

COURSE OUTLINE
PSYCH3MA3 Neuroscience of Music Cognition

Instructor: Dr. Laurel Trainor Psychology Building 309
LJT@mcmaster.ca 905-525-9140 x23007

Course TA: Katie Corrigan corrighka@mcmaster.ca 905-525-9140 x27114

Location: MDCL/1009

Time: Tuesday 11:30–12:30 and Thursday 11:30–1:30

Office hours: By appointment

Course Objectives. In this course we will examine perceptual, cognitive, emotional, and developmental aspects of music from a neuroscience 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, than 3MA3 and the password is "music".

Jan 5 *Overview*

Jan 7 *Is music an evolutionary adaptation?*

1. McDermott & Hauser, 2005
2. Lewis, 2002

Jan 12, 14 *Tonal structure in music*

3. Poulin-Charronnat, Bigand & Koelsch, 2006
4. Zatorre, 2001

Jan 19, 21 *Rhythm and movement*

5. Zatorre, Chen & Penhune, 2007
6. Grahn & Brett, 2007

Jan 26, 28 *Expectation & meaning*

7. Meyer, 1956
8. Trainor & Zatorre, 2009

Feb 2, 4 *Amusia, Music and Language*
9. Peretz, 2001
10. Koelsch et al., 2002
11. Louis, Alsop & Schlaug, 2009

Feb 9, 11 *Musical Development*
12. Trainor, 2005
13. Hannon & Trainor, 2007
14. Winkler et al., 2009
15. Philips-Silver & Trainor, 2005

Reading Week

Feb 23, 25, Mar 2 *Cortical plasticity, learning, and effects of musical experience*
16. Elbert et al., 1995
17. Pantev et al., 2001
18. Schellenberg, 2005
19. Trainor, Shahin & Roberts, 2009
20. Jentschke & Koelsch, 2009

March 4 *Autobiographical memory for music*
21. Janata, 2009

Mar 9 *Experiencing & performing music*
22. Limb & Braun, 2008

Mar 11 No class, work on presentations

Mar 16 No class, work on presentations

Mar 18 Presentations

Mar 23 Presentations

Mar 25 No class

Mar 30 Presentations

Apr 1 Presentations

Apr 6 Presentations if needed

Apr 8 Summary

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/senate/academic/ac_integrity.htm.

Evaluation

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

30% Attendance and participation. Note that for high marks, comments and questions must make an intellectual contribution.

16% Critiques

4% Progress Report on Grant Proposal. Due February 25th.

20% Written Grant Proposal. Due the *Friday before* your oral presentation.

20% Oral Presentation of Grant Proposal.

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

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.