Neurophysiology & Behavior (MEDS 4047)

Lecture: Tuesdays and Thursdays
12:00 - 1:50 PM

Course Director: Teresa Reyes
Email: reyesta@ucmail.uc.edu
Office Location: Reading campus A-120
Office Hours: by appointment

Course Overview, Description, Purpose

This course is designed to provide students with an overview of systems behavioral neuroscience. The course will cover sensory, motor and pain systems; homeostasis and biological rhythms, brain energetics, positive and negative affect and motivation, cognition, and psychoneuroimmunology.

Course Learning Outcomes

<table>
<thead>
<tr>
<th>Learning Outcomes</th>
<th>Demonstration of Learning Outcomes</th>
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<tbody>
<tr>
<td>1. Gain familiarity with topics in systems behavioral neuroscience.</td>
<td>1. Class participation</td>
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<tr>
<td></td>
<td>2. Midterm and final grades</td>
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<tr>
<td>2. Gain familiarity with critically reading the relevant literature.</td>
<td>1. Written responses</td>
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<tr>
<td></td>
<td>2. Class participation</td>
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Course Methodology

Course content will be taught in a lecture format from the course director, or course instructors. Approximately 75 min of the class period will be devoted to the lecture. Following the lecture, the remaining 35 min will be used to critically discuss the assigned reading. Written reading responses are due at the beginning of each class period. Class discussion and participation is a major component of the course.
Course Materials

This course does not require a textbook. Reading assignments will be posted on Canvas.

Assessments/Activities and Grading Policy

Grading will be assigned based on three points.
1. Attendance
2. Preparation AND participation
3. Midterm and final exam

Late Work

Late work will not be accepted unless you have been given an extension. Please communicate with me if you are unable to turn in assignments at the appointed time. It is imperative that you communicate with your instructor as soon as possible.

Classroom Procedures/Policies

Communication
All class communication will take place through Canvas or UC email. It is imperative that you check your email on a daily basis. Any important announcements will be communicated at least 12 hours in advance of the course start time.

Attendance Policy
Attendance is mandatory (excessive absences will lower the final grade). Active participation is essential for success. Participation includes advance preparation of reading assignments, coming to class prepared with questions, and involvement with classroom discussions. Questions are always welcomed; I will be happy to re-explain concepts. Successful participation in the classroom will frequently stimulate continuing discussion outside the classroom, both with fellow students and with the instructor. These ongoing interactions will prove valuable and are encouraged.

From UC Faculty Senate

Students at the University of Cincinnati are expected to attend classes in order to meet the learning objectives for the course. Students are expected to follow the class attendance policy as outlined by the instructor. Students participating in official University sponsored activities, where the student is representing the University, will meet with instructor related to absences due to university-sponsored activities. When such absences occur, students need to provide documentation of the event(s), and work with the professor to develop a written plan for completion of missed assignments or other course requirements with as much advance notice as possible. Any absence due to official University business may still count against the total number of allowable absences.
Faculty attendance
If an emergency occurs and the course director/faculty member does not arrive or notify the class of a cancellation please allow 15 minutes before leaving the classroom.

Class Cancellation Policy
In the rare case that a class must be cancelled, faculty will post an announcement on the LMS that will be emailed to students. Faculty will attempt to communicate class cancellations with as much advance notice as possible. Students should be sure that their LMS email is current and valid to ensure emails are received.

If the University closes due to inclement weather or other emergency situations, there will be an announcement posted on Canvas (LMS) and if possible on the local news channels (TV and radio). Communications related to University closures will also be sent to the student’s cell phone number on record through the automatic University emergency text messaging system. Students should notify the University if they change their cell phone number to ensure they will receive these important emergency communications.

If a UC closure or delayed opening is declared, class will be delayed or cancelled in accordance with the UC announcement, including course examinations.

If classes are cancelled due to inclement weather or other emergency situations please refer to Canvas for any posted assignments.

Academic Integrity
Academic dishonesty in any form is a serious offense and cannot be tolerated in an academic community. Dishonesty in any form, including cheating, plagiarism, and fabrication of research data or theft of ideas or information from others may result in a failing grade in a course and/or immediate suspension or dismissal from the Graduate Program. Information on "Misconduct Review Procedures" is available: http://www.uc.edu/conduct/Code_of_Conduct.html. Any work turned in by a student is subject to computerized checks for plagiarism (e.g. SafeAssign)

From UC Faculty Senate
The University Rules, including the Student Code of Conduct, and other documented policies of the department, college, and university related to academic integrity will be enforced. Any violation of these regulations, including acts of plagiarism or cheating, will be dealt with on an individual basis according to the severity of the misconduct.

Ethical Conduct
Each student is required to read and understand the content and implications contained in “On Being a Scientist” (available online at: http://www.nap.edu/catalog.php?record_id=12192) and the “University of Cincinnati’s Student Code of Conduct” (available online at: www.uc.edu/conduct/Code_of_Conduct.html) upon matriculation. An agreement, signed by the student, affirming that the student intends to follow and uphold the ethical conduct established in both publications, will be added to the student’s file.
# Course Calendar: Spring 2020 *(tentative)*

Lecture Schedule

<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
<th>Instructor</th>
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<tbody>
<tr>
<td>March 3</td>
<td>Introduction</td>
<td>Reyes</td>
</tr>
<tr>
<td>March 5</td>
<td>Sensory I</td>
<td>Pixley</td>
</tr>
<tr>
<td>March 10</td>
<td>Sensory II</td>
<td>Pixley</td>
</tr>
<tr>
<td>March 12</td>
<td>Motor systems</td>
<td>Crone</td>
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*Spring break*

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<thead>
<tr>
<th>Date</th>
<th>Topic</th>
<th>Instructor</th>
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<tbody>
<tr>
<td>March 24</td>
<td>Homeostasis</td>
<td>Ulrich-Lai</td>
</tr>
<tr>
<td>March 26</td>
<td>Somatosensory/ Pain</td>
<td>Jankowski</td>
</tr>
<tr>
<td>March 31</td>
<td>Brain energetics- vasculature</td>
<td>Wohleb</td>
</tr>
<tr>
<td>April 2</td>
<td><strong>MIDTERM</strong></td>
<td></td>
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<tr>
<td>April 7</td>
<td>Rhythms/sleep</td>
<td>Ulrich-Lai</td>
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<tr>
<td>April 9</td>
<td>Negative motivation/Aversion/Fear/ PTSD</td>
<td>Sah</td>
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<tr>
<td>April 14</td>
<td>Learning and memory/ cognition/ Alzheimer’s/ dementia</td>
<td>Sah</td>
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<tr>
<td>April 16</td>
<td>Positive motivation/appetitive/ reward/ addiction I</td>
<td>Reyes</td>
</tr>
<tr>
<td>April 21</td>
<td>Positive motivation/appetitive/ reward/ addiction II</td>
<td>Reyes</td>
</tr>
<tr>
<td>April 23</td>
<td>Psychoneuroimmunology</td>
<td>Wohleb</td>
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TBA **FINAL**

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**Appendix: Student Resources**

**Accessibility Policy**

*From UC Faculty Senate*
The University of Cincinnati is committed to providing all students with equal access to learning opportunities. Disability Services [now called Accessibility Resources] is the official campus office that works to arrange for reasonable accommodations for students with an identified physical, psychological or cognitive disability (learning, ADD/ADHD, psychological, visual, hearing, physical, cognitive, medical condition, etc.) Students are encouraged to contact Disabilities Services to arrange for a confidential meeting to discuss services and accommodations. Contact should be initiated as soon as possible to allow adequate time for accommodations to be arranged.

From Accessibility Resources

If you have a disability (e.g., visual impairment, hearing impairment, physical impairment, communication disorder, and/or specific learning disability, etc.) which may influence your performance in this course, you must meet with the Disability Services Office (DSO) to arrange for reasonable accommodations to ensure an equitable opportunity to meet all the requirements of this course. If you require accommodations due to disability, please contact DSO at 513-556-6823, Campus Location: 210 University Pavilion. You will be provided an Accommodation Form indicating your accommodation needs for the semester. Please present this form to me AS SOON AS POSSIBLE to ensure your accommodation needs are discussed, agreed upon, and provided.

Title IX

Title IX is a federal civil rights law that prohibits discrimination on the basis of a person’s actual or perceived sex, gender, gender identity, gender expression, or sexual orientation. Title IX also address instances of sexual violence, dating or domestic violence, and stalking. If a student discloses a Title IX issue to a faculty member, the faculty member is required to forward that information to the Title IX Office. The Title IX office will follow up with the student and discuss how the University can take steps to address the impact on the student and the community. They will also inform the student of their rights and direct them to available resources. The priority is to make sure students are safe and successful here at the University of Cincinnati. Students are not required to talk to anyone in the Title IX Office. Students may also directly report any instance of sex or gender-based discrimination, harassment or violence to the Title IX office at 513-556-3349. Students who wish to know more about their rights and resources on campus, they can consult the Title IX website or contact the Title IX office directly at 513-556-3349.

Counseling Services, Clifton Campus

Students have access to counseling and mental health care through the University Health Services (UHS), which can provide both psychotherapy and psychiatric services. In addition, students can receive three free professional counseling sessions upon request through the Counseling and Psychological Services (CAPS). These sessions are not associated with student’s insurance coverage. Students are encouraged to seek assistance for anxiety, depression, trauma/assault, adjustment to college life, interpersonal/relational difficulty, sexuality, family conflict, grief and loss, disordered eating and body image, alcohol and substance abuse, anger management, identity development and issues related to diversity, concerns associated with sexual orientation and spirituality concerns, as well as any other issue of concerns. After hours, students may call UHS at 513-556-2564 or CAPS Cares at 513-556-0648. For urgent physician consultation after-hours students may call 513-584-7777.
Counseling & Psychological Services (CAPS)
(513) 556-0648 (24 hours)

- Provides free, confidential crisis intervention, support groups, advocacy and ongoing individual counseling services to students who have experienced sexual violence, sexual harassment, stalking and/or intimate partner violence while enrolled at UC
- Emergent walk-in services are available during office hours, 8:30 - 4:00pm.
- After-hours helpline staffed by professional counselors available at (513) 556-0648
- Sexual Assault support counselors: Abby Lewis, MA, LICDC, LPCC

Title IX Office (Sex-Based Discrimination/Harassment & Sexual Violence)

- Provides investigation and accommodation for students filing a report with the University of Cincinnati. Reports may be filed through the Title IX Office website.
- Contact: Karla Phillips, Interim Title IX Coordinator (513) 556-3349

UC Police & Public Safety
(513) 556-1111

- The UC Police have a dedicated victim support team available for sexual assault survivors.
- Making a police report and ensuring that evidence is collected is important to preserve the option of prosecution, but it does not mean you have to prosecute.

Women Helping Women
(513) 381-5610

- Non-university, community-based free, confidential support, accompaniment and advocacy. Located at 215 East 9th St., 7th Floor.
- Provides support groups and hospital, court & police accompaniment
- Walk-in or call 24-hour crisis hotline (513) 381-5610

Note: Confidential services can be found only using pastoral care, CAPS, and University Health Services. All others trigger a report being filed.