

UTD Doctor of Audiology Program - Course Syllabus

COURSE INFORMATION

<i>Course Number/Section</i>	AUD 7351
<i>Course Title</i>	Physiological Assessment of the Vestibular System
<i>Term</i>	Spring 2017
<i>Days & Times</i>	Tuesdays. 6:00-8:45 PM, *5:00 PM April 11, 2017
<i>Location</i>	Callier Center Dallas, A229

PROFESSOR CONTACT INFORMATION

<i>Professors</i>	Jennifer A. Alford, Au.D. – Course Instructor
<i>Guest Lecturers</i>	J. Walter Kutz, M.D.
<i>Office Phone</i>	214-906-7134 cell
<i>Email Address</i>	Jennifer.alford@utsouthwestern.edu
<i>Office Location</i>	University of Texas Southwestern
<i>Office Hours</i>	Classroom A229 before class 5:30 PM- 6:00 PM or by appointment

COURSE PRE-REQUISITES, CO-REQUISITES, AND/OR OTHER RESTRICTIONS

Advanced Clinical Audiology – AUD 6310
Diagnostic Audiology – AUD 6311.
Anatomy and Physiology of Audition – AUD 6305

COURSE DESCRIPTION

Anatomy, physiology and pathophysiology of the vestibular, oculomotor and related systems used for maintaining equilibrium and balance. Assessment of history, signs and symptoms, and self-perceived handicap to develop differential diagnosis. Procedures used for diagnostic assessment of the vestibular system including informal evaluation techniques, ENG/VNG, rotary chair testing, platform posturography, VHIT and VEMP. Medical and non-medical treatments for vestibular and non-vestibular balance disorders.

STUDENT LEARNING OBJECTIVES/OUTCOMES

After completing this course, students should be able to:

1. Identify the structures of the vestibular system crucial to enabling an individual to maintain equilibrium and balance, and discuss the function of these structures in a normal system.
2. Identify the vestibular nervous system pathways, and discuss the relationship of these pathways to oculomotor and proprioceptive response to external stimuli.
3. Identify potential disorders affecting the balance system, and identify the possible physiological results of the pathology.
4. Take the history of a patient with complaints of dizziness and relate the symptoms to possible disorders of the balance system.
5. Perform a variety of informal diagnostic procedures and use the results to recommend appropriate formal evaluation or diagnostic referrals.
6. Perform an ENG/VNG.
7. Interpret the findings of an ENG/VNG
8. Perform a canalith repositioning maneuver.
9. Identify appropriate physical therapy treatment referral criteria for adults and children based upon evaluation results and history.

ASHA COMPETENCIES COVERED BY THE COURSE

Standard IV-B Foundations of Practice

B 4. Anatomy and physiology, pathophysiology and embryology and development of the auditory and vestibular systems.

B 11. Instrumentation and bioelectrical hazards

B.12. Infectious/contagious diseases and universal precautions.

B 14. Physical characteristics and measurement of electric and other non-acoustic stimuli.

B 16. Medical/surgical procedures for treatment of disorders affecting auditory and vestibular systems.

Standard IV-C Prevention and Identification

C 1. Interact effectively with patients, families, other appropriate individuals and professionals.

Standard IV-D Evaluation

D 1. Interact effectively with patients, families, other appropriate individuals and professionals.

D 3. Obtain a case history.

D 4. Perform an otoscopic examination.

D 5. Determine the need for cerumen removal.

D 6. Administer clinically appropriate and culturally sensitive assessment measures.

D 7. Perform audiologic assessment using physiologic, psychophysical and self-assessment measures.

D 8. Perform electrodiagnostic test procedures.

D 11. Document evaluation procedures and results.

D12. Interpret results of the evaluation to establish type and severity of disorder.

D 13. Generate recommendations and referrals resulting from the evaluation process.

D 14. Provide counseling to facilitate understanding of the auditory and balance disorder.

D 16. communicate results and recommendations orally and in writing to the patient and other appropriate individual(s).

D 17. Use instrumentation according to manufacturer's specifications and recommendations.

D 18. Determine whether instrumentation is in calibration according to accepted standards.

Standard IV-E Treatment

- D 1. Interact effectively with patients, families, other appropriate individuals and professionals.
- E 2. Develop and implement treatment plan using appropriate data.
- E 4. Counsel patients, families and other appropriate individuals.
- E 6. Collaborate with other service providers in case coordination.
- E 15. Document treatment procedures and results.
- E 16. Maintain records in a manner consistent with legal and professional standards.
- E 17. Communicate results, recommendations and progress to appropriate individual(s).
- D 18. Use instrumentation according to manufacturer's specifications and recommendations.
- D 19. Determine whether instrumentation is in calibration according to accepted standards.

REQUIRED TEXTBOOKS AND MATERIALS

Required Texts

Jacobson, Gary P. and Shepard, Neil T. eds., Balance Function Assessment and Management. Second Edition. Plural Publishing: San Diego, CA, 2008. (Abbreviated BFM&A in syllabus)

Required Materials

Additional readings and materials will be assigned as required.

Supplemental Materials

McCaslin, Devin. Electronystagmography/Videonystagmography (ENG/VNG). Plural Publishing: San Diego, CA. 2012 (Abbreviated M in syllabus)

American Academy of Audiology (AAA) Position Statement on the Audiologist's Role in the Diagnosis & Treatment of Vestibular Disorders. Available at:

<http://www.audiology.org/resources/documentlibrary/Pages/VestibularDisorders.aspx>

CLASS SCHEDULE

(Class schedule subject to change as needed)

January 10	Course introduction	
January 17	BFM&A Ch. 2 BFM&A Ch. 3	Anatomy and physiology of the vestibular system Anatomy and physiology of the oculomotor system
January 23	BFM&A Ch. 4 <i>Disorders assigned</i>	Vestibular pathophysiology and vestibular Compensation Common vestibular disorders.
January 31	BFM&A Ch. 6 BFM&A Ch. 7	Case history for the balance disordered patient. Informal tests of balance function
February 7	BFM&A Ch. 8 BFM&A Ch. 33 <i>Case History Dizziness Questionnaire Assignment Due</i>	Assessing dizziness-related quality of life Risk for falling

February 14	BFM&A Ch. 9-10, M Ch. 6 ENG/VNG: Oculomotor Testing	
<i>February 15</i>	<i>VNG Lab #1 Oculomotor testing</i>	
February 21	BFM&A Ch. 11, M Ch. 6 ENG/VNG: Positional Testing	
February 28	BF&A Ch. 12-13, M Ch. 7 ENG/VNG: Caloric Testing <i>Disorders papers due at or before 6 pm in electronic format</i>	
<i>March 1</i>	<i>VNG Lab #2 Positional Testing/Canalith repositioning</i>	
March 7	Midterm Exam	
March 14	Spring Break	
March 21	Meet at UTSW, Aston Clinic. 5th floor BFM&A Ch. 14-15 Rotational Chair BFM&A Ch. 18-19 Platform Posturography	
<i>March 21</i>	<i>Labs 4 &5 assigned, due April 11</i>	
March 28	BFM&A Ch. 16, 21 Article TBD	VHIT and VEMP Consussion and mTBI
April 4	AAA meeting. Indianapolis (April 5-8)	
April 11*	J. Walter Kutz, M.D. Ch. 27-28	Medical and Surgical Treatment of Otologic Vestibular Disorders (* CLASS MEETS 5:30 PM)
	BFM&A Ch. 31 <i>AAA Summary Paper Due</i>	BPPV Treatment and Vestibular Rehabilitation
<i>April 12</i>	<i>VNG Lab #3 Caloric Irrigation</i>	
April 18	BFM&A Ch. 25	Pediatric vestibular testing Diagnostic case studies
April 25	In-class final exam. Bring completed VNG script to class.	

GRADING POLICY

Letter grades will be assigned based upon the following final percentages.

99-100%	A+
94-98%	A
90-93%	A-
88-89%	B+
84-87%	B
80-83%	B-
78-79%	C+
74-77%	C
70-73%	C-
(<70%)	F

The final grade will be based on 3 assignments outlined below and two written examinations (midterm and final). Class attendance and participation is highly encouraged.

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| 1. Dizziness Questionnaire (due February 7) worth | <u>400 points</u> |
| 2. Three Disorders Papers (due February 28) each worth 100 pts. | <u>300 points</u> |
| 3. One in class midterm written examination (March 7), worth | <u>500 points</u> |
| 4. Attend at least one vestibular presentation at
AudiologyNOW 2017 and write a 1-2 page summary of the
presentation (due April 11). | <u>100 points</u> |
| 5. Final Exam to include one take home portion and one in class portion | |
| Take Home portion of final exam: "VNG Script" | <u>200 points</u> |
| In-class portion final exam | <u>500 points</u> |

Total	2000 Points
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ASSIGNMENTS: Complete assignments in electronic format and turn in printed copy with the exception of Assignment 2.

1) **Dizziness Questionnaire**

Complete all items on the dizziness questionnaire assignment. **Due at or before 6:00 PM February 7, 2017.**

2) **Disorders Papers Assignment**

Write three short (Maximum 1 page, single-spaced per disorder assigned) bulleted information sheets on the attached assigned disorders using the provided format. Please pay close attention to font style, size and instructions for formatting. These papers will be due in electronic form to me by email

(jennifer.alford@utsouthwestern.edu) **Due at or before 6 PM Feb 28, 2017.**

3) **AAA Summary**

Attend at least one AAA vestibular related session. Complete 1-2 page summary of a course that you attended. Please include the course title, speaker name, and summary of presentation. See me for alternate assignment if you are not going to AAA. **Due at or before 6 PM April 11, 2017.**

4) **Take home portion of final exam**

Complete a VNG Script complete with the following sections. **Due at or before 6:00 PM April 25, 2017.**

- a. Brief overview of the test in response to patient asking you, "So what will this test tell you?"
- b. Brief patient instructions for the following 8 parts of the exam outlined below.
 - i. Calibration
 - ii. Gaze
 - iii. Saccade
 - iv. Smooth pursuit
 - v. OPK
 - vi. Positional testing (head right, center and left)
 - vii. Dix-Hallpike
 - viii. Monothermal Caloric irrigation

COURSE POLICIES

Course Grade Policies

Per the AuD program handbook, C grades (including C+ or poorer) do not demonstrate adequate competency in the topic area and remediation or repetition of the course will be required; remediation/repetition plans require programmatic approval. Remediation of content does not result in a grade change for the course; the only way to have a course grade changed on your transcript is to repeat the course. You may be required to repeat coursework if your GPA does not meet University standards.

Per University policy: "If, at the end of a semester, a student's cumulative grade point average is below 3.0, the student will be placed on academic probation. The student must earn sufficient grade points during the next two semesters of registration to raise the cumulative grade point average to at least 3.0 exclusive of incomplete (X) grades. Failure to achieve this 3.0 cumulative grade point average will result in immediate dismissal from the University. A student must have a GPA of at least 3.0 to be eligible to graduate with a master's or doctoral degree."

Make-up exam

No make-up examinations will be given except for good cause and unless approved by the course instructor. Students approved for make-up examinations will be given an alternate date upon request.

Extra Credit

No provision is made for extra credit.

Late Work

All assignments must be turned in on time. Late assignments will result in a reduction of assignment grade.

Special Assignments

There are no special assignments.

Class Attendance

Students are not required to attend class. However, most students find that they are unable to pass examinations without regular attendance.

Classroom Citizenship

Students should be respectful of other students, the professors and guest lecturers, including appropriate use of technology.

Field Trip Policies / Off-Campus Instruction and Course Activities

Off-campus, out-of-state, foreign instruction/travel, and course-related field trip activities are subject to state law and University policies and procedures regarding travel and risk-related activities.

Detailed information regarding this policy, in accordance to *Texas Education Code*, Section 51.950, can be accessed at the UT Dallas Policy Navigator, <http://policy.utdallas.edu/utdbp3023>, and at <http://www.utdallas.edu/administration/insurance/travel>. Additional information is available from the office of the school dean.

Comet Creed

This creed was voted on by the UT Dallas student body in 2014. It is a standard that Comets choose to live by and encourage others to do the same:

“As a Comet, I pledge honesty, integrity, and service in all that I do.”

UT Dallas Syllabus Policies and Procedures

The information contained in the following link constitutes the University's policies and procedures segment of the course syllabus.

Please go to <http://go.utdallas.edu/syllabus-policies> for these policies.

The descriptions and timelines contained in this syllabus are subject to change at the discretion of the professor.