

SLP 514 Dysphagia Fall 2019

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Office Hours: Monday, Wednesday, 9:00 – 3:00 Central Time and by appointment	Class Schedule: Wednesdays 7:00 – 8:00 pm. Web

How to reach me: I am most easily reached by email, and check it multiple times throughout the day. I do not consider contact with you to be a “bother”. In fact, I invite you to talk with me frequently about our course content and your impressions of what you’re learning. Dysphagia is a complex topic, and sometimes a conversation can help illuminate an idea and support your learning.

Course Description: CD 514 will review anatomy and physiology relevant to the swallowing process, discuss normal swallowing function and development, explore disordered swallowing, and present assessment and therapy strategies/techniques. Case studies and clinical observations of patients with dysphagia will prepare students for clinical placement.

Required Text:

Groher, M., & Crary, M. (2015). *Dysphagia: Clinical Management in Adults and Children*. (2nd ed). Mosby Publishing. ISBN: 9780323187015

We WILL use this text in our course, and there will be exam questions drawn from it. Buy it. Read it!

Not required: (An option if you want more content on pediatric dysphagia)

Arvedson, J. & Brodsky, L. (2001). *Pediatric Swallowing and Feeding*. (2nd ed) Edition. Delmar. ISBN 0-7693-0076-6

Course Elements	Points
Assignments (8)	225
<u>Exams</u> (2)	<u>75</u>
Total	300

Core Objectives and ASHA Knowledge and Skills Acquisition (KASA)

Performance Indicators

Core Objectives:

- a. Define terminology relevant to study of dysphagia.
- b. Demonstrate understanding of the physiological and anatomic bases for swallowing.
- c. Explain the normal processes of swallowing in adult and pediatric populations.
- d. Explain the etiological bases of swallowing disorders.
- e. Describe disorders and remediation techniques in pediatric and adult populations.
- f. Analyze swallowing function based on videofluorographic, endoscopic, and/or clinical evaluation.
- g. Demonstrate interview, case history, basic counseling and assessment techniques.
- h. Implement principles of writing evaluation reports, including organization, information selection, synthesis, analysis, specificity and clarity.
- i. Demonstrate ability to develop a plan of treatment for dysphagia patients.
- j. Demonstrate ability to analyze current dysphagia research and explain relevance to SLP practice.

KASA Standard	Core Objective Addressed	Evaluation
III.B. Demonstrate knowledge of basic swallowing processes, including their biological, neurological, acoustic, psychological, developmental, and linguistic and cultural bases.	a, b, c	Quiz, Exam
III.C. Demonstrate knowledge of the nature of swallowing disorders, including the etiologies and characteristics of oral, pharyngeal, esophageal, and related functions, such as oral function for feeding.	d, e	Exam
III.D. Demonstrate knowledge of the principles and methods of prevention, assessment, and intervention for people with swallowing disorders.	f, j, k	Intervention Project, Clinical evaluation
IV.G.1. Demonstrate assessment skill outcomes including: screening and prevention procedures; collect case history information; select and administer appropriate evaluation procedures; adapt evaluation procedures to meet client needs; interpret/ integrate/ synthesize all information to develop diagnoses /make recommendations; complete administrative and recording functions necessary to support evaluation; and refer clients for appropriate services.	f, g, h	Screening, Oral-Peripheral Evaluation, Bedside Swallow Evaluation
IV.G.2. Demonstrate intervention skill outcomes including: develop setting-appropriate intervention plans with measurable and attainable goals; collaborate in planning process; implement intervention plans, select or develop and use appropriate materials and instrumentation for prevention and intervention; measure and evaluate performance/progress; modify plans/strategies/ materials/instrumentation as needed to meet client needs; complete administrative and recording functions necessary to support evaluation; and refer clients for appropriate services.	e, i	Exams, Student demonstration
IV.G.3. Demonstrate interaction and personal qualities including: communicate effectively, recognizing needs/values/preferred mode of communication, and cultural/ linguistic background of client/caregivers/etc.; collaborate in case management; provide counseling regarding swallowing to client/caregivers/ etc.; adhere to ASHA code of ethics and behave professionally.	g, k	Screenings, Oral Motor Evaluation, Bedside Swallow Evaluation, Demonstration

General Policies

1. Students are expected to participate in class discussions and complete assignments in a thorough and insightful manner. Assignments must be posted by **midnight of the due date** in order to avoid a grade reduction of 5% per day. Quizzes and exams will not be accepted late. If unforeseen events interfere with your ability to participate in this course, prompt communication with the instructor through email or phone contact would be to your advantage.
2. Plagiarism will result in the failure of the assignment involved. The University definition of plagiarism is found on page 59 of the Faculty Handbook. To represent ideas or interpretations taken from another source as one's own is plagiarism. Plagiarism is a serious offense. The academic work of students must be their own. Students must give the author(s) credit for any source material used. To lift content directly from a source without giving credit is a flagrant act. To present a borrowed passage after having changed a few words, even if the source is cited, is also plagiarism. Student work presented in this course may be analyzed using plagiarism detection software.
3. Students with disabilities, who require accommodations (academic adjustments and/or auxiliary aids or services) for this course, must contact the Student Accessibility Resource Center (<https://www.wku.edu/sarc/>) phone (270) 745-5004; TDD: 270-745-3030. Please do not request accommodations directly from the instructor without a letter of accommodation from the Student Accessibility Resource Center.
4. Technology Management: This course will involve the use of Blackboard software. Managing student technology is the sole responsibility of the student. The student is responsible for making sure that: (a) student word processing software is compatible with that used by the University; (b) student email software is working properly and that students know how to use it (e.g., to send attachments to the professor); (c) Internet service providers' equipment and software are installed and working properly in conjunction with student computers; (d) in the event that a student's computer stops working properly or becomes totally inoperative, the student has another means by which he or she can successfully complete the course; and (e) any other student technology problem or issue gets successfully resolved. **The IT Help Desk can be reached at 270-745-7000.**
5. The instructor reserves the right to modify this syllabus as needed.
6. Grading Scale: Grades are based on the total percentage of points earned. This means that your grade equals earned points/total points. Grading is as follows:
 - A 93-100
 - B 85-92
 - C 77-84
 - D 68-76
 - F below 68

SLP 514 Fall 2019 Topics, Assignments, Due Dates

Aug 28	
Topic:	Introduction to Swallowing and Swallowing Disorders
Reading:	Groher Chapters 1 & 2
Sep 4	
Topic:	Anatomy & Physiology of the Swallowing Mechanism
Reading:	Groher Ch. 3 & 4
Due:	Assignment 1: Feed and Be Fed
Sep 11	
Topic:	Disorders of Swallowing
Reading:	Groher Ch. 5 & 6
Due:	Exam 1: Anatomical Landmarks
Sep 18	
Topic:	Screening and Assessment, Oral Peripheral Examination
Reading:	Groher Ch. 7, Screening Protocols
Due:	Assignment 2: Videos 1 & 2
Sep 25	
Topic:	Bedside Swallow Evaluation, Diagnosis
Reading:	Bedside Dysphagia Evaluation Protocol
Due:	Assignment 3: Video 3, Screening Mazes You may begin your BSE assignments after this date
Oct 2	
Topic:	Instrumental Assessment – MBS & FEES(T)
Reading:	Groher Ch. 8
Due:	
Oct 9	
Topic:	Dysphagia Intervention
Reading:	Groher Ch. 9 & 10
Due:	Assignment 4: BSE (Oral Mech & Food Trials)
Oct 16	
Topic:	Dysphagia Intervention
Reading:	Groher Ch. 12 & 13
Due:	Assignment 5: BSE (Interpretation)
Oct 23	
Topic:	Considerations for Infants & Children; Treatment Planning
Reading:	Groher Ch. 14 & 15
Due:	Assignment 6: MBS Report

Oct 30	No Class Meeting	
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Topic: Dysphagia Intervention – School-Age Children
 Reading: Materials provided on BB by Ms. Hutchison
 Due: Assignment 7: Intervention Grid

Nov 6		
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Topic: Goals & Documentation, Progression of Tx
 Reading: Sample Medical Record
 Due: Assignment 8: Intervention Project

Nov 13		
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Topic: Intervention Projects Review
 Reading: None
 Due: Comment on at least 3 intervention projects other than your own (in Discussion Board Forum)

Nov 20	(ASHA Week)	
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Topic: Ethics & Collaboration Across Disciplines
 Reading: Groher Ch. 11

Nov 27	No Class Meeting	
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Topic: Thanksgiving Break

Dec 4	No Class Meeting	
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Topic: **Exam 2: Comprehensive (covers all readings & lectures)**
 Your exam will be posted online in Tests & Quizzes during our regular class time.

Readings are due by class time on the date on which they appear.

Assignments are due by midnight on the day on which they appear.

The instructor reserves the right to make changes to this calendar as necessary. No meeting dates will be added after the first day of the semester.

SLP 514 Assignments Fall 2019

Assignment 1: Feed and Be Fed

Very often while conducting dysphagia evaluations and treatments, the SLP feeds part or all of a meal to a patient. We learn a lot about their endurance and ability to manage various consistencies by doing so, but it's an acquired skill that takes a fair amount of awareness of the patient's needs and comfort. This assignment will help you to get a feel for what it's like to be fed, and to feed an adult who is accustomed to doing this very personal activity independently.

Have someone feed you an entire meal (including beverages). They control all utensils, cups, napkin, etc. You cannot communicate other than indicating yes/no in some manner.

At a later meal, feed someone their entire meal (they can only communicate yes/no).

Write about the experience in two parts. First, what was the "being fed" experience like? What problems did you encounter? What did you wish you could communicate that you couldn't? Were you frustrated by anything (pace, order in which foods were offered, bite size, angle of the glass?) Was there anything positive that made the experience better for you?

In the second part of your response, talk about your experience feeding someone else. Now you're in control, and it's a different experience entirely. Was any part of the physical process awkward? How did you adapt? How did your recent experience of being fed impact the way you fed your friend? What did you do to minimize his/her frustrations and discomfort? Share any relevant thoughts and observations.

Assignment 2: Videos 1 & 2

Locate videos under BB, Assignments, Assignment 2 and create a document responding to the prompts below. Post document under Assignments.

1. Video 1 Normal Swallowing

- A. What anatomical landmarks and functions did this video illustrate (spelling counts here)?
- B. Describe the process of the normal swallow, using anatomical terms.

2. Video 2 Swallowing Disorders

- A. List and briefly describe (1-2 sentences each) the examples of **oral dysphagia** covered in the video.
- B. List and briefly describe the examples of **pharyngeal dysphagia** shown in the video.

Assignment 3: Videos 3

Watch the examples of the intervention techniques in Video 3 (under Assignments). For each technique, describe:

1. what the intervention is (name and a one-sentence description).
2. in professional terms, what is happening to make the technique effective. Consider what structures are involved, and why this technique works in this clinical case. For the head turn techniques, remember this is the patient's left or right pyriform sinus as they face you, not your left or right on your computer screen.
3. in layman's terms, how you would explain what is happening in this technique to a patient. (Layman's terms means using everyday language rather than technical terms.) Write this as if you are talking to a patient in front of you, using the actual words you would say. For example instead of saying, "You need to maintain your swallow at maximum laryngeal elevation" you would say something like "when your Adam's apple is at its highest point during the swallow". If you can explain it in layman's terms, you have a good understanding of it, and you will be more effective in communicating with your patients. Post your document under Assignment 2 in BB.

Assignment 4: BSE Oral Mech Exam and Food Trials on a Normal Subject

PURPOSE:

To prepare the student for externship by demonstrating a basic academic competency in dysphagia bedside evaluation.

TASK:

Complete one bedside swallowing evaluation on a normal child or adult subject of your choice, with completion of a checklist-type evaluation protocol form to record results. Your evaluation will include an oral mech exam (including oral preparatory, oral, and laryngeal function) and examination of swallowing function through presentation of liquid and food trials.

You will post on **Youtube video** of yourself completing the oral peripheral examination and food trials. The video has to be viewable by me (without a need to sign into your Drop Box or a Google account), and the YouTube link should be submitted under Assignments.

PROTOCOL:

You must use the **protocol form** provided on Blackboard. If your form doesn't include a place to record something I've indicated you should evaluate (and several items ARE MISSING), you must write it in. You may use common abbreviations such as WNL (within normal limits). The protocol form with a brief summary of findings and recommendations should be submitted within the assignment link where you post your video.

These components are expected in the oral mech exam:

- Therapist must be seated at same level as client and should explain each major step before beginning.
- Should wear medical gloves during exam.
- Must use tongue depressor and pen light appropriately during exam.

Mention of:

- Positioning, contractures
- Alertness and responsiveness
- Ability to follow directions and report
- Ability to handle secretions
- Respiration at rest (distress?)
- Timing of swallows with respiration
- Ability to hold breath (up to 5 seconds)
- Ability to breathe through nose

Student should examine structures first:

- Lips, tongue, hard & soft palate, faucial arches, sulci
- Status of dentition, secretions

Oral Function:

- Jaw (open, close, lateral, forward)
- Lips (protrude, retract, seal)
- Tongue (protrude, retract, lateral, clear sulci, elevate/depress, clear palate)
- Soft palate function (using tongue blade and penlight, ask for phonation of /ah ah ah/, look for even bilateral soft palate elevation)
- Gag reflex: walk tongue blade back slowly on tongue until elicit gag (20% of people don't have a gag reflex)
- Oral sensitivity (Light touch with swab to structures within mouth, should assess right and left sides)

Laryngeal function:

- Listen to voice quality during sustained phonation of /ah/
- Quality: wet (gurgly), hoarse, breathy

- Phonation time in seconds (laryngeal control) (“Say /ah/ as long as you can”)
- Ability to change pitch (demo pitch glide)
- Volitional cough (weak, strong, productive)
- Throat clear (weak, strong, productive)
- Palpation of dry swallow to assess laryngeal elevation using 4 finger method

Food trials

- **Liquids:**
- Therapist should palpate each liquid swallow, and should have fingers in place on neck BEFORE providing the liquid bolus.
- Report oral transit time (count seconds from the time you give the direction to swallow until you feel the thyroid cartilage elevate in full swallow movement). Take an average of three liquid swallows in reporting transit time.
- Therapist should ask client to phonate brief /ah/ after every liquid swallow to assess voice quality.
- Therapist presents ½ teaspoon, full tsp, then single cup drink, then allows client to take multiple cup drink/self-regulated amount, then straw (pinching straw to control amount), then regular straw sip, then multiple straw swallows. May present thickened liquids but not required.
- **Solids:**
- Therapist must palpate each swallow (for mech soft and regular consistencies, may provide bolus, then palpate).
- Do not report oral transit time (this is reported for liquids only).
- Report oral prep time for each solid consistency.
- Therapist should request to look in mouth after each solid bolus swallow to check for residue/pocketing, and must use tongue blade and penlight. Requesting /ah/ phonation is not required for solids.
- Provide small amounts, slowly increasing: 1/2 tsp, 1 tsp, rounded tsp, self-regulated amounts for each consistency:
- Pureed (blenderized, such as applesauce, pudding)
- Mechanical soft (soft, requires little chewing – pasta, ripe fruit pieces)
- Regular (requires chewing – cracker, cookies, sandwich)

Assignment 5: BSE Interpretation

PURPOSE:

To prepare the student for externship by demonstrating a basic academic competency in dysphagia bedside evaluation.

TASK:

Conduct interpretation of a recorded bedside swallowing evaluation on a disordered adult subject, with completion of a checklist-type evaluation protocol form to record results.

PROTOCOL:

You must use the **protocol form** provided on Blackboard. Again, if your form doesn't include a place to record something I've indicated you should evaluate (and several items ARE MISSING), you must write it in. You may use common abbreviations such as WNL (within normal limits), R for right, L for left. The protocol form with an additional summary of findings and recommendations should be submitted within the assignment link.

Medical History for Ms. Callie

Ms. Callie is an 83-year-old white female s/p right cerebrovascular accident with mild left-sided weakness. She was referred for a swallow evaluation due to nursing report that she was having difficulty swallowing regular consistencies.

She was admitted to the nursing home one week ago after a three-day acute hospital stay. Ms. Callie was admitted on a mechanical soft diet with thin liquids. She has not reported any symptoms of reflux. Chart review reveals no significant weight loss or nutritional problems. She is aware of her swallowing difficulties and is able to anticipate when she is going to have difficulty swallowing a particular food. Her goal is to go home soon.

Rules to Follow in Interpreting the Recorded Examination

If the therapist does not do something she should have, you need to make note of that on your form ("Gag reflex not elicited"). That way I know you know it should have been done!

If the therapist verbalizes something ("There is mild residue on your tongue.") you will report that as the result ("Mild residue on tongue for pureed consistency.").

If the therapist does not verbally clarify for you what she is seeing (she looks in the patient's mouth post swallow and just says "ok") assume the result was WNL.

If your form does not have a place for information your notes tell you to collect, write it neatly in the margin.

At this point, stop and think about the results you've recorded, both oral mech and food trials. What does Miss Callie's performance tell you? What is a safe and efficient diet for her? What does she need for treatment if anything?

Your summary at the end will be brief, and will follow the format provided on your lecture notes ("Miss C. exhibits _____ characterized by ____"). For full credit, you do need to make a diagnosis, which includes a severity and type of dysphagia. You'll report symptoms (organize by oral and pharyngeal symptoms), then follow up with remaining info indicated in lecture notes (diet order including liquids and med administration, any recommended instrumental study, any recommended referrals, etc.).

If you recommend any dysphagia treatment, you do not have to write out a treatment plan at this point, just generally make a statement at the end of the summary recommending treatment and generally what for.

Assignment 6: MBS Report

Write up a full summary from class discussion, to include: diagnosis (severity and type of dysphagia), symptoms observed for oral and pharyngeal components and on which consistencies, your judgment on risk of aspiration, your recommendations (diet, medication administration, need for dysphagia treatment, and any referrals you think are necessary), and a treatment plan (one LTG and 3 STGs that are drawn from stated impairments). Post your document under Assignment 6.

Assignment 7: Intervention Grid

This assignment is designed to help you create a link between the symptoms you see in a client, the underlying possible causes of the symptom, and what interventions would be appropriate in your treatment plan. Create a grid that lists at least 10 dysphagia **symptoms***, underlying physiologic impairments, the muscles and cranial nerves involved, and the appropriate treatment(s) that you would use to remediate them. A template grid has been provided for you, with an example on the first row. You need to add 10 additional items (beyond the example provided), and post your grid under Assignment 7.

*Symptoms are the things you see in your client, such as anterior loss of food, slow oral transit time, slow oral prep time, oral residue, pharyngeal residue, etc. The impairment is the physiologic cause of that observed symptom (if the symptom is anterior loss of food, it may be weak lip seal or impaired facial sensation).

Post your grid under Assignment 7.

Assignment 8: Intervention Project

Working with a partner, choose a population which tends to experience dysphagia. Investigate the types of dysphagia intervention that are typically used with that population, and present your findings in a proofread document, **2 – 3 pages in length, 1.5 line spacing**. Claim your topic under Discussion Board by putting last names of partners and your population in the subject line (“Holmes Watson Dementia”) so everyone can see at a glance who has claimed which topic). No duplicates: the first group to claim a topic owns that topic.

Cover basics of:

- the underlying condition and what causes the dysphagia in this group (consider genetic, neurologic, neuromuscular, sensory problems). Limit this section to **½ page**.
- why people with this diagnosis/condition need dysphagia treatment (think about why these interventions work for this group – this will be tied to the etiology of the disease/condition)
- describe common treatments (who’s a good candidate, types of treatment, progression, expected outcome). Consider including a link to a video showing how intervention looks with a patient of this type.
- discuss briefly what research tells us about the effectiveness of these treatments (ASHA is a good source for reviews of treatment effectiveness). Make a statement about level of evidence: is there weak, moderate, or strong support for efficacy of intervention with this population?

Some ideas for populations:

Head and neck cancer (radiation and/or surgery)

Tracheotomy

Laryngectomy

Acquired brain injury

Cerebral Palsy

Fetal Alcohol Syndrome

Genetic Syndromes (choose one)

Autism/Pervasive Developmental Disorder

Progressive Neurologic Diseases

Dementia

Craniofacial anomalies

Children with behavioral/psychological feeding problems

Dysphagia Interventions (which you may encounter and consider in your reading)

Indirect Interventions

Oral-Motor Exercises

Laryngeal Exercises

Swallowing Maneuvers

Facilitation Techniques

Thermal-Tactile Stimulation

E-Stim (such as VitalStim)

Biofeedback

Oral Sensorimotor intervention

DPNS: Deep Pharyngeal Neuromuscular Stimulation

Desensitization and minimizing abnormal reflex patterns

Compensatory Techniques

Positioning/Postural Techniques

Diet Modification

Adaptive equipment

Other

Frazier Free Water Protocol

Speaking valves

Increasing intake for nutrition and hydration

Post your completed project under Assignment 7. You may share your projects with each other in Discussion Board so you can use them as a resource when working with clients in the future.