

Fall, 2016
Biological Bases of Behavior
15:290:583
3 Credits
Mondays, 4:50 PM -7:30 PM

Instructor Name Daniel DaSilva	Email address dr.dan.dasilva@gmail.com
Phone Number 973-257-9000 x 205	10 Seminar Pl Rm ____
Office Hours by appointment	Prerequisites or other limitations:
Mode of Instruction: <input type="checkbox"/> Lecture <input checked="" type="checkbox"/> Seminar <input type="checkbox"/> Hybrid <input type="checkbox"/> Online <input type="checkbox"/> Other	Permission required: <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes Directions about where to get permission numbers: Contact Ed Psych Office

Learning goals:

1. Attain mastery of psychological constructs and theories relevant to learning, cognition and development.
2. Appropriately apply these psychological constructs and theories to educational settings and related applied contexts.
3. Achieve skill in the critical evaluation of empirical evidence related to the psychology of education.
4. Attain competence in oral and written communication on topics within educational psychology.
5. Demonstrate the ability to conceptually integrate multiple domains in terms of both structure and function.
6. Be able to conceptualize and explain neurological disorders affecting cognitive functioning based on an understanding of brain structure and function.
7. Be able to apply knowledge of functional neuroanatomy and dysfunction in the special education setting.

Course catalog description:

This graduate level course will focus on functional neuroanatomy to develop an understanding of brain structure and function. The second half of the course is devoted to the understanding of cognitive dysfunction including learning disabilities, as well as a brief overview of neuropsychological assessment.

Class materials/ Textbooks:

- Beaumont (2008) Introduction to Neuropsychology, Second Edition.
Pennington (2009) Diagnosing Learning Disorder: A Neuropsychological Approach, Second Edition.
Luria (1973) The Working Brain (optional but recommended)

Other description of course purposes, context, methods, etc:

The course also aims to draw on the experiences of students, many of whom work in the special education setting as teachers or evaluators, in order to enhance the learning experience

Grading policy:

Grading for this course will be based on a midterm, an eight to ten page scholarly paper (standard margins, double-spaced **meeting APA standards**) on a relevant topic, an in-class presentation, and class participation. Regular class attendance is REQUIRED and EXPECTED for successful completion of this course. The midterm, paper, and presentation are each worth a third of the grade for this course.

Assignments¹:

1. Essay-based midterm exam focusing on integration of knowledge from first half of course.
2. Eight to ten page scholarly paper focusing on a specific neurological disorder or condition (subject to approval by the instructor), written according to APA style.
3. In-class PowerPoint presentation based on the paper topic with handouts.

Web site: (If any)

Academic Integrity Policy:

The Office of Student Conduct supervises issues related to violations of academic integrity (see <http://academicintegrity.rutgers.edu>). Please familiarize yourself with the university policy on academic integrity at https://slwordpress.rutgers.edu/academicintegrity/wp-content/uploads/sites/41/2014/11/AI_Policy_2013.pdf

Office of Disability Services:

Rutgers University welcomes students with disabilities into all of the University's educational programs. In order to receive consideration for reasonable accommodations, a student with a disability must contact the appropriate disability services office at the campus where you are officially enrolled, participate in an intake interview, and provide documentation: <https://ods.rutgers.edu/students/documentation-guidelines>. If the documentation supports your

¹ Including exams, papers etc.

request for reasonable accommodations, your campus's disability services office will provide you with a Letter of Accommodations. Please share this letter with your instructors and discuss the accommodations with them as early in your courses as possible. To begin this process, please complete the Registration form on the ODS web site at:
<https://ods.rutgers.edu/students/registration-form>.

Course Schedule

Week	Assignments & Readings
Week 1	<p>Course Introduction</p> <ul style="list-style-type: none"> ◆ Goals, requirements, paper guidelines ◆ History of neuropsychology ◆ Overview of the basic structures of the CNS ◆ <i>Reading: Beaumont Ch 1</i>
Week 2	<p>General Brain Anatomy and Functional Systems</p> <ul style="list-style-type: none"> ◆ Basic cellular structures and principles of transmission ◆ The CNS: <ul style="list-style-type: none"> ◆ Spinal Cord ◆ Brainstem ◆ The Hemispheres ◆ <i>Reading: Beaumont Ch. 2</i>
Week 3	<p>Frontal Lobes</p> <ul style="list-style-type: none"> ◆ Anatomy ◆ Function ◆ Disorders ◆ <i>Reading: Beaumont, Ch 3</i>
Week 4	<p>Neurological Disorders</p> <ul style="list-style-type: none"> ◆ Overview <p><i>Reading: handouts and Beaumont, Ch 8</i></p>
Week 5	<p>The Temporal Lobes</p> <ul style="list-style-type: none"> ◆ Anatomy ◆ Function ◆ Disorders ◆ <i>Reading: Beaumont Ch 4</i>
Week 6	<p>The Parietal Lobes</p> <ul style="list-style-type: none"> ◆ Anatomy ◆ Function ◆ Disorders ◆ <i>Reading: Beaumont Ch 5</i>

Week 7	Occipital Lobes <ul style="list-style-type: none"> ◆ Occipital Lobes ◆ Anatomy ◆ Function ◆ Disorders ◆ Reading: <i>Beaumont</i> Ch 6
Week 8	Hemispheric Asymmetry <ul style="list-style-type: none"> ◆ Reading <i>Beaumont, Chs.10, 11,12, 14</i>
Week 9	: Psychopharmacology (Midterms Due) <ul style="list-style-type: none"> ◆ Guest Lecturer: <i>Richard Mistichelli, RPH</i> ◆ Handouts
Week 10	Brain Injury, Behavior, and Psychopathology <ul style="list-style-type: none"> ◆ Traumatic Brian Injury ◆ Psychiatric disorders ◆ Additional topics of interest: Anoxia/hypoxia, toxic exposures, infections ◆ Readings: <i>Beaumont Ch 8</i>
Week 11	Neuropsychology of LD (Part 1) <ul style="list-style-type: none"> ◆ Readings: <i>Pennington, Chs 6, 7, & 12</i>
Week 12	: Neuropsychology of LD (Part 2) <ul style="list-style-type: none"> ◆ Readings: <i>Pennington, Chs 6, 7, & 12</i>
Week 13	Neuropsychological Assessment <ul style="list-style-type: none"> ◆ Readings: <i>Darby Ch 10 and Pennington Chs 1 and 2 (Chs 3, 4, 5 not required but will lead to greater personal enrichment).</i>
Week 14	Presentations