University of Northern Colorado  
Department of Audiology and Speech-Language Sciences  

ALS 655  Acquired Disorders of Language and Cognition  CRN 21736  

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Course Description  
This course describes signs and symptoms, evaluation approaches, differential diagnostic criteria, prevention, and management approaches to speech and language disorders resulting from acquired neurological dysfunction across the lifespan. Prerequisite: ASLS 555  

Required Text  
Burlington MA: Jones & Bartlett Learning, Incorporated.  

Additional Resources  
Baltimore: Williams & Wilkins.  
San Diego: Plural Publishing.  
doi:10.1371/journal.pmed.1000100  
**Student Competencies**

At the conclusion of this course, each student will be expected to meet each competency listed in the table below. These competencies contribute to a student’s ability to meet one of the academic outcome standards identified by the American Speech-Language-Hearing Association as standards for entry-level practice in speech-language pathology (effective 9/1/14; revised 3/1/16).

<table>
<thead>
<tr>
<th>Competency</th>
<th>Activity</th>
<th>ASHA Standard</th>
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| 1) Identify basic structures and functions of the central and peripheral nervous systems as they relate to:  
a. language and communication comprehension and production,  
b. neural plasticity, models of recovery and treatment | CD, E, EBP, R | IV-B, IV-C |
| 2) List and describe neurological etiologies, disorder subtypes, and cognitive, behavioral and psychosocial symptoms associated with the following neurogenic communication disorders:  
Acquired aphasia  
Mild Cognitive Impairment  
Primary Progressive Aphasia  
Right Hemisphere Disorder | CD, E, R,V | IV-B, IV-C, IV-D |
| 3) Describe five models of evidence-based intervention | CD, E, EBP, R | IV-C, IV-D, IV-F, IV-A, IV-B |
| 4) Following the International Classification of Functioning, Disability and Health (ICF) model, describe two impairment-based assessments and two activity/participation-based assessments for each NCD in Competency 2. | CD, E, R, SRMA, V | IV-C, IV-D, IV-F, IV-B |
| 5) Following the ICF describe at least two impairment-based treatment techniques and at least two activity/participation-based treatment techniques appropriate for each NCD in Competency 2. | CD, E, EBP R, SRMA, V | IV-C, IV-D, IV-F, IV-B |
| 6) Define quality of life and list two examples of application in assessment and treatment for each NCD in Competency 2. | CD, E, R, SRMA, V | IV-D, IV-E, IV-G, IV-A, IV-B |
| 7) Identify two current issues in each area of responsibility in assessment and treatment of persons with NCD: cultural sensitivity, ethical behavior, evidence-based practice, fiscal responsibility, patient multilingualism, and service delivery. | CD, R, V | IV-E, IV-H |

CD = Class Discussion  
E = Examination  
EBP = Evidence-based Practice activity  
R = Readings  
SRMA = Systematic Review – Meta-analysis Project  
V = Video review
**Course Activities**

**Study Groups**

Each student must join a study group. A study group is composed of 4-5 students and will exist across the semester. Each student is expected to engage in substantive discussion on course topics within your study group. Post the name of your study group and the names of the members on the Discussion Board.

**Class Discussion**

All students are expected to participate in discussions in their study groups and in the class at large. Grading for this component will be based on the presence and quality of comments and will contribute to the final participation grade.

**Readings**

Students are expected to read all assigned material; some information in the required readings may not be explicitly discussed in study groups or the class of the whole, however the information contained in the readings will contribute to a student's ability to participate in class discussion and complete course activities, including the examination.

**Midterm Exam**

One examination is planned for this course at midterm; it will contain questions in objective and short answer formats.

**Evidence-based Practice Activity**

Translate theories and models of evaluation and intervention into practice documents. Through your study group meetings, synthesize information and respond to the questions below about a treatment technique. Write your responses in text or graphic form in one document and post to Canvas.

1. Select a treatment technique from among those provided.
2. Read the original description and 5 additional scholarly papers reporting empirical data as a result of implementing the technique; if 5 papers with empirical data are unavailable, substitute theoretical papers substantiating the viability of the technique.
   a. Describe characteristics of individuals who are and are not candidates for this treatment.
   b. Create or reproduce a basic flowchart or list of steps of the treatment technique
   c. Describe the clinical service delivery parameters, e.g. frequency, duration
   d. Identify the dependent variable(s) and data collection schedule
   e. State or calculate the effect size for each set of treatment data (i.e. for each treatment article).
3. Describe how the technique would be delivered in contemporary clinical practice
   a. Note real and possible discrepancies between reported service delivery parameters and contemporary practice parameters
   b. Propose a theoretically-based modification to treatment delivery based on contemporary practice parameters
   c. Identify possible intended and unintended consequences of the modification
4. Provide a visual demonstration of the technique
   a. Search the Internet for at least one video clip of the technique
   b. Post the clip(s) to the Canvas site
   c. If no video is available, create one illustrating what your group believes the technique would look like if administered in your contemporary clinical practice
5. Include a reference list
Systematic Review – Meta-analysis Activity

Search the ASHA N-CEP Compendium of Systematic Reviews, the Academy of Neurological Communication Disorders and Sciences list of systematic reviews, and any other research database available to located systematic reviews (SR) and meta-analyses (MA) involving acquired aphasia, primary progressive aphasia, or right hemisphere disorder assessment or treatment. Select two, and through your study group meetings, read the SR or MA.

1. Select two systematic reviews or meta-analyses relative to aphasia. Secure instructor approval prior to beginning the project to determine appropriateness of the review and avoid duplication of effort.
2. Complete a PRISMA checklist for each SR or MA (Moher, Liberati, Tetzlaff, Altman & PRISMA Group, 2009; Liberati, Altman, Tetzlaff, Mulrow, Gøtzsche, Ioannidis, Clarke…Moher, 2009).
3. Write a summary statement about the SR or MA, including the clinical utility of the SR or MA in guiding your work in contemporary clinical practice.

Important Reminders

Disability Access

Students who believe they may need accommodations in this class are encouraged to contact the Disability Access Center (970) 351-2289 as soon as possible to better ensure that such accommodations are implemented in a timely fashion.

Honor Code

All members of the University of Northern Colorado community are entrusted with the responsibility to uphold and promote five fundamental values: Honesty, Trust, Respect, Fairness, and Responsibility. These core elements foster an atmosphere, inside and outside of the classroom, which serves as a foundation and guides the UNC community’s academic, professional, and personal growth. Endorsement of these core elements by students, faculty, staff, administration, and trustees strengthens the integrity and value of our academic climate.

Written Assignments

For all written assignments, we expect students will summarize, synthesize & evaluate sources of information to demonstrate understanding and mastery of the material. Students whose writing relies heavily on quoted material taken directly from sources (even if appropriately cited) without discussion, consideration of reliability, evaluation and synthesis are not demonstrating graduate-level mastery of the material. In such cases, the grade earned will reflect the lack of mastery of material.

UNC’s Policies

UNC’s policies and recommendations for academic misconduct will be followed.
### Course Grading

Components of the course are listed in the table below. Grades will be posted on Canvas. It is the responsibility of each student to check Canvas and verify the accuracy of a grade. Assignments are to be completed in a timely manner. Occasionally unforeseen circumstances arise that prevent timely completion of assignments. If such a circumstance arises, please notify the instructor as soon as the circumstance presents itself, and make specific arrangements to complete the activity in an alternative manner.

<table>
<thead>
<tr>
<th>Course Activity</th>
<th>Weight</th>
<th>Due Date</th>
<th>Cumulative Course %</th>
<th>Course Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Systematic Review/Meta-Analysis Project #1</td>
<td>20%</td>
<td>1/30</td>
<td>96 - 100</td>
<td>A</td>
</tr>
<tr>
<td>Midterm exam</td>
<td>20%</td>
<td>2/27</td>
<td>90 – 96</td>
<td>A-</td>
</tr>
<tr>
<td>Systematic Review/Meta-Analysis Project #2</td>
<td>20%</td>
<td>3/27</td>
<td>85 - 89</td>
<td>B+</td>
</tr>
<tr>
<td>Evidence-based Practice Project</td>
<td>30%</td>
<td>4/17</td>
<td>80 – 84</td>
<td>B</td>
</tr>
<tr>
<td>Discussion participation</td>
<td>10%</td>
<td>throughout</td>
<td>&lt;83</td>
<td>B-</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100%</strong></td>
<td></td>
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## Course Schedule

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<thead>
<tr>
<th>Week</th>
<th>Topic</th>
<th>Chapters &amp; Readings</th>
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</table>
| 1/9  | Etiology  
A little bit of history  
Reading a Systematic Review or Meta-analysis | 1 – 2  
Mohr et al. (2009)  
Liberati et al. (2009) |
| 1/16 | Neuroanatomy and neuroplasticity | 3 - 4  
Kleim & Jones, 2008 |
| 1/23 | Models of assessment and treatment  
Standardized and nonstandardized assessment measures  
Patient Reported Outcomes | 5 |
| 1/30 | Model-based intervention  
Discharge planning | 6 |
| 2/6  | Influence of cognition and other assessment factors | 7 |
| 2/13 | Disorders of auditory comprehension | 8 |
| 2/20 | Disorders of word retrieval and word production | 9 |
| 2/27 | **Midterm Examination**  
Disorders of reading | 10 |
| 3/6  | Disorders of written language | 11 |
| Spring Break | | |
| 3/20 | Disorders of sentence processing | 12 |
| 3/27 | Assessment and treatment at the level of conversation | 13 |
| 4/3  | Client-centered assessment and treatment  
Patient Reported Outcomes | 14 – 16  
Hula et al. |
| 4/10 | Primary Progressive Aphasia  
Dementia | 20  
Assigned reading |
| 4/17 | Right Hemisphere Disorder | 17 - 18 |
| 4/30 | Traumatic brain injury | 19 |
| 5/5  | Comments on other groups’ EBP and SRMA Projects | |

✓ = exam or assignment due in that week