Course Goals

This course is designed to introduce the student to contemporary practices of creating and presenting electroacoustic music from the practical perspectives of analyzing works and understanding current technologies and aesthetic paradigms. In addition to musicological issues, composition will be placed in the wider context of contemporary art and New Media practices.

Lectures will alternate between composer and radio producer Michal Rataj and artist and composer Eric Rosenzveig.

Practical compositional lectures by Michal Rataj will focus on the analysis of a few key works, each dealing with specific aspects of music and technology and individual compositional approaches.

Eric Rosenzveig will present theoretical classes providing an overview, background and competing theories from the varied perspectives of the artist, philosopher, technologist, musician and composer. We will try and look at the question “why” in addition to “how” to make a new work. We'll listen to many shorter works in class, to provide context to our discussions.

Course Requirements:

A final composition presented live in the last week of class: 40% of grade
A midterm paper (approx. 10 pages): 25% of grade
A final paper (approx. 5 pages): 15% of grade
Attendance and participation 20% of grade

The main output of the class will be electroacoustic music compositions, in the widest sense of the word (live electronic pieces, acousmatic music, generative algorithmic music, sound installation, etc.).

Materials:

*Audio-Culture, Readings in Modern Music*, Christoph Cox, editor, Continuum (2x copies in library)

*Electronic and Experimental Music, Pioneers in Technology and Composition*, Thom Holmes, Routledge (available electronically as a PDF)

Other readings and recordings will be furnished for study purposes electronically weekly.
Prague concerts:
We'll keep you informed about relevant Prague cultural events during your stay here.

Schedule

**Tue, Feb.3 Rataj (1)**
Introduction and overview: listening, analysis and composition; planning

**Thu, Feb.5 Rataj (2), 9:00 – 10:20**
Kaia Saariaho: *Noa-Noa* [analysis]
Sound–Noise Axis – contemporary harmonic language?

composing with noise bits (basic MAX random based sample player)

Reading: K. Saariaho: *Timber and Harmony*
Score & Recording: K. Saariaho: *Noa-Noa*

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**Tue, Feb.10 Rataj (3)**
Pedal-Piece-Paradigm – simple interaction with MIDI pedal
Michal Rataj: Small Imprints for clarinet & live electronics

Score & Recording: M. Rataj: Small Imprints

Thu, Feb.12 Soundwalk from Richtruv Dum with guest lecturer Sara Pinheiro

Tue, Feb.17 Rataj (4)
Jesper Nordin: Calm Like a Bomb /analysis/
Rock’n’noise inspiration in live electronics

Score & Recording: Jesper Nordin: Calm Like a Bomb

Thu, Feb.19 Rosenzveig (2)
Introduction: background, theory, historical examples, related fields

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Tue, Feb.24 Rosenzveig (3)
note & sound, the ‘other’ musical materials of the 20th century; timbre in non-western music & western popular music

Thu, Feb.26 Rosenzveig (4)
systems and conceptual art; extra-musical compositional choices

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**Tue, March 3 Rataj (5)**

Introduction to MAX – simple real-time generative processes, basic MIDI, basic tricks

**Thu, March 5 Rosenzveig (5)**

algorithms and the computer; generative processes; random numbers; the database

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**Tue, March 10 Rataj (6)**

Group composition

**Thu, March 12 Rosenzveig (6)**

making live music with computers - introduction to performance systems hard & soft; custom instrument as composition

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**Tue, March 17 Rataj (7)**

Pierre Schaeffer: Sound Object, Acousmatic Situation

Referential listening, sound hermeneutics, sound composition and space

Practical composition session in Pro Tools.

Reading: Pierre Schaeffer: Acousmatics

Recordings: Pierre Schaeffer / Pierre Henry: *Symphonie Pour Un Homme Seul*; Pierre Henry: *La Ville. Die Stadt*; Pierre Alexandre Tremblay: *Ces enigmes lumineuses*

**Thu, March 19 Rosenzveig (7)**
reproduction as composition; GRM and the electronic music studio; the recording studio as instrument; plastic medium of digital audio.

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**Tue, March 24 Rataj (8)**

Basic Sound Synthesis - fundamentals of sound analysis / resynthesis, software, tools, ideas

**Thu, March 26 Rosenzveig (8)**

signal processing; effect as genre; electric & electronic instrumentation in the 20th cent.; the recording engineer/producer in popular music

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**Tue, March 31 Rataj (9)**

Group Composition.

**Thu, April 2 Rataj (10)**

Practical composing with multichannel sound diffusion

Algorithms / examples in Pro Tools and MAX.

**Mid Term Paper Due**

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**April 6-10: SPRING BREAK**

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**Tue, April 14 Rosenzveig (9), 9:00 – 10:20 AM**

collage & found sound - reference & quote; sampling; copyright
Thu. April 16 Rosenzveig (10)
notation as algorithm; sound representation; artist scores - graphic, textual and other sources

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Tue, April 21 Rataj (11)
Designated Space. A movie by Hana Železná.
Electroacoustic soundtrack composition in a Pro Tools Session.

Thu. April 23 Rosenzveig (11)
Soundtrack as liberty. Applications of electroacoustic music in contemporary film scoring and sound design

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Tue, April 28 Rataj (12)
Alvin Curran: Un altro ferragosto (analysis)

Recording: Alvin Curran: Un altro ferragosto

Reading: Klaus Schöning: On The Archeology Of Acoustic Arts in Radio

Thu. April 30 Rosenzveig (12)
Sound art and installation: a mature form in the past twenty years

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Tue, May 5 Rataj (13)
Sensors as instruments. Working with tablet, Wii controller, iPhone a. o.

Thu. May 7 Rosenzveig (13)
Musical gesture extended – visuals, data translation, other media

Final Paper Due

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**Tue, Dec 12 Rataj (14)**

Group composition

**Thu, May 14 Rosenzveig (14)**

summary & discussion of papers