



**McGILL UNIVERSITY  
Faculty of Medicine  
School of Communication Sciences & Disorders  
Winter 2020**

**SCSD 642  
Aural Rehabilitation  
Number of Credits: 3 Credits  
Course Time: Tuesdays 13:00-15:00**

**Instructor:  
Liliane Brunetti, M.Cl.Sc (Adult Focus)  
Mary-Jane Blais, M.Sc., SLP(C) (Pediatric Focus)**

**Office Hours:** By appointment (set up by phone or by email in advance)  
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**COURSE OVERVIEW:**

This course will familiarize the student with issues central to understanding the impact of hearing loss/deafness on speech and language in various populations (both adult and pediatric) and will introduce models and approaches for habilitation/rehabilitation of communication in these populations.

The Aural Rehabilitation course will be presented in two sections:

- 1) Adult Focus
- 2) Pediatric Focus

**LEARNING OBJECTIVES:**

**ROLE 1: CENTRAL ROLE/CONTENT EXPERT**

<b>Foundational Principles</b>	
<b>Gain and apply knowledge of hearing, hearing loss and disorders of the auditory system and their impact on communication/language development in adults and children</b>	
Interpret audiogram and integrate results in case study	Mid-session test Case study Take Home Exam
Develop and apply understanding of SLP's diverse roles in Working with the adult / pediatric hard of hearing population	Mid-session test Case study

<b>Apply knowledge of communication modalities in adults and children</b>	
Identify different approaches to habilitation and rehabilitation of speech and language (e.g. oral, manual, total) and their advantages and disadvantages	Group Presentations
Identify and reflect upon the philosophical underpinnings of sign language and other communication methods used by the hearing impaired	Group Presentations
Learn about facilitating techniques and ways to optimize communication for adults	Mid-session test Case study
Expand knowledge of listening technology related to hearing loss	Mid-session test Case study
<b>Apply knowledge of principles of clinical practice</b>	
Implement ASHA best practices for working with children and adults with all types of deafness/hearing loss	Mid-session test Case study Group Presentations Take Home Exam
Identify/ describe the impact of universal hearing screening, as well as the present status of the implementation of universal hearing screening across Canadian provinces	Take Home Exam
<b>Apply knowledge of speech acoustics and development of auditory skills in children</b>	
Demonstrate practical application of speech acoustics in relation to actual children/actual audiograms by linking knowledge about speech acoustics to actual audiograms	Group Presentations Take Home Exam
Identify different stages of auditory skill development	Group Presentations Take Home Exam
<b>Apply knowledge of auditory neurological development in children</b>	
Identify critical periods for language development in children requiring cochlear implants	Take Home Exam
Identify neurological changes when these critical periods are not met and recognize impact on language development	Take Home Exam

<b>Assessment</b>
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**Develop an assessment strategy to evaluate communication/language for the DHH pediatric population**

Apply audiometric information to the speech-language assessment, including identifying the type and degree of hearing loss from an audiogram, as well as hearing aid and cochlear implant information	Take Home Exam
Modify speech and language assessment procedures to accommodate varying degrees of hearing loss	Take Home Exam
Identify different assessment tools appropriate for assessing the communication skills of DHH pediatric population, including those performing at the 0-18 month-old-level	Take Home Exam

**Client-centeredness**

**Respect client and client diversity, values and beliefs**

Acquire knowledge about client values and beliefs regarding hearing loss	Group Presentations
Recognize and identify the impact of deafness on the individuals and on their families	Mid-session test

**Incorporate client perspective of needs, expectations, values and beliefs into service provision**

Identify and adapt to where clients are in the grieving process	Take Home Exam
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**ROLE 3: COLLABORATOR**

**Collaboration with other professionals**

**Interact according to differing roles and responsibilities of team members**

Collaborate efficiently with all team members, respect each others' roles/responsibilities, contribute to a positive team dynamic	Group Presentations
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**INSTRUCTIONAL METHOD:**

The course consists of lectures, guest lecturers, videos, readings, class discussions, and group assignments.

**REQUIRED COURSE MATERIALS:**

Readings posted on *MyCourses*

**COURSE CONTENT**

<u><b>Section I – Liliane Brunetti – Adult Focus</b></u>	
<b>Date</b>	<b>Topics and Readings</b>
<b>Jan. 7, 2020</b>	<p><b>Introduction &amp; Overview of Audiological Rehabilitation</b></p> <ul style="list-style-type: none"> <li>• Review of Audiology introduction course</li> <li>• Definition of audiological rehabilitation or Aural Rehab (AR)</li> <li>• Historical background</li> <li>• AR model – CORE &amp; CARE</li> <li>• Hearing Aids &amp; Assistive Devices</li> </ul> <p><u>Readings:</u>            ASHA position paper - Definition of Competencies for Aural Rehabilitation            Teaching Coping Strategies, J. Abrahamson            CI rehab not just for kids, D. L. Sorkin, &amp; N. Caleffe-Schenck</p>
<b>Jan. 14, 2020</b>	<p><b>Auditory / Visual Stimuli in Communication</b></p> <ul style="list-style-type: none"> <li>• Acoustics of speech</li> <li>• Speech perception and hearing loss</li> <li>• Auditory Training</li> <li>• Speech reading</li> </ul> <p><u>Readings:</u>            Schow, R.L. (2007) Introduction to Audiologic Rehabilitation            Chapter 4, p. 115 -136            Chapter 5, p. 151- 168</p>
<b>Jan. 21, 2020</b>	<p><b>Listen up! ...or use your visual cues.</b>  <b>Guest Lecturer: Farha Hussain, M.Sc. SLP(C)</b>, SLP at the MAB-Mackay Rehab Centre</p> <ul style="list-style-type: none"> <li>• Speech Language Pathology &amp; Aural Rehabilitation</li> <li>• Communication assessment, intervention &amp; strategies</li> <li>•</li> </ul>

	<p><u>Readings:</u> Tracking and Communication Repair Procedures, M. Ross</p>
<b>Jan. 28, 2020</b>	<p><b>Assessment &amp; management of clients with hearing loss</b> <b>Optimizing functional communication with acquired hearing loss</b></p> <ul style="list-style-type: none"> <li>• Profile of adult / elderly client</li> <li>• Rehabilitation model</li> <li>• Rehabilitation management</li> <li>• Self-assessment inventory</li> </ul> <p><u>Readings:</u> Schow, R.L. (2007) Introduction to Audiologic Rehabilitation Chapter 10, p. 393 – 429 Training the adult brain to listen, Hearing Journal (PageTen) R.Sweetow Hearing Questionnaires Aphab, COSI, HAUQ</p>
<b>Feb. 4, 2020</b>	<p><b>Test</b> <b>Meeting and/or videos of adult cochlear implant clients having gone through rehabilitation program</b></p> <ul style="list-style-type: none"> <li>• Case study - discussion re: presentations</li> </ul> <p><u>Readings:</u> A retrospective look at the future of aural rehabilitation, M. Ross Auditory Neuropathy, Boys Town National Research Hospital</p>
<b>Feb. 11, 2020</b>	<p><b>Group presentations</b></p> <p><u>Readings:</u> none</p>
	<p><b><u>Section II – Mary-Jane Blais – Pediatric Focus</u></b></p>
<b>Feb. 18, 2020</b>	<p><b>Overview of demographics and best practices of aural rehabilitation in Pediatric Populations</b></p> <ul style="list-style-type: none"> <li>• Historical overview of Sign Language and Oralism (mostly Europe/North America)</li> </ul>

	<ul style="list-style-type: none"> <li>• Historical conflict between approaches</li> <li>• Current ratio of Sign Language user to Aural/Oral Deaf post CI era (Local data)</li> <li>• Percentage of Deaf/deaf in general population and impact on future S-LP caseloads</li> <li>• Introduction to ASHA best practices for working with children of all types of deafness/hearing loss</li> </ul> <p><u>Readings:</u></p> <p>ASHA's 'Supplement to the JCIH 2007 Position Statement: Principles and Guidelines for Early Intervention Following Confirmation That a Child Is Deaf or Hard of Hearing', online at:  <a href="http://www.asha.org/policy/ps2013-00339/">http://www.asha.org/policy/ps2013-00339/</a>  Yoshinaga-Itano, C. (2013). Principles and Guidelines for Early Intervention After Confirmation That a Child Is Deaf or Hard of Hearing. <i>Journal of Deaf Studies and Deaf Education</i> 19, 143-175</p> <p>Distribution of group assignment: Debating issues in deafness</p>
<p><b>Feb. 25, 2020</b></p>	<p><b>Universal Hearing Screening &amp; Family and Psycho-social Impact</b></p> <ul style="list-style-type: none"> <li>• DEBATE: Preservation of Deaf culture vs. parent choice</li> <li>• Overview of Status of Universal Hearing Screening in Canadian Provinces</li> <li>• Introduction to SAC's 'report card' on Universal Hearing Screening</li> <li>• The impact of earlier hearing screening on families and on language outcome</li> <li>• Psycho-social Impact and Cycle of Grief (also multi-ethnic considerations in grieving)</li> <li>• Parent story of impact: With special guests Zachary Holbrough (Young CI recipient) and Elaine Dix-Holbrough (Zachary's mom)</li> </ul> <p><u>Readings:</u></p> <p>Cole, B. &amp; Flexer, C. (2007). Children with hearing loss: Developing listening and talking. Chapter 10 pp. 261-271</p> <p>"Newborn Hearing Screening": ASHA: <a href="https://www.asha.org/practice-portal/professional-issues/newborn-hearing-screening/">https://www.asha.org/practice-portal/professional-issues/newborn-hearing-screening/</a></p>
<p><b>Mar. 3, 2020</b></p>	<p><b><u>Study Break – No class</u></b></p>
<p><b>Mar. 10, 2020</b></p>	<p><b>Approaches to Working with deaf/hearing impaired children</b></p> <ul style="list-style-type: none"> <li>• DEBATE: Use of visual supports vs. auditory-only training</li> <li>• American Sign Language</li> <li>• Signed Exact English</li> <li>• Cued Speech</li> <li>• Auditory Verbal Therapy (LSLS)</li> <li>• Total Language Approach</li> <li>• Bilingual/bicultural approach</li> </ul> <p><u>Readings:</u></p>

	<p>Gardiner-Walsh, S. &amp; Lenihan, S. (2017). An introduction to educating children who are deaf/hard of hearing: Chapter 2</p> <p>Chu et al., 2016: Addressing the 'type' and 'dose' in early intervention provided to children using cochlear implants: How much is enough?</p> <p>Mellon, N. K., Niparko, J. K., Rathmann, C., Mathur, G., Humphries, T., Napoli, D. J., ... &amp; Lantos, J. D. (2015). Should all deaf children learn sign language? <i>Pediatrics</i>, 136(1), 170-176.</p> <p>Smith, J. &amp; Wolfe, J. (2016). Should all deaf children learn sign language? <i>The Hearing Journal</i>, 10, pp. 18-24</p>
<b>Mar. 18, 2020</b>	<p><b>Auditory Neurological Development &amp; Introduction to (Re)habilitation</b></p> <ul style="list-style-type: none"> <li>• DEBATE: Early (0-6mo) vs. Later (12mo+) cochlear implantation</li> <li>• Critical periods for language development in children requiring implants</li> <li>• Neurological changes when these critical periods are not met</li> <li>• Critical periods for visual language (sign language)</li> <li>• Impact when these critical periods are not met</li> <li>• Optimizing outcome for language outcome for young children</li> <li>• Data on outcome for language for children with two CIs versus one CI</li> </ul> <p><u>Readings:</u></p> <p>Sharma, A., Dorman, M., Kral, A. (2005), The influence of a sensitive period on central auditory development in children with unilateral and bilateral cochlear implants, in <i>Hearing Research</i> 203, <i>Elsevier</i>, pp. 134-143 (Also available on the world-wide web at: <a href="http://www.sciencedirect.com">www.sciencedirect.com</a>)</p> <p>Sharma et al. (2015). Developmental and cross-modal plasticity in deafness: Evidence from the P1 and N1 event related potentials in cochlear implanted children.</p> <p>Additional readings on critical periods to be distributed</p>
<b>Mar. 26, 2020</b>	<p><b>Calculating Hearing Age, Evaluating, and Intervening with Babies and Young Children</b></p> <ul style="list-style-type: none"> <li>• DEBATE: Use of AAC vs. exclusive focus on signed/spoken language</li> <li>• When and how and why to calculate hearing age of young children</li> <li>• S-LP evaluation tools for very young children</li> <li>• Demo reports on very young children</li> <li>• Best practices applied to intervention of young children</li> <li>• An introduction to working with very young children with ANSD (Auditory Neuropathy Spectrum Disorder)</li> </ul> <p><u>Readings:</u></p> <p>Cole, B. &amp; Flexer, C. (2007). Children with hearing loss: Developing listening and talking. Chapter 6-7 pp. 166-223</p>
<b>March 31, 2020</b>	<p><b>Speech Acoustics &amp; Development of Auditory Skills in Children</b></p> <ul style="list-style-type: none"> <li>• DEBATE: Simultaneous bilingualism vs. Focus on L1</li> <li>• Practical application of speech acoustics in relation to actual children/actual</li> </ul>

	<p>audiograms</p> <ul style="list-style-type: none"> <li>• Understanding speech acoustic charts and formants</li> <li>• Understanding when a speech problem is due to a hearing access versus due to a speech sound disorder</li> <li>• Introduction to the development of listening skills in young children</li> <li>• Keys to success with auditory development / language development of young children</li> </ul> <p><u>Readings:</u> Handouts on speech acoustics and auditory development to be distributed</p>
<b>April 7, 2020</b>	<p><b>Issues with Older Children with Hearing Loss/Deafness</b> Guest Lecturer: Farha Hussain, M.Sc.(A), SLP(C), SLP at the Lethbridge-Layton-Mackay Rehab Centre</p> <ul style="list-style-type: none"> <li>• <u>DEBATE</u>: Specialized school settings vs. mainstreaming</li> <li>• Literacy and hearing loss/deafness (also literacy issues with ASL speakers)</li> <li>• Keys to success in education</li> <li>• Client-centered rehabilitation and empowerment</li> <li>• Special considerations with Inuit and Cree populations</li> <li>• Review, summary, questions</li> </ul> <p><u>Readings:</u> SAC: Speech Language Pathology and Audiology for First Nations Position Statement. Lederberg, A. R., Schick, B., &amp; Spencer, P. E. (2012, July 30). Language and Literacy Development of Deaf and Hard-of-Hearing Children: Successes and Challenges. <i>Developmental Psychology</i>.</p> <p>Additional readings to be distributed.</p> <p>Take home test distributed; to be handed in within one week (by midnight on April 16<sup>th</sup>, 2020). Possible to email take home from afar.</p>

## EVALUATION:

Students will be given a grade upon completion of the two sections of the course.

Assignment	Date	Sub Roles Targeted	Expected Performance Level
<b><u>Adult section:</u></b> Test – 30 %	Feb. 4, 2020	Foundational Principles Client Centeredness	Advanced beginner
Case Study – 20 %	Feb. 11, 2020	Foundational Principles Client Centeredness	
<b><u>Pediatric Section:</u></b> Group presentation:	Feb-April 2020	Foundational Principles	Advanced beginner



Debating issues in deafness – 20%		Client Centeredness Collaboration with other Professionals	
Take Home Exam – 30%	April, 2020	Foundational Principles Client Centeredness Assessment	

## McGILL POLICY STATEMENTS:

### ACADEMIC INTEGRITY

*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).*

### LANGUAGE OF SUBMISSION

*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.*

## ADDITIONAL STATEMENTS:

### USE OF SMART PHONES, TABLETS AND LAPTOPS

Students are permitted to use Smartphones, tablets, and computers in class for academic purposes e.g. taking notes, researching relevant information, calendar functions etc. They may not be used for social reasons e.g. texting, Facebook, Twitter, Instagram etc. If students are using technology for non-academic purposes in class they may lose the privilege of using these items in class.

### STUDENTS WITH DISABILITIES

As the instructor of this course I endeavor to provide an inclusive learning environment. However, if you experience barriers to learning in this course, do not hesitate to discuss them with me and the [Office for Students with Disabilities](#), 514-398-6009.