DAT335 – Music Perception and Cognition  3 (3,0)
Course Syllabus
Cogswell Polytechnical College
Spring 2009

Instructor: Adnan Marquez-Borbon
Class Meetings: T Th 1:30-3:15pm
Office Hours: TBA
Room : 211 (Smart Lab)
Email: adnanm@ccrma.stanford.edu
(when emailing, put as subject the title of the class)

Course Description:
Survey of research on perceptual and cognitive theories of sound and music. Topics include characteristics of sound, anatomy of the ear, hearing functions, cognitive skills related to music perception, and memory in music.

Prerequisites: SCI220

DAT Learning Outcomes fulfilled by this course:
Explain the conceptual basis of the processes involved in hearing and music cognition from a scientific perspective.

GE Learning Outcomes fulfilled by this course:
Describe scientific principles and perform research about those principles; apply scientific reasoning to analyze data.

Materials: The required text is An Introduction to the Psychology of Hearing. 5th edition. By Brian C.J. Moore. Supplementary handouts and assignments will be provided by the instructor.

Exam: A midterm will be provided sometime during the 8th or 9th week of the semester. The material covered will include the textbook readings and any other extra material provided as noted by the instructor.

Term Project: A 6-8 page term paper will be required on a topic chosen before hand by the student. The paper should be written in the MLA style format (See A Guide To MLA Documentation by Joseph Trimmer or MLA Handbook for Writers of Research Papers, 6th Ed. By Joseph Garibaldi)

Final Presentation: A 10-15 min presentation based on the term paper topic will be held during the last week of classes. Power point slides, web pages are highly recommended as complementary presentation material.

Grading: Each assignment (including midterm and final exams, as well as the term paper) will be graded on a 100-point scale. No grade curving will be done. Exercises are due the following week during the regular class meeting.
Midterm – 40 %
Term paper – 25 %
Homework – 20 %
Presentation – 15 %

Grade breakdown
A: 90 - 100
B: 80 - 89
C: 70 - 79
D: 60 - 69
F: < 60

Course Outline

Topic:
1. The Nature of Sound and the Auditory System
2. Absolute Thresholds
3. Frequency Selectivity, Masking, and Critical Bands
4. Loudness Perception
5. Temporal Processing
6. Pitch Perception
7. Spatial Perception
8. Auditory Pattern and Object Perception
9. Speech Perception
10. Practical Applications