McGILL UNIVERSITY
Faculty of Medicine
School of Communication Sciences & Disorders
FALL 2014
Room 869

Introduction to Audiology
SCSD-401-616/A
Number of Credits: 3 Credits
Course Time: Wednesday 11 am to 1 pm

Instructor:
Linda Polka, Ph.D.

Office: room 816 Phone: 398-7235
Office Hours: By appointment (set up by phone or by email)
Email: linda.polka@mcmill.ca

COURSE CONTENT:
- The objective of the course is to provide a basic understanding of the diagnostic and rehabilitative goals of clinical audiology. The course will familiarize students with concepts that underlie proper administration, interpretation, and application of information obtained in a basic audiologic evaluation.

LEARNING OUTCOMES:
By the end of this course students will:
- Learn basic scientific principles that form the foundation of audiological practice
- Be able to perform and interpret tests within a basic audiometric test battery
- Be able to communicate audiology test results to an adult patient or parent of a child patient
- Be familiar with several specialized audiological tests and understand their role in the assessment process
- Appreciate the importance of accurate audiologic diagnosis in planning intervention and assessing prognosis.
- Gain introductory knowledge about common hearing disorders
- Gain introductory knowledge about the range of intervention options available to help hearing impaired individuals
- Be acquainted with standard forms of amplification and sensory implants and begin to understand (in a general way) how they are implemented to reduce the negative impact of hearing impairment.

INSTRUCTIONAL METHOD:
- Lectures and Group Laboratory Sessions (Detailed lab syllabus will be provided)
COURSE MATERIALS:

- Supplemental readings posted on My Courses

ASSIGNMENTS & EVALUATION

- Midterm Exam (in class) (45%)
- Group Report & Presentation (20%)
  - Student groups will be assigned a hearing disorder to describe in a written report and short in-class presentation. Details for this assignment (assigned disorders, report format and grading rubric, schedule for presentation) will be provided in a separate document. Group presentations will be scheduled weeks 10 and 11.
- Final Exam (in class) (30%)
- Lab (5%)

McGILL POLICY STATEMENTS:

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).

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.

In the event of extraordinary circumstances beyond the University’s control, the content and/or evaluation scheme in this course is subject to change.


**TOPICS AND READINGS**

**Week 1. Sept 3**

**Topic:** Course Introduction  
The human ear & types of hearing impairments

**Readings:**  
Chapter 1 & 2

**Sept 4**  
**NO LAB MEETING**

**Week 2. Sept 10**

**Topic:** Acoustics & psychoacoustics  

**Readings:**  
Chapter 3

**LAB 1 Sept 11**  
The Audiology Test Suite  
Otoscopy  
Tuning fork tests

**Week 3. Sept 17**

**Topic:** Behavioural assessment of hearing  

**Readings:**  
Chapter 4

**LAB 2 Sept 18**  
AC Testing

**Week 4. Sept 24**

**Topic:** Behavioural assessment of hearing  

**Readings:**  
Chapter 6, pages 130-134 (pages 135-145 optional)

**LAB 3 Sept 25**  
BC Testing & Masking

**Week 5. Oct 1**

Speech Audiometry  

**Readings:**  
Chapter 5

**LAB 4 Oct 2**  
Speech tests

**Week 6. Oct 8**

**Topic:** Imittance Audiometry  

**Readings:**  
Chapter 7, pages 153 thru 168  
Article: The Middle Ear Muscles

**Oct 9 TBA**  
Imittance Audiometry lecture (continued)

**Week 7. Oct 15**

LAB 5 Imittance (3 groups)  

**Readings:** None; problems assigned

**LAB 5 Oct 16**  
9-11 Imittance (3 groups)  
12-2 pm Integrating test information/midterm review

**Week 8. Oct 22**

MID TERM
Oct 23 TBA lecture
Topic: Evoked Response Audiometry
Otoacoustic Emissions
Readings: Chapter 7, pages 169-188

Week 9 Oct 29
Topic: Testing hearing in special populations
Readings: Chapter 8

LAB 6 Oct 30 9:30 Paediatric assessment

Week 10 Nov 5
Topic: Hearing disorders/Case examples – Group presentations
Readings: Chapter 9, 10, 11 & 12

LAB 7 Nov 6 Hearing disorders/Case examples – Group presentations
Meeting time TBA

Week 11 Nov 12
Topic: Hearing disorders/Case examples – Group presentations
Readings: Chapter 9, 10, 11 & 12

LAB 8 Nov 13: Morning (9-11): MOSD field trip (Group 2)
Afternoon (1-4 pm): SCSD Research Day – all students

Week 12 Nov 19
Topic: Amplification
Guest Lecture: Liliane Brunetti
Readings: Chapter 14

LAB 9 Nov 20 Morning (9-11) MOSD field trip (Group 1)
Afternoon (1pm): CHIP field trip (Group 2)

Week 13 Nov 26
Topic: Cochlear Implants
Guest Lecture: Dr. Anthony Zeitouni

LAB 10 Nov 27: Morning (9:30 Group B; 10:30 Group A) HAid workshop
Afternoon (1 pm): CHIP field trip (Group 1)

Final exam: Wed Dec 3 10 – noon
Fall 2014- Audiology Lab

Course No.: 401-616/A+
Lab Instructor: Aruna Sudarshan
Office Room 846/ Office Hours: by appointment; sudarshan@mail.mcgill.ca
Meeting time/place: 869 when all students; 870 for small group sessions
Labs 1-4:
9:00 to 9:30 am all students
   Small group (4 students/group); Room 870
   Session 1:  9:30 - 10:50
   Session 2:  10:50 - 12:10
   Session 3:  12:40 - 2:00
   Session 4:  2:00 - 3:20
   Session 5:  3:20 - 4:40
   Session 6:  4:40- 6:00

Evaluation (pass/fail): Participation in all lab sessions & completion of assignments (5%)

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<thead>
<tr>
<th>Date</th>
<th>Topic</th>
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<tbody>
<tr>
<td>Sept 4</td>
<td>Lab Introduction – <strong>During lecture hours</strong></td>
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<tr>
<td>Sept 11 (AS)</td>
<td>*Lab 1: The Audiology Testing Suite; Otoscopy &amp; Tuning Fork tests</td>
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<td>Sept 18 (AS)</td>
<td>*Lab 2: Air conduction testing</td>
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<td>Sept 25 (AS)</td>
<td>*Lab 3: Bone conduction testing &amp; Masking</td>
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<td>Oct 2 (AS)</td>
<td>*Lab 4: Speech Tests</td>
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<td>Oct 8 (LP)</td>
<td>lecture TBA - Immittance (Continued) - <strong>all students</strong></td>
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<td>Oct 15 (AS) 11-1</td>
<td><strong>Lab 5: Immittance lab (AS) – 3 groups (40 min each)</strong></td>
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<td>Room 869</td>
<td>NOTE: some groups will complete this lab during the lecture time slot</td>
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<tr>
<td>Oct 16 9-11 (AS)</td>
<td><strong>Lab 5: Immittance lab (AS) – 3 groups (40 min each)</strong></td>
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<td>Room 869</td>
<td>12–2pm Integration &amp; problem sets/(midterm review (LP) - <strong>all students</strong></td>
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<td>Oct 23</td>
<td>Lecture TBA – ABR &amp; OAE – all students together</td>
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<td>Oct 30 (AS)</td>
<td><strong>Lab 6: Paediatric testing – video presentation and discussion</strong></td>
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<td>Meeting time: 9:30 (all students)</td>
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<td>Nov 6 (LP)</td>
<td><strong>Lab 7: Hearing Disorder Group Presentations - all students TBA</strong></td>
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| Nov 13      | **Lab 8: Morning (9-11) Field trip: MOSD (Group 2)**
Nov 20  Lab 9: Morning (9-11) Field trip: MOSD (Group 1)
        Afternoon (1-4) Field trip: CHIP (Group 2)

Nov 27  Lab 10: Morning (Group B 9:30 ; Group A 10:30 ) Hearing aids workshop
        Afternoon (1 pm) Field trip: CHIP (Group 1)

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