# University of Florida College of Public Health & Health Professions Syllabus RSD 6920: Respiratory Neurobiology Journal Club (1 credit)

Semester: Spring 2023 Delivery Format: On-Campus

Instructor Name: Gordon S. Mitchell, Professor, Physical Therapy

Room Number: McKnight Brain Institute, L1-120

Phone Number: 352-273-6107 (Mitchell) Email Address: <a href="mailto:gsmitche@phhp.ufl.edu">gsmitche@phhp.ufl.edu</a>

Office Hours: By appointment Teaching Assistants: None

Preferred Course Communications: email

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 respiratory neurobiology and related areas (for example, neuroplasticity) to gain a more comprehensive understanding of: 1) respiratory neurobiology and rehabilitation, and 2) how to read and critique literature. Students present literature selected in concert with the instructor. These presentations will include a brief summary of the rationale/background, methodology, results, and implications of the data. All registered students participate in discussions and analysis of papers each week.

#### **Relation to Program Outcomes**

This course was designed to meet several learning outcomes (related to respiratory neurobiology) including:

- Develop critical reading and thinking skills
- Learn how to critically evaluate research manuscripts
- Learn how to present research data to a mixed audience
- Learn how to receive and answer research questions

#### **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 neurobiology
- Increase understanding of respiratory neurobiology and connectons with related fields of study
- 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 of the semester, a paper is selected by a student presenting within the framework of respiratory neurobiology with an emphasis on respiratory plasticity, or closely related areas. The paper must be sent to the instructor for approval at least 1 week in advance of the presentation day. This paper forms the basis for discussion at weekly meetings. Each week, 1 student will be assigned to present an overview of the assigned reading. In a PowerPoint or white board speaking format, the student will provide a brief summary of the rationale/background for the study, methodology, results, and implications of data. Enrolled students are expected to carefully read all articles prior to class, and to actively participate in discussions. Each enrolled student will be required to present a minimum of 1-2 articles to the group. Readings will be emailed to the class at least five days prior to the day each particular reading is discussed.

Week	Date(s)	Topic(s)
1	Jan 11	Organizational meeting
2	Jan 18	Student presentation
3	Jan 25	Student presentation
4	Feb 1	Student presentation
5	Feb 8	Student presentation
6	Feb 15	Student presentation
7	Feb 22	Student presentation
8	March 1	Student presentation
9	March 8	Student presentation
10	March 15	Spring Break
11	March 22	Student presentation
12	March 29	Student presentation
13	April 5	Student presentation
14	April 12	Student presentation
15	April 19	Student presentation
16	April 26	Student presentation

#### **Course Materials and Technology**

The readings will be emailed to students at least 5 days prior to the day of discussion. For technical support for this class, please contact the UF Help Desk at:

- Learning-support@ufl.edu
- (352) 392-HELP select option 2
- https://lss.at.ufl.edu/help.shtml

#### **ACADEMIC REQUIREMENTS AND GRADING**

#### **Assignments**

Students will be assessed on 2 factors:

1). Presentation of a selected original research article (50% of grade).

Each student will present an original research article to the class once during the semester. The student will prepare a 30-40-minute presentation and 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 statement as to why the paper was chosen, and 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. PowerPoint will be submitted to the instructor via email prior to presentation.

# 2). In class, verbal, peer-review critique of the original research article being presented (50% of grade)

Approximately 20-30 minutes of each journal club will be dedicated to question and discussions. In class participation is required for a successful journal club; thus, each student must contribute a question/discussion item related to the research article being presented, each week. Two percentage points (2%) will be awarded each week, for 16 weeks, for contribution to the discussion.

- 0 No question/discussion item turned in
- 1 Paper content was not adequately addressed and/or question/discussion item was superficial
- 2 Paper content was adequately address and question/discussion item demonstrated understanding.

#### Grading

Each week, <u>enrolled students</u> will be evaluated by the course instructor on their contributions to question/discussion items relevant to the research article and level of engagement in the course discussion (50 points). Evaluation will also include the paper presentation made by the student (50 points).

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

Example:

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-	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	Α	Α-	B+	В	B-	C+	C	Ċ-	D+	D	D-	Ш	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:

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

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:

In this class, different trainees (pre and postdoctoral) will be in attendance. However, attendance is only required of graduate students formally enrolled in the course. We find that the presence of other students/trainees enriches the quality of the interaction as we learn about respiratory neurobiology and how to critique papers.

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.

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: <a href="http://facstaff.phhp.ufl.edu/services/resourcequide/getstarted.htm">http://facstaff.phhp.ufl.edu/services/resourcequide/getstarted.htm</a>

#### 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 <a href="https://evaluations.ufl.edu">https://evaluations.ufl.edu</a>. 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 <a href="https://evaluations.ufl.edu/results/">https://evaluations.ufl.edu/results/</a>.

#### 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 <a href="http://www.dso.ufl.edu">http://www.dso.ufl.edu</a> 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: <a href="http://www.umatter.ufl.edu/">http://www.umatter.ufl.edu/</a>. 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: <a href="https://shcc.ufl.edu/">https://shcc.ufl.edu/</a>
- 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: <a href="https://www.multicultural.ufl.edu">www.multicultural.ufl.edu</a>