Neuromotor Speech Disorders, Fall 2020

CSD 724, 2 credits

Class meeting time: 8:00 a.m. – 9:40 a.m. Mondays on Zoom

**Professor:** Julia Fischer, Ph.D., <u>ifischer@uwsp.edu</u>

Office: 037 CPS

Office Hours: After class and throughout the week via meeting request.

**Course Description** 

This course examines developmental and acquired dysarthria and acquired apraxia of speech (AOS) in the following areas: neurologic etiology; differential diagnosis; assessment and

treatment.

ASHA 2020 Certification Standards. Successful completion of course requirements (i.e., a grade of B or better) will result in meeting the following standards. If these standards are not met, you will receive a grade of incomplete in the course until all are met.

The applicant must have demonstrated knowledge of communication and swallowing disorders and differences, including the appropriate etiologies, characteristics, anatomical/physiological, acoustic, psychological, developmental, and linguistic and cultural correlates in the following areas: • speech sound production, to encompass articulation, motor planning and execution, phonology, and accent modification; • fluency and fluency disorders; • voice and resonance, including respiration and phonation; • receptive and expressive language to include phonology, morphology, syntax, semantics, pragmatics (language use and social aspects of communication), prelinguistic communication, paralinguistic communication (e.g., gestures, signs, body language), and literacy in speaking, listening, reading, and writing; • hearing, including the impact on speech and language; • swallowing/feeding, including structure and function of orofacial myology, oral, pharyngeal, laryngeal, pulmonary, esophageal, gastrointestinal, and related functions across the life span; • cognitive aspects of communication, including attention, memory, sequencing, problem solving, and executive

functioning; • social aspects of communication, including challenging behavior, ineffective social skills, and lack of communication opportunities; and • augmentative and alternative communication modalities.

# Standard IV-D

### Prevention

1. Identify causes and risk factors for neuromotor speech disorders.

#### Assessment

- List examples of formal and informal neuromotor speech assessment tools.

  Intervention
- 3. Explain intervention approaches for people with dysarthria and AOS.

### Standard V-B

- 1. c. Administer, score, and interpret tests designed to assess neuromotor speech disorders.
- 2. Make treatment decisions based upon the results of clinical and instrumental assessment results and evidence in the literature.

# Required textbook and resource

Freed, D. B. (2020). *Motor Speech Disorders: Diagnosis and Treatment* (3rd ed.). San Diego, CA: Plural Publishing.

Plural+Plus Companion Website, Motor Speech Disorders: Diagnosis and Treatment (3rd ed.).

# Required readings (will be added to e-Reserve on Canvas)

Allison, K. M., & Hustad, K. C. (2018). Data-driven classification of dysarthria profiles in children with cerebral palsy. *Journal of Speech, Language, and Hearing Research, 61*(12), 2837-2853. doi.org/10.1044/2018\_JSLHR-S-17-0356

Molloy, J., & Jagoe, C. (2019). Use of diagnostic criteria for acquired apraxia of speech: A scoping review. *International Journal of Language and Communication Disorders*.

DOI:10.1111/1460-6984.12494

Romano, N., Federici, M., & Castaldi, A. (2019). Imaging of cranial nerves: A pictorial overview. *Insights into Imaging, 10*:33, 1-21. doi:10/1186/s13244-019-0719-5

#### **Recommended Resources**

LaPointe, L. L. (2012). *Atlas of Neuroanatomy for Communication Science and Disorders*. New York: Thieme Medical Publishers.

Yorkston, K. M., Miller, R. M., Strand, E. A., & Britton, D. (2013). *Management of speech and swallowing in degenerative diseases* (3rd ed.). Austin, TX: PRO-ED.

#### Canvas

The syllabus, PowerPoint handouts, resources, assignments, exams and grades will be available on Canvas.

# **Course requirements**

- 1. **Neurology quiz:** 10% of final grade.
- 2. **Dysarthria quiz:** 20% of final grade.
- 3. **Dysarthria/Apraxia of Speech quiz**: 20% of final grade.
- 4. **Assessment Project**: due no later than <u>10/19/2020</u>. Part A: You will watch a video demonstrating administration of the AIDS intelligibility test. You will calculate the speaker's level of intelligibility at the word and sentence level and calculate this rate of speech. Part B: You will watch a video demonstrating administration of the ABA-2. You will complete the recording form and score his performance. Part C: Upload your completed assessment forms and a typed reflection paper (about 1 page) describing what you learned from this project. This project will be worth 25% of your final grade.

- 5. **Treatment Project:** This project will count for 25% of your final grade and is due no later than **11/30/2020**. Read 2 of the following articles about dysarthria treatment. Write a 2-3-page paper summarizing each article and then compare and contrast the results of the studies.
- Park, S., Theodoros, D., Finch, E., & Cardell, E. (2016). Be Clear: A New Intensive Speech

  Treatment for Adults With Nonprogressive Dysarthria. *American Journal of Speech-Language Pathology*, 25(1), 97–110. doi: 10.1044/2015 ajslp-14-0113
- Pennington, L., Roelant, E., Thompson, V., Robson, S., Steen, N., & Miller, N. (2013). Intensive dysarthria therapy for younger children with cerebral palsy. *Developmental Medicine & Child Neurology*, *55*(5), 464–471. doi: 10.1111/dmcn.12098
- Pennington, L., Lombardo, E., Steen, N., & Miller, N. (2017). Acoustic changes in the speech of children with cerebral palsy following an intensive program of dysarthria therapy\*.

  \*\*International Journal of Language & Communication Disorders, 53(1), 182–195. doi: 10.1111/1460-6984.12336
- Vogel, A. P., Stoll, L. H., Oettinger, A., Rommel, N., Kraus, E.-M., Timmann, D., ... Synofzik, M. (2019). Speech treatment improves dysarthria in multisystemic ataxia: a rater-blinded, controlled pilot-study in ARSACS. *Journal of Neurology*, *266*(5), 1260–1266. doi: 10.1007/s00415-019-09258-4
- Yorkston, K., & Baylor, C. (2017). Incorporating the Principles of Self-Management into Treatment of Dysarthria Associated with Parkinson's Disease. *Seminars in Speech and Language*, *38*(03), 210–219. doi: 10.1055/s-0037-1602840

## **Student Concerns**

If a student has a concern about a course or instructor, the first step is to talk to the instructor. If the situation remains unresolved, the student should talk to the Department Chair of the department in which the course is taught. Because I am the current Department Chair in the Communication Sciences and Disorders Department, students with any concerns about me as the instructor of the course should contact the Assistant Dean of the School of Health Sciences

and Wellness or the Dean of the College of Professional Studies. Students can also contact the Dean of Students in 212 Old Main.

# Professor Fischer's expectations of students taking this course:

- 1. She expects you will attend all scheduled classes for this course. You are responsible for all material presented in class. Please contact her if you will miss class for an extended period of time.
- 2. She expects you to act professionally in class and out of class. Your behavior should reflect decisions you would make similar to working at a job in this profession. Use formal professional language in all correspondence and communication. She expects cell phones to be turned off and put away during class. If you are expecting a call and feel you need to answer during class, talk to her before the class begins. Texting is prohibited during class. She also expects email and social media software to be closed at all times if you use a computer during class. She appreciates videos on during class to see facial expressions for feedback but understands if students need a video break during class meetings.
- 3. She expects you to complete *all required readings* and stay current with your readings and assignments to perform your best on course requirements.]
- 4. She expects you meet all course requirement due dates. You must contact Professor Fischer **before** missing a deadline or you will receive a failing grade on that requirement.
- 5. She expects clear and concise written language for all course requirements. Written correspondence is often the method of communication among professionals. Your written language reflects your knowledge, attitude, dedication, and work ethic. Assignments are graded on language content (vocabulary, word usage) and writing style (spelling, grammatical structure, paragraph cohesion). Anyone needing help with written language is encouraged to contact Professor Fischer early in the semester to discuss ways to improve your written expression. She also suggests making an appointment at the Tutoring-Learning Center located in the University Learning Resources Center, 715-346-3568.
- 6. Inform Professor Fischer about any disability that may impact your performance in this class. She will make any necessary accommodations for each student according to their needs. Students with disabilities should contact the Office of Disability Services during the first 2 weeks of the semester to request accommodations.
- 7. Notify Professor Fischer within the first 3 weeks of the semester to request a change to course requirements for religious beliefs according to UWS 22.
- 8. Lecture materials and recordings for CSD 765 are protected intellectual property at UW-Stevens Point. Students in this course may use the materials and recordings for their

personal use related to participation in this class. Students may also take notes solely for their personal use. If a lecture is not already recorded, you are not authorized to record my lectures without my permission unless you are considered by the university to be a qualified student with a disability requiring accommodation. [Regent Policy Document 4-1] Students may not copy or share lecture materials and recordings outside of class, including posting on internet sites or selling to commercial entities. Students are also prohibited from providing or selling their personal notes to anyone else or being paid for taking notes by any person or commercial firm without the instructor's express written permission. Unauthorized use of these copyrighted lecture materials and recordings constitutes copyright infringement and may be addressed under the university's policies, UWS Chapters 14 and 17, governing student academic and non-academic misconduct.

# **Safety Information**

**COVID-19**: complete the daily screening form online each day before you come to campus. Wear your cloth face covering in the Clinic at all times. Follow the traffic flow patterns and capacity limits in the Clinic.

In the event of a **medical emergency**, call 911 or use red emergency phone located in the middle hallway in the department. Offer assistance if trained and willing to do so. Guide emergency responders to victim.

In the event of a **tornado warning**, proceed to the lowest level interior room without window exposure which is the middle hallway in the department. Avoid wide-span rooms and buildings.

In the event of a **fire alarm**, evacuate the building in a calm manner. Meet at the College of Professional Studies Sign on the Fourth Avenue. Notify instructor or emergency command personnel of any missing individuals.

**Active Shooter** – Run/Escape, Hide, Fight. If trapped hide, lock doors, turn off lights, spread out and remain quiet. Follow instructions of emergency responders.

See UW-Stevens Point Emergency Management Plan at <a href="https://www.uwsp.edu/rmgt">www.uwsp.edu/rmgt</a> for details on all emergency response at UW-Stevens Point.

# Grades

I determine grades by converting accumulated points into percentage scores. I assign percentage scores to letter grades as follows. A grade of 'B' or higher is considered passing in this graduate school program.

Α	95-100	B-	80-82
A-	90-94	C+	77-79
B+	87-89	С	73-76
В	83-86	C-	70-72

# **Tentative Course Schedule**

Date	Topic	Reading & Companion Website Slides, Image Bank
9/14	Motor Speech Disorders, Motor system	Chapters 1, 2
9/21	Motor system	Chapter 2; Romano, Federici &
		Castaldi
9/28	Motor system	
Week of October 5th	Neurology Quiz	Canvas
10/5	Evaluation of motor speech disorders	Chapter 3
10/12	Evaluation of motor speech disorders	Allison & Hustad
10/19	Flaccid Dysarthria	Chapter 4
10/26	Spastic Dysarthria, UUMN Dysarthria	Chapters 5, 6
11/2	Ataxic Dysarthria	Chapter 7
Week of November 9th	Dysarthria Quiz	Canvas

11/9	Hypokinetic Dysarthria, Hyperkinetic	Chapters 8, 9
	Dysarthria	
11/16	Mixed Dysarthria	Chapter 10
11/23	AOS	Chapter 11
11/30	AOS	Molloy & Jagoe
12/7	Differential Diagnosis	
12/16	Dysarthria/Apraxia of Speech Quiz	Canvas