Learning Goals

BY THE END OF THE SEMESTER, YOU SHOULD BE ABLE TO:

- Identify the anatomical location and function of the major features of the central and peripheral nervous systems including:
  - Motor and somatosensory pathways
  - Major nerves including cranial and spinal nerves
  - Vascularization of the brain and spinal cord
  - Brainstem, cerebellum, limbic system, basal ganglia, hypothalamus, pituitary, and cerebral cortices
- Describe and discuss neurological conditions that arise from disfunction of the nervous system including stroke, Bell's palsy, Parkinson's disease, cranial nerve damage, paralysis, Alzheimer's disease, aphasia, and loss of sensation
- Describe how neurons interact to form circuits that underlie behavior
- Review clinical neurological cases and interpret symptoms to develop hypotheses on areas of damage
- Develop oral skills in class discussions of experimental design and issues related to neuroscience
Assignments and Grading

Assignments to help you assess your basic comprehension of topics covered:

Knowledge Probes – Each week we will start with a knowledge probe. This will be a short assignment that will help to highlight key information that we will cover and offer a preview of material to come. For me, it will help determine the best starting point for our conversations. These probes will help us both assess your previous knowledge and preconceptions of the topics.

Weekly Assessments/Quizzes - these weekly assessments assure that you have the content knowledge, reading comprehension, and preparation for discussion and lecture. Quiz due dates are listed on OAKS. No late quizzes will be accepted. The lowest 2 quiz grades will be dropped.

Assignments to help you assess your ability to apply and synthesize your knowledge:

Reflect & Apply Assignments – We will use case studies and other assignments throughout the semester to assess and integrate our knowledge of the anatomy and physiology of various nervous system components with the behavioral outcomes of those systems. Specifications for the assignments will be posted on OAKS.

Research Paper on Neurological Disease or Disorder – you will have an opportunity to go more in-depth on a specialized topic related to this course that we weren’t able to specifically cover. In a 7–8-page APA-style paper, you will review the current scientific research available on a neurological disease or disorder of your choosing (prior authorization of topic is required). Specifications for the assignment will be posted on OAKS.

Midterm and Final Exams – online examinations that will focus on your ability to apply, analyze, and interpret the concepts that you have learned each week. Whereas the weekly quizzes are composed of multiple choice questions focused mainly on recognition and comprehension, the midterm and final exams will focus on higher order understanding and application. These exams will consist of short answer, essay, and creative assignments. Note: These exams will be taken online. No make-up exams will be given. Missed exams will result in a grade of zero. If you expect to have an absence on an exam day (athletic activity, etc.), please contact me prior to the exam to make alternative arrangements.

LATE ASSIGNMENTS ARE NOT ACCEPTED AND WILL RESULT IN A ZERO FOR THE ASSIGNMENT.

Grading:

Knowledge Probes 55 (11 x 5 points each; lowest 2 dropped)
Weekly Assessments/Quizzes 330 (11 X 30 points each; lowest 2 dropped)
Reflect & Apply Assignments 110 (11 x 10 points each; lowest 2 dropped)
Research Paper 155 (pts distributed according to guide on OAKS)
Exams (Midterm and Final) 350 (2 x 175 points each)
1000 points total

Grading Scale:

A = ≥ 940  94%   |   B- = 800-839  80-83.99%   |   D+ = 670-699  67-69.99%
B+ = 870-899  87-89.99%   |   C = 740-769  74-76.99%   |   D- = 600-639  60-63.99%
B = 840-869  84-86.99%   |   C- = 700-739  70-73.99%   |   F = 0-599  <59.99%

Attendance Policy:

We will use the Zoom course meetings to discuss the weekly content. Your attendance during these sessions is critical for us to have a successful semester. Please make sure to attend all classes. If you do need to miss class, please contact Dr. Wilhelm to let her know prior to the absence.

Missing more than 4 class periods will result in a reduction in your final grade by 30 points for each absence. Missing 8 or more class periods will result in an automatic F in the course due to excessive absences. Please note, because this is an online course, no differences will be made between excused and unexcused absences (unless as required by law for certain military duties or if travel/absence is required to represent the College). If you must miss several class periods you are likely to fall behind in the course. If you miss a substantial portion of the course meeting periods, you likely will struggle to complete the course and may want to consider withdrawing from the course for the semester.
<table>
<thead>
<tr>
<th>WEEK</th>
<th>DATE</th>
<th>TOPIC</th>
<th>ASSIGNED READING</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Jan 10-15</td>
<td>Introduction and Historical Perspectives</td>
<td>Chapter 1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Basic Features and Organization of the Nervous System</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Jan 16-22</td>
<td>Organization of the Nervous System</td>
<td>Chapter 7 and</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cranium, Ventricles, Meninges, Cerebral</td>
<td>reading on OAKS</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Hemispheres, and Vascular Supply</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Neuroanatomical Research Methods: Neurologic Exam and Imaging</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Jan 23-29</td>
<td>Neural Development</td>
<td>Chapter 7</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cerebral Cortex</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Jan 30 – Feb 5</td>
<td>The Somatic Sensory System: Mechanoreception and Proprioception</td>
<td>Chapter 12</td>
</tr>
<tr>
<td>5</td>
<td>Feb 6-12</td>
<td>The Somatic Sensory System: Nociception and Thermoreception</td>
<td>Chapter 12</td>
</tr>
<tr>
<td>6</td>
<td>Feb 13-Feb 19</td>
<td>Spinal Control of Movement</td>
<td>Chapter 13</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Spinal Nerve Roots, Peripheral Nerves, and Major Plexuses</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Feb 20-26</td>
<td>Brain Control of Movement: Basal Ganglia, Cerebellum and Related</td>
<td>Chapter 14</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Systems</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Feb 27-March 5</td>
<td>Review and Midterm Exam (March 3)</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>March 6-12</td>
<td>Spring Break, No Classes</td>
<td>No Classes</td>
</tr>
<tr>
<td>10</td>
<td>March 13-19</td>
<td>Brain Stem and Cranial Nerves</td>
<td>Reading Posted on</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>OAKS</td>
</tr>
<tr>
<td>11</td>
<td>March 20-26</td>
<td>Chemical Control of the Brain: Hypothalamus and Pituitary</td>
<td>Chapter 15</td>
</tr>
<tr>
<td>12</td>
<td>March 27-April 2</td>
<td>Sex Differences in the Nervous System</td>
<td>Chapter 17 and</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Reading Posted on</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>OAKS</td>
</tr>
<tr>
<td>13</td>
<td>April 3-9</td>
<td>Brain Mechanisms of Emotion: Limbic System</td>
<td>Chapter 18</td>
</tr>
<tr>
<td>14</td>
<td>April 10-16</td>
<td>Brain Mechanisms of Language</td>
<td>Chapter 20</td>
</tr>
<tr>
<td>15</td>
<td>April 17-23</td>
<td>Brain Plasticity</td>
<td>Chapter 23</td>
</tr>
<tr>
<td>16</td>
<td>April 24-30</td>
<td>Tuesday, April 26 is Reading Day</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Thursday, April 28 from 10:30 AM – 12:30 PM is Final Exam</td>
<td></td>
</tr>
</tbody>
</table>

**Specific due dates for assignments, quizzes, papers, and exams will be posted on OAKS.**

Knowledge Probes will be due on Mondays by 11:59 PM
Assessments/Quizzes and Application Assignments will be due on Saturdays by 11:59 PM
Midterm Exam will be due by 12:05 PM on Thursday, March 3
Final Exam will be 10:30 AM – 12:30 PM on Thursday, April 28
Research Paper will be due in parts during March and April (see OAKS for details)

**Other Important Dates (from the CofC Registrar’s Office):**

January 10 Classes Begin (Online all semester for this course)
January 18 Last day of Drop/Add for full semester courses and to apply for Pass/Not Pass grade
February 15 Last day to apply to graduate for Spring 2022
March 6-12 Spring break, no classes
March 15 Maymester and Summer Sessions registration begins
March 25 Last day to withdraw with a status indicator of “W”
March 29 Fall course registration begins (see your advisor for your dates)
April 26 Reading Day
LIFE/COLEGE BALANCE AND SELF-CARE

You feel comfortable with your preferences. I use she/her pronouns. Please advise me as you feel comfortable of your preferences.

NAMES AND IDENTITIES MATTER!

I will gladly honor your request to address you by the name and gender pronouns of your choice. I use she/her pronouns. Please advise me as you feel comfortable with your preferences.

MENTAL AND PHYSICAL WELLBEING

At the college, we take every student’s mental and physical wellbeing seriously. If you find yourself experiencing physical illnesses, please reach out to student health services (843.955.5520). If you find yourself experiencing any mental health challenges, please consider contacting the Counseling Center (professional counselors at http://counseling.cofc.edu) or the Students 4 Support (certified volunteers through texting “4support” to 839865).

LIFE/COLEGE BALANCE AND SELF-CARE

Whether it is family and relationship problems, working nearly full-time, depression, anxiety, problems related to alcohol or other drug use, sexual assault and/or the death of family and friends, I am aware of and sympathetic to the fact that college students experience these and other challenges that make it difficult to focus on academics. I understand that this semester may be particularly difficult as we are dealing with the national health emergency. I am here to support you the best that I can during this time.

If you experience one or more of these things during our class and you are struggling to complete coursework (or just need help), please communicate with me (you do not have to go into specific details). There are numerous resources that I can recommend to you and, to an extent, I can work with you on deadlines.

ACADEMIC HONESTY

Lying, cheating, attempted cheating, and plagiarism are violations of our Honor Code that, when identified, are investigated. Each incident will be examined to determine the degree of deception involved. Incidents where the instructor determines the student’s actions are related more to misunderstanding and confusion will be handled by the instructor. The instructor designs an intervention or assigns a grade reduction to help prevent the student from repeating the error. The response is recorded on a form and signed both by the instructor and the student. It is forwarded to the Office of the Dean of Students and placed in the student’s file. Cases of suspected academic dishonesty will be reported directly by the instructor and/or others having knowledge of the incident to the Dean of Students. A student found responsible by the Honor Board for academic dishonesty will receive a XXF in the course, indicating failure of the course due to academic dishonesty. This status indicator will appear on the student’s transcript for two years after which the student may petition for the XX to be expunged. The F is permanent. Students can find the complete Honor Code and all related processes in the Student Handbook.

ADDITIONAL RESOURCES

ACCESSIBILITY STATEMENT

The College will make reasonable accommodations for persons with documented disabilities. Students should apply for services at the Center for Disability Services/SNAP located on the first floor of the Lightsey Center, Suite 104. Students approved for accommodations are responsible for notifying me as soon as possible and for contacting me one week before accommodation is needed.

Each of us learns in different ways, and the organization of any course will accommodate each student differently. Please talk to me at the beginning of the semester about your individual learning needs and how this course can best accommodate them. If you do not have a documented disability, remember that other support services, including the Center for Student Learning (Addlestone Library, room 116) and the Counseling Center (843.955.5640), are available to assist you with writing, mathematics, and general study skills.

CENTER FOR STUDENT LEARNING

The Center for Student Learning’s (CSL) academic support services provide assistance in study strategies, speaking & writing skills, and course content. Services include tutoring, Supplemental Instruction, study skills appointments, and workshops. Students of all abilities have become more successful using these programs throughout their academic career, and the services are available to you at no additional cost. For more information regarding these services please visit the CSL website at http://csl.cofc.edu or call (843) 953-5655.

FINANCIAL, FOOD, AND HOUSING RESOURCES

If you are having difficulty affording groceries or getting sufficient food to eat every day, or lack a safe and stable place to live, and believe this may affect your performance in the course, please contact the Dean of Students for support. Also, you can go to http://studentaffairs.cofc.edu/student-food-housing-insecurity/index.php to learn about food and housing assistance that is available to you. In addition, there are several resources on and off campus to help. You can visit the Cougar Pantry in the Stern Center (2nd floor), a student-run food pantry that provides dry-goods and hygiene products at no charge to any student in need. Please also consider reaching out to your professor as you are comfortable.

RECORDING OF CLASSES VIA ZOOM

It is expected that you will be in class via Zoom each day. Attendance is mandatory and will be counted as part of your grade. On occasion, class sessions may be recorded via both voice and video recording. By attending and remaining in this class, you consent to being recorded. Recorded class sessions are for instructional use only and may not be shared with anyone who is not enrolled in the class. Students should not rely on class recordings to replace attending class live.

INCLEMENT WEATHER/PANDEMIC/INTERRUPTION OF INSTRUCTION

If in-person classes are suspended, faculty will announce to their students a detailed plan for a change in modality to ensure the continuity of learning. All students must have access to a computer equipped with a web camera, microphone, and Internet access. Resources are available to provide students with these essential tools.

TECHNICAL ISSUES/IT SUPPORT

If you have questions about course content, please email Dr. Wilhelm promptly. If you experience technical problems, please contact Student Computing Support Desk (phone: 843-953-5457) or email: studentcomputingsupport@cofc.edu.

TECHNICAL ISSUES/IT SUPPORT

If you have questions about course content, please email Dr. Wilhelm promptly. If you experience technical problems, please contact Student Computing Support Desk (phone: 843-953-5457) or email: studentcomputingsupport@cofc.edu.