

## CDT 341: SOUND DESIGN

(Fall 2013)

Consortium for Digital Arts Culture and Technology – cDACT  
Stony Brook University

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### Description:

An investigation into the scientific, formal and artistic qualities of sound developed for students who may or may not have had formal musical training. Students will write reviews of sound pieces, create film or game soundtracks and create sound-based art works in response to course content, and write a paper on acoustic or psycho-acoustic phenomena. Emphasis is on studio production techniques, history of sound art and basic acoustics. Students will work on Macintoshes in the HYBRID site.

### Requirements and Grading:

NOTE: Timely attendance is MANDATORY. Any unexcused absence will count against you. Attendance will be taken at the beginning of all classes and is required. Your FINAL grade will be dropped ONE LETTER GRADE for every three (3) absences. Any two (2) of either late arrivals or early departures will count as one absence. I strongly urge you to hand assignments in on time as late assignments will be dropped ONE LETTER GRADE for each 24 hour delay.

<b>A</b>	Excellent work exceeding expectations. Outstanding participation, attendance, and assignments. A student producing work in the top 20 % of her or his class.
<b>B</b>	Above average assignments and mastery of tools and concepts, participation and attendance.
<b>C</b>	Average execution of assignments, participation and attendance.
<b>D</b>	Well below average work, participation and attendance.
<b>F</b>	Unsatisfactory work, participation and attendance.

I am aware of the difficulty of juggling the tasks of learning complex software and dealing with readings and ideas. Therefore, the work called "Assignments" are "Lite". That is, unless you do something manifestly unartistic or derivative, grades will be assigned more on technical merit — i.e., is it finished, does it work — than on content. However, for the "Projects," grading is based on conceptual and aesthetic merit as well as technical execution and effort.

<b>Class Participation and 1 Paragraph Reaction Statements (4)</b>	<b>20 %</b>
<b>Lite-Assignments (5)</b>	<b>25 %</b>
<b>2 page Short Papers (2)</b>	<b>10 %</b>
<b>Class Presentation, write-up and sound file creation</b>	<b>10 %</b>
<b>Project #1</b>	<b>10 %</b>
<b>Project #2</b>	<b>10 %</b>
<b>Project #3</b>	<b>15 %</b>

#### **Lab Access:**

The HYBRID ROOM is accessible 24-hrs. a day with your ID and personal code. The security systems record entrances and exits and you are responsible for the equipment while you are logged into the security system. If you are negligent with equipment, you will be responsible for its replacement.

The HYBRID ROOM does not allow food or drink at any time. Bringing food or drink into the either room will result in loss of access. Access to labs is a privilege for 327 students **only**. DO NOT GIVE OUT YOUR CODE(S) TO ANYONE ELSE OR YOU WILL LOSE ACCESS.

#### **Equipment Checkout:**

Equipment may only be checked out (and in) by the Digital Assistant during posted checkout office hours. Signup sheets are available in a notebook in the checkout office each week for reservations. You may reserve equipment one week in advance. Equipment is due one week after it has been checked out, and you are encouraged to hand equipment in early if you no longer need it.

#### **Supplies:**

You will be given storage space on our networked server. You may want to purchase a Firewire/USB harddrive, DVD-Rs, or USB key for extra backup and storage. These can be purchased at any computer store.

#### **Materials:**

Required readings and art sites can be found through e-reserves in Blackboard or online.

#### **Recommended Materials:**

Required readings can be found through e-reserves on Blackboard and are also available for purchase as a course packet.

The following books (or many others according to your interests) might be helpful for additional technical assistance and context for assignments. Try the Campus Bookstore, the library, amazon.com, and most other bookstores with a music section. NOTE: All our software has help available on the Internet through the HELP menu.

**Technical iTunes, Logic, Live:** go shopping and find a text that speaks to you in a way you understand.

#### **Course Website:**

<http://emedia.art.sunysb.edu/amt341>

In addition to this syllabus, the site includes an updated schedule, and links to information about current exhibitions and events, technical resources on the web, and links to sound artists. Check the website regularly for changes to the schedule.

## Learning Outcomes:

By the end of this course, students should be able to:

- Use digital technology to capture a high-quality recording of live sound
- Import and export digital audio in various formats for CD and on-line distribution
- Edit and manipulate sound using professional-grade commercial audio software
- Understand and apply audio effects to live and recorded sound
- Create and apply sound effects, and other recorded audio, to video
- Develop the technical vocabulary for in-depth discussion of the representational and artistic use and manipulation of recorded sound
- Recognize the use of sound-manipulation techniques in movies and recordings, and be able to articulate how these manipulations affect our perception of recorded events
- Understand and apply the basics of time-based form to sound
- Create original material by apply sound-manipulation techniques for expressive purposes
- Design and present an original sonic work using recorded, manipulated and synthesized sound
- Design and present an original music work using sound live/interactive performance software
- Develop the vocabulary to discuss digital sound on both a technical and aesthetic level

## Schedule:

Week 1	<p><b>Lecture: What is Sound?</b> Introduction to the field and class lectures. <i>Reading</i> and 1 paragraph precis: "The Art of Noise" by Russolo <i>Lab</i>: Lab, accounts, access paperwork and refresher on using the lab.</p>
Week 2	<p><b>Lecture: Recording, Signal to Noise Ratio</b> Listen and 1 paragraph precis: "Poem Electronique" by Varese <i>Lab</i>: Computer and Recording Basics with Audacity</p>
Week 3	<p><b>Lecture: Manipulation of Recorded Sound</b> Listen: 12 min. Excerpt of "Soundmap of the Hudson" by Lockwood <i>Lab</i>: Basic sound manipulation, fades, pitch and time shifting <b>Assignment 1 DUE.</b></p>
Week 4	<p><b>Lecture: Importing and Exporting Sound</b> Reading and 1 paragraph precis "Sound-On-Film: Interviews with Creators of Film Sound" by Foley <i>Lab</i>: iTunes</p>
Week 5	<p><b>Lecture: Sound Effects</b> Listen: 15 min excerpt "Black Hawk Down" <b>Assignment 2 Due.</b></p>
Week 6	<p><b>Lecture: Navigating Logic</b></p>

*Readings:* "Spectromorphology Hits Hollywood: Morphology, Objectification and Moral Messages in the Sound Design of Black Hawk Down" by Rudy

*Lab:* Introduction to Logic

**CD Review Due**

Week 7

*Lecture:* **Plugins and Audio Effects**

*Readings:* "Audio Culture Readings in Modern Music" excerpt by Oliveros

*Lab:* Plugins and Audio Effects

**Assignment 3 Due.**

Week 8

*Lecture:* **Combining Audio and Video in Logic**

Listen and 1 paragraph precis: "Deep Listening Practice"

*Lab:* Video in Logic

Week 9

**Project 1 Due for Discussion/Critique**

Week 10

*Lecture:* **Introduction to Live**

Listen: "Riverrun" by Truax

*Lab:* Introduction to Live

**Concert Review Due**

Week 11

*Lecture:* **Basic Acoustics**

Read: "Barry Truax's Riverrun" by Helmuth in *Analytical Methods of Electroacoustic Music*

*Lab:* acoustic and psychoacoustic phenomena

**Assignment 4 Due.**

Week 12

*Lecture:* **Project 2 Due for Critique/Discussion**

Week 13

*Lecture:* **Loops and Ambient Music**

Listen and 1 paragraph précis: 15 min. excerpt "Music for Airports" by Eno

Week 14

*Lecture:* **Student Presentations**

**Paper 3 and Assignment 5 Due.**

Week 15

*Lecture:* **Incorporating Interaction**

Reading: "Haunted Weather" excerpt by Toop

**Assignment 6 Due.**

**FINALS Project 3 Due for Critique/Discussion**

### **Assignments, Projects, and Papers**

Precis	Four 1 paragraph response statements
Assignment 1	Record sound using portable recorder and import into computer using Audacity. 1-1.5 min
Assignment 2	Burn Foley CD with several tracks of sound effects using iTunes

	3 or more short sound effects 10 sec. or less 1 or more long sound effects 45 sec. or more
Assignment 3	Create a Logic file with at least 4 tracks, 8 fades and 2 effects with a logical form. 1-2 min.
Assignment 4	Create three tracks of ambient loops in Live.
Assignment 5	Use the mapping capabilities of Live to control Project 2's sound
Project 1	Create a soundtrack with Foley for a video, animation, theater piece or computer game. 1-3 min.
Project 2	Create a piece with clear musical form in Live using recorded and synthesized sounds. 3-5 min.
Project 3	Create a unique sound art piece for performance or installation with or without a visual element. 4 –15 min.
Paper 1	2 page Concert Review
Paper 2	2 page CD Review
Presentation	Short presentation, précis, and sound file on acoustic or psychoacoustic phenomenon

**Lab Access:**

The emedia SINC site is accessible extended hours with your ID. The security system records entrances and exits and you are responsible for the equipment while you are present. DO NOT give out your ID to anyone or you will lose your access.

**Equipment Checkout:**

You can check out equipment to assist the production of your projects. Following all rules on the lending forms you sign.

**Supplies:**

You will be given storage space on our networked server the EMEDIAVAULT as well as your own NETID space. You may want to purchase a USB key/jumpdrive, CDRWs, CDRs, DVDRs, or some kind of external hard drive for extra backup and storage. These can be purchased at any computer store. You may want to process photographs, buy audiotape (cassette or DAT), or videotape (VHS, MiniDV) and other materials appropriate to your project as well.

**DISABILITY SUPPORT SERVICES (DSS)**

If you have a physical, psychological, medical or learning disability that may impact your course work, please contact Disability Support Services, ECC (Educational Communications Center) Building, Room 128, (631) 6326748. They will determine with you what accommodations, if any, are necessary and appropriate. All information and documentation is confidential.

Students who require assistance during emergency evacuation are encouraged to discuss their needs with their professors and Disability Support Services. For procedures and information go to the following website: <http://www.stonybrook.edu/ehs/fire/disabilities>

**ACADEMIC INTEGRITY**

Each student must pursue his or her academic goals honestly and be personally accountable for all submitted work. Representing another person's work as your own is always wrong. Faculty are required to

report any suspected instances of academic dishonesty to the Academic Judiciary. Faculty in the Health Sciences Center (School of Health Technology & Management, Nursing, Social Welfare, Dental Medicine) and School of Medicine are required to follow their schoolspecific procedures. For more comprehensive information on academic integrity, including categories of academic dishonesty, please refer to the academic judiciary website at <http://www.stonybrook.edu/uaa/academicjudiciary/>

**CRITICAL INCIDENT MANAGEMENT**

Stony Brook University expects students to respect the rights, privileges, and property of other people. Faculty are required to report to the Office of Judicial Affairs any disruptive behavior that interrupts their ability to teach, compromises the safety of the learning environment, or inhibits students' ability to learn.