

COURSE OUTLINE Winter 2012
PSYCH3MA3 Neuroscience of Music Cognition

Instructor: Dr. Laurel Trainor Psychology Building 309
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Course TA: Laura Cirelli Psychology Building 128
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Location: PC 335

Time: Mondays 1:30-2:20pm; Thursdays 12:30-2:20pm

Office hours: By appointment

Course Objectives. In this course we will examine perceptual, cognitive, and socioemotional aspects of music from a neuroscientific point of view. The roles of evolution, biology, innate factors, and experience in human musical activity and ability will be considered. The class will be run as a seminar, and students are expected to read the assigned papers before class and to participate in class discussions. Students will work in groups, do presentations in class, read primary source materials, and learn to think critically.

Course Schedule (subject to revision)

Readings are available for download from the psychology web pages (www.science.mcmaster.ca/psychology/undergraduate.html). Click on Level 3 PSYCH courses, then 3MA3. The login name is 3ma3 and the password is trainor.

Jan 5 *Is music an evolutionary adaptation?*
1. McDermott & Hauser, 2005

Jan 9, 12 *Tonal structure in music*
2. Trainor et al., 2002
3. Lewis, 2002
4. Poulin-Charronnat, Bigand & Koelsch, 2006
5. Zatorre, 2001

Jan 16, 19 *Rhythm and movement*
6. Zatorre, Chen & Penhune, 2007
7. Grahn & Brett, 2007
8. Schacter et al., 2009

Jan 23, 26 *Entrainment, Parkinson's Disease and social interaction*
9. Grahn & Brett, 2009

10. McIntosh et al., 1997
11. Fujioka et al., in press
12. Wiltermuth & Heath, 2009
13. Hove & Risen 2009

Jan 30, Feb 2

Amusia

14. Loui, Alsop & Schlaug, 2009
15. Moreau, Jolicoeur & Peretz, 2009
16. Philips-Silver et al., 2011

Feb 6, 9, 13, 16

Cortical plasticity, learning, and effects of musical experience

17. Elbert et al., 1995
18. Pantev et al., 2001
19. Trainor, Shahin & Roberts, 2009
20. Jentschke & Koelsch, 2009
21. Trainor et al., in press

Expectation & meaning

22. Huron, Chapter 1, 2006
23. Trainor & Zatorre, 2009

Feb 18-22

Reading Week

Feb 27, Mar 1

Autobiographical memory for music

24. Janata, 2009

Experiencing & performing music

25. Limb & Braun, 2008
26. Sacks, Chapter 6, 2007

Mar 5, 8

No class, work on presentations

Mar 12, 15

No class, work on presentations

Mar 19, 22

Presentations

Mar 26, 29

Presentations

Apr 2

Summary and take home exam

Academic Dishonesty Policy Reminder

Academic dishonesty consists of misrepresentation by deception or by other fraudulent means and can result in serious consequences, e.g., the grade of zero on an assignment, loss of credit with a notation on the transcript (notation reads: "Grade of F assigned for academic dishonesty"), and/or suspension or expulsion from the university. It is your responsibility to understand what constitutes academic dishonesty. For information on the various kinds of academic dishonesty please refer to the Academic Integrity Policy, specifically Appendix 3, located at <http://www.mcmaster.ca/academicintegrity>.

Evaluation

Late assignments will not be accepted unless prior arrangements have been made with the instructor.

20% Attendance and participation. Note that for high marks, comments and questions must make an intellectual contribution.

16% Critiques. Due dates depend on which ones you are assigned.

4% Progress Report on Grant Proposal. Due March 1st

15% Written Grant Proposal. Due the *class before* your oral presentation.

15% Oral Presentation of Grant Proposal.

10% Peer Evaluation of Grant Proposal. Due one week after the presentation you are evaluating.

20% Final Take Home Exam

McMaster's Grading Scale

90-100	85-89	80-84	77-79	73-76	70-72	67-69	63-66	60-62	57-59	53-56	50-52	0-49
A+	A	A-	B+	B	B-	C+	C	C-	D+	D	D-	F

The instructor reserves the right to adjust the final marks up or down, on an individual basis, in the light of special circumstances and/or the individual's overall performance in the course.

A note on dates and deadlines: The instructor and university reserve the right to modify elements of the course during the term. The university may change the dates and deadlines for any or all courses in extreme circumstances. If either type of modification becomes necessary, reasonable notice and communication with the students will be given with an explanation and the opportunity to comment on changes. It is the responsibility of the student to check their McMaster email regularly during the term and to note any changes.

A note on class attendance: Because much of this class is based on discussion and presentations, is very hard to do well unless you attend all classes.