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Office Hours: By Appointment

Course Description

This course is an advanced seminar with the goal of introducing students to the theory and practice of Clinical Neuropsychology. This specialized subfield of Clinical Psychology aims to assess and interpret the relationship between nervous system function, cognition, emotion and behavior; and to apply this knowledge to the design of individualized patient interventions. Students will gain an understanding of the field through review of adult and pediatric cognitive and neurological disorders. The psychosocial adjustment of patients living with each disorder and the dynamics among individuals involved in their care are additional themes of emphasis. The course takes an interdisciplinary approach integrating information from several subfields of medicine (neurology, neuroradiology and psychiatry) and psychology (cognitive, abnormal, developmental, biological, health psychology). Students will acquire knowledge through review of both clinical cases and research outcomes. An introductory background in neuroscience is required.

Organizational Approach

The course is “case-based” in that students will review presenting symptoms, etiology/neuropathology and neuropsychological profiles for specific disorders/diseases. An overview of neuroanatomy, neurophysiology and neurodevelopment will be provided within the context of each disease/disorder. Scientific approaches to brain/behavior investigation including animal and human research methodologies will also be reviewed. The process of Neuropsychological Assessment will be taught through a “hands-on” approach in which students will develop skills through direct practice with classmates. Ethical considerations in the field will be integrated throughout the course.

Course Requirements

Attendance

Consistent attendance is extremely important. One unexcused absence is allowed during the semester. Please email me before the missed class. If you anticipate missing several classes, you must carefully consider the consequences. Unfortunately, due to the content, pace and format of the course, it will be impossible to fully grasp material following a missed class.

Class Participation

This class will be taught in seminar format. Student participation is a key factor in nurturing an enriching learning environment. It is expected that all students will contribute to each week’s discussion. You will be evaluated on the quality of your contributions. Evaluations of class participation will be based on the following:
Has the student demonstrated knowledge of the reading assignments?
Has the student provided new insight which builds on information in the readings?
Is the student a good listener, addressing and integrating comments from classmates?
Are the student’s comments relevant, on track and non-tangential?

Examinations

Each student will be required to complete a take home midterm and final examination. The final examination is not cumulative. Both exams will be distributed one week before the due date. Material will be included from both lecture and assigned readings.

Presentations

In each class session, two or more students will present a clinical case, applying knowledge in nervous system dysfunction, relevant functional domains (e.g. attention, memory, visuospatial abilities) and current empirically based interventions. The presenters will read all assigned readings as well as additional articles which will add more depth to the discussion. Additional information will be provided in class.

Reading Assignments

Students are expected to read all assigned readings prior to class. Each student should come to class prepared to discuss the readings. Most readings are from the primary texts, Ogden and Zillmer. All other assigned readings will be posted on Courseworks.

Final Grades

Your final average will be calculated as follows:

<table>
<thead>
<tr>
<th>Component</th>
<th>Weight</th>
<th>Due Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Midterm Examination</td>
<td>20%</td>
<td>July 30th</td>
</tr>
<tr>
<td>Final Examination</td>
<td>20%</td>
<td>August 14th</td>
</tr>
<tr>
<td>Neuroassessment Report</td>
<td>20%</td>
<td>August 11th</td>
</tr>
<tr>
<td>Presentation</td>
<td>20%</td>
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Course Readings

The required texts for the course are:


Additional readings will be provided from the following texts:


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DISCUSSION TOPICS AND READING ASSIGNMENTS

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<tr>
<th>Foundations of Clinical Neuropsychology</th>
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**July 7: Welcome to the Course!**

**July 9: Conceptualizing Cognitive Domains and Case Analysis**

Group Exercise, No Assigned Readings

**July 14 and 16: Neuroassessment: Theory and Procedures**

**Reading Assignments:**

**July 14**

Strauss: Chapter 3: History Taking
        Chapter 4: Test Selection, Test Administration, and Preparation of the Patient
Zillmer: Chapter 3: Neuropsychological Assessment and Diagnosis

July 16

Lezak: Chapter 5: The Neuropsychological Examination: Procedures
Chapter 6: The Neuropsychological Examination: Interpretation

Disorders with Emphasis on Deficits in Specific Cognitive Domains

July 21: Memory: Alzheimer Disease and Other Dementias

Reading Assignment:

Morgan: Chapter 39: Normal Aging, Mild Cognitive Impairment, and Alzheimer’s Disease
Ogden: Case 17: Dementia: A Family Tragedy
Grant: Chapter 23: The Neuropsychology of Memory Dysfunction and Its Assessment (Recommended)
Zillmer: Chapter 14: Normal Aging and Dementia: Alzheimer’s Disease

July 23: Language: Aphasia

Reading Assignment:

Ogden: Case 5: The Breakdown of Language: Case Studies of Aphasia
Zillmer: Chapter 8: Pages 215-221 (Auditory and Language Processing)

*Midterm Examination Distributed*

July 28: Executive Function: Attention Deficit Hyperactivity Disorder/Frontal Lobe Disorders

Reading Assignment:

Anderson: Chapter 11, Case 7: Attention Deficit Hyperactivity Disorder
Morgan: Chapter 16: Neuropsychological Perspectives on ADHD
Chapter 35: Adult Attention Deficit Hyperactivity Disorder: Basic and Clinical Issues
Chapter 11: Pages 322-332 (Disruptive Behavioral Disorders-ADHD)
Ogden: Case 9: The Impaired Executive: A Case of Frontal-Lobe Dysfunction
July 30: IN CLASS NEUROASSESSMENT ADMINISTRATION

*Midterm Examination Due*

August 4: Motor Disorders: Parkinson’s Disease

Reading Assignment:

Grant: Chapter 9: The Neuropsychological Aspects of Parkinson’s Disease and Parkinsonism
Ogden: Case 15: Mind Over Matter: Coping with Parkinson’s Disease
Zillmer: Chapter 7: Motor Systems (Pages 189-197)
Chapter 15: Subcortical Dementias

August 6: Cerebrovascular Disorders

Reading Assignment:

Morgan: Intracranial Hemorrhage and Subarachnoid Hemorrhage
Ogden: Case 12: Explosions in the Mind: A Case of Subarachnoid Hemorrhage
Zillmer: Chapter 12: Cerebrovascular Disorders and Tumors (Pages 340-356)

*Final Examination Distributed*

August 11: Head Trauma and Traumatic Brain Injury

Reading Assignment:

Morgan: Chapter 21: Moderate and Severe Traumatic Brain Injury
Chapter 22: Mild Traumatic Brain Injury and Post Concussion Syndrome
Ogden: Case 10: Beating the Odds, Severe Head Injury and the Importance of Ongoing Rehabilitation
Case 11: The Unseen Injury, Minor Closed Head Injury
Zillmer: Chapter 13: Traumatic Head Injury and Rehabilitation

*Neuroassessment Report Submission*

August 13-Course Wrap-Up

August 14th: Final Examination Submission to Courseworks
Extra Help

I am available for individual tutoring by appointment. Please do not hesitate to ask for tutoring, additional study materials, and/or general support throughout the semester. My goal is to make sure that each of you performs at your maximum potential and that your efforts are rewarded.

WELCOME TO CLINICAL NEUROPSYCHOLOGY!!!