Seminar in Aphasiology
COMD 7302/ Spring, 2019

William F. Katz, Ph.D.
Class: Mon. 3:00 -5:45 CD1 A.101
Office hours: Mon 2:00 – 2:45 and by appt. (x 3188/ CD 121 *wkatz@utdallas.edu*)

Class website: https://www.utdallas.edu/speech-production-lab/teaching/courses/aphasiology/
(requires UTD logon)

Pre-requisites: Prior coursework in adult neurogenic speech disorders and/or neuroanatomy is helpful.

Course description: A comprehensive overview of current issues in neurolinguistics. We first review models of brain and language, traditional and current. We next focus on aphasia, covering classification, symptoms, and etiology. Language breakdown is analyzed at each level of the grammar, including phonetics/phonology, lexicon/morphology, syntax, and semantics. Disorders of speech and praxis are also considered. The goal is to provide an understanding of how linguistic and cognitive theories explain the facts of aphasia and associated disorders.

Required Materials: We will work from PDF/copied articles and chapters:

UTD e-reserves link: TBA
PW: **Aphasia19**
✓ Also see webpage LINKS for additional materials

This course has been designed to ensure that students demonstrate required knowledge and skill as outlined in the Standards and Implementation Guidelines for the Certificate of Clinical Competence in Speech-Language Pathology. The specific standards addressed in this class are: III-B, III-C, III-D, III-E, III-F, III-G, IV-B, IV-G

STUDENT LEARNING OBJECTIVES:

Students will:

1. Identify normal and abnormal language as it pertains to adult language disorders. (Std.III-B, III-C, III-D)
2. Describe intervention strategies for adults with language and cognitive communication disorders in a variety of settings. (III-D)
3. Describe appropriate educational materials and community resources for adults with language and cognitive communication disorders. (Std. III-D, IV-B)
4. Describe and apply knowledge about ethical considerations and professional issues and their impact on treatment of adults with language and cognitive communication disorders. (Std. III-E, III-G)
5. Analyze treatment approaches for adult neurogenic communication disorders to achieve desired patient outcomes based on current best evidence. (Std. III-D, III-F, IV-B)
6. Identify appropriate data collection and treatment documentation for adult patients. (Std. III-D, III-G, IV-B)
7. Develop appropriate treatment activities for a variety of adult patients in varying settings with a variety of linguistic, cultural, and socioeconomic differences. (Std. III-D, III-F, III-G, IV-B)

COURSE OUTLINE

1/14 Introduction - 'Meet and greet', explanation of course design and materials
Historical perspectives - History of brain-language relationships and aphasia study
In-class materials – PPT; handouts.
Format: Lecture - WK

- In-class reading (excerpts) *"The man who couldn't speak and how he revolutionized psychology"* (Konnikova, Scientific American, 2017)

Links:

http://www.neurosurgery.org/cybermuseum/pre20th/epapyrus.html Edwin Smith Surgical Papyrus
Landmarks in the history of aphasia and its therapy (Chris Code)
http://www.acsu.buffalo.edu/~duchan/new_history/overview.html A History of Speech Language Pathology (Judy Duchan)

***1/21* – MLK day, University CLOSED**

1/28 Brain and language
Format: Lecture, discussion, demo

- ✓ PPT presentation: *Language and the brain*
- ✓ Brain demonstration *(in-class),* briefly examine CT and MRI films

Links:
Virtual reality for phantom limb pain (video shorts)
https://www.youtube.com/watch?v=tRmYNwWRR78
https://www.youtube.com/watch?v=l1nf37xIzQ0

Non-invasive brain stimulation helps stroke patients gain prolonged language recovery
https://www.eurekalert.org/pub_releases/2013-07/tjov-nbs062613.php

- Poeppel, D., Emmorey, K., Hickok, G. and Pylkkanen, L. (2012). Towards a new neurobiology of language. *The Journal of Neuroscience*. 32(41), 14125-14131.

[ASSIGN STUDENT PRESENTERS/GROUPS FOR REST OF COURSE]

****** NOTE: The format for all subsequent sessions will consist of student–led seminars ******

2/4 Classification of aphasia: Classical approaches and current issues
Format: Lecture, discussion

- ✓ PPT presentation (time permitting): *Stroke: Incidence, cost, functional anatomy, prevention*

Articles

- Tippett and Hillis (2016), Vascular Aphasia Syndromes, Chapter 73, Neurobiology of Language, G. Hickok and S. Small, Eds., Elsevier B.V., pgs. 913-922.

- Yourganov, G., Smith, K. G., Fridriksson, J., & Rorden, C. (2015). Predicting aphasia type from brain damage measured with structural MRI. *Cortex*, 73, 203-215.

- Kasselimis, D. S., Simos, P. G., Peppas, C., Evdokimidis, I., & Potagas, C. (2017). The unbridged gap between clinical diagnosis and contemporary research on aphasia: A short discussion on the validity and clinical utility of taxonomic categories. *Brain and language*, 164, 63-67.

2/11 Philosophical background: Brain, Mind, and Language
Format: Lecture, discussion

LINKS: Please view before class:

1. A teaser! Oxford Online Course advert
   https://www.conted.ox.ac.uk/courses/philosophy-of-mind-online

2. http://www.ted.com/talks/david_chalmers_how_do_you_explain_consciousness
   "David Chalmers: How do you explain consciousness?" (2014) *21 min video*

3. https://www.youtube.com/watch?v=j_OPQgPIdKg
   Consciousness and the Brain: John Searle (2013) 15 min video

✓ PPT presentation: *Short backgrounder on philosophy (WK)*

Articles:

- Churchland, P.M (1988). *Matter and Consciousness*, Chap. 2, pg. 7-42. [group 1]

- Searle, P. (1984). *Minds, Brains, and Science*, Chap. 1, pg. 13-27. [group 2]

2/18 Disorders of Phonology
Format: Lecture, discussion

BACKGROUND:

✓ RELEVANT FOR NEXT TWO LECTURES: G. Albyn Davis: Chapter 3, *Investigating Language Impairments*, (2014), pg. 43-69. (Psycholinguistics and aphasia).

✓ Garst, D., & Katz, W. (2006). Foreign Accent Syndrome. *The ASHA Leader*, 11, 10-11, 31. See also http://www.utdallas.edu/research/FAS/index.html

LINKS: http://www.utdallas.edu/research/FAS/

- Blumstein, S.E. Psycholinguistic approaches to the study of syndromes and symptoms of aphasia. Chapter 74, Neurobiology of Language, G. Hickok and S. Small, Eds., Elsevier B.V., pgs. 923-933.

- Miller, N., Lowit, A., & O'Sullivan, H. (2006). What makes acquired foreign accent syndrome foreign? *Journal of Neurolinguistics,* 19, 385-409.

- Jonkers, R., van der Scheer, F., and Gilbers, D. (2017). The common denominator in the perception of accents in cases with foreign accent syndrome. *Aphasiology*, 31:9. 1021-1043.

2/25 Disorders of Semantics – From Words to Meaning
Format: Discussion

LINKS: http://wordnet.princeton.edu/

- Rapp, B.C. & Caramazza, A. (1998). Lexical deficits. Acquired aphasia, (M.T. Sarno, Ed.), Chapter 6.

- Harnish, S. M., Morgan, J., Lundine, J. P., Bauer, A., Singletary, F., Benjamin, M. L., & Crosson, B. (2014). Dosing of a cued picture-naming treatment for anomia. *American Journal of Speech-Language Pathology,* 23(2), S285-S299.

  McCarthy, R. A., & Warrington, E. K. (2016). Past, present, and prospects: Reflections 40 years on from the selective impairment of semantic memory (Warrington, 1975). Quarterly Journal of Experimental Psychology, 69(10), 1941–1968.

3/4 Disorders of Syntax and Morphology (agrammatism)
Format: Discussion

BACKGROUND: Marshall, J. (2013). "Disorders of Sentence Processing" (Chap. 10), in I. Papathanasiou, P. Coppens & C. Potagas, *Aphasia and Related Neurogenic Communication Disorders*, MA: Jones & Bartlett. p. 197 – 216.

- Thompson, C. & Shapiro, L. (2007). Complexity in treatment of syntactic deficits. *American Journal of Speech-Language Pathology* 16, 30-42.

- Lee, J. and Man, G. (2017). Language recovery in aphasia following implicit structural priming training: a case study, *Aphasiology*, 31:12, 1441-1458.

- Des Roches, C. A., Vallila-Rohter, S., Villard, S., Tripodis, Y., Caplan, D., & Kiran, S. (2016). Evaluating Treatment and Generalization Patterns of Two Theoretically Motivated Sentence Comprehension Therapies. *American Journal of Speech-Language Pathology*, 25(4S), S743-S757.

3/11 Disorders of Repetition
Format: Charting, discussion

BACKGROUND: Ardila, A. (2010). A Review of Conduction Aphasia. *Curr Neurol Neurosci Rep*., 10, 499–50.

In-class video: Wertz, R. *The fluent aphasias – CA patient*

- Baldo J., Klostermann , E., Dronkers, N, (2008). It's either a cook or a baker: Patients with conduction aphasia get the gist but lose the trace. *Brain and Language*, 105, 134-40.
- Buchsbaum, B. R., Baldo, J., Okada, K., Berman, K. F., Dronkers, N., D'Esposito, M., & Hickok, G. (2011). Conduction aphasia, sensory-motor integration, and phonological short-term memory–an aggregate analysis of lesion and fMRI data. *Brain and language*, 119(3), 119-128.

- Domingues et al. (2014). Transcranial direct current stimulation improves word production in Conduction Apahasia: Electroencephalographic and behavioral evidence. *International Journal of Clinical and Health Psychology* 14, 240-245.

→ NOTE: Receive MIDTERM EXAM (take-home)

--- 3/18 to 3/22 -- SPRING BREAK ---

(Completed midterm exam due)

3/25 Apraxia of speech: Kinematic analysis and management
Format: Discussion

LINKS: http://www.utdallas.edu/~wkatz/visual_speech_research.html UTD Visible speech project

BACKGROUND: McNeil, M.R., & Robin, D. "Apraxia of speech: Definition and differential diagnosis." Chapter in: McNeil, M.R. (Ed.), *Clinical Management of Sensorimotor Speech Disorders. 2nd Ed.*, New York: Thieme Medical Publishers (2008).

- Katz, W., McNeil, M., & Garst, D. (2010). Treating apraxia of speech (AOS) with EMA-supplied visual augmented feedback. *Aphasiology*, 24, 826-837.

- Wambaugh, J., Nessler, C., Cameron, R., & Mauszycki (2012). Acquired apraxia of speech: The effects of repeated practice and rate/rhythm control treatments on sound production accuracy, *American Journal of Speech-Language Pathology*, 21, S5-S27.

- Maas, E., Gutiérrez, K., & Ballard, K. (2014). Phonological encoding in apraxia of speech and aphasia, *Aphasiology*, 28:1, 25-48

3/18 Spring break

3/25 Word recognition, sentence processing, and aphasia

Format: Discussion

a. Swinney, D. (1979). Lexical access during sentence comprehension: (Re)Consideration of context effects. *Journal of Verbal Learning and Verbal Behavior*, 18, 645-659.

- Yee, E., Blumstein, S.E., Sedivy, J.C. (2008). Lexical-semantic activation in Broca's and Wernicke's aphasia: evidence from eye movements. *J. Cogn. Neurosci*., 20, 592-612.

- Fama, M. E., Hayward, W., Snider, S. F., Friedman, R. B., & Turkeltaub, P. E. (2017). Subjective experience of inner speech in aphasia: Preliminary behavioral relationships and neural correlates. *Brain and Language*, *164*, 32-42.

4/1 Right hemisphere communication disorders/ Neural control of prosody
Format: Discussion

BACKGROUND: Myers, P. & Blake, M. (2008). Communication disorders associated with right-hemisphere damage. In R. Chapey (Ed.) *Language Intervention Strategies in Aphasia and Related Neurogenic Communication Disorders.* 5th *Ed.* Baltimore: Lippincott Williams & Wilkins, pp. 963-987.

- Paulmann, S. (2016). The neurocognition of prosody, Chapter 88, Neurobiology of Language, G. Hickok and S. Small, Eds., Elsevier B.V., pgs. 1109-1120.

- Tomkins, C., Blake, M, Wambaugh, J., and Meigh, K. (2011). A novel, implicit treatment for language comprehension processes in right hemisphere brain damage. *Aphasiology*, 25(6-7): 789–799.

- Fordell et al.. (2016). RehAtt – scanning training for neglect enhanced by multi-sensory stimulation in Virtual Reality Top Stroke Rehabil. 2016 Jun;23(3):191-9

**** 4/15 → Speech Motor Conference (Callier Prize) - discussion with scientists about aphasia-relevant topics***

Steven M. Barlow, Ph.D.	https://cehs.unl.edu/secd/faculty/steven-barlow/
Jonathan Brumberg, Ph.D.	http://splh.ku.edu/jonathan-s-brumberg
Jordan R. Green, Ph.D., CCC-SLP	https://www.mghihp.edu/jordan-r-green-phd-ccc-slp-fasha
Tara McAllister, Ph.D., CCC-SLP	https://steinhardt.nyu.edu/faculty/Tara_McAllister_Byun

4/22 Connectionist models of language processing and aphasia
Format: Discussion

LINKS:

- https://www.youtube.com/watch?v=e9HikL57rMU&t=4s
  Gary Dell, *9:18 min video*
- https://www.youtube.com/watch?v=yOFrQGDy0V0
  Nadine Martin, Testing Theories: Using aphasia intervention to gain theoretical insights
  7 min video

- http://www.youtube.com/watch?v=gakJlr3GecE *NetTalk* – brief demo after different amounts of iterations

✓ In-class PPT and demo (WK): *Connectionist modeling software (JAVA 'Neuroph')– build a simple network for an 'XOR' problem, then "lesion" it*

- Hinton, G.E., Plaut, D.C., & Shallice, T. (1993). Simulating brain damage. Scientific American, October issue.

- Woollams, A. M. (2014). Connectionist neuropsychology: uncovering ultimate causes of acquired dyslexia. *Phil. Trans. R. Soc. B*, 369(1634), 20120398.

4/29 ***In-class presentation (and discussion) of student grant proposals.***

Grading policy: Knowledge will be assessed by:

1. Selected readings from required chapters and articles.
2. Outlining and presenting materials as seminar leaders.
3. Participating in class – asking questions, synthesizing information.
4. Take-home midterm exam (short essay format).
5. Term paper in the form of a "mini-grant proposal" ←Tentative due date: **Friday 5/3 at noon**

Grading formula: Class discussion 10%; Presentations 30%, Midterm, 30%; Final project, 30%.

VERY IMPORTANT! 🕮

✓ It is essential that your reading be completed BEFORE class discussion!

✓ If you are scheduled to lead an article discussion – **do not miss class!** (only if you have a real emergency!) If somehow you cannot make it, please contact me ASAP so that I can prepare in your stead. Otherwise, the whole class will suffer.

✓ I will schedule two short meetings with each student to discuss issues concerning the final paper.

ASHA STANDARDS ADDRESSED IN THIS CLASS: How knowledge is conveyed and how knowledge and skill acquisition will be demonstrated.

Standard III – B

The applicant must demonstrate knowledge of basic human communication and swallowing processes, including their biological, neurological, acoustic, psychological, developmental, and linguistic and cultural basis

Knowledge will be conveyed via class lectures and readings. Acquisition will be demonstrated via class discussions, exams, and required projects.

Standard III-C

The applicant must demonstrate knowledge of the nature of speech, language, hearing, and communication disorders and differences and swallowing disorders, including their etiologies characteristics, anatomical/physiological, acoustic, psychological, developmental, and linguistic and cultural correlates.

Knowledge will be conveyed via class lectures and readings. Acquisition will be demonstrated via class discussions, exams, and required projects.

Standard III-D

The applicant must possess knowledge of the principles and methods of prevention, assessment, and intervention for people with communication and swallowing disorders, including consideration of anatomical/physiological, psychological, developmental, and linguistic and cultural correlates of the disorder.
Knowledge will be conveyed via class lectures and readings. Acquisition will be demonstrated via class discussions, exams, and required projects.

Standard III-E

The applicant must demonstrate knowledge of standards of ethical conduct.
Knowledge will be conveyed via class lectures and readings. Acquisition will be demonstrated via class discussions, exams, and required projects.

Standard III – F

The applicant must demonstrate knowledge of processes used in research and the integration of research principles into evidence-based clinical practice.
Knowledge will be conveyed via class lectures and readings. Acquisition will be demonstrated via class discussions, exams, and required projects.

Standard III – G

The applicant must demonstrate knowledge of contemporary professional issues.
Knowledge will be conveyed via class lectures and readings. Acquisition will be demonstrated via class discussions, exams, and required projects.

Standard IV – B

The applicant must possess skill in oral and written or other forms of communication sufficient for entry into professional practice.
Knowledge will be conveyed via class lectures and readings. Acquisition will be demonstrated via class discussions, exams, and required projects.

Students will demonstrate the following skills:

1. Identify normal and abnormal adult language and cognitive communication as it pertains to adult neurogenic disorders.
   As measured by:

   Successful completion of exams, Successful completion of projects

2. Describe intervention strategies for adult patients with language and cognitive communication disorders.
   As measured by:

   Successful completion of exams, Successful completion of projects

3. Describe impact of physical, behavioral and medical status on adult language and cognitive communication disorders.
   As measured by:

   Successful completion of exams, Successful completion of projects

4. Describe and choose appropriate compensatory techniques, facilitation techniques and environmental modifications for adult patients with language and cognitive communication deficits.
   As measured by:

   Successful completion of exams, Successful completion of projects

5. Interpret, integrate and synthesize information to develop appropriate recommendations for intervention/treatment plans and to appropriately document a patient's progress in therapy.
   As measured by:

   Successful completion of exams, Successful completion of projects

6. Describe and develop measurable and achievable goals that would meet a patient's needs and target functional outcomes.
   As measured by:

   Successful completion of exams, Successful completion of projects

7. Identify standards of ethical conduct as they relate to the practice of adult language and cognitive communication rehabilitation.
   As measured by:

   Successful completion of exams, Successful completion of projects

8. Identify and describe cultural issues that relate to adult language and cognitive communication disorders and treatment.
   As measured by:

   Successful completion of exams, Successful completion of projects

9. Identify and discuss aspects of adult language and cognitive communication intervention in varying treatment settings.
   As measured by:

   Successful completion of exams, Successful completion of projects

10. Discuss and describe educational needs of patients, families, and the multidisciplinary professional team for adults with language and cognitive communication disorders.
    As measured by:

    Successful completion of exams, Successful completion of projects

11. Discuss and develop appropriate treatment activities for adults with language and cognitive communication disorders.
    As measured by:

    Successful completion of exams, Successful completion of projects

12. Discuss and describe strategies to achieve generalization of communication skills/strategies for adults in natural environments.
    As measured by:

    Successful completion of exams, Successful completion of projects

13. Discuss and describe strategies to collect and analyze data from therapy.
As measured by:

Successful completion of exams, Successful completion of projects

14. Discuss and describe documentation procedures for various treatment settings.
As measured by:

Successful completion of exams, Successful completion of projects

15. Discuss strategies to prevent adult language and cognitive communication disorders.
As measured by:

Successful completion of exams, Successful completion of projects

Field Trip Policies, Off-campus Instruction and Course Activities

Off-campus, out-of-state, and foreign instruction and activities are subject to state law and University policies and procedures regarding travel and risk-related activities. Information regarding these rules and regulations may be found at the website address http://www.utdallas.edu/BusinessAffairs/Travel_Risk_Activities.htm. Additional information is available from the office of the school dean. Below is a description of any travel and/or risk-related activity associated with this course.

Student Conduct & Discipline

The University of Texas System and The University of Texas at Dallas have rules and regulations for the orderly and efficient conduct of their business. It is the responsibility of each student and each student organization to be knowledgeable about the rules and regulations which govern student conduct and activities. General information on student conduct and discipline is contained in the UTD publication, *A to Z Guide*, which is provided to all registered students each academic year.

The University of Texas at Dallas administers student discipline within the procedures of recognized and established due process. Procedures are defined and described in the *Rules and Regulations, Board of Regents, The University of Texas System, Part 1, Chapter VI, Section 3*, and in Title V, Rules on Student Services and Activities of the university's *Handbook of Operating Procedures*. Copies of these rules and regulations are available to students in the Office of the Dean of Students, where staff members are available to assist students in interpreting the rules and regulations (SU 1.602, 972/883-6391).

A student at the university neither loses the rights nor escapes the responsibilities of citizenship. He or she is expected to obey federal, state, and local laws as well as the Regents' Rules, university regulations, and administrative rules. Students are subject to discipline for violating the standards of conduct whether such conduct takes place on or off campus, or whether civil or criminal penalties are also imposed for such conduct.

Academic Integrity

The faculty expects from its students a high level of responsibility and academic honesty. Because the value of an academic degree depends upon the absolute integrity of the

work done by the student for that degree, it is imperative that a student demonstrate a high standard of individual honor in his or her scholastic work.

Scholastic dishonesty includes, but is not limited to, statements, acts or omissions related to applications for enrollment or the award of a degree, and/or the submission as one's own work or material that is not one's own. As a general rule, scholastic dishonesty involves one of the following acts: cheating, plagiarism, collusion and/or falsifying academic records. Students suspected of academic dishonesty are subject to disciplinary proceedings.

Plagiarism, especially from the web, from portions of papers for other classes, and from any other source is unacceptable and will be dealt with under the university's policy on plagiarism (see general catalog for details). This course will use the resources of turnitin.com, which searches the web for possible plagiarism and is over 90% effective.

Email Use

The University of Texas at Dallas recognizes the value and efficiency of communication between faculty/staff and students through electronic mail. At the same time, email raises some issues concerning security and the identity of each individual in an email exchange. The university encourages all official student email correspondence be sent only to a student's U.T. Dallas email address and that faculty and staff consider email from students official only if it originates from a UTD student account. This allows the university to maintain a high degree of confidence in the identity of all individual corresponding and the security of the transmitted information. UTD furnishes each student with a free email account that is to be used in all communication with university personnel. The Department of Information Resources at U.T. Dallas provides a method for students to have their U.T. Dallas mail forwarded to other accounts.

Withdrawal from Class

The administration of this institution has set deadlines for withdrawal of any college-level courses. These dates and times are published in that semester's course catalog. Administration procedures must be followed. It is the student's responsibility to handle withdrawal requirements from any class. In other words, I cannot drop or withdraw any student. You must do the proper paperwork to ensure that you will not receive a final grade of "F" in a course if you choose not to attend the class once you are enrolled.

Student Grievance Procedures

Procedures for student grievances are found in Title V, Rules on Student Services and Activities, of the university's *Handbook of Operating Procedures*.

In attempting to resolve any student grievance regarding grades, evaluations, or other fulfillments of academic responsibility, it is the obligation of the student first to make a serious effort to resolve the matter with the instructor, supervisor, administrator, or committee with whom the grievance originates (hereafter called "the respondent"). Individual faculty members retain primary responsibility for assigning grades and evaluations. If the matter cannot be resolved at that level, the grievance must be submitted in writing to the respondent with a copy of the respondent's School Dean. If the matter is not resolved by the written response provided by the respondent, the student may submit a written appeal to the School Dean. If the grievance is not resolved by the School Dean's decision, the student may make a written appeal to the Dean of Graduate or Undergraduate Education, and the deal will appoint and convene an Academic

Appeals Panel. The decision of the Academic Appeals Panel is final. The results of the academic appeals process will be distributed to all involved parties.

Copies of these rules and regulations are available to students in the Office of the Dean of Students, where staff members are available to assist students in interpreting the rules and regulations.

Incomplete Grade Policy

As per university policy, incomplete grades will be granted only for work unavoidably missed at the semester's end and only if 70% of the course work has been completed. An incomplete grade must be resolved within eight (8) weeks from the first day of the subsequent long semester. If the required work to complete the course and to remove the incomplete grade is not submitted by the specified deadline, the incomplete grade is changed automatically to a grade of **F**.

Disability Services

The goal of Disability Services is to provide students with disabilities educational opportunities equal to those of their non-disabled peers. Disability Services is located in room 1.610 in the Student Union. Office hours are Monday and Thursday, 8:30 a.m. to 6:30 p.m.; Tuesday and Wednesday, 8:30 a.m. to 7:30 p.m.; and Friday, 8:30 a.m. to 5:30 p.m.

The contact information for the Office of Disability Services is:
The University of Texas at Dallas, SU 22
PO Box 830688
Richardson, Texas 75083-0688
(972) 883-2098 (voice or TTY)

Essentially, the law requires that colleges and universities make those reasonable adjustments necessary to eliminate discrimination on the basis of disability. For example, it may be necessary to remove classroom prohibitions against tape recorders or animals (in the case of dog guides) for students who are blind. Occasionally an assignment requirement may be substituted (for example, a research paper versus an oral presentation for a student who is hearing impaired). Classes enrolled students with mobility impairments may have to be rescheduled in accessible facilities. The college or university may need to provide special services such as registration, note-taking, or mobility assistance.

It is the student's responsibility to notify his or her professors of the need for such an accommodation. Disability Services provides students with letters to present to faculty members to verify that the student has a disability and needs accommodations. Individuals requiring special accommodation should contact the professor after class or during office hours.

Religious Holy Days

The University of Texas at Dallas will excuse a student from class or other required activities for the travel to and observance of a religious holy day for a religion whose places of worship are exempt from property tax under Section 11.20, Tax Code, Texas Code Annotated.

The student is encouraged to notify the instructor or activity sponsor as soon as possible regarding the absence, preferably in advance of the assignment. The student, so excused, will be allowed to take the exam or complete the assignment within a reasonable time after the absence: a period equal

to the length of the absence, up to a maximum of one week. A student who notifies the instructor and completes any missed exam or assignment may not be penalized for the absence. A student who fails to complete the exam or assignment within the prescribed period may receive a failing grade for that exam or assignment.

If a student or an instructor disagrees about the nature of the absence [i.e., for the purpose of observing a religious holy day] or if there is similar disagreement about whether the student has been given a reasonable time to complete any missed assignments or examinations, either the student or the instructor may request a ruling from the chief executive officer of the institution, or his or her designee. The chief executive officer or designee must take into account the legislative intent of TEC 51.911(b), and the student and instructor will abide by the decision of the chief executive officer or designee.

These descriptions and timelines are subject to change at the discretion of the Professor.