

# MUMT 617

## Cognitive Dynamics of Music Listening

### Syllabus

#### Course Information

**Time:**

Thursdays, 8:35–11:35am  
January 11th–April 12th, 2018

**Location:**

Music Library Seminar Room A-410  
555 Sherbrooke St. West, New Music Building  
4th floor (enter library on 3rd floor)

**Instructor:**

Dr. Nat Condit-Schultz  
550 Sherbrooke St. West, East Tower, Suite 500, DDMAL lab  
nathaniel.condit-schultz@mcgill.ca

**Office Hours:**

By appointment

**Course Web Site:**

All course materials are shared on the myCourses site ([www.mcgill.ca/lms](http://www.mcgill.ca/lms))

#### Course Description

First, some definitions:

**Cognition:** knowledge, thought, and “mental operations” in general—including perception, attention, anticipation, memory, emotion, creativity, pattern recognition, and learning.

**Dynamics:** how matter and energy interact and change over time; motion—actions—things *happening* over time.

**Cognitive dynamics:** thought and experience as it happens *in time*. Cognitive dynamics are the essence of consciousness: how memory, attention, perception, and emotion intertwine in our ongoing experience of the world.

The study of music, whether theoretical or psychological, all too often approaches music as static objects: “pieces,” “parts,” “structures,” “notes,” etc. However, music, like sound in general, is an inherently ephemeral dynamic process, unfolding in real-time. In this seminar we will explore theoretical, aesthetic, creative, and psychological perspectives on the cognitive dynamics of music listening. We will read and critique literature related to a variety of interdisciplinary topics concerning the cognition of musical materials. We will discuss how theories of music account for, or fail to account for, music’s dynamic nature. We will ask: how does this theory or that empirical observation improve our understanding of musical experience? How do we **theorize** about dynamic musical cognition? What kind of **hypotheses** can be tested about dynamic musical cognition? How do we **measure** dynamic musical cognition? How can our theoretical conception of music be translated into scientific models of real-time cognitive dynamics? Our aim is to lay the groundwork for a truly dynamic theory of musical listening and experience. In particular, we will interrogate the concept of musical *form*—what is form? How does it exist in time? We will enrich our understanding of musical cognition by studying, comparing, and contrasting the cognition of orthodox (tonality, meter) and avant-garde musical materials.

## Course Structure

As a seminar, this course is primarily focused on student-lead discussion and debate. In addition, students will complete two major assignments, the results of each presented in class: a midterm individual assignment and a final group assignment.

The first half of the term is loosely organized around different time-frames of cognition:

1. The cognition of the past (memory, schemata, etc.).
2. The cognition of the future (expectation, anticipation, surprise, etc. ).
3. The cognition of the present (attention, perception, emotion, etc.).

In the second half of the term, we will discuss concepts of musical form and structure. We will ground our exploration form in the study of the *the Angel of Death*. *The Angel of Death* is a composition by Roger Reynolds, composed specifically in collaboration with a team of music psychologists as part of an integrated creative/scientific undertaking.

## Readings and Discussions

Readings from books and articles will be made available on the course website. The entire class will read and discuss several primary readings each week; Several supplemental readings are assigned each week as well. Each reading discussion will be lead by one or more student(s). Discussion leaders will first present and summarize the required and supplemental readings, and then lead the class discussion. Each student will lead the class discussion at least once—the leadership schedule will be decided in the first week of class.

## Discussion Forum

The class website includes an online web forum, where we will continue our discussions. Students are expected to participate each week in the forum as part of their grade.

Credit for participation in the forum can be achieved through:

1. Asking questions about upcoming readings.
2. Attempting to answer (even speculate about) other student's questions about upcoming readings.
3. Participating in tasks assigned by the instructor (details below).
4. Any other productive, on-topic contribution!

## Attendance, Participation

Students are expected to attend and actively participate in all class sessions. Each absence from class without a valid excuse (doctor's note, etc.) will result in subtraction of 5 points out of 100 on the final grade. Excessive (or routine) unexcused tardiness may also result in point deductions. Attendance is just a minimum—failure to regularly participate in class *will also affect your grade*. Participation in the online discussion forum is also required. Exceptional, constructive and helpful participation in class or the online forum may be rewarded with as many as five extra credit points.

## Assignments

Unless specifically excused by the instructor in advance, late assignments will be penalized 10% of their total worth for each class period they are not submitted/presented: One missing class = -10%; Two missing classes = -20%; etc.

### Homework tasks

The instructor will occasionally assign homework tasks intended to enrich the online and in-class discussions. You will submit answers to these tasks through the class forum. As an example: regarding our musical expectation topic, I will ask you to share a passage of music that you find surprising, and discuss why.

## Midterm project

As a midterm assignment, students will each present personal projects concerning the cognitive dynamics of music listening. Each student will come up with a major issue concerning the cognitive dynamics of music listening that particularly interests them. This issue must be discussed with the instructor by February 11th, to assure appropriateness, and that each student pursues a distinct topic.

## Final project

For the final assignment, students will work in groups. Each group will develop a hypothetical experiment that aims to make a significant contribution to our understanding of the cognition of temporal form in music. The project will include: 1) a theoretical motivation and framework, informed by a review of relevant literature; 2) a specific, testable hypothesis; 3) an experimental design, including stimuli; 4) a plan for the analysis of the data; 5) a discussion of predicted results. Each group will give a twenty-minute presentation on their project, followed by a ten-minute question and answer period, as well as a 4–6 page write-up of the project. Group members will also submit a private document describing their role, and the role of their group mates, in the project.

## Grading

In-class participation	15
Forum participation	10
Homework assignments	15
Midterm project	30
Final project	30
Extra participation credit	up to +5
Unexcused absences	–5 per absence

## Class Schedule

Week,	Date	Topic	Activity
Week 1,	January 11	<b>Introduction</b> Course overview, introductions What are cognitive dynamics?	Discussion
Week 2,	January 18	<b>The Past</b> <i>Memory</i>	Discussion
Week 3,	January 25	<b>The Future</b> <i>Expectations</i>	Discussion
Week 4,	February 1		Discussion
Week 5,	February 8	<b>The Now</b> <i>Attention</i>	Discussion
Week 6,	February 15	<i>Emotion</i>	Discussion
Week 7,	February 22		Discussion
Week 8,	March 1	—————	Midterm presentations
Reading Week		—————	No class
Week 10,	March 15	<b>Form</b> What is a musical “structure”? What are musical “materials”? <i>The Angel of Death</i>	Discussion
Week 11,	March 22	<i>Segmentation</i>	Discussion
Week 12,	March 29	<i>Similarity</i>	Discussion
Week 13,	April 5	<i>Transformation</i>	Discussion
Week 14,	April 12	—————	Final Presentations

## **Policy Statements**

### **Language**

In accord with McGill University's Charter of Students' Rights, students in this course have the right to submit in English or in French any written work that is to be graded. This does not apply to courses in which acquiring proficiency in a language is one of the objectives.

### **Academic Integrity**

McGill University values academic integrity. Therefore, all students must understand the meaning and consequences of cheating, plagiarism and other academic offences under the Code of Student Conduct and Disciplinary Procedures (see [www.mcgill.ca/students/srr/honest/](http://www.mcgill.ca/students/srr/honest/) for more information).

### **Learning Environment**

As the instructor of this course I endeavor to provide an inclusive learning environment. However, if you experience barriers to learning in this course, do not hesitate to discuss them with me and the Office for Students with Disabilities, 514-398-6009.

### **Unforeseen changes**

In the event of extraordinary circumstances beyond the University's control, the content and/or evaluation scheme in this course is subject to change. If such a case arises, there will be timely communications to the students regarding the change.