

University of Florida
College of Public Health & Health Professions Syllabus
RSD 6920: *Respiratory Neurobiology Journal Club* (1 credit)
 BREATHE Conference Room: MBI L1-126
 1:55-2:45 pm, Mondays
 Fall Semester, 2024

Instructor Name: Gordon S. Mitchell, Professor, Physical Therapy
 Office Number: McKnight Brain Institute, L1-120
 Phone Number: 352-273-6107 (Mitchell)
 Email Address: gsmitch@phhp.ufl.edu
 Office Hours: By appointment
 Preferred Course Communications: email
 Co-coordinator: Aaron Jones, postdoctoral associate, aaronjones@phhp.ufl.edu

Prerequisites: This course is open to all Rehabilitation Science PhD students. Other graduate students are invited to register with permission of the instructor.

PURPOSE AND OUTCOME

Course Overview

This class critically evaluates published papers in the broad field of neurobiology related to breathing. Students will gain a more comprehensive understanding of the literature, as well as how to critique and present a scientific paper. Students will discuss and analyze papers. Each week students present selected reading including a brief summary of the rationale/background, methodology, results, weaknesses and implications of the study.

Relation to Program Outcomes

The course is designed to meet several learning outcomes (as related to respiratory neurobiology) including:

- Teach students to identify high quality research articles
- Develop critical reading and thinking skills
- Learn how to present research data to a diverse audience
- Learn how to receive and answer research questions
- Teach students how to critically evaluate research manuscripts

Course Objectives and/or Goals

Upon successful completion of this course, the students will be able to:

- Critically evaluate scientific papers in the area of respiratory neuromuscular biology
- Critique primary scientific literature
- Defend opinions on research manuscripts
- Plan and execute research presentations and lead discussions with fellow researchers

DESCRIPTION OF COURSE CONTENT

Topical Outline/Course Schedule

Each week, a paper approved by the instructors is presented; papers will be in the area of neurobiology, with an emphasis on respiratory neurobiology and plasticity, or closely related areas of neuroscience or muscle biology. Recent papers from the literature form the basis for discussion at weekly meetings. One student will be assigned as the primary presenter to the group, with focus on interpretation and critique. In PowerPoint or white board speaking format, students will briefly summarize the rationale/background of the study, methods used, results, and their implications. Enrolled students are expected to: present at least one paper to the group, carefully read all articles prior to class, and actively participate in discussion. Readings will be made available to the class no less than one week prior to the day that reading is discussed.

Week	Date(s)	Topic(s)
1	Aug 26	Organizational meeting
2	Sept 2	Holiday—no session
3	Sept 9	Trainee presentation

Week	Date(s)	Topic(s)
4	Sept 16	Trainee presentation
5	Sept 23	Trainee presentation
6	Sept 30	Presentation/Many gone to Oxford Conference
7	Oct 7	Trainee presentation
8	Oct 14	Trainee presentation
9	Oct 21	Trainee presentation
10	Oct 28	Trainee presentation
11	Nov 4	Trainee presentation
12	Nov 11	Holiday—no session
13	Nov 18	Trainee presentation
14	Nov 25	Trainee presentation (Thanksgiving is Nov 28)
15	Dec 2	Trainee presentation
16	Dec 9	Trainee presentation

Course Materials and Technology

Computer, projection system and white boards are available in the BREATHE Conference Room.

ACADEMIC REQUIREMENTS AND GRADING

Assignments

Students will be assessed based on three criteria:

1). Presentation of a original research article (45% of grade).

Each student will present an original research article to the class at least once during the semester. The student will prepare a 30-40 minute presentation (with the rest of the time taken up by discussion). Presentations will include: i) a **general** introduction (background) to the topic being discussed; ii) a statement on the goal(s) or central question(s) of the paper; iii) a critical evaluation of the experimental techniques/methodologies presented in the paper; iv) a clear explanation of the figures presented in the paper; v) an explanation as to how the data addressed or did not address the hypotheses/goals of the paper; vi) an overview of the strengths and weaknesses of the paper; vii) a discussion of the scientific implications; viii) a discussion as to whether the interpretations/conclusions were justified based on the data, and; ix) a final evaluation of the paper. Students will be assessed on the clarity of their presentation, quality of the slides, and thoroughness of critical evaluation of the paper.

2). Response to questions distributed by the presenter (25% of grade)

The student presenting will distribute 5 written questions to the instructor *via* email one week prior to their presentation which directly relate to the article they are presenting. The instructor will distribute one question to 5 students, who will prepare a thorough verbal responses for in class discussion. It is anticipated that each student taking the course will be assigned 5 such questions throughout the course of the semester. The instructors will evaluate the accuracy and thoroughness of student responses to these questions. Students should provide (verbal) citations to support their answers.

3.) In class, verbal, peer-review critique of original research articles being presented (30% of grade)

Since in class participation is essential for a successful journal club, every student must contribute those discussions. Two percentage points (2%) will be awarded each week, for 16 weeks, for discussion contributions.

0 – No question/discussion item turned in

1 – The content of the paper was not adequately addressed and/or discussion was superficial

2 – Paper content was adequately addressed and discussion demonstrated understanding.

Grading

Each week, students answering the 5 questions will be evaluated by the course instructor on the comprehensiveness and accuracy of their response. In addition, each week, every student will be evaluated by the course instructor on whether they contributed a question/discussion item relevant to the research article and level of engagement in the course discussion.

Point system used (i.e., how do course points translate into letter grades).

Example:

Points earned	93-100	90-92	87-89	83-86	80-82	77-79	73-76	70-72	67-69	63-66	60-62	Below 60
Letter Grade	A	A-	B+	B	B-	C+	C	C-	D+	D	D-	E

Please be aware that a C- is not an acceptable grade for graduate students. The GPA for graduate students must be 3.0. in all 5000 level courses and above to graduate. A grade of C counts toward a graduate degree only if a sufficient number of credits in courses numbered 5000 or higher have been earned with a B+ or higher.

Letter Grade	A	A-	B+	B	B-	C+	C	C-	D+	D	D-	E	WF	I	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:

<http://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx>

Exam Policy: Not applicable (no exams)

Policy Related to Make up Exams or Other Work

If you are unable to attend Journal Club you should e-mail the course instructor ahead of time whenever possible to arrange for make-up work.

Please note all faculty are bound by the UF policy for excused absences. Excused absences must be consistent with university policies in the Graduate Catalog

<http://gradcatalog.ufl.edu/content.php?catoid=10&navoid=2020#attendance>

and require appropriate documentation. Additional information can be found here:

<https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx>

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. Link to full policy:

<http://facstaff.php.ufl.edu/services/resourceguide/getstarted.htm>

STUDENT EXPECTATIONS, ROLES, AND OPPORTUNITIES FOR INPUT

Expectations Regarding Course Behavior

The presenting student is expected to arrive early such that the class presentation can begin at the start of the class period. All other students are expected to arrive on time. Cell phones, tablets and laptops may be used to search for materials related to the presentation and topic, but for no other purpose. Cell phones must be silenced. During discussions, students are expected to behave professionally and be respectful of each other's opinions.

Communication Guidelines

The presenting student is required to e-mail their selected manuscript to the instructor for approval no later than 6 days prior to their presentation day. With approval from the instructor, the presenting student is then expected to e-mail their selected manuscript to the class no later than 5 days prior to their presentation day.

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://gradschool.ufl.edu/students/introduction.html>

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 feedback on the quality of instruction in this course by completing online evaluations at <https://evaluations.ufl.edu>. Evaluations are typically open during the last two or three weeks of the semester, but students will be given specific times when they are open. Summary results of these assessments are available to students at <https://evaluations.ufl.edu/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 me as the instructor of the course 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
