

Seminar in Central Auditory Processing Disorders
AUD 940
Spring 2012

Instructors: Mark E. Chertoff, Ph.D., Sarah E. Zlomke, Au.D., CCC-A
Time: 9:00 - 11:00
Location: Miller

Course Description

The goals of this seminar are to provide students a working knowledge of the issues in Central Auditory Processing. The knowledge to be gained is in the background fundamentals of central auditory processing, diagnostic procedures, and therapeutic strategies. This will be obtained through readings, demonstrations, and class discussions.

Course Objective / Learning Outcomes

1. Review anatomy and physiology of central auditory system
2. Development of behavioral and electrophysiological measures of CAP
3. Learning to critically review research literature
4. Develop therapeutic intervention strategies.

ASHA Standards

Students enrolled in this class will acquire knowledge and skills associated with the following ASHA standards for certification in Audiology: B.4, B.6, B.7, B.15.

Grading Policy

Dr. Chertoff will be teaching the first 8 weeks of class, and Dr. Zlomke will teach the remaining 8 weeks. Students will be graded on 8 online quizzes (25 points each), an online midterm (100 points), and a final based on a clinical observation (100 points). Moreover, each student will be responsible for writing a 1 page summary for each of the papers assigned in class. A loss of 10 points from the final grade will be assessed for each summary paper not completed. Final grades will be determined by the percentage of the total points accumulated, i.e. 90% and above = A, 80-89% = B, 70-79% = C, etc.

Clinical Observation

Observations will be set up with Dr. Zlomke. This will consist of completing and APD evaluation, scoring, and clinical report. Available times will be set up ahead of time and by alphabetical order.

Book Required

Bellis, T. J. Assessment and Management of Central Auditory Processing Disorders in the Educational Setting. From Science to Practice. Thomson, Delmar Learning.

Topics and Readings

Class 1:

- A. Course Logistics
- B. Lecture 1
- C. Readings: Bellis Chapter 1, Ortel, 1999

Class 2:

- A. Lecture 1, 2
- B. Readings: Ortel, 1999 – **summary due.**
- C. Quiz 1 due.

Class 3:

- A. Lecture 2, 3
- B. Readings: Pollak, 2003 – **summary due.**

Class 4:

- A. Lecture 3
- B. Readings: Winer, 2005 – **summary due.**
- C. Quiz 2 due.

Class 5:

- A. Definitions of Auditory Processing (controversy)
- B. Reading: Portions of (Central) Auditory Processing Disorders 2005: Working Group on Auditory Processing Disorders,
- C. Reading: NEED TO GET THIS – Controversy chapter – **summary due.**

Class 6:

- A. Behavioral Measures of Auditory Processing (Dichotic, Temporal, Low redundancy, and Binaural Interaction tests)
- B. Reading: Bellis (pages 56-65, 65-76, 213-218, 218-221).
- C. Reading: Noffsinger et al, 1984 – **summary due.**
- D. Reading: Hirsh I.J. JASA 31, 6, 1959 – **summary due.**
- E. Quiz 3 due.

Class 7:

- A. Demo Behavioral Measures.
- B. Physiology Measures of Auditory Processing.
- C. Reading: Bellis (pages 225-229)
- D. Reading: Johnson et al., 2005 – **summary due.**
- E. Reading: Wible et al., 2005 – **summary due.**

Class 8:

- A. Test Design: Validity, Reliability, ROC curves
- B. Reading: SCAN 3
- C. Reading: New test develop
- D. Quiz due.
- E. Midterm due following week or so?

3/14/12 - Class 9:

APD Models: Bellis – Ferre Model, Buffalo Model, Fey Model, Spoken Language Processing Model

- a. Medwetsky (2011). Spoken Language Processing Model: Bridging Auditory and Language Processing to Guide Assessment and Intervention. Language Speech and Hearing Services in Schools, 42: 286-296.
- b. Guidelines for the Diagnosis, Treatment and Management of Children and Adults with CAPD, American Academy of Audiology, 2010, pages 30-33.
- c. Bellis, pages 288 - 302

3/21/12 - No Class - Spring Break

3/28/12, 4/4/12 - Class 10 and 11:

APD Case History, Test Measures and Choosing a Test Battery

- a. Bellis, pages 235 - 261
- b. Guidelines for the Diagnosis, Treatment and Management of Children and Adults with CAPD, American Academy of Audiology, 2010, pages 5-22.

- c. (Central) Auditory Processing Disorders 2005: Working Group on Auditory Processing Disorders, American Speech-Language-Hearing Association, 2005, pages 6-13.
- d. Bellis and Ferre (1999). Multidimensional Approach to the Differential Diagnosis of Central Auditory Processing Disorders in Children. *J Am Acad Audiol*, 10:319-328.

4/11/12 - Class 12:

Interpretation of the Battery: Results to Categories of APD

- a. Bellis, pages 270 to 302
- b. Katz, Stecher, and Henderson (1992). Chapter 6: Classification of Auditory Processing Disorders. From *Central Auditory Processing: A Transdisciplinary View*.

4/18/12 - Class 13:

APD and Special Populations

- a. Chermak et al. (1999). Differential Diagnosis and Management of Central Auditory Processing Disorder and Attention Deficit Hyperactivity Disorder. *J Am Acad Audiol*, 10: 289-303.
- b. Chermak et al. (2002). Behavioral Characteristics of Auditory Processing Disorder and Attention-Deficit Hyperactivity Disorder: Predominantly Inattentive Type. *J Am Acad Audiol*, 13: 332-338.
- c. Neijenhuis et al. (2004). The Effect of Mild Hearing Impairment on Auditory Processing Tests. *J Am Acad Audiol*, 16:6-16.

4/25/12, 5/2/12 - Class 14 and 15:

APD Intervention: Direct Auditory Training, Environmental Modifications, Compensation Strategies

- a. Bellis, Chapters 8 and 9
- b. Alonso and Schochat (2009). The Efficacy of Formal Auditory Training in Children with (Central) Auditory Processing Disorder: Behavioral and Electrophysiological Evaluation. *Braz J Otorhinolaryngol*, 75(5): 726-732.
- c. Hayes et al. (2003). Neural Plasticity Following Auditory Training in Children with Learning Problems. *Clinical Neurophysiology*, 114: 673-684.
- d. Guidelines for the Diagnosis, Treatment and Management of Children and Adults with CAPD, American Academy of Audiology, 2010, pages 24-29.

5/9/12 - Class 16:

Final projects are due

Learning assistance, academic performance enhancement, and psychological services at KUMC are free, confidential, and available at Student Counseling & Educational Support Services by calling 913-588-6580 or visit G116 Student Center.

Any student in this course who needs an accommodation because of a disability in order to complete this course should contact the instructor the Equal Opportunity/Disability Specialist (913-588-7813, TDD 913-588-7963) as soon as possible.

Any student with extenuating circumstances which could prevent the fullest expression of his/her abilities should contact the instructor to make individual arrangements.

Any student who does not understand and/or accept the contents and terms of this syllabus must notify the instructor in writing within one week after receiving this syllabus.