University of Florida College of Public Health & Health Professions Syllabus CLP7934: SPECIAL TOPICS IN NEUROMODULATION

LP7934: SPECIAL TOPICS IN NEUROMODU (1 credit hr)

Meeting Time/Place: Tuesday 12-1PM (60 min slot, once/week), Zoom

Spring Semester 2022

Delivery Format: Online

Course Projects Drive: **To be provided (Canvas) Instructor(s) Name:** Adam J. Woods, Ph.D.
Associate Professor, Clinical & Health Psychology;

Office: Communicore C2-018

Phone: 352-294-5842

Instructor Email Address: ajwoods@phhp.ufl.edu

Teaching Assistant: Hanna Hausman

TA Email Address: hanna.hausman@phhp.ufl.edu

Office Hours: By Appointment

Preferred Course Communication: email (every effort will be made to respond within 24 hrs)

Prerequisites: None.

COURSE OVERVIEW AND OBJECTIVES

This course addresses current topics in neuromodulation, which is defined as physical or behavioral methods of intervention targeting alteration of brain function and ultimately behavioral performance. This course will provide students with concentrated readings and discussion of current topics in the field of neuromodulation. Offerings of the course may focus on 1 particular forms of neuromodulation (e.g., transcranial direct current stimulation) or cover an overview of various forms of neuromodulation (e.g., cognitive training, electroconvulsive therapy, transcranial magnetic stimulation, near infrared photobiomodulation, etc.). In the context of assigned readings, presentations, and discussions, you will learn about basic elements of study/trial design, underlying mechanisms of action, and potential clinical applications for neuromodulation approaches. This course is part of the neuropsychology/cognitive and emotion neuroscience foci in Clinical and Health Psychology.

By the end of this course, students taking this course will be able to:

- 1. Identify and evaluate the research and clinical application of selected neuromodulation methods (e.g., transcranial direct current stimulation)
 - a. Compare and contrast the different applications of neuromodulation in research and clinical settings
 - Identify critical study/trial design considerations for implementing the selected neuromodulation method.
- 2. Integrate knowledge of the selected neuromodulation method into a paper summarizing major advantages and disadvantages of the selected neuromodulation technology
 - a. Identify important components of sound use of neuromodulation technology
 - b. Understand critical considerations for study/trial design or clinical applications
- 3. Appraise the complexity of selected neuromodulation methodologies and their

implementation based on group dissection of presented and reviewed papers.

The Peptalk

For some of you, this may be your first introduction to neuromodulation methodologies. Some of you may not have used the methods covered in this course. That's ok. Regardless of your past experience, this is going to be a class about actively expanding your understanding of the field of neuromodulation. It will be a lot of fun. You are going to read one to two papers per week with careful attention to detail. This is not a typical lecture type class. This course will involve a mix of student presented overviews, cross discussion with me and your peers, and plenty of thought questions along the way. The hope is that you will come away not only knowing more about what the selected neuromodulation method can provide in a clinical and research setting, but also excitement about using the methods in your work.

INSTRUCTIONAL METHODS

Introduction to Blended Learning

A Blended Learning class uses a mixture of technology and face-to-face instruction to help students maximize their learning. Blended learning typically involves multiple technologies such as E-Learning systems, online video, and web assignments for the communication of information. Knowledge content that would have traditionally been presented during a live class lecture is instead provided online before the live class takes place. This allows more of the face-to-face time to focus on the higher levels of learning. These rich interactions with the instructor can be used to help students think critically, obtain expertise, and practice clinical reasoning.

Why Blended Learning?

Because health professions highly value the professionals' clinical skills and ability to interpret information in addition to what they know, passive engagement with presentations and rote learning do not adequately prepare students for their respective professions. Blended Learning prepares students for the rigorous requirements of health professions by creating meaningful student/teacher and peer interactions centered in problems and skill sets that resemble those likely to be experienced in the student's chosen field.

What Does It Mean for Students?

Students are expected to come to class prepared by completing all out-of-class readings and assignments. The coursework outside of class typically lays a foundation of knowledge or gives students practice needed to engage in higher levels of learning during live class sessions. During the face-to-face class time, students practice critical skills used by health professionals – critical thinking, problem solving, collaborating, and/or applying concepts gained from the out-of-class assignments to real-world examples. If students are not prepared for the face-to-face sessions, they will likely struggle to reach the higher learning goals of the course. When students come prepared, they can be active participants throughout the blended learning course experience, which will help them master course material and maintain what they have learned beyond the end of the course.

DESCRIPTION OF COURSE CONTENT

Course Format

This course will be conducted in the form of a graduate seminar. Class will meet Tuesday's from 12-1PM (60min slot) via zoom. This is a participatory course. Classes will typically consist of a 20-30 minute student presentation of selected papers and 30 min of facilitated group discussion. Please be on time. Students will be expected to read all papers prior to the assigned class.

Course Content

Week 1 – I	Paper 1 – Transcranial Direct Current Stimulation Introduction & Methodology
01/11/22	Discussion of syllabus Introduction to transcranial direct current stimulation (tDCS) Review of selected papers for the course and student suggested tDCS papers Paper for review: Woods et al., (2016). A technical guide to tDCS, and related non-invasive brain stimulation tools. Clinical Neurophysiology 127: 1031-1048. https://www.sciencedirect.com/science/article/pii/S1388245715010883
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	Paper 2 – Neural Mechanisms
01/18/22	Nitsche MA, Fricke K, Henschke U, Schlitterlau A, Liebetanz D, Lang N, Henning S, Tergau F, Paulus W. Pharmacological modulation of cortical excitability shifts induced by transcranial direct current stimulation in humans. J Physiol. 2003 Nov 15;553(Pt 1):293-301. doi: 10.1113/jphysiol.2003.049916. Epub 2003 Aug 29. PMID: 12949224; PMCID: PMC2343495. https://pubmed.ncbi.nlm.nih.gov/12949224/
Wook 2	Paper 3 – Neural Mechanisms
01/25/22	Batsikadze G, Moliadze V, Paulus W, Kuo MF, Nitsche MA. Partially non-linear stimulation intensity-dependent effects of direct current stimulation on motor cortex excitability in humans. J Physiol. 2013 Apr 1;591(7):1987-2000. doi: 10.1113/jphysiol.2012.249730. PMID: 23339180; PMCID: PMC3624864. https://pubmed.ncbi.nlm.nih.gov/23339180/
	NO CLASS – International Neuropsychological Society Meeting
02/1/22	NO CLASS
	Paper 4 – Neural Mechanisms
02/8/22	Mosayebi Samani et al. (2019). Titrating the neuroplastic effects of cathodal transcranial direct current stimulation (tDCS) over the primary motor cortex. Cortex 119: 350-361 https://www.sciencedirect.com/science/article/pii/S0010945219301844?via%3Dihub
Week 6 – I	Paper 5 – Safety
02/15/22	Bikson M, Grossman P, Thomas C, Zannou AL, Jiang J, Adnan T, Mourdoukoutas AP, Kronberg G, Truong D, Boggio P, Brunoni AR, Charvet L, Fregni F, Fritsch B, Gillick B, Hamilton RH, Hampstead BM, Jankord R, Kirton A, Knotkova H, Liebetanz D, Liu A, Loo C, Nitsche MA, Reis J, Richardson JD, Rotenberg A, Turkeltaub PE, Woods AJ. Safety of Transcranial Direct Current Stimulation: Evidence Based Update 2016. Brain Stimul. 2016 Sep-Oct;9(5):641-661. doi: 10.1016/j.brs.2016.06.004. Epub 2016 Jun 15. PMID: 27372845; PMCID: PMC5007190. https://pubmed.ncbi.nlm.nih.gov/27372845/
Week 7	Papar 6 Applications (Strake Application)
vveek / -	Paper 6 – Applications (Stroke/Aphasia)

02/22/22	Shah-Basak PP, Norise C, Garcia G, Torres J, Faseyitan O, Hamilton RH. Individualized treatment with transcranial direct current stimulation in patients with chronic non-fluent aphasia due to stroke. Front Hum Neurosci. 2015 Apr 21;9:201. doi: 10.3389/fnhum.2015.00201. PMID: 25954178; PMCID: PMC4404833. https://pubmed.ncbi.nlm.nih.gov/25954178/
Week 8 – F	Paper 7 – Applications (Depression)
03/1/22	Brunoni AR, Moffa AH, Sampaio-Junior B, Borrione L, Moreno ML, Fernandes RA, Veronezi BP, Nogueira BS, Aparicio LVM, Razza LB, Chamorro R, Tort LC, Fraguas R, Lotufo PA, Gattaz WF, Fregni F, Benseñor IM; ELECT-TDCS Investigators. Trial of Electrical Direct-Current Therapy versus Escitalopram for Depression. N Engl J Med. 2017 Jun 29;376(26):2523-2533. doi: 10.1056/NEJMoa1612999. PMID: 28657871. https://pubmed.ncbi.nlm.nih.gov/28657871/
Week 9 – 5	Spring Break – No Class
03/8/22	NO CLASS
	Paper 8 – Applications (Cognitive Aging)
03/15/22	Albizu A, Fang R, Indahlastari A, O'Shea A, Stolte SE, See KB, Boutzoukas EM, Kraft JN, Nissim NR, Woods AJ. Machine learning and individual variability in electric field characteristics predict tDCS treatment response. Brain Stimul. 2020 Nov-Dec;13(6):1753-1764. doi: 10.1016/j.brs.2020.10.001. Epub 2020 Oct 10. PMID: 33049412; PMCID: PMC7731513. https://pubmed.ncbi.nlm.nih.gov/33049412/
Week 44	Danas O. Applications (Dadinson's Disease)
Week 11 – 03/22/22	Paper 9 – Applications (Parkinson's Disease) Benninger DH, Lomarev M, Lopez G, Wassermann EM, Li X, Considine E, Hallett M. Transcranial direct current stimulation for the treatment of Parkinson's disease. J Neurol Neurosurg Psychiatry. 2010 Oct;81(10):1105-11. doi: 10.1136/jnnp.2009.202556. Erratum in: J Neurol Neurosurg Psychiatry. 2011 Mar;82(3):354. PMID: 20870863; PMCID: PMC4162743. https://pubmed.ncbi.nlm.nih.gov/20870863/
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03/29/22	Paper 10 – Applications (Alzheimer's Disease) Hampstead BM, Sathian K, Bikson M, Stringer AY. Combined mnemonic strategy training and high-definition transcranial direct current stimulation for memory deficits in mild cognitive impairment. Alzheimers Dement (N Y). 2017 May 15;3(3):459-470. doi: 10.1016/j.trci.2017.04.008. PMID: 29067352; PMCID: PMC5651427. https://pubmed.ncbi.nlm.nih.gov/29067352/
Week 13 -	Paper 11 – Applications (Motor Function)
04/5/22	Manor B, Zhou J, Harrison R, Lo OY, Travison TG, Hausdorff JM, Pascual-Leone A, Lipsitz L. Transcranial Direct Current Stimulation May Improve Cognitive-Motor Function in Functionally Limited Older Adults. Neurorehabil Neural Repair. 2018 Sep;32(9):788-798. doi: 10.1177/1545968318792616. Epub 2018 Aug 22. PMID: 30132389; PMCID: PMC6143414. https://pubmed.ncbi.nlm.nih.gov/30132389/
Week 14 -	Paper 12 – Applications (Cognitive Neuroscience)
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04/12/22	Woods AJ, Hamilton RH, Kranjec A, Minhaus P, Bikson M, Yu J, Chatterjee A. Space, time, and causality in the human brain. Neuroimage. 2014 May 15;92:285-97. doi: 10.1016/j.neuroimage.2014.02.015. Epub 2014 Feb 19. PMID: 24561228; PMCID: PMC4008651. https://pubmed.ncbi.nlm.nih.gov/24561228/
	111.70.77 PABITICAL TIME 1.11111.11111.190 V/Z 100 1220/
Week 15 -	Paper 13 – Final Paper Due – Applications (Chronic Pain)
04/19/22	Ahn H, Woods AJ, Kunik ME, Bhattacharjee A, Chen Z, Choi E, Fillingim RB. Efficacy of transcranial direct current stimulation over primary motor cortex (anode) and contralateral supraorbital area (cathode) on clinical pain severity and mobility performance in persons with knee osteoarthritis: An experimenter- and participant-blinded, randomized, sham-controlled pilot clinical study. Brain Stimul. 2017 Sep-Oct;10(5):902-909. doi: 10.1016/j.brs.2017.05.007. Epub 2017 May 19. PMID: 28566193; PMCID: PMC5568498. https://pubmed.ncbi.nlm.nih.gov/28566193/

Final Paper Due electronically to Dr. Woods on April 19th

by 5PM: ajwoods@phhp.ufl.edu

Course Materials

Readings will involve selected seminal papers on the selected neuromodulation topic. Each week, you will read one to two seminal papers and each will be presented by one of the students in the course. There will not be a required textbook for this course. Articles/chapters will be distributed electronically and placed in a designated class folder on our class cloud drive (TBD). Make sure you have access to this drive. If not, it is your responsibility to let me know so that you can be given access by IT. I will try to make handouts/slides available in this class folder after class. There will be a total of 13 classes oriented toward discussion of assigned papers. Papers assigned in this course are below. The instructor may add or substitute papers prior to the start of each semester to reflect the most modern applications of methods covered in the course.

Assigne	d Papers
Week 1	Woods et al., (2016). A technical guide to tDCS, and related non-invasive brain stimulation tools. Clinical Neurophysiology 127: 1031-1048. https://www.sciencedirect.com/science/article/pii/S1388245715010883
Week 2	Nitsche MA, Fricke K, Henschke U, Schlitterlau A, Liebetanz D, Lang N, Henning S, Tergau F, Paulus W. Pharmacological modulation of cortical excitability shifts induced by transcranial direct current stimulation in humans. J Physiol. 2003 Nov 15;553(Pt 1):293-301. doi: 10.1113/jphysiol.2003.049916. Epub 2003 Aug 29. PMID: 12949224; PMCID: PMC2343495. https://pubmed.ncbi.nlm.nih.gov/12949224/
Week 3	Batsikadze G, Moliadze V, Paulus W, Kuo MF, Nitsche MA. Partially non-linear stimulation intensity-dependent effects of direct current stimulation on motor cortex excitability in humans. J Physiol. 2013 Apr 1;591(7):1987-2000. doi: 10.1113/jphysiol.2012.249730. PMID: 23339180; PMCID: PMC3624864. https://pubmed.ncbi.nlm.nih.gov/23339180/

Week 5	Mosayebi Samani et al. (2019). Titrating the neuroplastic effects of cathodal transcranial direct current stimulation (tDCS) over the primary motor cortex. Cortex
	119: 350-361
Week 6	https://www.sciencedirect.com/science/article/pii/S0010945219301844?via%3Dihub Bikson M, Grossman P, Thomas C, Zannou AL, Jiang J, Adnan T, Mourdoukoutas AP, Kronberg G, Truong D, Boggio P, Brunoni AR, Charvet L, Fregni F, Fritsch B, Gillick B, Hamilton RH, Hampstead BM, Jankord R, Kirton A, Knotkova H, Liebetanz D, Liu A, Loo C, Nitsche MA, Reis J, Richardson JD, Rotenberg A, Turkeltaub PE, Woods AJ. Safety of Transcranial Direct Current Stimulation: Evidence Based Update 2016. Brain Stimul. 2016 Sep-Oct;9(5):641-661. doi: 10.1016/j.brs.2016.06.004. Epub 2016 Jun 15. PMID: 27372845; PMCID: PMC5007190.
14/ 1 =	https://pubmed.ncbi.nlm.nih.gov/27372845/
Week 7	Shah-Basak PP, Norise C, Garcia G, Torres J, Faseyitan O, Hamilton RH. Individualized treatment with transcranial direct current stimulation in patients with chronic non-fluent aphasia due to stroke. Front Hum Neurosci. 2015 Apr 21;9:201. doi: 10.3389/fnhum.2015.00201. PMID: 25954178; PMCID: PMC4404833. https://pubmed.ncbi.nlm.nih.gov/25954178/
Week 8	Brunoni AR, Moffa AH, Sampaio-Junior B, Borrione L, Moreno ML, Fernandes RA, Veronezi BP, Nogueira BS, Aparicio LVM, Razza LB, Chamorro R, Tort LC, Fraguas R, Lotufo PA, Gattaz WF, Fregni F, Benseñor IM; ELECT-TDCS Investigators. Trial of Electrical Direct-Current Therapy versus Escitalopram for Depression. N Engl J Med. 2017 Jun 29;376(26):2523-2533. doi: 10.1056/NEJMoa1612999. PMID: 28657871. https://pubmed.ncbi.nlm.nih.gov/28657871/
Week	Albizu A, Fang R, Indahlastari A, O'Shea A, Stolte SE, See KB, Boutzoukas EM,
10	Kraft JN, Nissim NR, Woods AJ. Machine learning and individual variability in electric field characteristics predict tDCS treatment response. Brain Stimul. 2020 Nov-Dec;13(6):1753-1764. doi: 10.1016/j.brs.2020.10.001. Epub 2020 Oct 10. PMID: 33049412; PMCID: PMC7731513. https://pubmed.ncbi.nlm.nih.gov/33049412/
Week 11	Benninger DH, Lomarev M, Lopez G, Wassermann EM, Li X, Considine E, Hallett M. Transcranial direct current stimulation for the treatment of Parkinson's disease. J Neurol Neurosurg Psychiatry. 2010 Oct;81(10):1105-11. doi: 10.1136/jnnp.2009.202556. Erratum in: J Neurol Neurosurg Psychiatry. 2011 Mar;82(3):354. PMID: 20870863; PMCID: PMC4162743. https://pubmed.ncbi.nlm.nih.gov/20870863/
Week 12	Hampstead BM, Sathian K, Bikson M, Stringer AY. Combined mnemonic strategy training and high-definition transcranial direct current stimulation for memory deficits in mild cognitive impairment. Alzheimers Dement (N Y). 2017 May 15;3(3):459-470. doi: 10.1016/j.trci.2017.04.008. PMID: 29067352; PMCID: PMC5651427. https://pubmed.ncbi.nlm.nih.gov/29067352/
Week 13	Manor B, Zhou J, Harrison R, Lo OY, Travison TG, Hausdorff JM, Pascual-Leone A, Lipsitz L. Transcranial Direct Current Stimulation May Improve Cognitive-Motor Function in Functionally Limited Older Adults. Neurorehabil Neural Repair. 2018 Sep;32(9):788-798. doi: 10.1177/1545968318792616. Epub 2018 Aug 22. PMID: 30132389; PMCID: PMC6143414. https://pubmed.ncbi.nlm.nih.gov/30132389/
Week 14	Woods AJ, Hamilton RH, Kranjec A, Minhaus P, Bikson M, Yu J, Chatterjee A. Space, time, and causality in the human brain. Neuroimage. 2014 May 15;92:285-97. doi: 10.1016/j.neuroimage.2014.02.015. Epub 2014 Feb 19. PMID: 24561228; PMCID: PMC4008651.

	https://pubmed.ncbi.nlm.nih.gov/24561228/
Week 15	Ahn H, Woods AJ, Kunik ME, Bhattacharjee A, Chen Z, Choi E, Fillingim RB. Efficacy of transcranial direct current stimulation over primary motor cortex (anode) and contralateral supraorbital area (cathode) on clinical pain severity and mobility performance in persons with knee osteoarthritis: An experimenter- and participant-blinded, randomized, sham-controlled pilot clinical study. Brain Stimul. 2017 Sep-Oct;10(5):902-909. doi: 10.1016/j.brs.2017.05.007. Epub 2017 May 19. PMID:
	28566193; PMCID: PMC5568498. https://pubmed.ncbi.nlm.nih.gov/28566193/

ACADEMIC REQUIREMENTS AND GRADING

Course Requirements, Evaluation, and Grading

Grades will be weighted according to the number of points available for each component, as described below. Final grades will be calculated as a percentage of the highest score. Evaluation in the course will be based on the following components. There will be a total of 100 points possible in this course.

Requirement	Percent of Final Grade	Points toward Final Grade
Final Paper	50%	50
Paper Presentation and Discussion Facilitation	30%	30
Paper Discussion Participation	20%	20

1. Final Paper

The Final Paper will comprise 50% of your grade. This paper will be a summary of new information learned about the selected neuromodulation technology over the course, focusing on the technology's potential advantages and disadvantages for research and clinical application. Students should include a bibliography of citations referenced in the text. This is intended to demonstrate the student's mastery of the conceptual application of the selected neuromodulation method and theoretical content covered during the course. Font must be Arial 11 with no more than 1.5 inch margins on all sides. **Due April 19**th **by 5PM**

Final Paper Grading Rubric		
Requirement	Percent of Assignment Grade	Final Grade Points
Description of at least one advantage to using the technology for research or clinical application	30%	15
Description of at least one disadvantage to using the technology for research or clinical application	30%	15
Description of at least one new theoretical/mechanistic concept learned	30%	15
Bibliography	10%	5

Late submission of the final paper will result in 10% deduction from the total Final Paper grade.

2. Methods Paper Presentations and Discussion Facilitation

Methods Paper Presentations and Discussion Facilitation will comprise 30% of your grade (30 points). Each student will take the lead in presenting two or more seminal paper using the week's discussed method to the class and engaging discussion about the paper. At the first course, students will sign up for topics of presentation. Part of this assignment will involve

learning something more about the "method" at hand in addition to examining/discussing the importance of the chosen method for clinical and research application and what information the method can provide. You will also serve as discussion leader for a ~30-minute discussion of your presented paper along with the course instructor. The format of the discussion will be left up to the person leading it that day. Examples of Discussion Facilitation methods are available upon request. Methods Paper Presentations will be graded on quality of presentation of the materials contained in the paper. Quality of presentation is defined as a) relevant discussion of the presented paper during the presentation, b) demonstration of evidence of critical thinking regarding the content of the paper, and c) presentation of slides clearly relaying the content of the paper to peers. Facilitated Discussion will be graded on the ability of the presenter to initiate and maintain relevant discussion of the presented paper and relevant topics (presenters will have access to submitted Methods Discussion Questions to assist in this process).

Methods Paper Presentations and Discussion Facilitation Grading Rubric									
Requirement	Percent of Assignment Grade	Final Grade Points							
20-30 minute presentation of selected paper(s)	50%	15							
30-40 minute facilitated student discussion(s)	50%	15							

3. Paper Discussion Participation

Methods Discussions activity will comprise 20% of your grade (20 points). Students are expected to actively participate in the weekly discussion based on the paper assigned and the paper presented by your fellow students in the course. That week's student presenter will facilitate the discussion along with the course instructor, but it is important for fellow students to use this opportunity to explore their questions related to the week's content on the information presented. There will be 6 paper discussions based on student presented papers.

Paper Discussion Participation Grading Rubric								
Requirement	Percent of Assignment Grade	Final Grade Points						
Engage in active discussion of the paper presented through group discussion questions posed during the course of facilitated discussion.	100%	20						

Grading

Scores will be rounded to the nearest percent (rounded up or down, whichever is closest) for grade determination in accordance with the grading table below

% of 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-	F

Below is a table linking letter grades to grade points.

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Letter	Α	A-	B+	В	B-	C+	С	C-	D+	D	D-	Е	WF		NG	S-U
Grade																
Grade	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
Points																

For greater detail on the meaning of letter grades and university policies related to them, see

the Registrar's Grade Policy regulations at http://www.registrar.ufl.edu/catalog/policies/regulationgrades.html

Policy Related to Class Attendance

Attendance is expected as a part of the student's professional training. Students are expected to arrive for class on time and to remain for the full class period. Students needing to miss class should make prior arrangements with the instructor.

Please note all faculty are bound by the UF policy for excused absences. For information regarding the UF Attendance Policy see the Registrar website for additional details:

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

Please note that the level of impact on your final grade will vary depending on the content of an unexcused missed class. For example, unexcused absence from a class comprised of a methods lab would deduct 2 points from your final grade. Unexcused absence from a class containing a methods discussion (without submission of 2 discussion questions) and a methods lab would deduct 3.25 points from your final grade. Unexcused absence from a class that you are scheduled to present the Methods paper and facilitated discussion would deduct 20 points from your final grade.

Policy Related to Make-up Exams or Other Work

Students are expected to complete assigned readings prior to coming to class. Personal issues with respect to class attendance or fulfillment of course requirements will be handled on an individual basis. Students must make *prior* arrangements with the instructor if they must miss any in-class activities, and an alternative completion time/method must be arranged (when possible).

Requirements for class attendance and make-up exams, assignments, and other work in this course are consistent with university policies that can be found in the online catalog at:

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

STUDENT EXPECTATIONS, ROLES, AND OPPORTUNITIES FOR INPUT

Expectations Regarding Course Behavior

Please refrain from using cell phones or any other electronic devices during class as it is distracting and inconsiderate of other students and the instructor. Laptop use is acceptable for note taking or presenting. However, do not browse other websites during class time. It is expected that students will be engaged and actively participate during class. Do not arrive late to class or disrupt the class as it is distracting and inconsiderate of other students and the instructor.

To the extent permitted by facility rules and restrictions, you may bring food and/or beverages to class as long as it does not interfere with your ability to work and/or participate in class and as long as it does not interfere with or your classmates' ability to work and participate in class. You will be expected to clean-up after yourself and dispose of all trash before leaving the classroom.

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.phhp.ufl.edu/services/resourceguide/getstarted.htm

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 nondiscrimination 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

Communication Guidelines

As a blended learning class, it is imperative that students check email and the Canvas website often (i.e., once daily). Students are expected to participate in graded online discussions on various topics throughout the course. Please reference the applicable assignment rubrics for online discussions for a clear outline of what is expected with regard to posts and replies. In addition, please see the following resource for guidelines on online course etiquette:

http://teach.ufl.edu/wp-content/uploads/2012/08/NetiquetteGuideforOnlineCourses.pdf.

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://sccr.dso.ufl.edu/process/student-

honor-code/

http://graduateschool.ufl.edu/

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 so make sure you include a statement regarding the value and expectation for student participation in course evaluations. We suggest you include a comment regarding how you will use the evaluations (e.g. to make specific improvements to the course and teaching style, assignments, etc.). It is also important to make some statement regarding the direct influence they have on faculty tenure and promotion, so your input is valuable. 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/

If 80% of students submit the online faculty evaluation, 1 additional point will be applied to the final grade of all students. If 100% of students submit the online faculty evaluation, 2 additional points will be applied to all student's final grade.

SUPPORT SERVICES

Accommodations for Students with Disabilities

Students with disabilities who experience learning barriers and would like to request academic accommodations should connect with the disability Resource Center by visiting https://disability.ufl.edu/students/get-started/. It is important for students to share their accommodation letter with their instructor and discuss their access needs, as early as possible in the semester.

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

https://alachuacounty.us/depts/css/crisiscenter/pages/crisiscenter.aspx

BUT – 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.