

Faculty of Medicine and Health Sciences and Disorders

School of **Communication Sciences**

Year 2 Winter 2023 SCSD 689 - Management Cranio-Facial Disorders Number of credits: 1 Credit Course Time: Friday 2:15 pm to 4:15 pm Location: SCSD Room 862

Instructor: Lisa Massaro, M.Sc.(A), SLP Office Phone: 514-992-1002 Office Hours: By appointment (please set up by email) Email: lisa.massaro@mcgill.ca

LAND ACKNOWLEDGEMENT

McGill University is located on land which has long served as a site of meeting and exchange amongst indigenous peoples, including the Haudenosaunee and Anishnabeg nations. McGill honours, recognizes, and respects these nations as the traditional stewards of the lands and waters on which we meet today.

COURSE DESCRIPTION/OVERVIEW:

Craniofacial disorders and the role of the speech-language pathologist in the clinical management of patients with these disorders in relation to the roles of other members of the cranio-facial team.

Instructor Message Regarding Course Delivery

- This course will be delivered in class unless the pandemic situation makes on-line delivery necessary. We understand that students have encountered many challenges during the pandemic, including social isolation. Returning to in-person classes will allow us to better support your learning, well-being, and sense of community.
- During the class, efforts will be made to foster student engagement through sharing of knowledge, case discussion and case analysis with particular care given to challenging areas that may have been impacted by the pandemic experience.
- Various resources are available via myCourses and include Guidelines for Students on Teaching, Learning, and Assessment and Learning Resources.
- Efforts have been made to ensure that readings and assignments in this course are manageable for students. However, students are encouraged to share with instructor any concerns they have with respect to the workload or if they are feeling overloaded. In this way, a common solution can be determined.]

LEARNING OBJECTIVES/OUTCOMES (COMPETENCIES):

UNIT ONE: Basic Requirements

The speech-language pathologist demonstrates knowledge of:

1.4 Counseling and Applied Psychology

1.4.iii Cultural and linguistic factors that may affect clinical relationships, assessment, and treatment outcomes; including but not limited to race, ethnicity, and gender identity.

1.4.iv The psychosocial effects of communication disorders on the client and significant others, including stigma.

UNIT TWO: Knowledge Expert

The speech-language pathologist demonstrates knowledge of:

2.6 Resonance Disorders

2.6.i Anatomy and physiology of the velopharyngeal sphincter and resonating cavities (pharynx, oral cavity, nasal cavity) and application of this knowledge to clinical practice.

2.6.ii The perceptual characteristics of normal versus abnormal resonance including hypernasality, hyponasality, cul-de-sac or mixed resonance, in addition to knowledge of the other perceptual characteristics of velopharyngeal dysfunction (e.g., audible/ turbulent nasal air emission, compensatory misarticulation, reduced intraoral pressure, dysphonia).

2.6.iii Etiologies associated with resonance disorders including structural causes (e.g., cleft lip/palate, craniofacial anomalies, adenoidectomy, nasopharyngeal obstruction), neurogenic factors (e.g., dysarthria, apraxia), and velopharyngeal mislearning (e.g., phoneme-specific).

2.6.iv Articulatory, vocal, phonological, linguistic, and psychosocial factors associated with velopharyngeal dysfunction and other resonance disorders.

2.6.v Communication profiles of subgroups of clients (e.g., CLP, 22q11.2 deletion syndrome) with velopharyngeal dysfunction and other resonance disorders.

2.6.vi The psychosocial, educational, and vocational impact of velopharyngeal dysfunction and other resonance disorders.

2.6.vii The impact of velopharyngeal dysfunction and other resonance disorders on other speech subsystems (e.g., respiratory, laryngeal, articulatory).

UNIT THREE: Clinical Expert: Cross-Cutting Assessment and Intervention Standards *The speech-language pathologist demonstrates knowledge of:*

3.2 Plan, conduct, and adjust an assessment:

3.2.ii Use principles of assessment to develop assessment plans (e.g., tools, strategies, resources, environment) that reflect background information about the client (including personal and environmental factors), known or suspected primary and concomitant disorders (e.g., medical, emotional), knowledge of normal and disordered communication or swallowing as well as risk factors for communication or swallowing disorders; modify this plan when appropriate.

3.2.iii Demonstrate knowledge of principles underlying clinical assessment, including standardized and nonstandardized procedures and their advantages, disadvantages, limitations, representativeness, and applicability to the individual management plan.

3.3 Analyze and interpret assessment results:

3.3.i Analyze formal, informal, quantitative, and qualitative assessment results, including accurate scoring and interpretation of standardized tests.

3.3.ii Formulate a diagnostic statement about the client's communication or swallowing skills, including the impact on daily activities and educational, vocational, and psychosocial needs; include functional prognosis, as appropriate.

3.5 Develop and implement a realistic, evidence-informed, and measurable intervention plan:

3.5.ii Develop specific, measurable, realistic, time-limited targets to reach the aims.

3.5.viii Refer to other healthcare or educational professionals as required; identify and recommend alternative services when client needs are beyond the professional limitations of the speech-language pathologist.

3.7 Consider sociodemographic and sociocultural factors in all aspects of assessment and intervention, including but not limited to factors such as race, ethnicity, gender identity, and differential access to services by Indigenous and other underserved populations; and intersections among these factors, communication, and swallowing.

UNIT THREE: Clinical Expert: Cross-Cutting Assessment and Intervention Standards The speech-language pathologist demonstrates knowledge of:

4.6 Resonance Disorders

4.6.i Assess velopharyngeal and resonance function, and impact on speech characteristics, using perceptual, acoustic, and articulatory measures.

4.6.ii Identify the need for aerodynamic and instrumental assessment (e.g., Multiview video fluoroscopy, naso/endoscopy).

4.6.iii Develop evidence-informed recommendations, including potential referrals to other professionals (e.g., speech-language pathologist at cleft palate/craniofacial centre, plastic surgery, genetics, otolaryngology, other rehabilitation professionals).

4.6.iv Describe and summarize indications for surgical, prosthetic, and nonsurgical interventions for resonance disorders.

INSTRUCTIONAL METHODS:

- Lectures with student participation in hands-on activities in the classroom.
- Practical activities will include phonetic transcriptions, group brainstorming, answering practical questions, group presentations and case study analysis.
- MyCourses will be used as the platform for course content. Students will need access to a computer and internet.
- Class PowerPoint presentations will be available before each class. They are a broad summary of the material that will be covered. In order to understand their content, participation in classes, discussions and activities will be necessary. The PowerPoint presentations are protected by copyright and cannot be posted anywhere or shared (see statement at end of course outline).
- Assignments can be found in "Assignment" section of myCourses. Assignment submissions can be made there for answers to "Practical Question #1" and "Practical Question #2".
- The group presentation on a Craniofacial syndrome, sequence or association can be emailed to the instructor in the format described.
- The final exam will be available via myCourses and will be done from home. It is expected that students complete the exam in an individual fashion (i.e., alone).

Please note that plans are subject to change based on public health protocols.

Expectations for Student Participation

- Attend all classes. If valid reason for absence, please contact instructor by email to inform her.
- Read all posted readings prior to class.
- Print materials/test copies as required in the weekly description.
- Reflect and share ideas/questions in class and group discussions.
- Employ respectful and professional communication.
- Verify their emails several times per week any updates or changes.

REQUIRED COURSE MATERIALS

Required readings for each week are posted in MyCourses and are noted in the weekly schedule. They will be put in the section "Readings" pertaining to the week for which they should be read prior to class. Readings have been limited to essential material pertinent to learning.

OPTIONAL COURSE MATERIALS

Supplemental materials to enrich learning are listed below. Articles are posted in MyCourses. Books or resource material can be accessed either in the SCSD material room or via the McGill Library.

Core curriculum for assessment and treatment of craniofacial-clefting conditions American Cleft Palate Association, www.acpa-cpf.org.

Henningsson, G., Kuehn, D. P., Sell, D., Sweeney, T., Trost-Cardamone, J. E., Whitehill, T. L. (2008). Universal Parameters for Reporting Speech Outcomes in Individuals with Cleft Palate. Cleft Palate-Craniofacial Journal, 45(1), 1-17.

Kummer, Ann W. (2013). Cleft Palate and Craniofacial Anomalies: Effects on Speech and Resonance (3rd ed.). U.S.A: Thompson Delmar Learning.

Peterson-Falzone, S. J., Trost-Cardamone, J.E., Karnell, M.P. & Hardin-Jones, M.A. (2017). The Clinician's Guide to Treating Cleft Palate Speech-2nd Edition. U.S.A.: Mosby, Elsevier.

Sulprizio, Sandra (2010). The Source for Cleft Palate and Craniofacial Speech Disorders. East Moine, IL: LinguiSystems.

Class	Date	Description	Course Materials	Assignments Due
1	Jan. 6, 23	 Define craniofacial disorders. Review anatomy and physiology of orofacial structures and velopharyngeal valve. Understand potential impacts of craniofacial difference on resonance, speech sounds/articulation and voice. 	 Review notes and Power Point slides from Anatomy & Physiology: Speech and Hearing Readings: Forrest, C. R., Hopper, R. A. (2013). Craniofacial Syndromes and Surgery. Plastic and Reconstructive Surgery Journal, 131(1), read p. 86- 91 (end of "Psychosocial" se paragraph). Salt, H. Claessen, et al (2020). Speech production in young children with tongue-tie. Int. J. of Ped. ORL, 134, p. 1-6. 	
2	Jan. 13, 23	 Recognize different types of cleft lip and/or palate and submucous cleft palate. Become familiar with race, prevalence, sex distribution effects related to cleft lip/palate. Describe physical management of cleft lip and/or palate and velopharyngeal dysfunction. Understand team care in craniofacial differences & appreciate role and expertise of SLP on team. 	Review notes and slides from Genetics Class: "Embryology of craniofacial structures" & "Embryology of the ear" Readings: 1. Peterson-Falzone, S. J. (2011). Types of Clefts and Multianomaly Craniofacial Conditions, Seminars in Speech and Language, 22(20), p. 96-98 "Embryological development of CL/P". 2. Kummer, Ann W. (2018). A Pediatrician's Guide to Communication Disorders Secondary to Cleft Lip/Palate. Pediatr Clin N Am, p.32-42 (prevalence and types of clefts, excellent pictures), p. 45 (Treatment-end of section on "Speech therapy").	
3	Jan. 20, 23	1. Develop knowledge related to feeding considerations and	Readings: Peterson-Falzone, S. J. (2011).	Jan. 19, 2023 Practical

COURSE CONTENT

		 adaptations. 2. Understand and describe speech and language development and characteristics. 3. Recognize developmental, educational, vocational, and psychosocial aspects. 4. Describe various syndromes, sequences and associations known to have craniofacial differences. 5. Adapt case history taking craniofacial population. 	Types of Clefts and Multianomaly Craniofacial Conditions, Seminars in Speech and Language, 22(20), p. 98-114.	Question Submit to "Assignments" 20%
4	Jan. 27, 23	 Craniofacial population. Present and describe craniofacial and physical features, speech- language and developmental issues in various syndromes, sequences and associations known to have craniofacial differences. Understand components of assessment particular to CFD Explore assessment tools used with CFD. 	 Bring pocket mirror to class. Handouts available on MyCourses for Weeks 4 & 5 (students should print copy of each document): VeloPharyngeal Impairment Effects on Life Outcomes (VELO) Intelligibility in Context Scale (ICS) Universal Parameters for Reporting Speech Outcomes in Individuals with Cleft Palate. Alexander et al. (2006). American English Sentence Sample (Judith Trost-Cardamone) Oral Peripheral Evaluation (Linguisystems) Readings: Kummer, Ann W. (2016). 	Jan. 25, 23 *email send slides to L. Massaro by Jan. 25, 2023 Jan 27, 23: Small group presentation on assigned craniofacial population 20%
5	Feb. 3, 23	1. Analyze and interpret speech	Evaluation of Speech and Resonance for Children with Craniofacial Anomalies. Facial Plast Surg Clin N Am, 24, 445-451. Bring documents printed for	
		 findings. 2. Review a clinical conclusion, prognostic statement and recommendations based on an evaluation. 3. Understand intervention techniques for CFD based on age and speech difficulty. 	assessment purposes from last week. Readings: 1. Kummer, Ann W. (2011). Speech Therapy for Errors Secondary to Cleft Palate and Velopharyngeal Dysfunction. Seminars in Speech and Language, 32(2), 191-198.	
6	Feb. 17, 23	1. Understand intervention techniques for CFD based on age		Feb. 17, 2023 (17h) to Feb.

and speech difficulty.	23, 2023
2. Select and practice specific	(11h59).
treatment techniques according to	
speech sound or resonance errors.	Final Take-
	Home Exam
	(60%)

EVALUATION

This course is assigned a pass/fail grade. Attendance and participation in all classes are mandatory, unless valid reason as discussed with instructor.

Grading Criteria:

In order to receive a PASS in the SCSD 689 the students must receive a PASS (65% or better) in all areas:

Course Work:

- A PASS on assignments and final examination (multiple choice, take-home exam)
- Attendance and participation in all lectures and classroom activities
- No extensions will be provided unless discussed with and approved by course lecturer.

Name of Assignment or Exam	Targeted Competencies	Due Date	% of Final Grade
Practical Question: Select a practical question from a choice of questions provided during lecture 1. See scoring rubric below for more details*. Preparation time will be approximately 1 hour and should be completed on individual bases. Submissions via myCourses "Assignments".	2.6.i 2.6.ii 2.6.iii 2.6.v 2.6.vii	Jan. 19, 2023	20%
Small group presentation on assigned craniofacial population. Topic will be given at end of Class 3 and a model will be provided by the instructor. The presentation will consist of 4 slides summarizing craniofacial features, other physical features, speech-language issues and developmental issues in the assigned syndrome, sequence or association. See scoring rubric below**. Time to prepare the presentation will be approximately 1-2 hours. Group presentation will occur in class and will be approximately 5-10 minutes.	2.6.iii 2.6.iv 2.6.v 2.6.vi 2.6.vii	Jan. 25, 23	20%

Slides will be shared with class to provide resources on the various populations.			
Final Multiple Choice Take-Home Exam. Exam will take less than 2 hours to complete. The exam will be available via myCourses as of Feb. 17, 2023, 17h and will be available for one week. It will close on Feb. 29, 2023 at 11h59. The exam is to be completed individually. It is an open- book exam. The course lecturer will be available via email or phone (if emergency technical problems) throughout the examination period.	Any items covered in learning objectives or competencies related to this course (see section "Learning Objectives- Competencies".	Feb. 23, 23	60%

*Scoring Rubric for Practical Question

Elaborate or supply relevant	Base response of two different	Provide appropriate referencing
information on selected	sources. You can choose from	of information where necessary
practical question. Include 3-5	course information (1 source),	(i.e., bibliography).
facts or arguments to support	reliable scientific article (review	1/10
your idea. Employ up to 250	article or RCT), or reliable expert	
words.	source (textbook listed in	
6/10	supplemental readings or other).	
	3/10	

**Scoring Rubric for Presentation on Craniofacial Syndrome, Sequence or Association

Slide 1:	Slide 2:	Slide 3:	Slide 4:	Other
Complete	Complete	Complete	Complete	Ability for
information	information	information	information	team to
regarding	regarding other	regarding speech-	regarding	respond to
craniofacial	features.	language issues.	developmental	relevant
features.			issues.	question.
2/10	2/10	2/10	2/10	2/10

MCGILL POLICY STATEMENTS

Language of Submission

In accord with McGill University's <u>Charter of Students' Rights</u>, students in this course have the right to submit in English or in French any written work that is to be graded. This does not apply to courses in which acquiring proficiency in a language is one of the objectives." (Approved by Senate on 21 January 2009).

Conformément à <u>la Charte des droits de l'étudiant</u> de l'Université McGill, chaque étudiant a le droit de soumettre en français ou en anglais tout travail écrit devant être noté, sauf dans le cas des cours dont l'un des objets est la maîtrise d'une langue.

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 <u>Code of Student Conduct</u> <u>and Disciplinary Procedures</u>" (Approved by Senate on 29 January 2003) (See <u>McGill's guide to academic honesty</u> for more information).

L'université McGill attache une haute importance à l'honnêteté académique. Il incombe par conséquent à tous les étudiants de comprendre ce que l'on entend par tricherie, plagiat et autres infractions académiques, ainsi que les conséquences que peuvent avoir de telles actions, selon le Code de conduite de l'étudiant et des procédures disciplinaires (pour de plus amples renseignements, veuillez consulter le guide pour l'honnêteté académique de McGill.

Course Materials

© Instructor-generated course materials (e.g., handouts, notes, summaries, exam questions) are protected by law and may not be copied or distributed in any form or in any medium without explicit permission of the instructor. Note that infringements of <u>copyright</u> can be subject to follow up by the University under the Code of Student Conduct and Disciplinary Procedures.

Accessibility

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 <u>Office for Students with Disabilities</u>, 514-398-6009.

Many students may face mental health challenges that can impact not only their academic success but also their ability to thrive in our campus community. Please reach out for support when you need it; many <u>resources</u> are available on-campus, off-campus and online."

If you have difficulty affording food or if you lack a safe and stable place to live and believe that this may affect your performance in this course, I encourage you to contact the <u>Dean of Students</u> who can connect you with support services.

<u>End-of-course evaluations</u> are one of the ways that McGill works towards maintaining and improving the quality of courses and the student's learning experience. You will be notified by e-mail when the evaluations are available. Please note that a minimum number of responses must be received for results to be available to students.