Sound Design for Theater
THST S401
MWF: 9-11:15am
Location: TBD

Instructor: Nathan A. Roberts (nathan.roberts@yale.edu)
Office Hours (220 York Street):
by appointment

Course Description:
In this course, students will engage with the theoretical and practical considerations of conceptual sound design for the theatre. The course is founded on the premise that all theatrical designers (whether scenic, costume, lighting, or sound) all answer the same charge: to translate a playwright’s “words into a world.”

The primary concern of conceptual sound design (as distinct from reinforcement design) is the creation of sonic material (sound and music) that deepens and enhances the audience's understanding and experience of the performed text. While a foundational understanding of the physics of sound and technologies of sound delivery are part of this process, our primary focus will be on the interpretation of text and the development of critical listening skills.

Students will learn to read a play as designers. Much of our language for describing sound has been inherited from the visual arts. While we will explore many issues salient to auditory culture (through readings and exercises), we will consistently draw upon a source that is decidedly visual: The Dramatic Imagination, Robert Edmond Jones’s definitive work on modern scenography, will provide a through-line for our discourse. As we read and respond to selected plays, students will be asked to conceptualize visually as well as aurally, and to consider larger questions of style.

Course Goals:
Upon successful completion of this class, students will be able to:

- Translate dramatic action into aural imagery
- Develop a point-of-view about a play into a design concept
- Listen critically
- Make design decisions informed by fundamentals of sound and hearing
- Communicate design ideas to collaborators
- Manipulate sound in the digital domain
Course Materials:

Primary Material:
- *Cloud Tectonics*, José Rivera
- *Blood Wedding*, Federico García Lorca
- *The Tempest*, William Shakespeare
- *Trying to Find China Town*, Henry David Hwang

Supporting Material:
- *The Dramatic Imagination*, Robert Edmond Jones
- *Sound and Music for the Theatre*, Deena Kaye and James LeBrecht
- *What to Listen for in Music*, Aaron Copland

Additional readings will be distributed via the Canvas site.

You will be writing a critique of the sound design in (production TBD) playing at the International Festival of Arts and Ideas from June (dates TBD) to June (dates TBD); please arrange for tickets as early as possible.

For some project work, it will be necessary to have access to a computer (Mac or PC), and free DAW (digital audio workstation) sound editing and playback software.

Mac: Garageband. QLab.
PC: Reaper. Show Cue Systems. SFX.

When sharing your aural responses and other class-work, you may bring audio content on flash media or a compact disc, play sound from an iDevice, or perform live.

Grading:
**Response projects (35%)**: These are comprised of smaller exercises in response to topics presented in class (e.g. image-response pieces, radio play project, transition project, sound-scenery project, Lorca’s Moon, Tempest live underscore, virtual “something” project, *Arts and Ideas* production critique).

**Design Project One (20%)**: written concept statement, image-gallery, scene-plot-summary, and aural responses for *Cloud Tectonics*.

**Design Project Two (30%)**: written concept statement, image-gallery, scene-plot-summary, initial building notes, magic sheet, and sample cue content for *Trying to Find Chinatown*.

**Participation (15%)**: based on attendance and demonstrated engagement with the readings and class discussions.
**Academic Honesty:**
In addition to Yale’s regulations regarding academic integrity, it is critical professional practice for a sound designer to pursue appropriate licensing when the work of another artist (musical or otherwise) is incorporated into their design. There will be times in your work when you will present wholly original sonic content, and there will be times when you present content that references another work, in part or in whole. In your professional career, it is absolutely essential to inform your producers of any content in your design that includes copyrighted material. We will begin this practice in this class by naming (in our written work and class presentations) the composers/and ensembles of any music or sound we are using that is not wholly original.
Schedule of Topics, Readings, and Assignments
*NB: Readings are listed on the day they are due (i.e. when they will be discussed), not the day they are assigned. Additional details for all assignments will be distributed in class.

**Week One**

**Monday, 5/28**
Topics:
- Introductions, overview of course and syllabus
- How do we talk about sound: what language is available to describe what we hear?
- Critical listening: listening for content/dramatic intent vs. production values (in-class active listening exercise)
- Fundamentals of sound as a mechanical phenomenon
- The role of the conceptual sound designer in the theatre

Readings:
- *Musical Instrument Design* (Hopkin): “Musical Sound Perception” (pp. 1-6) and “Acoustic Principles” (pp. 7-20) **ON CANVAS**
- *The Dramatic Imagination* (Jones): Introduction & Chapter One

Assignments:
- Image-response pieces (**DUE WEDNESDAY, 5/30**) **ON CANVAS**

**Wednesday, 5/30**
Topics:
- The Elements of Design/Principles of Composition: visual-aural analogues.
- Review image-response pieces

Readings:
- *What to Listen for in Music* (Copland): “Preliminaries” (pp. 3-6) and “How We Listen” (pp. 7-15)
- *Sound and Music for the Theatre* (Kaye & LeBrecht): “The Evolution of Sound Design” (pp. 1-10)
- *Theatrical Design and Production* (Gillette): “Style, Composition, and Design” (pp. 76-88) **ON CANVAS**

**Friday, 6/1**
Topics:
- The Sound Designer and the Text: approaches to script analysis
- The Scene-Plot Summary (text storyboard): tracking the play’s shifts in energy or temperament
- Discussion of *Cloud Tectonics* (Rivera)

Readings:
- *The Dramatic Imagination* (Jones): Chapters Two and Three
• *Sound and Music for the Theatre* (Kaye & LeBrecht): “The Foundation of Sound Design” (pp. 12-39) and “Developing the Concept and Design” (pp. 40-50)
• *Cloud Tectonics* (Rivera)

Assignments:
• Concept statement, image gallery, aural responses, and Scene-Plot Summary for *Cloud Tectonics* (**DUE MONDAY, 6/4**)

### Week Two

**Monday, 6/4**
Topics:
• Review *Cloud Tectonics* assignments
Readings:
• *The Dramatic Imagination* (Jones): Chapter Four
• *Sound and Music for the Theatre* (Kaye & LeBrecht): “Research, Resources, and Selection” (pp. 51-64)

**Wednesday, 6/6**
Topics:
• Digital theory, introduction to digital audio editing
Readings:
• *Audio Engineering for Sound Reinforcement* (Eargle/Foreman): Chapter 1: Acoustical Fundamentals (pp. 5-9) and Chapter 4: Digital Fundamentals (pp. 43-52) **ON CANVAS**

Assignments:
• “Theatre of the Mind” (radio play project) (**DUE FRIDAY, 6/8**)

**Friday, 6/8**
Topics:
• Review radio play projects
• Psychoacoustics: sound as a sensory/perceptual event.
• Continuity and Transitions: narrative or bridges, page turns and punctuations
• Approaches to cueing/content playback strategies
Readings:
• *The Dramatic Imagination* (Jones): Chapters Five and Six
• *Sound Design* (Sonnenschein): “From Vibration to Sensation” (pp. 63-76) **ON CANVAS**
• *Sound Design* (Sonnenschein): “From Sensation to Perception” (pp. 77-100) **ON CANVAS**

Assignments:
• Transition project (**DUE MONDAY, 6/11**)

Week Three

Monday, 6/11
Topics:
- Review transition projects
- The “Soundscape”: Textures, Environments, and Atmos
- Naturalism vs. Abstraction
- Depth of Field: Foreground, Middleground, and Background layering
- Defining silence
- Field Recording

Readings:
- *The Dramatic Imagination* (Jones): Chapter Seven
- *Noise, Water, Meat* (Kahn): “Introduction” (pp. 2-19) ON CANVAS
- *The Soundscape* (Schafer): “Music, the Soundscape and Changing Perceptions” (pp. 103-119) ON CANVAS

Assignments:
- “sound-scenery” project (DUE WEDNESDAY, 6/13)

Wednesday, 6/13
Topics:
- Review sound-scenery assignments

Assignments:
- *Arts and Ideas* response paper/critique (DUE FRIDAY, 6/15)

Friday, 6/15
Topics:
- Discussion of *Arts and Ideas* production of TBD
- Style and Techniques of Abstraction
- Representation vs. Impressionism, Expressionism, and the Surreal
- Aural stimuli as internal vs. external influence

Readings:
- *The Dramatic Imagination* (Jones): Chapter Eight
- *Listening and Voice. A Phenomenology of Sound* (Ihde): “Auditory Imagination” (pp. 61-66) ON CANVAS
- *Musicophilia* (Sacks): “Music on the Brain: Imagery and Imagination” (pp. 32-43) ON CANVAS

Assignments:
- Finding the voice of the Moon in Lorca’s *Blood Wedding* (DUE MONDAY, 6/18)
**Week Four**

**Monday, 6/18**

Topics:
- Review Lorca Moon projects
- Principles of Underscoring: sound design as composition
- Composition/Re-composition
- Diegetic vs. Non-Diegetic
- Live sound vs. Playback
- Rhythm and Language

Readings:
- *What to Listen for in Music* (Copland): “The Four Elements of Music”
  - I. Rhythm (pp.26-38)
  - II. Melody (pp.39-48)
  - III. Harmony (pp.49-62)
  - IV. Tone Color (pp.63-80)
- *What to Listen for in Music* (Copland): “Musical Texture” (pp. 81-90)
- *What to Listen for in Music* (Copland): “Film Music” (pp. 202-210)

Assignments:
- *The Tempest* live-underscore project **(DUE WEDNESDAY, 6/20)**

**Wednesday, 6/20**

Topics:
- Presentation of *The Tempest* live-underscore projects
- Discussion of *Trying to Find Chinatown* (Hwang)
- Digital Sampling

Readings:
- *Trying to Find Chinatown* (Hwang)

Assignments:
- Animating the inanimate (virtual “something” project) **(DUE MONDAY, 6/25)**

**Friday, 6/22**

Topics:
- Auralization and Spatialization: Content and Delivery
- Distribution areas, Localization (sourcing), Imaging, Image Broadening, and Layering
- Audience Soundfield: Presentational Frame, House Surround, Ceiling, Floor
- The Design on paper (sound plot, schematic block diagram, “magic sheet”)

Readings:
- *Sound* (Brown): “Live Listening: The Aural Phenomenology of Theatre” (pp. 138-148) **ON CANVAS**
- *Musicophilia* (Sacks): “In Living Stereo: Why We Have Two Ears” (pp. 152-161) **ON CANVAS**
Week Five

**Monday, 6/25**

Topics:
- Presentation of virtual “something” projects
- The Performance Environment/Acoustics

Readings:
- *Spaces Speak, Are You Listening?* (Blesser & Salter): “Auditory Spatial Awareness” (pp. 11-66) **ON CANVAS**

Assignment:
- Concept statement, image gallery, aural responses, Scene-Plot Summary, Initial Building Notes, sample cue content, and “Magic Sheet” for *Trying to Find Chinatown* **(DUE FRIDAY, 6/29)**

**Wednesday, 6/27**

Topics:
- Cueing time in-class in preparation for Friday’s design presentations.

**Friday, 6/29**

Topics:
- Design Presentations for *Trying to Find Chinatown*