

HAWAI'I SCHOOL OF PROFESSIONAL PSYCHOLOGY AT CHAMINADE UNIVERSITY OF HONOLULU

# **Course Syllabus**

<u>Chaminade University Honolulu</u> 3140 Waiʻalae Avenue - Honolulu, HI 96816 <u>www.chaminade.edu</u>

### Course Number: PP8646-01-7

Course Title: Introduction to Neuropsychological Assessment Department Name: Hawai'i School of Professional Psychology College/School/Division Name: School of Education and Behavioral Sciences Term: Spring 2020 Course Credits: 3 Class Meeting Days: Monday Class Meeting Hours: 2:30 PM – 5:30 PM Class Location: Eiben Hall Room 201

Instructor Name: Robert M. Anderson Jr., Ph.D. Email: <u>robert.anderson@chaminade.edu</u> Phone: 808.739.7426 Office Location: Behavioral Sciences Room 109 Office Hours: Tuesday 2:00 PM – 5:00 PM; Thursday 1: 00 PM – 5:00 PM; Friday 1:00 PM – 5:00 PM Instructor Website: Other Professional Contact Information (Skype, Twitter, Blog, etc.):

### **University Course Catalog Description**

This course provides an introduction to the assessment of brain-behavior relationships. A variety of neuropsychological tests will be introduced, covering the major cognitive domains in neuropsychology, with an emphasis on the process by which such tests are interpreted, in light of all of the data available, including historical, interview, observational, and test data.

### **Course Overview**

This course provides a review of neuroanatomy and an introduction to neuropsychology, focusing on the neurological basis and neuropsychological consequences of cerebral dysfunction. The course surveys types of cognitive and behavioral dysfunction and the broad range of neurological conditions that have neuropsychological implications.

This course also extends the understanding of brain-behavior relationships through training in the formal assessment of these relationships. Students learn the administration and interpretation of instruments associated with neuropsychological functioning including cognition, memory, and personality functioning. Students learn to write comprehensive Neuropsychological Consultation reports, which include rehabilitation appropriate recommendations for treatment.

# Instructional Contact and Credit Hours

Students can expect 15 hours of instructional engagement for every 1 semester credit hour of a course. Instructional engagement activities include lectures, presentations, discussions, group-work, and other activities that would normally occur during class time. Instructional engagement activities may occur in a face-to-face meeting, or in the classroom. In addition to instructional engagement, students can expect to complete 30 hours of outside work for every 1 semester credit hour of a course. Outside work includes preparing for and completing readings and assignments. Such outside work includes, but is not limited to, all research associated with completing assignments, work with others to complete a group project, participation in tutorials, labs, simulations and other electronic activities that are not a part of the instructional engagement, as well as any activities related to preparation for instructional engagement.

At least an equivalent amount of work specified in the paragraph above shall be applied for other academic activities as established by the institution, including laboratory work, internships, practica, studio work, and other academic work leading to the award of credit hours.

#### **Marianist Values**

This class represents one component of your education at Chaminade University of Honolulu. An education in the Marianist Tradition in marked by five principles and you should take every opportunity possible to reflect upon the role of these characteristics in your education and development:

- Education for formation in faith
- Provide an integral, quality education
- Educate in family spirit
- Educate for service, justice and peace
- Educate for adaptation and change

#### **Native Hawaiian Values**

Education is an integral value in both Marianist and Native Hawaiian culture. Both recognize the transformative effect of a well-rounded, value-centered education on society, particularly in seeking justice for the marginalized, the forgotten, and the oppressed, always with an eye toward God (Ke Akua). This is reflected in the 'Ōlelo No'eau (Hawai'ian proverbs) and Marianist core beliefs:

- 1. Educate for Formation in Faith (Mana) E ola au i ke akua ('Ōlelo No'eau 364) May I live by God
- 2. Provide an Integral, Quality Education (Na'auao) Lawe i ka ma'alea a kū'ono'ono ('Ōlelo No'eau 1957) Acquire skill and make it deep
- Educate in Family Spirit ('Ohana) 'Ike aku, 'ike mai, kōkua aku kōkua mai; pela iho la ka nohana 'ohana ('Ōlelo No'eau 1200) Recognize others, be recognized, help others, be helped; such is a family relationship
- 4. Educate for Service, Justice and Peace (Aloha) Ka lama kū o ka no'eau ('Ōlelo No'eau 1430) Education is the standing torch of wisdom
- Educate for Adaptation and Change (Aina) 'A'ohe pau ka 'ike i ka hālau ho'okahi ('Ōlelo No'eau 203) All knowledge is not taught in the same school

### **Program Learning Outcomes: HSPP Aims and Competencies**

The Hawai'i School of Professional Psychology at Chaminade University of Honolulu's clinical psychology doctoral program's aim is to educate and train students employing a practitioner-scholar model so that they will be able to function effectively as clinical psychologists. To ensure that students are adequately prepared, the curriculum is designed to provide for the meaningful integration of psychological science, theory, and clinical practice. The clinical psychology program at the Hawai'i School of Professional Psychology is designed to emphasize the development of knowledge, skills, and attitudes essential in the training of health service psychologists who are committed to the ethical provision of quality, evidence based services to diverse populations and who are able to apply multiple theoretical perspectives to clinical issues.

The Hawai'i School of Professional Psychology at Chaminade University of Honolulu's clinical psychology doctoral program subscribes to the APA Standards of Accreditation. As such, students are expected to establish an identity in and orientation to health service psychology by acquiring the necessary discipline-specific knowledge and profession-wide competencies as follows:

1. Students will demonstrate knowledge of ethical and legal standards relevant to the practice of clinical psychology, including professional ethics that guide professional behavior.

- 2. Students will develop both communication and interpersonal skills, to include utilization of clear, informative, well-integrated communication, critical thinking, and effective interpersonal skills in professional interactions.
- 3. Students will demonstrate knowledge of professional values and attitudes as well as self-reflective practice and openness to supervision and feedback.
- 4. Students will demonstrate competency in individual and cultural diversity, including knowledge of theoretical models and diversity research that serve to guide the application of diversity competence.
- 5. Students will have knowledge of the history and systems of psychology as well as the basic areas in scientific psychology, including affective, biological, cognitive, developmental, psychopharmacological, and sociocultural aspects of behavior.
- 6. Students will demonstrate competency in the science of psychology, including knowledge and application of psychometrics, statistical analyses, and quantitative and qualitative research methods.
- 7. Students will demonstrate competency in psychological assessment, including the ability to administer, interpret, and integrate psychological test results and apply knowledge of strengths and psychopathology to the assessment process.
- 8. Students will demonstrate competency in clinical intervention, including case formulation, theoretical conceptualization, developing and applying evidence based treatment plans, and evaluating treatment effectiveness in work with clients.
- 9. Students will evidence knowledge of consultation models and practices, and demonstrate interprofessional and interdisciplinary skills in consultative services.
- 10. Students will evidence knowledge of supervision models and practices.
- 11. Students will understand and apply the Marianist values in their professional practice.

# Learning Outcomes

- Students will demonstrate the ability to administer, score, and interpret the results obtained from neuropsychological testing instruments with other behavioral and qualitative information. (Competency 5, 6, 7)
- 2. Students will demonstrate an understanding of the APA Code of Ethics as that code applies to the study of neuropsychology. (Competency 1)
- 3. Students will be able to demonstrate foundational knowledge in the core areas of neuropsychology. (Competency 5)
- 4. Students will develop an understanding of the philosophical, theoretical, and empirical foundations of neuropsychological assessment. (Competency 5, 6)
- 5. Students will demonstrate the necessary knowledge and skills for working with diverse clients as it applies to neuropsychological practice (with diversity broadly defined as issues related to gender, age, sexual orientation, race/ethnicity, national origin, religion, physical ability, & SES). (Competency 1, 4)
- 6. Students will demonstrate an appreciation of the impact of cultural diversity on neuropsychological assessment methods. (Competency 4, 7)

# **Required Learning Materials**

Required Textbooks

- Lezak, M., Howieson, D., Bigler, E. & Tranel, D. (2012). *Neuropsychological assessment* (5<sup>th</sup> ed.). New York, NY, Oxford. ISBN-13: 978-0195395525 (LHBT)
- Strauss, E., Sherman, E., & Spreen, O. (2006). A compendium of neuropsychological tests: Administration, norms, and commentary (3<sup>rd</sup> ed.). New York, NY: Oxford. ISBN 978-0195159578 (SSS)

# **Required Papers**

- Barnett, M. D., Parsons, T. D., Reynolds, B. L., & Bedford, L. A. (2018). Impact of rapport on neuropsychological test performance. *Applied Neuropsychology: Adult, 25*(3), 258-265. https://doi.org/10.1080/23279095.2017.1293671
- Benedict, R. H. B., DeLuca, J., Enzinger, C., Guerts, J. J. G., Krupp, L. B., & Rao, S. M. (2017). Neuropsychology of multiple sclerosis: Looking back and moving forward. *Journal of the International Neuropsychological Society*, 23, 832-842. https://doi.org/10.1017/S1355617717000959

- Casaletto, K. B., & Heaton, R. K. (2017). Neuropsychological assessment: Past and future. *Journal of the International Neuropsychological Society*, *23*(9-10), 778-790. https://doi.org/10.1017/S1355617717001060
- Duff, K., Hobson, V. L., Beglinger, L. J., & O'Bryant, S. E. (2010). Diagnostic accuracy of the RBANS in mild cognitive impairment limitations on assessing milder impairments. *Archives of Clinical Neuropsychology*, 25, 429-441. https://doi.org/10.1093/arclin/acq045
- Duff, K., Patton, D. E., Schoenberg, M. R., James, M., Scott, J. G., & Adams, R. L. (2011). Interest discrepancies on the RBANS: Results from the OKLAHOMA study. *Applied Neuropsychology*, *18*, 79-85. https://doi.org/10.1080/09084282.2010.523359 (Duff 2)
- Larrabee, G. J. (2015). The multiple validities of neuropsychological assessment. *American Psychologist*, 70(8), 779-788. https://doi.org/10.1037/a0039835 (Larrabee 1)
- Larrabee, G. J., & Rohling, M. L. (2013). Neuropsychological differential diagnosis of traumatic brain injury. Behavioral Sciences and the Law, 31(6), 686-701. https://doi.org/10.10002/bsl.2087 (Larrabee 2)
- Leonard, E. L. (2015). Forensic neuropsychology and expert witness testimony: An overview of forensic practice. *International Journal of Law and Psychiatry*, *42*, 177-182. https://doi.org/10.1016/j.ijlp.2015.08.023
- O'Brien, F. M., Fortune, G. M., Dicker, P., O'Hanlon, E., Cassidy, E, Delanty, N., Garavan, H., & Murphy, K. C. (2015). Psychiatric and neuropsychological profiles of people with psychogenic nonepileptic seizures. *Epilepsy and Behavior*, *43*, 39-54. https://doi.org/10.1016/j.yebeh.2014.11.021
- Prince, C., & Bruhns, M. E. (2017). Evaluation and treatment of mild traumatic brain injury: The role of neuropsychology. *Brain Science*, *7*, Article 105. https://doi.org/10.3390/brainsci7080105
- Richards, P. M., Geiger, J. A., & Tussey, C. M. (2015). The dirty dozen: 12 sources of bias in forensic neuropsychology with ways to mitigate. *Psychological Injury and Law*, 8, 265-280. https://doi.org/10.1007/s12207-015-9235-1
- Roebuck,-Spencer, T. M., Glenz, T., Puente, A. E., Denney, R. L., Ruffs, R. M., Hostetter, G., & Blanchini, K. J. (2017). Cognitive screening tests versus comprehensive neuropsychological test batteries: A National Association of Neuropsychology education paper. *Archives of Clinical Neuropsychology*, *32*, 491-498. https://doi.org/10.1093/arclin/acx021
- Tesio, V., Torta, D. M. E., Colonna, F., Leombruni, P., Ghiggia, A., Fusaro, E., Geminiani, G. C., Torta, R. & Castelli, L. (2015). Are fibromyalgia patients cognitively impaired? Objective subjective neuropsychological evidence. *Arthritis Care and Research*, 67(1), 143-150. https://doi.org/10.1002/acr.22403
- Walczyk, J. J., Sewell, N., & DiBenedetto, M. B. (2018). A review of approaches to detecting malingering in forensic contexts and promising cognitive load-inducing lie detection techniques. *Frontiers in Psychiatry*, 9, Article 700. https://doi.org/10.3389/fpsyt.2018.00700

### Grading

# **Course Requirements/Methods of Evaluation**

**Class Participation:** Satisfactory participation in class discussion, exercises, and test administration practice is expected. Completion of all readings and assignments by class time. Two missed classes will require extra work. More than two may result in loss of credit for the course. Assignments may be penalized 10% for each day late.

**Neuropsychological Assessment and Neuropsychological Report:** Satisfactory administration, scoring, and interpretation of one neuropsychological screening battery is expected. Each must contain: 1) scoring protocol and 2) report must be accompanied by an 3) informed consent form, and a separate 4) rationale. The rationale will explain the reasoning and the statistics used to arrive at your conclusions in the interpretation. The neuropsychological screening will be administered to another Argosy clinical psychology student who will simulate a neurological disorder.

Satisfactory interpretation and written report of data from a neuropsychological battery provided by the instructor is expected. Satisfactory description of an assessment procedure for a case provided by the instructor is expected.

**RBANS Administration and Scoring:** Satisfactory administration and scoring of the RBANS to a fellow student as evidenced by a video and protocol turned in on the date due is expected. Minimum score to pass course is 80%. RBANS evaluation may be repeated if necessary.

**Research Summary:** Satisfactory writing (using APA style) and presentation of a research summary of approximately 12 double-spaced pages is expected. The research summary should summarize, using **at least** 5 representative journal articles, an area of current neuropsychological research. Your topic should be discussed with the instructor.

Quizzes: Satisfactory completion of two quizzes is expected.

**Take-Home Final Exam:** Satisfactory completion of a final exam - a take-home interpretation of a neuropsychological evaluation provided by the instructor and description of an assessment procedure for a case provided by the instructor is expected.

Project/Assignment	% of final grade
Neuropsychological Assessment (15%) and Neuropsychological Report (15%)	30%
Research Summary	15%
2 Quizzes Worth 7.5% Each	15%
Take-Home Final Exam	20%
Class Participation	10%
RBANS Administration and Scoring*	10%
Total	100%

\* In addition to scoring an overall grade of 80% or higher, to pass the course, a grade of 80% correct or greater must be achieved on the RBANS. If a grade of 80% is not achieved an incomplete will be granted and, after remediation and within the requisite time period, a grade of 80% or greater must be achieved on the RBANS to pass the course.

#### Grading Scale (final scores >.5 will be rounded up)

Schedule

A = 90 - 100	B = 80 – 89	C = 70 – 79	F = 69 and below

Date	Topics	Readings	Assignments
1/6	Introduction	LHBT 1,2; SSS 3,4	Each day didactic
			presentations,
			demonstrations, and in
			class practice with
			neuropsychological tests
			will occur.
1/13	Brain-Behavior Relationships;	LHBT 3,4,9; SSS 1,2,9	1/20/20 is a holiday.
	Deficit Determination;	(Barnett)(Casaletto)	
	Orientation and Attention		
1/27	Interpretation; Perception	LHBT 6,10; SSS 12,13	
		(Roebuck-Spencer)	
2/3	Memory; Traumatic Brain	LHBT 11,12,7TBI; SSS 10	
	Injury	(Duff Hobson)(Prince)	

2/10	Language; Vascular Disorders	LHBT 13,7Vascular	
		Disorders; SSS 7,11 (Duff	
		2) (Larrabee 2)	
2/17	Construction; Dementia	LHBT 14,7p.206-256	Quiz 1; Data distributed
		(Benedict)	for Neuropsychological
			Report
2/24	Concept Formation;	LHBT 15,7Toxic	RBANS VIDEO AND
	Intelligence; Toxic Conditions	Conditions; SSS 6	RECORD SHEET DUE
3/2	Executive Functions and Motor	LHBT 16,7Infectious	
	Performance; Infectious	Diseases; SSS 8,14	
	Diseases		
3/9	Neuropsychological	LHBT 17,7Brain Tumors;	Neuropsychological
	Assessment Batteries; Brain	SSS 6 (Larrabee 1)	Report Due
	Tumors		Final Exam Distributed
3/16	Rating Scales and Inventories;	LHBT 18,7Oxygen	
	Oxygen Deprivation	Deprivation	
3/23	Personality and Emotional	LHBT 19,7Metabolic and	<b>Research Summaries Due</b>
	Functioning; Metabolic and	Endocrine Disorders; SSS	
	Endocrine Disorders	15 (Tesio)	
3/30	Forensic Neuropsychology;	LHBT 19,7Metabolic and	Quiz 2;
	Cross-Cultural	Endocrine Disorders; SSS	
	Neuropsychological	15 (Leonard)(Richards)	
4/6	Response Bias and Incomplete	LHBT 20,7Nutritional	Neuropsychological
	Effort; Nutritional Deficiencies;	Deficiencies; SSS 16	Assessment Due
	Child	(Walczyk)	
4/13	Epilepsy	(O'Brien)	Final Exam Report Due
4/20	Class Summary		Presentation of Research
			Summaries