10: 0967172772

ISBN-13: 978-0967172774

The Tao of Physics: An Exploration of the Parallels between Modern Physics and Eastern Mysticism (25th Anniversary Edition)

by Fritjof Capra

ISBN-10: 1570625190

ISBN-13: 978-1570625190