

**University of Florida**  
**College of Public Health & Health Professions**  
**OTH 6008: Neuroscience for Human Occupation Syllabus (5 credits)**  
**Fall 2023**

Lecture: Tuesdays 9:00am – 12:00 pm; HPNP room G101

\*\* On 9/19/23 & 10/17/23, lecture 8:00 am – 10:25 am to accommodate *Putting Families First*\*\*

Lecture Exam Dates: 2:00pm – 5:00 pm 9/12/23; 10/3/23; 10/24/23; 11/14/23; HPNP room G101

Lab: Wednesdays; Lab Section A: 8:30 –10:25, Lab Section B: 10:40–12:35; HSC room CG-024

Lab Tutoring: Wednesdays 1:00 – 2:30; HSC room CG-024

**Lead Instructor:**

Stefanie Bodison, OTD, OTR/L, FAOTA

Office: HPNP 2121

Email: [stefaniebodison@p.php.ufl.edu](mailto:stefaniebodison@p.php.ufl.edu)

Phone Number: 352-273-9883

Office Hours: Tuesdays 12:15 pm – 1:15 pm (office); Wednesdays 1:00 – 2:30 (neuro lab); or by appointment

**Instructor:**

Breanna Howell, OTD, OTR/L

Email: [bhowell@p.php.ufl.edu](mailto:bhowell@p.php.ufl.edu)

Office Hours: Tuesdays 8:30 - 9:00 am (HPNP G101); Wednesdays 1:00 – 2:30 (neuro lab); or by appointment

**Preferred Communication for Instructional Team:** Email

**PREREQUISITES**

Admission to the OTD program; anatomy and physiology courses with lab.

**COURSE OVERVIEW**

This course is designed to provide theoretical foundation for occupation in human functioning through neuroscience. It includes detailed study of human neuroanatomy, neurophysiology, and disorders of the human nervous system, with an emphasis on sensory, motor, emotional, and cognitive development.

**RELATIONSHIP TO PROGRAM OUTCOMES**

This course is one of the basic science courses taught during the first year of the UF Occupational Therapy Doctoral (OTD) program. This course emphasizes the relationship between neurological structures and functions in the context of the Occupational Therapy Practice Framework (OTPF) to provide students with a strong foundation on which to build their occupational therapy clinical skills in subsequent courses.

**INSTRUCTIONAL METHODS & COURSE OBJECTIVES**

**Instructional Methods**

Students will attend one lecture and one lab each week. Course instructional methods include lectures, course notes, audiovisual materials, labs consisting of specimens & models, course texts, case studies of neurological disorders, and blended learning methods that use a mixture of online and face-to-face instruction. Competency in neuroanatomical identification is critical for today's healthcare professionals. Students are expected to actively engage in the course throughout the semester. Students must come to class having completed all out-of-class assignments as detailed each week on Canvas. This preparation gives students the knowledge or practice needed to engage in higher levels of learning during the live class sessions. Students are expected to actively participate in the live class. Active participation fosters a rich course experience for all students and facilitates overall mastery of the course objectives.

**Course Objectives and/or Goals**

As outlined in the objectives below, the course material covers the following Education Standards for the American Council for the Accreditation of OT Education (ACOTE):

- B.1.1. Human Body, Development, and Behavior: Demonstrate knowledge of the structure and function of the human body to include the biological and physical sciences, neurosciences, kinesiology, and biomechanics. (*Theme: Human Occupation and Health*)
- B.3.5. Effects of Disease Processes: Analyze and evaluate the effects of disease processes including heritable diseases, genetic conditions, mental illness, disability, trauma, and injury on occupational performance. (*Theme: Human Occupation and Health*)
- B.4.21. Teaching–Learning Process and Health Literacy: Demonstrate, evaluate, and utilize the principles of the teaching-learning process using educational methods and health literacy education approaches; design activities and clinical training for persons, groups, and populations; instruct and train the client, caregiver, family, significant others, and communities at the level of the audience. (*Theme: Critical Thinking for Practice and Scholarship*).

Student Learning Objectives	ACOTE Standard(s)	Curricular Theme(s)	Assessment
<b>Lecture (neuroanatomy structure &amp; function)</b>			
By the end of the course, students will be able to:			
Define basic concepts, terminology, and divisions of the nervous system.	B.1.1. Human Body, Development, and Behavior	Human Occupation and Health	Knowledge Preps, Knowledge Checks, Exam
Describe the processes of neurodevelopment and define related terminology.	B.1.1. Human Body, Development, and Behavior	Human Occupation and Health	Knowledge Preps, Knowledge Checks, Exam
Describe the organization, structure and function of the cerebrum, limbic system, basal ganglia, cerebellum, brainstem, cranial nerves, spinal cord, and peripheral nerves.	B.1.1. Human Body, Development, and Behavior	Human Occupation and Health	Knowledge Preps, Knowledge Checks, Exam
Articulate the processes of nerve conduction, transmission of nerve impulse, excitation, and inhibition.	B.1.1. Human Body, Development, and Behavior	Human Occupation and Health	Knowledge Preps, Knowledge Checks, Exam
Trace and describe the flow of blood and cerebrospinal fluid of the brain and spinal cord.	B.1.1. Human Body, Development, and Behavior	Human Occupation and Health	Knowledge Preps, Knowledge Checks, Exam
Relate between the structures, organization, and function of the various sensory systems including the visual, somatosensory, vestibular, and auditory systems.	B.1.1. Human Body, Development, and Behavior	Human Occupation and Health	Knowledge Preps, Knowledge Checks, Exam
Integrate the information of structure and function as well as dysfunction of the nervous system by applying knowledge of brain anatomy and Brodmann's areas to cortical functions in the various areas and lobes and infer the disorders related to the various neurological structures.	B.1.1. Human Body, Development, and Behavior	Human Occupation and Health	Knowledge Preps, Knowledge Checks, Exam
Combine your knowledge of the structure, organization, and function of the motor systems to appraise control of posture and movement.	B.4.21. Teaching–Learning Process and Health Literacy	Critical Thinking for Practice and Scholarship	Knowledge Preps, Knowledge Checks, Exam

Student Learning Objectives	ACOTE Standard(s)	Curricular Theme(s)	Assessment
<b>Lab (Identification of brain &amp; spinal cord structure; Integration of knowledge of normal anatomy and physiology to inform understanding of various injuries, conditions, and disorders)</b>			
By the end of the course, students will be able to:			
Identify the following structures and describe their function: cerebrum, diencephalon, cerebellum, brain stem & cranial nerves, and spinal cord & spinal nerves.	B.1.1. Human Body, Development, and Behavior	Human Occupation and Health	Knowledge Prep, Knowledge Check, Competency
Identify vascular and ventricular structures, trace blood and CSF flow in the brain and spinal cord.	B.1.1. Human Body, Development, and Behavior	Human Occupation and Health	Knowledge Prep, Knowledge Check, Competency
Discern the etiology, symptoms, signs and treatment of major neurological diseases, disorders, and dysfunctions.	B.1.1. Human Body, Development, and Behavior B.3.5 Effects of Disease Processes	Human Occupation and Health	Knowledge Prep, Knowledge Check, Competency
Relate specific disorders to the neurological structures studied in brain lab.	B.4.21. Teaching– Learning Process and Health Literacy B.3.5 Effects of Disease Processes	Critical Thinking for Practice and Scholarship Human Occupation and Health	Knowledge Prep, Knowledge Check, Competency
Differentiate between various disorders based on their known signs and symptoms.	B.1.1. Human Body, Development, and Behavior B.3.5 Effects of Disease Processes	Human Occupation and Health	Knowledge Prep, Knowledge Check, Competency
Compare and contrast different lesions based on their location in the brain and their resultant dysfunction.	B.1.1. Human Body, Development, and Behavior B.3.5 Effects of Disease Processes	Human Occupation and Health	Knowledge Prep, Knowledge Check, Competency
Incorporate knowledge of structure and function to identify areas of concern based on diagnosis, and verbally communicate these findings to standardized patients.	B.4.21. Teaching– Learning Process and Health Literacy B.3.5 Effects of Disease Processes	Critical Thinking for Practice and Scholarship Human Occupation and Health	Knowledge Prep, Knowledge Check, Competency

**OVERVIEW OF COURSE CONTENT & COURSE MATERIAL****Course Schedule & Topical Outline - *detailed schedule including readings begins on page 11.***

<b>Week</b>	<b>Dates</b>	<b>Lecture Topics (Tuesdays)</b>	<b>Lab Topics (Wednesdays)</b>
1	8/22-8/23	Lecture 1: Fundamental Concepts	<b>Lab 1: No lab</b>
2	8/29-8/30	Lecture 2A: Neurons & Neurotransmitters Lecture 2B: Foundational Neuroanatomy	Lab 2: Cerebrum Identification
3	9/5-9/6	Lecture 3A: Neural Plasticity Lecture 3B: Blood Supply and CSF	Lab 3: Blood Supply, Ventricles, Meninges, and Sinuses
4	9/12-9/13 Exam 9 - 11:30 Lecture 2 - 5	<b>Lecture Exam 1</b>  Lecture 4A: Neural Development Lecture 4B: Mechanisms of Learning & Memory	Lab 4: Coronal Brain Views
5	9/19-9/20 Lecture 8-10:25	Lecture 5A: Autonomic Nervous System Lecture 5B: Mechanisms of Emotion	Lab 5: Cranial Nerves
6	9/26-9/27	Lecture 6A: Visual System Lecture 6B: Attention & Arousal	<b>Lab Competency 1</b>
7	10/3-10/4 Exam 9 - 11:30 Lecture 2 - 5	<b>Lecture Exam 2</b>  Lecture 7A: Anatomy of the Spinal Cord Lecture 7B: Spinal Control of Movement	Lab 7: Spinal Cord Injury
8	10/10-10/11	Lecture 8A: Brain Control of Movement Lecture 8B: Vestibular System	Lab 8: Basal Ganglia and Cerebellar Disorders
9	10/17-10/18 Lecture 8-10:25	Lecture 9A: Adult and Aging Brain Lecture 9B: Traumatic Brain Injury and Brain Tumors	Lab 9: Traumatic Brain Injury (TBI) and Brain Tumors
10	10/24-10/25 Exam 9 - 11:30 Lecture 2 - 5	<b>Lecture Exam 3</b>  Lecture 10: Somatosensory System	Lab 10: Autoimmune and Inflammatory Conditions
11	10/31-11/1	Lecture 11A: Auditory System Lecture 11B: Language Development	<b>Lab Competency 2</b>
12	11/7-11/8	Lecture 12A: Gustatory & Olfactory Systems Lecture 12B: Mechanisms of Motivation	Lab 12: Cerebrovascular Accident (CVA)
13	11/14-11/15 Exam 9 - 11:30 Lecture 2 - 5	<b>Lecture Exam 4</b>  Lecture 13: Sensory Processing	Lab 13: Sensory Processing Conditions
14	11/21-11/22	<b>Lecture 14: No Lecture</b>	<b>Lab 14: No Lab</b>
15	11/28-11/29	Lecture 15A: Childhood Disorders Lecture 15B: Mental Health Conditions	Lab 15: Childhood and Mental Health Conditions
16	12/5-12/6	Lecture 16A: Cognition & Memory Lecture 16B: Brain Rhythms & Sleep	<b>Lab Competency 3</b>
17	12/12	<b>Final Exam</b>	

### Required Course Materials

We will use the following texts in the course. Please feel free to use electronic copies of all texts if you prefer.

Texts 2, 3, 5 and 6 are all available as free e-books through the UF library and accessed via the "Course Reserves" link on the course home page in Canvas (try this first!) If you need additional instructions, see handout titled "How to Access Neuroscience Course Texts" on the course home page in Canvas.

1. Bear, M. F., Connors, B. W., & Paradiso, M. A. (2016). *Neuroscience: Exploring the Brain*. Wolter Kluwer. Students are required to have access to a personal copy for the course. ***The regular and enhanced 4<sup>th</sup> editions of this text (distributed by two different publishers) are identical.***
2. Bundy, A. C. & Lane, S. J. (Eds.) (2019). *Sensory Integration Theory and Practice*, 3<sup>rd</sup> Edition. FA Davis.
3. Gutman, S.A. (2017). *Quick Reference Neuroscience for Rehabilitation Professionals* (3<sup>rd</sup> edition). SLACK Inc.
4. Haines, D.E. (2019). *Neuroanatomy Atlas in Clinical Context: Structures, Sections, Systems and Syndromes* (10<sup>th</sup> Edition). Wolters Kluwer. Students are required to have access to a personal copy for use in all labs.
5. Rohkamm, R. (2014). *Color Atlas of Neurology* (2<sup>nd</sup> Edition). Thieme.
6. Society for Neuroscience (Ed.). (2018). *The brain facts book*. BrainFacts.org.  
<https://www.brainfacts.org/the-brain-facts-book>

### Academic Resources

For technical support for this class, please contact the UF Help Desk at:

[helpdesk@ufl.edu](mailto:helpdesk@ufl.edu)

(352) 392-HELP - select option 2

<https://helpdesk.ufl.edu/>

Additional academic resources are available here:

[Career Connections Center](#): Reitz Union Suite 1300, 352-392-1601. Career assistance and counseling services.

[Library Support](#): Various ways to receive assistance with respect to using the libraries or finding resources.

[Teaching Center](#): Broward Hall, 352-392-2010 or to make an appointment 352- 392-6420. General study skills and tutoring.

[Writing Studio](#): 2215 Turlington Hall, 352-846-1138. Help brainstorming, formatting, and writing papers.

## ACADEMIC REQUIREMENTS AND GRADING

### Course Assignments

There are five types of assignments in this course: Knowledge Prep Activities, Knowledge Check Activities, Lab Competencies, Lecture Exams, and a comprehensive Final Exam. Each type of activity is described below.

**Students are expected to complete each type of assignment independently and submit them on time.**

**Some assignments cannot be made-up, as is described below.**

- **Knowledge Prep (KP):** These are graded activities to help students prepare themselves for lecture and lab. They should be completed by the due date with a passing score as noted in Canvas each week. Knowledge Preps are graded pass/no pass (P/NP) and they cannot be made-up. Each student must complete 12 of 14 (85%) Lecture Knowledge Preps and 9 of 11 (85%) Lab Knowledge Preps to pass the course. Lecture and Lab Knowledge Preps are due 11:59 pm the day before the content is covered.
- **Knowledge Check (KC):** These are graded activities to assess whether students are grasping concepts as they are being learned. They should be completed by the due date with a passing score as noted in Canvas each week. Knowledge Checks are graded pass/no pass (P/NP) and cannot be made-up. Each student must complete 3 of 3 (100%) Lecture Knowledge Checks and 9 of 11 (85%) Lab Knowledge Checks to pass the course. Check Canvas for Lecture Knowledge Checks due dates. Lab Knowledge Checks are due 11:59 pm the day before the content is covered.
- **Lab Competencies:** There are three performance-based lab competencies. Students will identify and/or describe neurological structures and functions and relate these structures/functions to specific conditions. The performance criteria for each Lab Competency will vary and a scoring rubric will be available to students at least one week in advance of the assessment. Lab Competencies are graded pass/no pass (P/NP), with a score of 80% or better required to pass each competency. Students will have the opportunity to retake each Lab Competency a maximum of two times to earn a passing score.
- **Lecture Exams:** There are four closed note lecture exams. Exams include multiple choice questions, short answer, case studies, and matching questions. The exams will be administered in the same classroom where the lecture occurs. Lecture Exams 1 through 4 are 60 points each, and students must earn a minimum of 42/60 points (70%) to pass each Lecture Exam. Following each Lecture Exam, students not receiving a passing score will have an opportunity to complete corrections for missed exam questions to earn back  $\frac{1}{2}$  of the points available to reach a passing score. Students must complete Lecture Exam corrections within 6 days of completing the exam itself.
- **Final Exam:** The Final Exam is cumulative and includes multiple choice questions, short answer, case studies, and matching questions. The Final Exam will be closed note and occurs in the same classroom as lecture. The cumulative Final Exam is 200 points and students must earn a minimum of 140/200 points (70%) to pass the Final Exam. Following the Final Exam, students not receiving a passing score will have an opportunity to complete corrections for missed exam questions to earn back  $\frac{1}{2}$  of the points available to reach a passing score. Students must complete Final Exam corrections within 3 days of completing the exam itself.

### Grading of Course Assignments

The grade for this course is based on 1000 possible points as described in the table below. All assignments **must be completed independently and submitted on time** to pass the course.

Assignment	Points Available	Percent of Course Grade
Lecture Exam 1	60	6%
Lecture Exam 2	60	6%
Lecture Exam 3	60	6%
Lecture Exam 4	60	6%

Lab Competency 1 (P/NP)	100	10%
Lab Competency 2 (P/NP)	100	10%
Lab Competency 3 (P/NP)	100	10%
Final Exam	200	20%
Knowledge Preps (P/NP)	160	16%
Knowledge Checks (P/NP)	100	10%
Total Points Available	1000	100%

### Conversion of Course Assignment Points to Course Letter Grade and UF Grade Points

Points Earned	900-1000	870-899	800-869	770-799	700-769	670-699	630-669	600-629	0-599
Grading Scale	90 -100	87-89	80-86	77-79	70-76	67-69	63-66	60-62	0-59
Course Letter Grade	A	B+	B	C+	C	D+	D	D-	E
UF Grade Points Earned	4.0	3.33	3.0	2.33	2.0	1.33	1.0	0.67	0.0

More information about the OTD program grading policies can be found in the *OTD Student Manual*. More information about the general UF grading policy can be found [here](#).

#### Policy Related to Required Class Attendance

OTD students are required to **attend all class activities**. See the *OTD Student Manual* for additional policies related to attendance. For information regarding the UF Attendance Policy see the Registrar website for additional details: <https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx>

All students will be held responsible for all material presented and discussed during class activities. If possible, a student who must be late or absent to a class activity should notify the instructor prior to the scheduled time in order to understand the possibility of makeup activities. Some experiences cannot be made up. Students should arrive on time for class and stay for the entire class period. If you must arrive late or leave early, we ask that you make every effort to let the instructor know ahead of time. Late arrivals and early departures are treated as absences and students must let the instructor know how they intend to make up missed work.

Please note all faculty are bound by the UF policy for excused absences See the *OTD Student Manual* for policies related to attendance. For information regarding the UF Attendance Policy see the Registrar website for additional details: <https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx>

#### Course Exam Policy

You will be taking all Lecture Exams on your own computer in class. You must pre-install the Respondus Lockdown Browser before taking the Lecture Exam. Students who need accommodation for in-class exams must notify Dr. Bodison at the start of the course so that arrangements can be made in advance.

#### Policy Related to Make-up Exams or Other Work

Any requests for Lecture Exam or Lab Competency make-up due to an excused absence must be submitted to Dr. Bodison via email within 48 hours of missing an exam or competency. Any work that is submitted late due to technical issues MUST be accompanied by the email received from the Help Desk when the problem was reported to them. The email will document the time and date of the problem. You MUST email Dr. Bodison within 24 hours of the technical difficulty to inform her of your problem/late or missed assignment.

## INCLUSIVE LEARNING ENVIRONMENT

Public health and health professions are based on the belief in human dignity and 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 acceptance 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 an inclusive learning environment, please see your instructor or refer to the Office of Multicultural & Diversity Affairs website: [www.multicultural.ufl.edu](http://www.multicultural.ufl.edu)

To create as inclusive a learning environment as possible, we, your instructor team, will work to ensure that the classroom environment is conducive to the sharing of ideas, allowing students to explore relationships between course material, personal and social experiences. We strive to teach content objectively and create space for a respectful dialogue of ideas related to the impact of race, gender identity, sexual orientation, disability status, age, etc. on the topics taught in class. We seek to nurture a supportive peer culture both inside and outside of the classroom, and expect that students will treat each other in caring, empathic, and respectful ways.

### Accommodations for Students with Disabilities

If you require classroom accommodation because of a disability, it is recommended that 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 office of the Dean of Students will provide documentation of the necessary accommodation for you, which you must then give to Dr. Bodison. 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.

### Support Services for 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>. Online and in person assistance is available.
- **U 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>
- **University Police Department:** [Visit UF Police Department website](#) or call 352-392-1111 (or 9-1-1 for emergencies).
- **UF Health Shands Emergency Room / Trauma Center:** For immediate medical care call 352-733-0111 or go to the emergency room at 1515 SW Archer Road, Gainesville, FL 32608; [Visit the UF Health Emergency Room and Trauma Center website.](#)

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.



## STUDENT EXPECTATIONS, ROLES, AND OPPORTUNITIES FOR INPUT

### Expectations Regarding Course Behavior

For detailed information about the content summarized below see the relevant sections of the *OTD Student Manual*.

### Communication Guidelines

The course instruction team will communicate with students through Canvas or through ufl.edu email addresses. Please sign up to receive notifications from Canvas so that you are aware of new messages and announcements. Students should check their ufl.edu email daily. Please allow 24 hours for the instruction team to respond to any email inquiries you initiate. Instructors will not answer inquiries from Friday 5:00 pm through Monday 8:00 am.

### Student Expectations

1. Students are expected to regularly check Canvas for announcements and to access all lecture and lab material **prior** to each class.
2. It is the student's responsibility to arrive promptly to class and actively participate in and be attentive during all course activities.
3. Students are responsible for keeping the classroom in order and properly handling and storing all lab materials including models and specimens.
4. Students are expected to be prepared for class by reading, studying, and completing assignments as indicated in Canvas prior to coming to class. Students should bring all necessary materials to effectively participate in lecture and lab.
5. Phones, laptops, tablets, and electronic devices may be used in class for note taking, viewing slides, or accessing websites associated with ongoing class activities. Students are not allowed to use these devices in class for any other reason. You must inform and obtain the instructor's permission to audio record in either lecture or lab.
6. Professional work habits include being on time for class and staying until class is dismissed; refraining from chatter or other distracting behaviors; silencing all electronic ringers, notifications, and alarms; not reading other material during class; meeting assignment deadlines; arranging with instructor or peer to get handouts or announcements if unable to attend class; arranging with the instructor in advance if unable to complete tests and assignments as scheduled.
7. The following are required for lab:
  - a) Clean scrubs with student ID visible at all times while in lab.
  - b) Gloves. Each student must bring several pairs of gloves to each lab. Nitrile gloves are highly recommended.
  - c) Surgical masks should be worn at all times while in the lab environment to protect from high exposure to formaldehyde.
  - d) Clean, closed toe shoes with adequate base of support should be worn at all times in lab. No sandals or flip flops.
8. Please keep jewelry to a minimum to protect specimens and for sanitary reasons. No hats.
9. **Taking pictures of any kind in lab is prohibited.**
10. **No visitors are allowed in the lab! Entrance is limited to students enrolled in the class.**
11. Neural specimens are very fragile and must be handled with care. **Specimens must not be allowed to dry out.** Do not use water!! Only use the Biostat fluid. Wet a paper towel to cover parts of the specimen when they are out of the buckets for an extended period of time.
12. **Do not poke the specimen with a pencil or pen! Gently** touch the specimen with a wooden probe.
13. Students are expected to clean up after themselves in lab and return all lab materials to their proper place. **Students are not to remove atlases, models, specimens, or other lab materials from the lab.**

### 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 or the Graduate Student Website for additional details:

<https://www.dso.ufl.edu/sccr/process/student-conduct-honor-code/>  
<http://graduateschool.ufl.edu/>

Please remember that 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, or via <https://ufl.bluera.com/ufl/>. Summaries of course evaluation results are available to students at <https://gatorevals.aa.ufl.edu/public-results/>

### **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. For additional information, please review the Classroom Guests of Students policy in its entirety.

**DETAILED SCHEDULE & ASSIGNMENTS**

A **tentative schedule** of course readings, preparatory activities, and assignments can be found below. The most accurate schedule of readings and assignments will be released on Canvas one week before exams 1 - 4.

	Lecture Topics and Assignments	Lab Topics and Assignments
<b>WEEK 1</b> 8/22-8/23	<b>Lecture 1: Fundamental Concepts</b> <ul style="list-style-type: none"> <li>Bear, et al. (2016): Chapter 1</li> <li>Bear, et al. (2016): Chapter 7, pp. 180-191</li> <li>Bear, et al. (2016): Chapter 2</li> </ul> <b>Lecture 1 Knowledge Check</b>	<b>No Lab</b>
<b>WEEK 2</b> 8/29-8/30	<b>Lecture 2: Neurons &amp; Neurotransmitters and Foundational Neuroanatomy</b> <ul style="list-style-type: none"> <li>Bear, et al. (2016): Chapter 3</li> <li>Bear, et al. (2016): Chapter 4</li> <li>Bear, et al. (2016): Chapter 5</li> <li>Gutman (2017): Section 29</li> </ul> <b>Lecture 2 Knowledge Prep</b> <b>Lecture 2 Knowledge Check</b>	<b>Lab 2: Cerebrum Identification</b> <u>Lab Preparation</u> <ul style="list-style-type: none"> <li>Haines (2019): pp. 14, 16, 18, 20, 26, 28, 29</li> <li>Gutman (2017): Section 3</li> </ul> <b>Lab 2 Knowledge Prep</b>  <u>In-Lab</u> <ul style="list-style-type: none"> <li>In-lab Activity</li> </ul> <b>Lab 2 Knowledge Check</b>
<b>WEEK 3</b> 9/5-9/6	<b>Lecture 3: Neuroplasticity; Blood Supply and CSF</b> <ul style="list-style-type: none"> <li>Bear, et al. (2016): Chapter 23</li> <li>Bear, et al. (2016): Chapter 7 pp. 220-240</li> <li>Rohkamm (2014): pp 4-9; 14-27</li> </ul> <b>Lecture 3 Knowledge Prep</b> <b>Lecture 3 Knowledge Check</b>	<b>Lab 3: Blood Supply, Ventricles, Meninges, and Sinuses</b> <u>Lab Preparation</u> <ul style="list-style-type: none"> <li>Haines (2019): pp. 15, 17, 19, 21, 23, 25, 27, 58-59, 72</li> <li>Gutman (2017): Sections 4 &amp; 6</li> </ul> <b>Lab 3 Knowledge Prep</b>  <u>In-Lab</u> <ul style="list-style-type: none"> <li>In-lab Activity</li> </ul> <b>Lab 3 Knowledge Check</b>
<b>WEEK 4</b> 9/12-9/13 <b>Exam</b> 9 - 11:30 <b>Lecture 2 - 5</b>	<b>Lecture Exam 1</b>  <b>Lecture 4: Neural Development and Mechanisms of Learning and Memory</b> <ul style="list-style-type: none"> <li>Brain Facts Chapter 7 – pp. 49 - 52; 192-204</li> <li>Bear, et al. (2016): Chapter 25</li> </ul> <b>Lecture 4 Knowledge Prep</b>	<b>Lab 4: Coronal Brain Views</b> <u>Lab preparation</u> <ul style="list-style-type: none"> <li>Haines (2019): pp. 76 – 84</li> </ul> <b>Lab 4 Knowledge Prep</b>  <u>In-Lab</u> <ul style="list-style-type: none"> <li>In-lab Activity</li> </ul> <b>Lab 4 Knowledge Check</b>
<b>WEEK 5</b> 9/19-9/20 <b>Lecture</b> 8-10:25	<b>Lecture 5: Autonomic Nervous System and Emotions</b> <ul style="list-style-type: none"> <li>Bear, et al. (2016): Chapter 15</li> <li>Bear, et al. (2016): Chapter 18</li> </ul> <b>Lecture 5 Knowledge Prep</b>	<b>Lab 5: Cranial Nerves</b> <u>Lab preparation</u> <ul style="list-style-type: none"> <li>Haines (2019): pp. 20, 22, 24, 30, 32, tables 44 – 45, 50 – 52</li> <li>Gutman (2017): pp. 68 – 93</li> </ul> <b>Lab 5 Knowledge Prep</b>  <u>In-Lab</u> <ul style="list-style-type: none"> <li>In-lab Activity</li> </ul> <b>Lab 5 Knowledge Check</b>

	Lecture Topics and Assignments	Lab Topics and Assignments
<b>WEEK 6</b> 9/26-9/27	<b>Lecture 6: Visual System and Attention &amp; Arousal</b> <ul style="list-style-type: none"> <li>Bear, et al. (2016): Chapter 9</li> <li>Bear, et al. (2016): Chapter 10</li> <li>Bear, et al. (2016): Chapter 21</li> </ul> <b>Lecture 6 Knowledge Prep</b>	<b>Lab Competency 1</b>
<b>WEEK 7</b> 10/3-10/4 <b>Exam</b> 9 - 11:30 <b>Lecture 2 - 5</b>	<b>Lecture Exam 2</b> <b>Lecture 7: Anatomy of the Spinal Cord and Spinal Control of Movement</b> <ul style="list-style-type: none"> <li>Bear, et al. (2016): Chapter 13</li> </ul> <b>Lecture 7 Knowledge Prep</b>	<b>Lab 7: Spinal Cord Injury (SCI)</b> <u>Lab Preparation</u> <ul style="list-style-type: none"> <li>Haines (2019): pp. 8 – 10, 98 – 107</li> <li>Gutman (2017): Section 7 and pp. 220 – 231</li> </ul> <b>Lab 7 Knowledge Prep</b> <u>In-Lab</u> <ul style="list-style-type: none"> <li>In-lab Activity</li> </ul> <b>Lab 7 Knowledge Check</b>
<b>WEEK 8</b> 10/10-10/11	<b>Lecture 8: Brain Control of Movement &amp; the Vestibular System</b> <ul style="list-style-type: none"> <li>Bear, et al. (2016): Chapter 11</li> </ul> <b>Lecture 8 Knowledge Prep</b>	<b>Lab 8: Basal Ganglia &amp; Cerebellar Disorders</b> <u>Lab Preparation</u> <ul style="list-style-type: none"> <li>Bear, et al. (2016) Chapter 15</li> <li>Haines (2019): pp. 28, 34 – 35</li> <li>Gutman (2017): pp. 262 – 272, 388 – 391</li> </ul> <b>Lab 8 Knowledge Prep</b> <u>In-Lab</u> <ul style="list-style-type: none"> <li>In-lab Activity</li> </ul> <b>Lab 8 Knowledge Check</b>
<b>WEEK 9</b> 10/17-10/18 <b>Lecture</b> 8-10:25	<b>Lecture 9: Adult and Aging Brain and TBI</b> <ul style="list-style-type: none"> <li>Brain Facts Chapter 8 – pp. 53 - 58</li> </ul> <b>Lecture 9 Knowledge Prep</b>	<b>Lab 9: Traumatic Brain Injury (TBI)</b> <u>Lab Preparation</u> <ul style="list-style-type: none"> <li>Brain Facts Chapter 14</li> </ul> <b>Lab 9 Knowledge Prep</b> <u>In-Lab</u> <ul style="list-style-type: none"> <li>In-lab Activity</li> </ul> <b>Lab 9 Knowledge Check</b>
<b>WEEK 10</b> 10/24-10/25 <b>Exam</b> 9 - 11:30 <b>Lecture 2 - 5</b>	<b>Lecture Exam 3</b> <b>Lecture 10: Somatosensory System</b> <ul style="list-style-type: none"> <li>Bear, et al. (2016): Chapter 12</li> </ul> <b>Lecture 10 Knowledge Prep</b>	<b>Lab 10: Autoimmune and Inflammatory Conditions</b> <u>Lab Preparation</u> <ul style="list-style-type: none"> <li>Gutman (2017): pp. 106 – 112, 175</li> </ul> <b>Lab 10 Knowledge Prep</b> <u>In-Lab</u> <ul style="list-style-type: none"> <li>In-lab Activity</li> </ul> <b>Lab 10 Knowledge Check</b>

	Lecture Topics and Assignments	Lab Topics and Assignments
<b>WEEK 11</b> 10/31-11/1	<b>Lecture 11: Auditory System and Language Development</b> <ul style="list-style-type: none"> <li>Bear, et al. (2016): Chapter 11 pp. 370 -403</li> <li>Bear, et al. (2016): Chapter 20 pp. 686 -687; 694 - 705</li> </ul> <b>Lecture 11 Knowledge Prep</b>	<b>Lab Competency 2</b>
<b>WEEK 12</b> 11/7-11/8	<b>Lecture 12: Gustatory &amp; Olfactory Systems and Mechanisms of Motivation</b> <ul style="list-style-type: none"> <li>Bear, et al. (2016): Chapter 8</li> <li>Bear, et al. (2016): Chapter 16</li> </ul> <b>Lecture 12 Knowledge Prep</b>	<b>Lab 12: Cerebrovascular Accident (CVA)</b> <u>Lab Preparation</u> <ul style="list-style-type: none"> <li>Gutman (2017): pp. 304 – 325</li> </ul> <b>Lab 12 Knowledge Prep</b>  <u>In-Lab</u> <ul style="list-style-type: none"> <li>In-lab Activity</li> </ul> <b>Lab 12 Knowledge Check</b>
<b>WEEK 13</b> 11/14-11/15 <b>Exam</b> 9 - 11:30 <b>Lecture 2 - 5</b>	<b>Lecture Exam 4</b>  <b>Lecture 13: Sensory Processing</b> <ul style="list-style-type: none"> <li>Bundy &amp; Lane (2019): Chapter 6</li> <li>Bundy &amp; Lane (2019): Chapter 7</li> </ul> <b>Lecture 13 Knowledge Prep</b>	<b>Lab 13: Sensory Processing Conditions</b>  <b>Lab 13 Knowledge Prep</b>  <u>In-Lab</u> <ul style="list-style-type: none"> <li>In-lab Activity</li> </ul> <b>Lab 13 Knowledge Check</b>
<b>WEEK 14</b> 11/21-11/22	<b>Lecture 14: No Lecture</b>	<b>Lab 14: No Lab</b>
<b>WEEK 15</b> 11/28-11/29	<b>Lecture 15: Childhood Disorders and Mental Health Conditions</b> <ul style="list-style-type: none"> <li>Brain Facts Chapter 11</li> <li>Bear, et al. (2016): Chapter 22</li> <li>Bear, et al. (2016): pp 724 Box 21.1; pp 758 Box 22.1; pp. 803 Box 23.4</li> </ul> <b>Lecture 15 Knowledge Prep</b>	<b>Lab 15: Childhood Disorders and Mental Health Conditions</b>  <b>Lab 15 Knowledge Prep</b>  <u>In-Lab</u> <ul style="list-style-type: none"> <li>In-lab Activity</li> </ul> <b>Lab 15 Knowledge Check</b>
<b>WEEK 16</b> 12/5-12/6	<b>Lecture 16: Cognition, Memory, &amp; Sleep</b> <ul style="list-style-type: none"> <li>Brain Facts Chapter 5</li> <li>Bear, et al. (2016): Chapter 24</li> <li>Bear, et al. (2016): Chapter 25</li> </ul> <b>Lecture 16 Knowledge Prep</b>	<b>Lab Competency 3</b>
<b>Final Exam: Tuesday, December 12, 2023 9:00am – 12:00pm HPNP room G101</b>		