Music Cognition

PSYCH 2MA3 / MUSICCOG 2MA3
Term 2, 2013

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Meeting Time/Place: Monday 3:30-5:20 pm, Thursday 4:30-5:20 pm in ABB 164

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Office Hours: By appointment

Course Description

Music Cognition presents an overview of the physical basis and cognitive processing of music. The course begins with a description of the fundamental acoustic features of musical sound, and then moves onto higher-level topics related to the cognitive processing of melody, rhythm, texture, and form in music. The course also discusses music's important relationships with dance and language.

A second component of the course is a “Mini-Course in World Musics” – taking place during the Wednesday sessions – that presents a cross-cultural analysis of the major musical styles of the world. The goal of these sessions is not only to familiarize students with the principal music families of the world but to teach them how to think about music using a comparative approach.

Course Objectives

By the end of the semester, you should (a) understand the nature of sound waves, their propagation and their interactions during the generation of music; (b) have a general understanding of how to read waveforms, spectra, and spectrograms; (c) be familiar with the basic components of melodic and rhythmic systems; (d) understand music's relationships with dance and language; and (e) be familiar with the general features of the world’s major musical styles.

NOTE: The ability to read musical notation and an understanding of music theory at the competence of Level 2 Rudiments of the Royal Conservatory of Music is a requirement of this course. Testing material for this course will include notated examples as well as sound examples.
Readings
TEXTBOOK:

ARTICLES:
See the last page of this syllabus for the assigned articles.

World Music Playlists
For each world music lecture, there will be a playlist of 3 songs from the Smithsonian Folkways website that you should listen to and become familiar with. Note that the exams will include sound examples of world music NOT taken from these tracks. Hence, you should become familiar with the general stylistic features of each world region but not memorize the sound of the assigned tracks; other songs will be used on the exams.

Playlists will be accessible from Avenue to Learn after each Wednesday lecture.

Avenue to Learn
This course uses Avenue to Learn to post the course outline, lecture slideshows, articles, and other materials. Please go to avenue.mcmaster.ca in order to find out how to log onto the course’s home page.

Course Evaluation

Exams
There will be two exams. *Exam 2 will constitute one part of the final exam.* In addition, there will be a separate comprehensive final exam that will constitute the second part of the final exam and that will cover material from the entire course. The exams will consist of true-false questions, fill-in questions, and short-answer questions. The comprehensive final will consist of fill-in questions only.

Exams will cover the textbook, readings, and articles. Lecture material that does not pertain to these three sources will not be tested. In addition to concepts, you will be tested on *graphical* material, such as spectra, waveforms, etc.

NOTE: The world-music part of the course will be tested on these exams. This will include representative sound examples from the regions covered in the course.

Term Paper
You will be asked to write a 4-5-page (double-spaced) term paper on a topic of your choice in music psychology. The paper will count for 15% of the final grade, and must be turned in no later than **Monday, March 25** (week 11) at the beginning of class. Don’t forget to put your name and student ID on any material submitted for course credit.

The paper should be based on at least 3 primary research articles (i.e., not review articles, book chapters, web pages, magazine articles, etc.) dealing with some aspect of the course. The topic and a list of 3 references should be presented to your TA by week 9 (**Monday, March 4** is the final date). Your paper should discuss the experimental design, results, and interpretation of the studies. The research articles that are chosen should be related enough to one another that a *comparison* of their findings can be discussed.

NOTE: Citations and references should be written according to American Psychological Association (APA) style. Be meticulous when creating your reference list. If you are not familiar with how to create citations or references, please consult your TA.
**Problem Set**

A problem set containing questions about acoustics and psychoacoustics will be posted during week 2 and will be due no later than Thursday, February 7 (week 5) at the beginning of class. It will count for 10% of the semester grade. Don't forget to put your name and student ID on any material submitted for course credit.

**Contribution of the Assessments to the Final Grade**

- 2 exams (each one 25% of the grade)  
  50% of the grade
- Comprehensive final  
  25% of the grade
- Term paper  
  15% of the grade
- Problem set  
  10% of the grade

**An Important Note about Missing the Midterm (Exam 1)**

If you are too sick to write the midterm, you are required to inform the instructor of this by email or phone, preferably before the midterm but no more than 48 hours after the midterm. In addition, you must schedule a time with your TA to take a make-up midterm no more than one week after the midterm date. Please understand that presenting a doctor's note to the Dean's office does NOT exempt you from writing the midterm. Failure to the take the midterm by one week after the midterm date will result in a total loss of credit for the exam, unless you have certification from a doctor that you have a chronic condition and are unable to write the exam at that time.

**McMaster University Grading Scale**

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>A+</td>
<td>90-100</td>
</tr>
<tr>
<td>A</td>
<td>85-89</td>
</tr>
<tr>
<td>A-</td>
<td>80-84</td>
</tr>
<tr>
<td>B+</td>
<td>77-79</td>
</tr>
<tr>
<td>B</td>
<td>73-76</td>
</tr>
<tr>
<td>B-</td>
<td>70-72</td>
</tr>
<tr>
<td>C+</td>
<td>67-69</td>
</tr>
<tr>
<td>C</td>
<td>63-66</td>
</tr>
<tr>
<td>C-</td>
<td>60-62</td>
</tr>
<tr>
<td>D+</td>
<td>57-59</td>
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<tr>
<td>D</td>
<td>53-56</td>
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<td>D-</td>
<td>50-52</td>
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<tr>
<td>F</td>
<td>0-49</td>
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**Academic Integrity**

You are expected to exhibit honesty and use ethical behaviour in all aspects of the learning process. The academic credentials you earn are rooted in principles of honesty and academic integrity. Academic dishonesty is to knowingly act or fail to act in a way that results or could result in unearned academic credit or advantage. This behaviour 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 types of academic dishonesty please refer to the Academic Integrity Policy, located at http://www.mcmaster.ca/academicintegrity
The following illustrates only three forms of academic dishonesty:
1. Plagiarism, e.g. the submission of work that is not one’s own or for which other credit has been obtained.
2. Improper collaboration in group work.
3. Copying or using unauthorized aids in tests and examinations.

A Note from the University
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 explanation and the opportunity to comment on changes. It is the responsibility of the student to check their McMaster email and course websites weekly during the term and to note any changes.

A Summary of Important Dates

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
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</thead>
<tbody>
<tr>
<td>February 7</td>
<td>Problem Set is due (Thursday)</td>
</tr>
<tr>
<td>February 11</td>
<td>Exam 1</td>
</tr>
<tr>
<td>March 4</td>
<td>Term Paper topic + 3 references are due</td>
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<tr>
<td>March 14</td>
<td>NO CLASS (Thursday)</td>
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<tr>
<td>March 25</td>
<td>Term Paper is due</td>
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<tr>
<td>April ??</td>
<td>Exam 2 + Comprehensive Final (date, time and location TBA)</td>
</tr>
<tr>
<td>Week</td>
<td>Monday Lecture Topic</td>
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| 1 1/7-10 | (a) the “standard” model of music  
(b) Is music an art or a science?  
(c) music evolution | Ch. 1 | Classification of musics and instruments |
| 2 1/14-17 | (a) sound waves  
(b) waveforms and spectra | Ch. 1 | Africa (sub-Saharan) |
| 3 1/21-24 | (a) acoustics  
(b) the auditory system | Ch. 1 | Aboriginal Australia; Melanesia |
| 4 1/28-31 | (a) pitch perception  
(b) intervals and tuning systems  
(c) timbre | Ch. 3 | Middle East (Arabic, Turkish, and Persian styles) |
| 5 2/4-7 | (a) instruments I: stringed instruments  
**Problem Set due Thursday February 7**  
(b) instruments II: aerophones, percussion, and the voice | Ch. 4 | Old Europe |
| 6 2/11-14 | Exam 1 (February 11), covering lectures 1a-5b, and Africa→Old Europe in the World Music series | No class (February 14) |
| 7 2/25-28 | (a) pitch and interval  
(b) scale and melody | Gill (2009) | South Asia (India) |
| 8 3/4-7 | (a) harmony  
**Term Paper topic due Monday March 4**  
(b) texture and form | Krumhansl (1982) | East Asia (China, Japan, Korea) |
| 9 3/11-14 | No class (March 11) | No class (March 14) |
| 10 3/18-21 | (ab) rhythm in music and dance | Patel (2005); Schachner (2009) | Southeast Asia (Indonesia) |
| 11 3/25-28 | (ab) music and language  
**Term Paper due Monday March 25** | Ross (2007) | North America and the Circumpolar Region |
<p>| 12 4/1-4 | (ab) emotion and meaning in music | Konecni (2008) | South America; Polynesia |</p>
<table>
<thead>
<tr>
<th>Week 13</th>
<th>(ab) performance</th>
<th>Friberg (2006)</th>
</tr>
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</table>
| 4/8     | 1) Exam 2, covering lectures 7ab-13ab, and South Asia→South America/Polynesia in the World Music series  
         2) Comprehensive Final Exam, covering the entire course |                |

**Final 4/?**

**References for Articles (all are posted on Avenue)**

**Week 7**

**Week 8**

**Week 10**


**Week 11**

**Week 12**

**Week 13**