

McGILL UNIVERSITY Faculty of Medicine School of Communication Sciences & Disorders 2019 Fall

VOICE DISORDERS SCSD 639

Number of Credits: 3 Credits

Course Time: Monday 8:30am - 10:30am; Lab: 10:45am-11:45am

Location: SCSD, Room 869

Instructor: Nicole LI-JESSEN, Ph.D

Office: Rm 815 Office Phone: 514-398-5933

Office Hours: By appointment (set up by phone or by email)

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COURSE OVERVIEW:

Voice Disorders is a 3-credit graduate course that provides an overview of voice disorders, including causes, assessment, and treatment across the life span. The course also addresses the role of the speech-language pathologist in the multidisciplinary handling of patients with voice problems.

The general purpose is to provide *rudimentary knowledge and skills* in assessment and treatment of voice problems. The course is designed to provide professional students in speech-language pathology with basic information about (1) the personal and societal relevance of voice problems; (2) pathologies affecting voice; (3) basic approaches to evaluation of voice problems; (4) basic science foundations of voice therapy; (5) models of behavioral, pharmaceutical, and surgical treatment of voice problems.

LEARNING OBJECTIVES

ROLE 1: CENTRAL ROLE/CONTENT EXPERT

| Foundational Principles | | | |
|---|---|--|--|
| Demonstrate a basic knowledge of biomedical and physical sciences relevant to voice anatomy, physiology and disorders. | | | |
| Apply the knowledge of anatomy, neuroanatomy, and physiology of the larynx and of normal and disordered voice production and application of this knowledge to clinical practice. | Clinical case study; Voice workshop; Final exam | | |
| Identify factors and processes which may impact on voice production (e.g., removal of larynx, hearing loss, neuromuscular involvement, musculoskeletal tension, vocal fold pathology, | Clinical case study; Voice workshop; Final exam | | |

| systemic conditions, affective states, environmental factors). | |
|---|---|
| Identify psychosocial, educational and vocational impact of voice disorders. | Clinical case study; Voice workshop; Final exam |
| Understand the physiological basis, the perceptual and acoustical characteristics of alaryngeal speech and speech produced via esophageal means, tracheoesophageal prostheses, and/or mechanical devices. | Voice lab; Final exam |

| Assessment Develop an assessment plan to evaluate voice disorders. | | | |
|---|---------------------------------|--|--|
| | | | |
| Evaluates options for alaryngeal sound production when appropriate. | Final exam | | |
| Formulate a diagnostic and prognostic statement based on the medical diagnosis, voice assessment and the impact of physical, emotional, vocational, and environmental factors that influence the client's voice production. | Clinical case study; Final exam | | |

| Intervention Planning | | | | |
|---|--|--|--|--|
| Develop a treatment plan for voice disorders. | | | | |
| Demonstrate common voice therapy techniques, e.g., resonant voice, straw phonation and laryngeal massage. | Clinical case study; Voice lab; Voice workshop | | | |
| Demonstrate knowledge of different approaches to voice intervention, and alaryngeal voice production, their theoretical bases, advantages, disadvantages, and limitations. | Voice workshop; Final exam | | | |
| Select and apply an appropriate approach for treatment of the client's voice disorder. | Clinical case study; Final exam | | | |
| Formulate an appropriate service delivery model (e.g., regular review assessments, direct individual therapy, direct group therapy, referral to a multidisciplinary program) for treatment of the client's voice disorder | Clinical case study; Voice workshop; Final exam | | | |

ROLE 2: COMMUNICATOR

| Oral and Written Communication | | |
|--|----------------|--|
| Deliver effective and evidence-based information on the topic of voice disorders to public readers. | Voice workshop | |
| Present effective client-centered therapeutic communication through effective dynamic interactions with clients and other individuals in the public community. | Voice workshop | |

ROLE 3: COLLABORATOR

| Collaboration with Other Professionals | | |
|---|-------------------------------------|--|
| Interact according to different responsibilities of team members. | | |
| Collaborate effectively with other team members, participate equally in the work, and support positive team dynamics. | Clinical case study; Voice workshop | |

ROLE 5: SCHOLAR

| Evidence Informed Practice | | |
|--|---------------------|--|
| Integration of Research and Other Evidence Critically into Service Provision | | |
| Generate evidence-based assessment and treatment plans related to voice science and disorders. | Clinical case study | |

ROLE 7: PROFESSIONAL

| Professional Integrity | | |
|--|----------------|--|
| Embrace Appropriate Attitudes and Behaviours, Integrity, and to the Promotion of the Public Good | | |
| Demonstrate professional standards of behavior during the interaction with clients. | Voice workshop | |

Note: ROLE 4: ADVOCATE and ROLE 6: MANAGER are not specifically targeted in this class.

INSTRUCTIONAL METHOD

Lectures, laboratory, demonstrations, assignments, and student participation

REQUIRED COURSE MATERIALS

Colton, R. H., Casper, J. K., & Leonard, R. (2011). Understanding Voice Problems: A Physiological Perspective for Diagnosis and Treatment (4th ed). Baltimore, MD: Lippincott Williams & Wilkins. ISBN-10: 1609138740. ISBN-13: 978-1609138745

OPTIONAL COURSE MATERIALS

Additional readings: will be available on myCourses and can be obtained electronically through the McGill libraries.

<u>Tentative Course Outline and Schedule</u> (Subject to change depending on student response and needs)

| Date | Week | Lecture | In-Class Activity/ Lab | Online Modules ** | Assignment Due |
|------------|------|--|---|----------------------------|--|
| Sept 9 | 1 | Overview of Voice Problems and Voice Physiology | Overview of Voice Lab and Perceptual Voice Evaluation (Mccrum) *Bring your voice samples from the Super Lab* (starts at 8:30 a.m.) | - | |
| Sept 16 | 2 | Voice Evaluation | Clinical Case Study Group Discussion #A1 (45-min) | Anatomy 1-3 | |
| Sept 23 | 3 | Voice Evaluation | Extended 2-hr Voice Lab (Mccrum) 1. Perceptual Voice Evaluation 2. Acoustic Voice Evaluation *Bring your voice samples from the Super Lab* | Anatomy 4-6 | |
| Sept 30 | 4 | Overview of Vocal Fold Pathologies | Clinical Case Study Group Discussion #A2 (60-min) | VF Pathologies 1-2 | Case Study Assessment (on-site) |
| Oct 7 | 5 | Overview of Functional Voice Disorders | Clinical Case Study Group Discussion #T1 (45-min) | VF Pathologies 3-4 | |
| Oct 14 | | | No Class – Thanksgiving | | |
| Oct 21 | 6 | Trip to RVH Voice Cli | 3-hr Voice Lab (Mccrum) nic with Dr. Karen Kost, Ms. Marielle na Waters (** time to be confirmed**) | Functional Voice 1-2 | Workshop Proposal |
| Oct 28 | 7 | Overview of Neurologically- based Voice Disorders | Clinical Case Study Group Discussion #T2 (60-min) | Neuro Voice 1-2 | Case Study Intervention Plan (on-site) |
| Nov 4 | 8 | Extended 3-hr Voice Lab (Mccrum) 1. Review Perceptual Voice Ratings 2. Voice Therapy Techniques | | | |
| Nov 11 | 9 | Voice Therapy | Workshop Materials Review (McCrum and Li-Jessen) | | Workshop Presentation Slides |
| Nov 18 | 10 | Voice Therapy Surgical and Medical Management of Voice Disorders | Professional Voice Users: Case Studies (McCrum) | | |
| Nov 25 | 11 | by Ms. Eu | ice Disorder Guest Lecture ugenie Prefontaine (2 hr) al Management of Voice Disorders | | |

| Dec 2 | 12 | Laryngectomy by Ms. Gina Mills | Voice Lab (Mills) | |
|----------|----|-----------------------------------|------------------------------------|--|
| Dec 3 | 13 | Laryngectomy by Ms. Gina Mills | Voice Lab (Mills) | |
| TBD | | | Final Written Exam (Cumulative) | |

^{*} Additional readings will be assigned before the class.

EVALUATION

Grades will be determined from the following assignments. Assignment instructions will be given during the course. Please refer to the course outline and Wikipedia course page for assignment deadlines.

| Assignment | Competency(ies) Targeted | Expected Performance Level |
|---------------------------|---|----------------------------------|
| Online modules (25%) | Basic knowledge of anatomy and physiology of normal and disordered voice functions. | Advanced beginner |
| Clinical case study (25%) | Apply fundamental principles of assessment and treatment of voice disorders in special populations. | Advanced beginner |
| Voice workshop (20%) | Develop and implement a group voice therapy workshop for targeted populations. | Advanced beginner |
| Final exam (20%) | Formulate a diagnostic and prognostic statement based on the medical diagnosis, voice assessment and the impact of physical, emotional, vocational, and environmental factors that influence the client's voice production. Formulate an appropriate treatment plan of the client's voice diagradar. | Competent |
| Voice lab (10%) | client's voice disorder. Implement appropriate perceptual and acoustic measures for assessing voice production. Demonstrate common voice therapy techniques, e.g., resonant voice, straw phonation and laryngeal | Advanced beginner |

^{**} Online modules are due before class as they will prepare you for the in-class lecture and the class activity of the day.

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/) 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

- The <u>University Student Assessment Policy</u> exists to ensure fair and equitable academic assessment for all students and to protect students from excessive workloads. All students and instructors are encouraged to review this Policy, which addresses multiple aspects and methods of student assessment, e.g. the timing of evaluation due dates and weighting of final examinations.
- Instructor-generated course materials (e.g., handouts, notes, summaries, exam questions, etc.) 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 copyright can be subject to follow up by the University under the Code of Student Conduct and Disciplinary Procedures.
- 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.
- <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 email when the evaluations are available. Please note that a minimum number of responses must be received for results to be available to students.
- In the event of extraordinary circumstances beyond the University's control, the content and/or evaluation scheme in this course is subject to change.

LATE ASSIGNMENTS

Students are expected to complete assignments, exams, and presentations at times assigned by instructors. In the event that a student is unable to complete work on time, s/he should contact the instructor and provide a reason for requesting an extension prior to the deadline.

Instructors will indicate to the student whether their reason is sufficient to warrant an extension. All medical excuses must be followed by a letter from a doctor specific to that particular absence. Unexcused incomplete work (assignment, exams, and presentations) will result in failure or reduction in grade points.

ABSENCE FROM EXAMINATION

Supplemental examination will only be given to students who have a medical certificate, or are absent for religious holidays.