University of Florida College of Public Health & Health Professions Syllabus

CLP 6307 HUMAN HIGHER CORTICAL FUNCTION (3 hrs) Spring Semester 2022

Meeting Time/Place: Tuesday, 3:00 PM - 6:00 PM, Communicore, Room C1-003

Delivery Format: On campus, Standard

Course Share Drive: Canvas

Instructors:

Catherine Price, Ph.D., ABBP-CN Associate Professor / Paul Satz Term Professor cep23@ufl.edu

Kristin Hamlet, Ph.D.
Clinical Assistant Professor
kmoffett@ufl.edu

Co-Instructors:

Nicole Norheim, Psy.D. Neuropsychology Post-doc nicole.norheim@ufl.edu

Hillary Abel, Psy.D. Neuropsychology Post-Doc habel1294@ufl.edu Erin Trifilio, Ph.D. Neuropsychology Post-doc etrif07@ufl.edu

Class Location: All classes will be held in the Communicore building, Room C1-003. Accommodations via Zoom will be made for those students who must be absent due to illness.

Assigned Text: This course does not have an assigned textbook. Relevant articles or select chapters will be shared weekly and will serve as required readings.

Prerequisites. Must be a graduate student in good standing in Clinical and Health Psychology. All others must petition or get permission from the course instructors.

PURPOSE AND OUTCOME

General Overview and Purpose

This course will introduce the student to human brain-behavior relationships and other topics relevant to the biological basis of complex behavior including cognition and emotion. The course consists of topical lectures given by faculty of the University of Florida from diverse disciplines and associated with the McKnight Brain Institute, Fixel Institute of Neurological Diseases, and the Brain Research and Rehabilitation Center. This course is designed to provide an overview of normal and abnormal brain functioning from a systems perspective. Classical syndromes in neuropsychology and behavioral neurology will be presented. Cognitive, sensory, motor, and emotional signs, symptoms, and syndromes that arise from various forms of central nervous system disease will be examined and the functional anatomy underlying complex behavior will be discussed. Presenters include clinicians and basic research scientists who are addressing complex behavior from multiple perspectives.

Course Objectives

Successful completion of the course should allow students to (a) learn about basic structural and functional systems of the brain, (b) recognize and identify the functional brain systems involved in complex behaviors such as attention, memory,

language, spatial ability, and emotion, (c) develop the ability to recognize the major signs and symptoms of CNS impairment, and (d) develop an appreciation of the complexity of higher brain functions, both cognitive and emotional.

Relation to Program Outcomes

This course is part of the clinical and health psychology curriculum. Increased understanding of foundational knowledge in the fields of psychology, behavioral neurology, neuroscience and neuropsychology and its relationship to contemporary issues will improve both research and clinical missions of the field.

DESCRIPTION OF COURSE CONTENT

Course Format

This course will be conducted in the form of lectures by pre-eminent scientists, preceded by brief introductory reviews of relevant neuroanatomy, neurochemistry, and/or neuropharmacology by course instructors. Each class will involve 1-2 designated faculty leaders with selected relevant readings on the topic of question. *If available*, power points will be provided in advance or after the lecture given by a faculty presenter. However, depending on nature of presentation, some faculty may prefer not to share their personal work products and others do not use powerpoint for teaching purposes. You are responsible for learning the course materials, regardless of whether a handout is available from an individual lecturer. Presentation by faculty will be followed by a brief quiz on the lecture topics, including information from required readings.

Course Materials & Required Readings

The assigned readings for this course are available via UF's Canvas platform. Readings will consist of articles or chapters that will be available electronically in pdf form. Make sure that you have a working email address. If your email address changes or you miss the first day of class, it will be your responsibility to contact Dr. Hamlet or Dr. Price with your desired email address in order to receive notification about changes in course readings.

Location and Times

Class will meet Tuesdays in the Communicore building (Room C1-003) from 3:00-6:00 PM. Please be on time.

ACADEMIC REQUIREMENTS AND GRADING

Course Requirements, Evaluation, and Grading

Enrolled students are expected to attend weekly classes, complete weekly assigned readings **prior to class**. The exception is class 1. There will be a take home midterm exam and a final exam. The midterm will assess knowledge of material discussed through March 1st (the first 7 classes), and the final exam will be comprehensive. At the close of each class (from 5:45-6pm) will be a weekly guiz that is based on assigned readings and lecture material from that class.

<u>Weekly Quizzes</u>. A brief 5-10 question quiz will occur at the end of each class. Questions are short-answer or multiple choice/true-false and based on assigned readings or lecture content. There will be total of 12 quizzes starting with Class 2 (i.e., Classes 2-12), with students having the option to drop two quizzes of their choice for any reason (i.e., inability to attend class due to traveling, illness, low grade). The 10 quizzes you select will account for 20% of your grade. (i.e., each quiz = 2%).

<u>Mid-Term and Final Exams</u>: The midterm and final exams will be a combination of multiple choice, odd-man out, short essays and other types of short-answer formats. The content of these exams is based on lectures, readings, and class discussion.

Summary of Grading

The final grade will be determined according to the students' scores on weekly quizzes (20%), Midterm exam (worth 40% of the total grade), and the Final exam (worth 40% of the final grade).

Weekly Quizzes	20%	
Midterm Exam	40%	Due March 8, 2022
Final Exam	40%	Due April 26, 2022

Scores will be rounded to the nearest percent (rounded up or down, whichever is closest) for grade determination in accordance with the grading table below:

% of points earned	93%-	90%-	87%-	83%-	80%-	77%-	73%-	70%-	67%-	63%-	60%-	Below
	100%	92%	89%	86%	82%	79%	76%	72%	69%	66%	62%	60%
Letter Grade	Α	A-	B+	В	B-	C+	С	C-	D+	D	D-	F

Below is table linking letter grades to grade points. Please be aware that a C- is not an acceptable grade for graduate students. The expectation is that the grade for all 'neuropsychology' courses is at least B- or above. The GPA for graduate students must be 3.0 in all 5000 level courses and above to graduate.

Letter Grade	Α	A-	B+	В	B-	C+	С	C-	D+	D	D-	Ε	WF	[NG	S-U
Grade Points	4.0	3.67	3.33	3.0	2.67	2.33	2.0	1.67	1.33	1.0	0.67	0.0	0.0	0.0	0.0	0.0

For greater detail on the meaning of letter grades and university policies related to them, see the Registrar's Grade Policy regulations at https://gradcatalog.ufl.edu/graduate/regulations/

Policy Related to Class Attendance

Attendance and class participation is required. Students needing to miss class for personal (i.e., illness, death, etc.) or professional reasons should consult with Dr. Hamlet and Dr. Price **prior to the date** on which they will be unable to attend. Remote access will be available via zoom for those students who cannot attend in-person due to illness or quarantine. Efforts will be made to record these class lectures as well (more information forthcoming).

Policy Related to Make-up Exams or Quizzes

Students are allowed to drop 2 of the 12 quizzes for any reason, including illness or travel.

Excused absences must be consistent with university policies. https://gradcatalog.ufl.edu/graduate/regulations/

Policy Related to Guests Attending Class:

Only registered students are permitted to attend class. However, we recognize that students who are caretakers may face occasional unexpected challenges creating attendance barriers. Therefore, by exception, a department chair or his or her designee (e.g., instructors) may grant a student permission to bring a guest(s) for a total of two class sessions per semester. This is two sessions total across all courses. No further extensions will be granted. Please note that guests are **not** permitted to attend either cadaver or wet labs. Students are responsible for course material regardless of attendance.

STUDENT EXPECTATIONS, ROLES, AND OPPORTUNITIES FOR INPUT

Expectations Regarding Course Behavior

By definition, this graduate course relies on active intellectual engagement and discussion among all students enrolled in this class. By nature, intellectual disagreements are valued, welcomed, and encouraged, but must be courteous and respectful. **Electronic devices may be used during class for course-related activities only.**

Academic Integrity

Students are expected to act in accordance with the University of Florida policy on academic integrity. As a student at the University of Florida, you have committed yourself to uphold the Honor Code, which includes the following pledge:

"We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity."

You are expected to exhibit behavior consistent with this commitment to the UF academic community, and on all work submitted for credit at the University of Florida, the following pledge is either required or implied:

"On my honor, I have neither given nor received unauthorized aid in doing this assignment."

It is your individual responsibility to know and comply with all university policies and procedures regarding academic integrity and the Student Honor Code. Violations of the Honor Code at the University of Florida will not be tolerated.

Violations will be reported to the Dean of Students Office for consideration of disciplinary action. For additional information regarding Academic Integrity, please see Student Conduct and Honor Code for additional details: https://www.dso.ufl.edu/sccr/process/student-conduct-honor-code/

Please remember cheating, lying, misrepresentation, or plagiarism in any form is unacceptable and inexcusable behavior.

Online Faculty Course Evaluation Process

Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available at https://gatorevals.aa.ufl.edu/students/. Students will be notified when the evaluation period opens, and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals. Summaries of course evaluation results are available to students at https://gatorevals.aa.ufl.edu/public-results/.

SUPPORT SERVICES

Accommodations for Students with Disabilities

If you require classroom accommodation because of a disability, it is strongly recommended you register with the Dean of Students Office http://www.dso.ufl.edu within the first week of class or as soon as you believe you might be eligible for accommodations. The Dean of Students Office will provide documentation of accommodations to you, which you must then give to course instructors to receive accommodations. Please do this as soon as possible after you receive the letter. Students with disabilities should follow this procedure as early as possible in the semester. The College is committed to providing reasonable accommodations to assist students in their coursework.

Counseling and Student Health

Students sometimes experience stress from academic expectations and/or personal and interpersonal issues that may interfere with their academic performance. If you find yourself facing issues that have the potential to or are already negatively affecting your coursework, you are encouraged to talk with an instructor and/or seek help through University resources available to you.

- The Counseling and Wellness Center 352-392-1575 offers a variety of support services such as psychological assessment and intervention and assistance for math and test anxiety. Visit their web site for more information: http://www.counseling.ufl.edu. On line and in person assistance is available.
- You Matter We Care website: http://www.umatter.ufl.edu/. If you are feeling overwhelmed or stressed, you can reach out for help through the You Matter We Care website, which is staffed by Dean of Students and Counseling Center personnel.
- The Student Health Care Center at Shands is a satellite clinic of the main Student Health Care Center located on Fletcher Drive on campus. Student Health at Shands offers a variety of clinical services. The clinic is located on the second floor of the Dental Tower in the Health Science Center. For more information, contact the clinic at 392-0627 or check out the web site at: https://shcc.ufl.edu/
- Crisis intervention is always available 24/7 from:
 Alachua County Crisis Center:
 (352) 264-6789
 http://www.alachuacounty.us/DEPTS/CSS/CRISISCENTER/Pages/CrisisCenter.aspx

Do not wait until you reach a crisis to come in and talk with us. We have helped many students through stressful situations impacting their academic performance. You are not alone so do not be afraid to ask for assistance.

Inclusive Learning Environment

Public health and health professions are based on the belief in human dignity and on respect for the individual. As we share our personal beliefs inside or outside of the classroom, it is always with the understanding that we value and respect diversity of background, experience, and opinion, where every individual feels valued. We believe in, and promote, openness and tolerance of differences in ethnicity and culture, and we respect differing personal, spiritual, religious and political values. We further believe that celebrating such diversity enriches the quality of the educational experiences we provide our students and enhances our own personal and professional relationships. We embrace The University of Florida's Non-Discrimination Policy, which reads, "The University shall actively promote equal opportunity policies and practices conforming to laws against discrimination. The University is committed to non-discrimination with

respect to race, creed, color, religion, age, disability, sex, sexual orientation, gender identity and expression, marital status, national origin, political opinions or affiliations, genetic information and veteran status as protected under the Vietnam Era Veterans' Readjustment Assistance Act." If you have questions or concerns about your rights and responsibilities for inclusive learning environment, please see your instructor or refer to the Office of Multicultural & Diversity Affairs website: www.multicultural.ufl.edu

Professionalism and COVID

As students pursuing a path in the health professions or public health, it is crucial to demonstrate professional behaviors that reflect integrity and commitment to the health of patients, fellow health professionals, and to populations we serve. To accomplish this, a strong responsibility for the well-being of others must be evident in our decisions, along with accountability for our actions. Professionalism in the health disciplines requires adherence to high standards of conduct that begin long before graduation. This is particularly true during times of health emergencies such as the COVID pandemic, given our professional habits can have a direct impact upon the health of persons entrusted to us.

If you are not vaccinated, get vaccinated. Vaccines are readily available at no cost and have been demonstrated to be safe and effective against the COVID-19 virus. Visit this link for details on where to get your shot, including options that do not require an appointment: https://coronavirus.ufhealth.org/vaccinations/vaccine-availability/. Students who receive the first dose of the vaccine somewhere off-campus and/or outside of Gainesville can still receive their second dose on campus.

In response to COVID-19, the following professional practices are in place to maintain your learning environment, to enhance the safety of our in-classroom interactions, and to protect the health and safety of ourselves, our patients, our neighbors, and our loved ones.

- You are required to wear approved face coverings at all times while in Health Science Center classrooms and within Health Science Center buildings even if you are vaccinated.
- If you are sick, stay home and self-quarantine. Please visit the UF Health Screen, Test & Protect website about next steps, retake the questionnaire and schedule your test for no sooner than 24 hours after your symptoms began. Please call your primary care provider if you are ill and need immediate care or the UF Student Health Care Center at 352-392-1161 (or email covid@shcc.ufl.edu) to be evaluated for testing and to receive further instructions about returning to campus. UF Health Screen, Test & Protect offers guidance when you are sick, have been exposed to someone who has tested positive or have tested positive yourself. Visit the UF Health Screen, Test & Protect website for more information.
- Continue to follow healthy habits, including best practices like frequent hand washing.
- Avoid crowded places (including gatherings/parties with more than 10 people)

Sanitizing supplies are available in the classroom if you wish to wipe down your desks prior to sitting down and at the end of the class. Hand sanitizing stations will be located in every classroom.

Course materials will be provided to you with an excused absence, and you will be given a reasonable amount of time to make up work. If you are withheld from campus by the Department of Health through Screen, Test & Protect you are not permitted to use any on campus facilities. Students attempting to attend campus activities when withheld from campus will be referred to the Dean of Students Office.

Continue to regularly visit coronavirus.UFHealth.org and coronavirus.ufl.edu for up-to-date information about COVID-19 and vaccination.

COVID-19 SYMPTOMS

See https://www.cdc.gov/coronavirus/2019-ncov/symptoms-testing/symptoms.html for information about COVID-19 symptoms, which may include fever, cough, shortness of breath or difficulty breathing, fatigue, chills, muscle or body aches, headache, sore throat, congestion or runny nose, nausea or vomiting, diarrhea, and loss of taste or smell.

Class Schedule

Tuesdays 3-6, Communicore C1-003

Jan 11	Introduction and Neuroanatomy Prim	er	
3:00-3:30	Syllabus Review	Hamlet/Price, PhD	H&V Chapter 1, Introduction
3:30-4:30	Course Introduction	Hamlet/Price, PhD	Blumenfeld 2018, Chapter 2
4:45-5:45	Neuroanatomy Primer	Tanner, PhD	
January 18:	Memory & Amnesia, Human and Tran	slational Approaches	
3:00-3:30	Class Intro	Hamlet/Price, PhD	Bauer & Asken (2018)
3:30-4:30	The Human Amnesias	Bauer, PhD	McQuail (2021)
4:45-5:45	Animal Models of Memory Loss	Tom Foster, PhD	
5:45-6:00	Quiz 1		
January 25:	Aphasia & Apraxia		
3:00-3:30	Class Intro	Hamlet/Price, PhD	Heilman (2006)
3:30-5:45	The Classic Aphasias & Apraxias – a disorder of tool use	Heilman, MD e	Dronkers (2017) H&V, Chapter 10, Apraxia
5:45-6:00	Quiz 2		
February 1:	No class		
February 8:	Clinical Syndromes of Alzheimer's Di		
3:00-3:30	Class Intro	Hamlet/Price, PhD	Bondi (2017)
3:30-5:45	AD Overview & Research Update	Nick Doher, DO	Jack (2018)
5:45-6:00	Quiz 3		
February 15:	Epilepsy Syndromes and WADA		0. (00.17)
3:00-3:30	Class Intro	Hamlet/Price, PhD	Sirven (2015)
3:30-4:30	Epilepsy Syndromes	Bruzzone Giraldez, MD	Hermann (2017)
4:45-5:45 5:45-6:00	WADA, laterality, and beyond Quiz 4	Abel, PsyD	
Eobruary 22	Vigual Cognition Maglest and Vigual	Agnosia	
February 22: 3:00-3:30	Visual Cognition, Neglect and Visual		Payer (in press)
3:30-4:30	Class Intro Visual Agnosia	Hamlet/Price, PhD Bauer, PhD	Bauer (in press) H&V Chapter 12, Neglect
4:45-5:45	Neglect	Heilman, MD	riav Chapter 12, Neglect
5:45-6:00	Quiz 5	Heilinan, MD	
March 1:	Neuroplasticity, Cognitive Training, a	nd Rehabilitation	
3:00-3:30	Class Intro	Hamlet/Price, PhD	TBD
3:30-4:30	Cognitive Training & Rehab	Hamlet, PhD	TBD
4:45-5:45	Neuromodulation Approaches	Woods, PhD	
5:45-6:00	Quiz 6	•	
TAKE HOM	IF FXAM (covers first 7 classes) distrib	uited at the end of class. D	ue Tuesday March 8, by 6nm FS

TAKE HOME EXAM (covers first 7 classes) distributed at the end of class. Due Tuesday March 8, by 6pm EST

March 8: No class – Spring Break; Midterm is due by 6pm

March 15: 3:00-3:30 3:30-4:30 4:45-5:45 5:45-6:00	Subcortical Disorders – Parkinsonism Class Intro Multifacets of Parkinsonism & Related Disorders Neuroscience Rsrch Update Quiz 7	ns Hamlet/Price, PhD McFarland, MD, PhD Arpin, PhD	TBD TBD
March 22: 3:00-3:30 3:30-4:30 4:45-5:45 5:45-6:00	The Frontal Lobes; The Neurological Class Intro Frontal Lobe Syndromes & Mechanisms The Neurological Exam Quiz 8	Exam Hamlet/Price, PhD Norheim, PsyD Chapin, MD	TBD TBD
March 29: 3:00-3:30 3:30-4:30 4:45-5:45 5:45-6:00	Head Injury, TBI, & CTE Class Intro Concussion: Mechanism & Sxs CTE and TBI Quiz 9	Hamlet/Price, PhD Jaffee, MD DeKosky, MD	TBD TBD
April 5: 3:00-3:30 3:30-4:30 4:45-5:45 5:45-6:00	Emotion & Neurological Disorders of Class Intro Neurological d/o of Emotion Emotion Basics Quiz 10	Emotion Hamlet/Price, PhD Bowers, PhD Sambuco, PhD	TBD TBD
April 12: 3:00-3:30 3:30-4:30 4:45-5:45 5:45-6:00	Frontal & Subcortical Dementias Class Intro Vascular Dementia Frontotemporal Dementias Quiz 11	Hamlet/Price, PhD Price, PhD Trifilio, PhD	TBD TBD
April 19: 3:00-3:30 3:30-4:30 4:45-5:45 5:45-6:00 TAKE HOM	Delirium & Hospital Challenges Class Intro Delirium Hospital Challenges Quiz 12 E FINAL EXAM (cumulative) distribute	Hamlet/Price, PhD Hamlet/Price, PhD Radhakrishnan, MD d at the end of class. Due Tue	TBD TBD esday April 26th, by 6pm EST

April 26 No class – Final exam due by 6pm EST