#### **Term Information**

Effective Term

Spring 2022

No

## **General Information**

Course Bulletin Listing/Subject Area	Speech and Hearing Science
Fiscal Unit/Academic Org	Speech & Hearing - D0799
College/Academic Group	Arts and Sciences
Level/Career	Graduate
Course Number/Catalog	6466
Course Title	Normal Swallowing
Transcript Abbreviation	Normal Swallowing
Course Description	Students will learn the anatomy and physiology of normal swallowing as well as understand its value to human quality of life.
Semester Credit Hours/Units	Fixed: 2

## **Offering Information**

Length Of Course	14 Week
Flexibly Scheduled Course	Never
Does any section of this course have a distance education component?	No
Grading Basis	Letter Grade
Repeatable	No
Course Components	Lecture
Grade Roster Component	Lecture
Credit Available by Exam	No
Admission Condition Course	No
Off Campus	Never
Campus of Offering	Columbus

## **Prerequisites and Exclusions**

Prerequisites/Corequisites
Exclusions
Electronically Enforced

#### **Cross-Listings**

**Cross-Listings** 

## Subject/CIP Code

Subject/CIP Code	51.0202
Subsidy Level	Masters Course
Intended Rank	Masters

## **Requirement/Elective Designation**

Required for this unit's degrees, majors, and/or minors

## **Course Details**

Course goals or learning	<ul> <li>1. identify major components of swallow.</li> </ul>
objectives/outcomes	• 2. identify anatomy of each component.
	• 3. connect physiologic movement within and between each phase of the swallow.
	• 4. connect anatomy and physiology with movement of the bolus.
	• 5. recognize activities in life in which swallowing is of central focus.
	6. associate these activities with the quality of human life.
	• 7. precisely identify anatomy and physiology as visualized in clinical and instrumental examination.
	• 8. compare and contrast capabilities of clinical and instrumental examination.
	• 9. identify the normal changes in the swallow as humans age.
	• 10. relate the signs/symptoms of changes in the aging swallow to the physiologic rationale for them.
	• 11. be aware of how this affects the aged and their risks of dysphagia.
Content Topic List	• phases of the swallow, swallow
Sought Concurrence	No
Attachments	Normal Swallow Syllabus.docx: Syllabus
	(Syllabus. Owner: Harnish,Stacy M)

#### Comments

## **Workflow Information**

Status	User(s)	Date/Time	Step
Submitted	Harnish,Stacy M	01/25/2021 10:59 AM	Submitted for Approval
Approved	Fox,Robert Allen	01/25/2021 11:32 AM	Unit Approval
Approved	Haddad, Deborah Moore	01/25/2021 11:38 AM	College Approval
Pending Approval	Jenkins,Mary Ellen Bigler Hanlin,Deborah Kay Oldroyd,Shelby Quinn Hilty,Michael Vankeerbergen,Bernadet te Chantal	01/25/2021 11:38 AM	ASCCAO Approval



## Normal Swallowing SPHHRNG 6466 (2 Credits) Course Syllabus Spring 2022

**Instructor:** Nicole Wiksten, MS, CCC-SLP, BCS-S **Office Hours:** By appointment **Phone:** 614-292-9347 Email: <u>wiksten.1@osu.edu</u> Office Address: 115 Pressey Hall

Class Location: Time: Format: Lecture Credit Hours: 2 Class Website: Carmen

## **COURSE PURPOSE**

Students will learn the anatomy and physiology of normal swallowing as well as understand its value to human quality of life.

## GOALS - Related to 2020 ASHA Standards IV-C-G

Students will be able to:

- 1. understand and integrate the components of normal swallowing.
- 2. recognize the value of swallowing in human life.
- 3. appreciate and utilize different perspectives to integrate the same information related to the physiology of swallowing.
- 4. appreciate the changes and variations in swallowing across the lifespan.

## **LEARNING OUTCOMES**

Students will be able to:

- 1. identify major components of swallow.
- 2. identify anatomy of each component.
- 3. connect physiologic movement within and between each phase of the swallow.
- 4. connect anatomy and physiology with movement of the bolus.
- 5. recognize activities in life in which swallowing is of central focus.
- 6. associate these activities with the quality of human life.
- 7. precisely identify anatomy and physiology as visualized in clinical and instrumental examination.
- 8. compare and contrast capabilities of clinical and instrumental examination.
- 9. identify the normal changes in the swallow as humans age.
- 10. relate the signs/symptoms of changes in the aging swallow to the physiologic rationale for them.
- 11. be aware of how this affects the aged and their risks of dysphagia.



## **COURSE REQUIREMENTS AND GRADING**

## **READING**

#### **Required:**

- Cichero, J. A., & Murdoch, B. E. (Eds.). (2006). Dysphagia: foundation, theory and practice. John Wiley & Sons.
- Plowman, E. K., & Humbert, I. A. (2018). Elucidating inconsistencies in dysphagia diagnostics: Redefining normal. International journal of speech-language pathology, 20(3), 310-317.
- https://dysphagiacafe.com/2018/01/02/swallowing-difference-vs-swallowing-disorderpower-perspective/
- https://www.washingtonpost.com/national/health-science/problems-swallowing-are-abig-killer-but-the-treatment-can-be-horrible/2018/02/23/098ae26a-0229-11e8-bb03-722769454f82\_story.html

#### **Recommended:**

- Martin-Harris, B. (2015). Standardized Training in Swallowing Physiology: Evidence-based Assessment Using the Modified Barium Swallow Impairment Profile (MBSImP) Approach. Northern Speech Services.
- Humbert, I. A. (2011). The Swallowing Pocket Guide: A Quick Reference for Muscles and Innervation. Northern Speech Services, Incorporated.
- Corbin-Lewis, K., Liss, J. M., & Sciortino, K. (2005). Clinical anatomy and physiology of the swallowing mechanism.

## **ACTIVITIES**

#### **Reflection paper on value of swallowing in human life (10 pts)**

Demonstration of understanding of content	8 points
presented in class	
At least 300 words with correct grammar and	2 points
spelling	

#### Label anatomy (50 pts)

Facial anatomical drawing	2 points per 5 labels
Oral anatomical drawing	2 points per 5 labels
Pharyngeal anatomical drawing	2 points per 5 labels
MBS image	2 points per 5 labels
FEES image	2 points per 5 labels

#### Matching activity for muscle to function (20 pts)

Match the muscle in column 1 to its function in	1 point for each correct match
column 2.	

#### Nerve quiz (20 pts)

Correctly answer 10 multiple choice questions	2 points per question
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#### Midterm Exam (100 pts)



## Chart comparing clinical exam, MBS and FEES (20 pts)

Place the name of the exam that is able to	2 points per test item
assess each of 10 given components/situations	

## Video rating normal, abnormal, presbyphagia (20 pts)

Rate each of 5 swallow videos as normal,	4 points per video
abnormal or presbyphagia	

## Aging swallow quiz (10 pts)

Correctly answer 10 multiple choice questions	1 point per question

## 3D larynx project (50 pts)

All anatomical parts present	20 points
Correct placement	20 points
Labels in place and correct	10 points

#### Final Exam (100 pts)

## **GRADING CALCULATION**

А	93-100%	(372-400)	С	73-76%	(307-292)
A-	90-92%	(371-360)	C-	70-72%	(291-280)
B+	87-89%	(359-348)	D+	67-69%	(279-268)
В	83-86%	(347-332)	D	63-66%	(267-252)
B-	80-82%	(331-320)	Е	0-62%	(251-0)
C+	77-79%	(319-308)			

#### SCHEDULE OF LECTURES AND ASSIGNMENTS

TOPIC	ASSIGNMENT/ACTIVITY	POINTS	READING
Swallowing in life What does "normal" mean?	Pretest for existing knowledge Reflection paper	10	Plowman & Humbert (2018) Dysphagia Café article Washington Post article
Oral phase components Pressures and valves	Practice labeling	NA	Cichero & Murdoch (2006), 3- 25
Pharyngeal phase components	Use tech to survey class for answers	NA	No readings
Pharyngeal phase components	No activity	NA	No readings
	What does "normal" mean? Oral phase components Pressures and valves Pharyngeal phase components Pharyngeal phase	Swallowing in life What does "normal" mean?Pretest for existing knowledge Reflection paperOral phase components Pressures and valvesPractice labelingPharyngeal phase componentsUse tech to survey class for answersPharyngeal phase componentsNo activity	Swallowing in life What does "normal" mean?Pretest for existing knowledge Reflection paper10Oral phase components Pressures and valvesPractice labelingNAPharyngeal phase componentsUse tech to survey class for answersNA



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Esophageal phase components			No readings
Anatomy/physiolog y – Oral	Label anatomy in different views	50	Corbin-Lewis, Liss, & Sciortino (2005) CH1, pp1-37
Anatomy/physiolog y – Pharyngeal	No activity	NA	Corbin-Lewis, Liss, & Sciortino (2005) CH2, pp 41-62
Anatomy/physiolog y - Esophageal	Matching muscle to function	20	Corbin-Lewis, Liss, & Sciortino (2005) CH3, pp 67-87
Midterm	No activity	100	No readings
Nerves	Nerve quiz	20	No readings
How "phases" are connected; variations of normal	No activity	NA	Cichero & Murdoch (2006), pp 47-91
In depth review of clinical, MBS and FEES	Chart comparing exams	20	Cichero & Murdoch (2006), pp 149-234
Respiration and swallowing	No activity	NA	Cichero & Murdoch (2006), pp 93-109 Corbin-Lewis, Liss, & Sciortino (2005) pp 62-66.
Development of swallow mechanism; pediatric swallowing	Guest lecture – Children's Nationwide Hospital	NA	No readings
Presbyphagia	Video rating normal and presby Quiz on aging swallow	20 10	Cichero & Murdoch (2006), pp 38-44
	3D larynx Final	50 100	No readings
	<ul> <li>components</li> <li>components</li> <li>amatomy/physiolog</li> <li>y -</li> <li>Oral</li> <li>Anatomy/physiolog</li> <li>y - Pharyngeal</li> <li>Anatomy/physiolog</li> <li>y - Pharyngeal</li> <li>Anatomy/physiolog</li> <li>y - Esophageal</li> <li>Midterm</li> <li>Morves</li> <li>Morves</li> <li>How "phases" are</li> <li>connected;</li> <li>variations of</li> <li>normal</li> <li>In depth review of</li> <li>clinical, MBS and</li> <li>FEES</li> <li>Respiration and</li> <li>swallowing</li> <li>Development of</li> <li>swallowing</li> <li>pediatric</li> <li>swallowing</li> </ul>	componentsuAnatomy/physiolog y - OralLabel anatomy in different views OralAnatomy/physiolog y - PharyngealNo activityAnatomy/physiolog y - PharyngealNo activityAnatomy/physiolog y - EsophagealMatching muscle to functionNervesNo activityNervesNo activityHow "phases" are connected; variations of normalNo activityIn depth review of clinical, MBS and FEESChart comparing examsIn depth review of clinical, MBS and FEESNo activityDevelopment of swallowingSuest lecture - Children's Nationwide HospitalDevelopment of swallowingGuest lecture - Children's Nationwide Hospital and presby Quiz on aging swallowPresbyphagiaVideo rating normal and presby Quiz on aging swallow	componentsLabel anatomy in different viewsSoAnatomy/physiolog y - OralLabel anatomy in different views50Anatomy/physiolog y - PharyngealNo activityNAAnatomy/physiolog y - EsophagealMatching muscle to function20Anatomy/physiolog y - EsophagealMatching muscle to function20MidtermNo activity100NervesNerve quiz20MorresNerve quiz20NervesNo activity100NervesNo activityNAIn depth review of clinical, MBS and FEESChart comparing exams function20Respiration and swallowingNo activityNADevelopment of swallowingGuest lecture - Children's Nationwide Hospital mechanism; pediatric swallowingNiet straing normal and 



## **CLASS POLICIES**

- 1. Lecture topics scheduled in this syllabus are subject to change. Any changes will be announced in class.
- 2. Late assignments will **not** be accepted for full credit without **prior** permission from the instructor.
- 3. Just as you should expect that I am in class, ready to begin at the beginning of our class period, I expect that you are present and ready to begin at our starting time. Regular attendance is expected.
- 4. Cell Phones: The use of cell phones during class is prohibited. Please extend the courtesy to your classmates and the instructor by turning off your cell phone during class time.

## **Attendance and Participation Policy:**

It is expected that you will attend every class in order to learn the content, actively engage with the material, and participate in class discussions and labs. Penalties apply to unexcused absences and excessive late arrivals. Final course grades will be reduced 1% for each unexcused absence or excessive late arrivals. Only deaths and illnesses with a doctor's note will be excused. For every excused absence, you will turn in a 300-400 word reflection integrating the content of the lecture and readings for the missed lecture. This is due one week after the missed class. All faculty will keep attendance records. Arriving to class late is disruptive to the learning environment and is unprofessional. It is up to the discretion of the course instructor to define 'excessive'. Consult with your course instructor if you have extenuating circumstances.

## **Students with Disabilities**

The University strives to make all learning experiences as accessible as possible. If you anticipate or experience academic barriers based on your disability (including mental health, chronic or temporary medical conditions), please let me know immediately so that we can privately discuss options. To establish reasonable accommodations, I may request that you register with Student Life Disability Services. After registration, make arrangements with me as soon as possible to discuss your accommodations so that they may be implemented in a timely fashion. SLDS contact information: slds@osu.edu; 614-292-3307; slds.osu.edu; 098 Baker Hall, 113 W. 12th Avenue.

## Academic Misconduct:

It is the responsibility of the Committee on Academic Misconduct to investigate or establish procedures for the investigation of all reported cases of student academic misconduct. The term "academic misconduct" includes all forms of student academic misconduct wherever committed; illustrated by, but not limited to, cases of plagiarism and dishonest practices in connection with examinations. Instructors shall report all instances of alleged academic misconduct to the committee (Faculty Rule 3335-5-487). For additional information, see the Code of Student Conduct http://studentlife.osu.edu/csc/.

#### **Statement on Diversity**

The Ohio State University affirms the importance and value of diversity in the student body. Our programs and curricula reflect our multicultural society and global economy and seek to provide opportunities for students to learn more about persons who are different from them. We are committed to maintaining a community that recognizes and values the inherent worth and dignity of every person; fosters sensitivity, understanding, and mutual respect among each member of our community; and encourages each individual to strive to reach his or her own potential. Discrimination against any individual based upon protected status, which is defined as age, color,



disability, gender identity or expression, national origin, race, religion, sex, sexual orientation, or veteran status, is prohibited.

**PLEASE TAKE CARE OF YOURSELF (Mental Health Statement):** As a student you may experience a range of issues that can cause barriers to learning, such as strained relationships, increased anxiety, alcohol/drug problems, feeling down, difficulty concentrating and/or lack of motivation. These mental health concerns or stressful events may lead to diminished academic performance or reduce a student's ability to participate in daily activities. The Ohio State University offers services to assist you with addressing these and other concerns you may be experiencing. If you or someone you know are suffering from any of the aforementioned conditions, you can learn more about the broad range of confidential mental health services available on campus via the Office of Student Life's Counseling and Consultation Service (CCS) by visiting ccs.osu.edu or calling 614--292--5766. CCS is located on the 4th Floor of the Younkin Success Center and 10th Floor of Lincoln Tower. You can reach an on call counselor when CCS is closed at 614--292--5766 and 24 hour emergency help is also available through the 24/7 National Suicide Prevention Hotline at 1--800--273-TALK or at suicidepreventionlifeline.org.