

Andrews University

Summer Semester 2018 SPPA-596 Neurocognitive Disorders

Course Description

An exploration of neurocognitive deficits of speech and language, with emphasis in dementia, traumatic brain injury, and right hemisphere damage. Principles of neuroanatomy and physiology, language implications, executive functioning concerns, and multicultural impacts will be investigated.

Course Credit

3.0

Location

BH 118

Schedule

Monday-Wednesday 1330-1620

May 7- June 12, 2018

Instructor

Tammy Shilling, M.A. CCC-SLP

Required Materials

Manasco, M. Hunter (2016). *Introduction to Neurogenic Communication Disorders*. (2nd ed.). Burlington, MA: Jones & Bartlett.

Course Objectives

By the end of the course, students will be able to:

- Integrate basic information about neuroanatomy, neurophysiology, and the organization of the motor and sensory systems.
- Organize the anatomical structures of the central and peripheral nervous system and discuss their functional role
- Compare the physiological functions of the structures of the central and peripheral nervous system
- Evaluate and compare the basic human communication and cognitive processes in relation to neurocognitive etiologies
- Compare the neural connections of language function and dysfunction.

- The student will categorize and compare/contrast receptive and expressive language disorders in the areas of speaking, listening, reading, writing, and manual modalities.
- The student will organize the cognitive aspects of communication (attention, memory, sequencing, problem-solving, executive functioning), with reference to the etiology, cultural and linguistic background of the client.
- The student will evaluate and measure the assessment of the communicative disorders, diagnosis, and intervention relating to right hemisphere damage, traumatic brain injury, and dementia.

Upon completion of this course, the student will have met the following requirements for certification in speech-language pathology:

ASHA Standard	Outcome	Implementation	Evaluation Criteria
IV-A IV-B V-A	Student will be able to compare the physiological functions of the structures of the central and peripheral nervous system, and organize the anatomical structures of the central and peripheral nervous system and discuss their functional role.	Exams, Readings, Lecture	80% accuracy
IV-B V-A	The student will integrate information about neuroanatomy, neurophysiology, and the organization of the motor and sensory systems. The student will evaluate the basic human communication processes (neurological, acoustic). The student will compare the physiological functions of the structures of the central and peripheral nervous system.	Exams, Readings, Lecture	80% accuracy
IV-C IV-F V-A	The student will categorize and compare/contrast receptive and expressive language disorders as they relate to speaking, listening, reading, writing, and manual modalities, with reference to the cultural and linguistic background of the client.	Exams, Readings, Lecture, Treatment Plan Project, Research Paper	80% accuracy
IV-D IV-F V-A V-B (1.a-1.e) V-B (2.a, 2.c, 2.e, 2f)	Student will create and evaluate methods of prevention, assessment, intervention of receptive and expressive language in speaking, listening, reading, writing, and manual modalities, with reference to the cultural and linguistic background of the client.	Exams, Readings, Lectures, Treatment Plan Project, Assessment Portfolio	80% accuracy
IV-E IV-F IV-G V-A	Student will integrate the code of ethics and professional issues as they relate to neurocognitive disorders.	Exams, Readings, Lecture	80% accuracy

Course Requirements

Written Work: All assignments must be submitted following APA guidelines. APA style requires a specified title page, 11 or 12 point font, double spaced, one inch margins all around, and appropriate headers, and page number. Each written document must follow APA 6th edition style and Andrews University guidelines. Written work and projects will be graded based on the professional presentation and organization of the work, accurate grammar and syntax, and thoroughness/completeness of all specified areas assigned for the work.

Technology Requirements: Each student is required to have access to and a working knowledge of technology such as PC or MAC.

Exams: There will be a Midterm and a Final Exam given, each worth 100 points.

Reading: Reading assigned sections of the text is instrumental to learning and understanding. The text book is important. The book “Not my Son, Lord” is a required reading for this course. A copy of this book can be checked out from Mrs. Shilling’s office. It is requested that you return it at the end of the course. Additional outside material may be assigned for further study of a particular area/topic.

Treatment Plan Project: Students will create a treatment plan for each of the disorders (Traumatic Brain Injury, Right Hemisphere Disorders, Dementia) with one LTG and three STG’s. For each of the STG’s, you need to provide and explain two activities that you would use to address those STG’s. The activities must be evidence-based.

Research Papers: There will be 3 Research Papers due for each of the disorders covered in this class: Right Hemisphere Disorder, Traumatic Brain Injury, and Dementia. Each student will choose an evidence-based treatment approach to cover in the paper (topics to choose from are below). The student will find at least 3 research articles on the approach. Write a 3-4 page position paper (reference page not included) supported by research article findings. You will also complete a 4 to 5-minute presentation on your paper during class.

The paper should include an:

- Introduction
- Critical review of the treatment approach
- Discussion of conflicting information found in the research
- Utilization of evidence based practice as noted in the research
- Discussion of clinical effect and suggestions for further research in the area
- Discussion of any ethical implications
- Any possible multicultural implications
- Personal position on if this technique would be effective, and in what circumstances

Traumatic Brain Injury

- Sensory Stimulation
- Computer-Assisted Technology
- Drill and Practice Training

- Spaced Retrieval
- Dual Task Training
- Errorless Learning
- Metacognitive skills training
- Cognitive Support Technologies
- External memory aides
- Social Skills Training

Dementia

- Reminiscence Therapy
- Errorless learning
- Spaced Retrieval
- External Memory Aides
- Montessori approach

Right Hemisphere Disorder

- Motoric-imitative treatment
- Visual scanning Therapy
- Attention Therapy
- Conversational Coaching
- PACE
- Discourse comprehension
- Cognitive-Affective Treatment
- Social Skills Training

Assessment Portfolio: This is a group project. Students will become familiar with specific assessment tools for neurocognitive disorders. Students will choose 2 assessment tools for the following areas: Right Hemisphere Disorder, Traumatic Brain Injury, and Dementia. **A videotaped presentation will be required demonstrating the proficiency in administering the assessment battery.** A list of the assessment tools are listed below by topic for your group to choose from. A written summary will be completed and include the following:

- Name of the instrument
- Year of publication
- Notation of previous versions of the assessment
- Differences between the current and previous versions (if any)
- Population noted for administration
- Scoring Procedures (basals, ceilings, cueing allowed)
- Validity and reliability information
- Noted areas of concern found in the validity and reliability of the instrument
- Possible drawbacks of the instrument

- Multicultural and ethnic implications to be considered in the utilization and administration of the instrument

Traumatic Brain Injury Assessments

- Brief Test of Head Injury
- Ross Information Processing Assessment-2
- Cognitive Linguistic Quick Test +

Dementia Assessments

- Arizona Battery for Communication Disorders of Dementia
- Ross Information Processing Assessment- Geriatric: 2nd ed.
- St. Luis University Mental State Exam OR Montreal Cognitive Assessment

Right Hemisphere Disorder Assessments

- Mini Inventory of Right Brain Injury- 2nd ed.
- Communicative Activities in Daily Living- 3rd ed.
- RIC Evaluation of Communication Problems in Right Hemisphere Dysfunction (RICE)-3

Course Outline

- A review of neuroanatomy and neuropathology and the nomenclature of neuro-traumas
- Understand the principles of neuroimaging
- Understanding neuroanatomical substrates of human memory, executive functioning and how brain damage affects language and cognition
- Contemporary theories of neurophysical and neuropsychological rehabilitation
- Overview of healthy cognitive aging
- Mild cognitive impairment
- Right Hemisphere Disorders
 - Clinical neuropsychology
 - Primary cognitive impairments
 - Secondary impairments
 - Cognitive pragmatics of RHD
 - Clinical assessment
 - Treatment
- Traumatic Brain Injury
 - Head trauma
 - Neuropsychological assessment
 - Primary cognitive impairments
 - Personality and behavior
 - Insight, Language, Discourse
 - Cognitive-communicative assessments
 - Cognitive rehabilitation
 - Recovery and outcome

- Dementia
 - Diagnosis and assessment of different types of dementia
 - Alzheimer’s disease
 - Other causes of dementia
 - Dementia of Alzheimer’s type (DAT)
 - Language with DAT
 - Communicative and cognitive rehabilitation
 - Medical treatments
- Professional and ethical implications associated with assessing, diagnosing, and treatment of Neurocognitive disorders
- Using the research on evidence-based practice and the integration of these research principles in the management of those with neurocognitive disorders
- Overview of brain cancer and Encephalopathy and their language deficits

May 7	Neuroanatomy Review/ Memory/ Executive Functioning	Ch. 1, 2	Review syllabus Neuroanatomy quiz Presentation- Immediate or Short term memory activity or app
May 8	Healthy Cognitive Aging/Mild Cognitive Impairment	Ch. 1	Presentation-Bring to class an app or website for promoting healthy cognition and/or memory in older adults
May 9	Neuroimaging and Assessment	Lecture 3	Bring to class a relevant article on neuroimaging techniques and be ready to share
May 14	Brain Cancer/ Encephalopathy	Lecture 4	
May 15	Right Hemisphere Disorders	Ch. 5	
May 16	Right Hemisphere Disorders	Case Study Reviews	Assessment Portfolio Videos Due- Goal Writing
May 21	Right Hemisphere Disorders	Intervention Strategies & Materials; Research Presentations	Right Hemisphere Research Paper Due
May 22	Mid Term Exam		
May 23	TBI	Ch. 8	
May 28	NO CLASS- Holiday		
May 29	TBI	Case Study/Book Review- “ <i>Not my Son, Lord</i> ”	Assessment Portfolio Videos Due- Goal Writing
May 30	TBI	Intervention Strategies	TBI Research Paper Due
June 4	Dementia	Ch. 9/ GDS Training	
June 5	Dementia	Case Study Reviews	Assessment Portfolio Videos Due- Goal Writing
June 6	Dementia	Intervention Strategies & Materials: Research	Dementia Research Paper Due -Presentations

		Presentations	
June 11	Dementia	" <i>Still Alice</i> "	End of Class Party
June 12	Final Exam		Treatment Plan Project Due

Attendance Policy

Regular attendance at all classes and other academic appointments is required of each student.

Class Absences. Whenever the number of absences exceeds 20% (10% for graduate classes) of the total course appointments, the teacher may give a failing grade. Merely being absent from campus does not exempt the student from this policy. Absences recorded because of late registration, suspension, and early/late vacation leaves are not excused. The class work missed may be made up only if the teacher allows. Three tardies are equal to one absence.

Disability Accommodation

If you qualify for special assistance under the American Disabilities Act, please contact the Student Success office at Nethery Hall 100 or disabilities@andrews.edu.

Professionalism

To prepare students for the professional world, certain behaviors/activities are not allowed in the classroom.

- Cell phones should be turned off before entering the classroom.
- Picture-taking during class is not allowed.
- Recording devices are allowed only if pre-approved by instructor, and if approved, under no circumstance are recordings—visual or verbal—to be posted on a public website.
- Laptops should not be used for surfing the web or watching movies during class. It is disrespectful and unprofessional to use these devices inappropriately during class.
- Late Assignments are unacceptable unless prearranged with instructor.
- Eating in class: Please do not bring food or beverages to class. Water is permitted.
- Presentation is important. Your attention to detail, demeanor, timeliness, and attire factor into how you are perceived as a professional.
- Active participation in class discussions and critiques is an essential part of learning. Without participating and expressing opinions and thoughts, it is impossible to clarify your goals and develop a personal style.
 - You will be responsible for reading the text and all supplemental material assigned and/or handed out during the semester.
 - You will be expected to attend all class sessions and to participate fully in class discussions/activities.
- Changes: At the discretion of the teacher some assignments, quizzes, tests and projects may be changed for an enhanced learning experience for the students. Likewise the class schedule is fluid if more time or less is needed to cover each topic mentioned.
- Academic Integrity Policy: Andrews University is a community of scholars where academic honesty is the expected norm for faculty and students. All members of this community are expected to exhibit academic honesty in keeping with the policy outlined in the University

bulletin. In addition, the student is expected to comply with ethical and scientific standards in research as recognized by the US Office of Human Subjects Protection and the US Office of Research Integrity. It is expected that members of the scholarly community will act with integrity at all times, however, should an individual choose to demonstrate dishonesty, it should be understood that acts of academic dishonesty are taken extremely seriously. Acts of dishonesty are classified by level and reported centrally. The consequences of academic dishonesty will be determined by the instructor unless a student's record demonstrates repeated offenses (either three level-one offenses or two level-two offenses, or a level three and any other level violation). In the situation where the student record demonstrates such repeated violations, or where the student is accused of a level-four violation, the case will be referred to an Academic Integrity Panel for resolution. Serious or repeated violations can result in the issuance of an "XF" grade by Academic Integrity Panels, which indicates that the student failed the class for breach of academic integrity. The XF is placed on the student's permanent record and can only be removed under certain circumstances (see the University Bulletin)."

Emergency Protocols

Andrews University takes the safety of its students seriously. Signs identifying emergency protocol are posted throughout buildings. Instructors will provide guidance and direction to students in the classroom in the event of an emergency affecting that specific location. It is important that you follow these instructions and stay with your instructor during any evacuation or sheltering emergency.

Assessment and Grading Scale

Grading Summary:

Examinations – 200 pts
 Assessment Portfolio – 150 pts (50 pts each)
 Research Papers – 150 pts (50 pts each)
 Treatment Plan Project – 100 pts

Total Point Possible 600 points

Grading Scale:

A	94 – 100%	C+	77 – 79.99%
A-	90 – 93.99%	C	73 – 76.99%
B+	87 – 89.99%	C-	70 – 72.99%
B	83 – 86.99%	D	60 – 69.99%
B-	80 – 82.99%	F	Below 60%