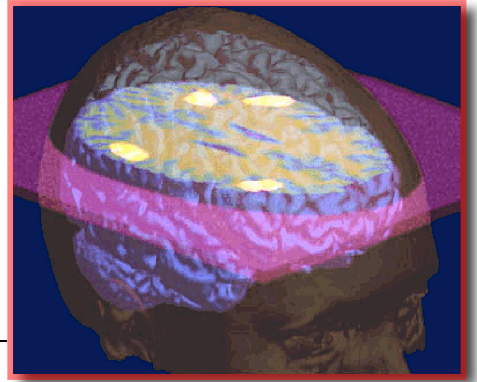


University of Florida
College of Public Health & Health Professions Syllabus
Department of Clinical & Health Psychology
*CLP 7934, Section 073D, **Cognitive and Affective***
Bases of Behavior

Fall 2019

Thursdays 12:50-3:50, HPNP Building: G-201
Materials at UF Canvas: <http://elearning.ufl.edu>



Instructor Information

William M. Perlstein, Ph.D.

Office: HPNP Building, Room 3120

Phone: (352) 222-8870 (cell)

Email: wmp@pnhp.ufl.edu

Office Hours: By appointment; please e-mail to schedule a meeting.

Note: E-mail is the preferred method of contact for the instructor. You are welcome to e-mail at any time; however, questions about exams or projects sent after 5:00pm on the day before class may not receive a response in time to make the deadline.

Course Overview and Purpose:

The purpose of this course is to familiarize the student with the current body of knowledge in the cognitive and affective neuroscientific bases of behavior. Historical developments and recent trends in cognitive psychology, cognitive neuropsychology, cognitive neuroscience and affective bases of behavior will be reviewed and applications of findings to research in clinical and health psychology will be explored. Coverage of the topical areas described below will emphasize the study of normal cognition and emotion processing, though some review of cognitive and psychological disorders will be undertaken, particularly when relevant findings inform or constrain theories of cognitive and affective processes.

The course will be conducted in the form of a graduate seminar, meaning students are expected to be *active participants*. Class will meet Thursdays from 12:50pm – 3:50pm. The majority of each class will consist of lectures or demonstrations given by the course instructor and/or select guest speakers. Three debates/discussions organized and presented by students will be undertaken throughout the term. Students will also prepare NRSA-style research proposals. Active student participation is expected and will comprise 10% of the final course grade. Please actively engage or you'll hear my voice much more than you'd like, which will place a ceiling on learning.

Course Objectives:

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

- 1) Understand and critically evaluate theory and research in cognitive psychology/neuroscience,
- 2) Develop technical and conceptual expertise in evaluating cognitive and affective research methods,
- 3) Apply recent developments in cognitive/affective psychology and neuroscience to their own work, and
- 4) Identify and understand sources of individual differences and diversity in cognitive abilities and processes.
- 5) Students should also be able to understand the relevance of developments in cognitive psychology/neuroscience for basic and applied work in clinical, counseling and school psychology, health and human performance, and other health-professions fields, including rehabilitation science

and speech, language and hearing sciences. Students from Marketing/Business programs have also benefited from discussions of broad cognitive concepts involving problem-solving and reasoning.

Instructional Methods:

Lecture, class discussion, and small-group and individual work will comprise the majority of class sessions. The role of the instructor will be to: present an overview of relevant topics, provide additional reading material and learning resources with up-to-date research findings, facilitate discussion of selected topics, and provide timely feedback. Expectations for students are to attend class fully prepared, participate in class discussions, and read assigned materials prior to class in preparation for lecture.

Course Materials and Technology:

Required textbook: Smith, E.E. & Kosslyn, S.M. (2007). *Cognitive Psychology: Mind and Brain* (1st edition). New Jersey: Pearson Education, Inc.

Chapters from other books and journal papers will be provided as pdf documents and made available in the course “files” tab on Canvas (<http://elearning.ufl.edu>); download by clicking on the link listed under readings for the week of the class. Lecture notes will be available through Canvas by noon the day of class (also under the “files” tab). To access assigned *readings and lectures*, once in Canvas for the course, click “*files*” tab and you will see folders for “*Class Readings (pdf)*” and “*Class Lectures (pptx)*” organized by class-session week as listed below. There will also be several optional readings for each week; these may provide alternative views and will be well-worth reading. All required and optional reading material (required and optional) will be available as pdfs for download on the Canvas system. This text is available online as hardcover and softcover. Lecture notes will be available through Canvas by noon the day of class (also under the “files” tab). To access assigned *readings and lectures*, once in Canvas for the course, click “*files*” tab and you will see folders for “*Class Readings (pdf)*” and “*Class Lectures (pptx)*” organized by class-session week as listed below. There will also be several optional readings for each week; these may provide alternative views and will be well-worth reading.

Note: *If you plan to print-out the lecture pptx files, I’d advise you to print them in **grayscale**, since many of the slide backgrounds are in black and this will eat up your printer ink!*

Canvas: Canvas is the course management system that you will use for this course. Canvas is accessed by using your Gatorlink account name and password at elearning.ufl.edu. There are several tutorials and student help links on the Canvas login site. If you have technical questions call the UF Computer Help Desk at 352-392-HELP or send email to helpdesk@ufl.edu. You are responsible for checking your account prior to each class to determine how you should prepare for the upcoming class.

If you have technical questions with your electronic device or the Canvas website, please contact the UF Help Desk at:

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

Text-Related Student Online-Resources:

Unfortunately, I learned from the publisher, weeks after adopting this text, that it is out-of-print. Thus, there will not be online student resources beyond what I’m creative enough to create. *The ones they sent last time were not useful; hoping they followed my recommendations for new generation—we’ll see and I’ll keep you informed!*

Course Requirements/Evaluation/Grading

Course grading will be determined by two take-home exams (25% each), a topical debate (15%), a brief, 1-page Research Topic Description (5%), a Research Proposal (20%), and class participation &

attendance (10%). The schedule for these events and deadlines for paper submissions can be found in the course plan below.

EXAMINATIONS will consist of objective, short answer, and multiple-choice portions covering topics discussed in class and in readings. Study questions *may* be provided periodically during the semester to assist in learning and in exam preparation. Examinations will be **take-home** and distributed via Canvas approximately 1 week prior to due date (Exam 1 due Nov. 14, Exam 2 due Dec. 12, each via email by 5pm on the due date). **Please return exams to me, via direct email (wmp@phhp.ufl.edu) using the subject heading <Last name>"CBB Exam 1" or <Last name> CBB Quiz#2" (e.g., "Perlstein-CBB Exam 1" on the due dates listed by 5PM. Students not adhering to these conventions, or not including their names on assignments, will NOT receive credit.** This happens lots, so please pay attention here.

RESEARCH TOPIC DESCRIPTION. Students will submit a 1-page single-spaced description of your preliminary ideas for the research proposal. The research topic description should describe the work to be done in the research proposals (see below). Essentially, what you want to get across in these descriptions is the **What, Why, and How** of your research idea. Though brief, please make it comprehensible enough to express your ideas, including primary aims/questions, significance of the questions, and research approach. That is, please include what question(s) you will be addressing, why this question(s) is important, and how you will address the question(s)—i.e., *what, why, and how*. Knowing that we will not have covered all topical areas by the due date of the research topic description, it is understood that your chosen topic might change as you encounter new course material. I will be available after class for students to discuss challenges/questions associated with their research ideas/descriptions before and after its due date (Oct. 24). The timing of this assignment in the schedule is to enable students to incorporate instructor feedback into the final proposals, due December 5. Please let me know if you plan to change your topic substantively following this due date so I can provide any necessary guidance. **Please send to me by 5PM on October 25 via direct email (wmp@phhp.ufl.edu), using the subject heading <Last name>"CBB Research Topic."**

RESEARCH PROPOSAL. This assignment is an opportunity for the student to perform further research on a topic of their choice and should be in the form of an "NRSA-style" research proposal (see Parent F31: <http://grants.nih.gov/grants/guide/pa-files/PA-11-111.html>). Proposals should not exceed 6 pages in length (excluding references), using single-spacing and at least an 11-point font with 1" margins. This should include: 1) *Specific Aims*, 2) *Background and Significance*, 3) *Research Design and Methods*, and 4) *Reference sections*. Students will choose an area of interest, pose a specific research question(s) with hypotheses, and describe in the proposal how they would address this question(s) using one or more of the methods and/or cognitive concepts discussed in class. No budget will be required, but students should be mindful of budgetary limitations to keep their proposed project realistic. **Please send to me by 5PM on December 5 via direct email (wmp@phhp.ufl.edu), using the subject heading <Last name>"CBB Research Proposal.** I have included a sample proposal that you may use to guide and format yours (though other formats are acceptable)—content- and format-wise. This can be found in the *files* tab under Grant Proposal Example folder. Please **DO NOT DISTRIBUTE** this proposal beyond your classmates.

DEBATES. Each student will participate in one of four debates scheduled throughout the semester. In these debates, students are required to advocate a position and support their arguments with theory and/or data. More specific information on the format of the debates will be given at some point during the first three class meetings. Students are expected to participate actively in class sessions, especially the debates, by expressing ideas, asking questions, and discussing relevant issues, readings, and experiences. **Grades** will be assigned to the whole group based on clarity of their arguments, use of literature in support of arguments, thoughtfulness in both initial presentation and various rebuttals and (need I say), "civility".

Debate format: Students will form 4 groups of 3-5 students each (dependent on class size) and sign up or be assigned after providing their preferences after the 2nd week for the affirmative (“pro”) or negative (“con”) side of the debate (e.g., there is/is no emotion without cognition). You will be encouraged to sign up for the opposite of what you believe (where possible). 60 minutes will be allotted for the entire debate; the affirmative (pro) group will present for 10-15 minutes, the negative (con) will then present for 10-15 minutes. Each side will then have 5 minutes for rebuttal, then the class will join in for a larger discussion for 15-20 minutes (longer if needed). You will be asked to base your arguments on findings in the literature and to provide Dr. Perlstein pdfs of the 2-3 references you use outside of those listed under course readings so he can make them available to the class through Canvas within one week of each debate. Please provide pdfs of these readings via email to Dr. Perlstein at least 1 week prior to the date of your teams’ debate (name the pdfs with the convention <first author last name>-Publication year>.pdf). Also, please include in the email your debate groups’ pdfs the list of citations for each paper in APA format. These readings will be provided in an updated syllabus reference list below as they are received and uploaded to Canvas. All students are expected to read all debate-related articles and play an active role in discussion. Preparation for the debates will require group cooperation to compose supporting arguments for your position. Once received, the debate-related pdfs will be placed in resource-specific folders available through Canvas (“files” tab) and made accessible to all students on an as-received basis.

The three debates will be:

Debate 1: “Functional neuroimaging can (Pro)/cannot (Con) completely replace lesion methods for informing theories of cognition.” **Held on Sept. 26.**

Debate 2: “Repressed memories are more likely to represent memory distortions (Pro) rather than true, unearthed recollections of past experience (Con).” **Held on November 7.**

Debate 3: “There is no emotion without cognition (or emotion is dependent upon cognition).” Pro = Emotion is dependent on cognition (there is no emotion without cognition); Con = Emotion is independent of cognition (there is emotion without cognition). **Held on November 21.**

ACADEMIC REQUIREMENTS AND GRADING

Attendance:

Attendance will be taken at every class. You will be allowed to miss one class with no penalty with attendance counting for 10% of your final grade. Class attendance is expected, not optional. You will be required to sign into class each week to mark your class attendance. It will not be permitted to sign in for a classmate; anyone caught doing this will lose their and their classmate’s attendance point for the day. We will ask you to sign in at a random time during the class period to encourage attendance throughout the duration of the class. If you do miss a class, it will be your responsibility to request notes from a classmate or schedule office hours with me to discuss content from that class.

Exams:

There will be TWO exams—a midterm and a final; each will be worth 25% of the total grade. Exams will not be cumulative and will cover material from lectures, readings, and in-class presentations or discussions. The format of exams will be multiple choice and short answer. There will be no make-up exams, except for documented medical reasons (i.e., physician note); other documented emergencies may or may not be approved pending decision by the instructor. If you miss an exam, you will receive a score of zero on that exam.

Class attendance will be rewarded via the inclusion of in-class information in each exam that is not covered in the textbook. Mid-term and Finals exams will be the take-home exams which will be due to me by direct email (wmp@php.ufl.edu) by 5PM on the day of the scheduled due dates (midterm = 11/14; Final = 12/12).

Grading:

Requirement	Distribution date	Due date	% of final grade
Exam #1 (mid-term)	November 7	November 14	25%
Exam #2 (final)	December 5	December 12	25%
3 Debates	---	Variable	15%
Research Topic Description Due	---	October 24	5%
Research Proposals Due	---	December 5	20%
Attendance & Participation	---	---	10%

The grading scale will be as follows: Grades will be weighted according to the number of points available for each component. Decimals will be rounded to the nearest whole number (up or down). Final grades will be calculated as a percentage of the highest score as follows:

% of points earned in class	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 equivalent	A	A-	B+	B	B-	C+	C	C-	D+	D	D-	F
GPA equivalent	4.0	3.67	3.33	3.0	2.67	2.33	2.0	1.67	1.33	1.0	0.67	0.0

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.

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>.

Incomplete grades: An incomplete grade may be assigned at the discretion of the instructor as an interim grade for a course in which the student has 1) completed a major portion of the course with a passing grade, 2) been unable to complete course requirements prior to the end of the term because of extenuating circumstances, and 3) obtained agreement from the instructor and arranged for resolution (contract) of the incomplete grade. Instructors assign incomplete grades following consultation with Department Chairs.

Policy Related to Make up Exams or Other Work:

You are expected to attend and to be prepared to participate in all class sessions. Personal issues with respect to fulfillment of course requirements will be handled on an individual basis. If you must miss an exam because of a foreseeable conflict (i.e., professional conference, athletic competition, religious observance, etc.) you are expected to notify me immediately to set-up alternative arrangements *prior* to the exam date. If a student is not able to complete a *take-home* exam due to an illness or medical emergency, they will be required to provide a statement from their healthcare provider documenting the illness or medical emergency. A make-up exam will be provided the first day the student returns to their normal class schedule or at the earliest convenience of the instructor. Requirements for 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>.

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>

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>

Reporting illnesses and family emergencies:

In the event you experience an unexpected illness, family, or otherwise personal emergency please notify the instructor immediately to set-up alternative arrangements.

The UF Religious Holidays Policy is available at:

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

For University of Florida Students, the following guidelines apply:

- Students, upon prior notification to their instructors, shall be excused from class or other scheduled academic activity to observe a religious holy day of their faith.
- Students shall be permitted a reasonable amount of time to make up the material or activities covered in their absence.
- Students shall not be penalized due to absence from class or other scheduled academic activity because of religious observances.

Any requests for make-ups due to technical issues MUST be accompanied by the ticket number received from LSS when the problem was reported to them. The ticket number will document the time and date of the problem. You MUST e-mail me within 24 hours of the technical difficulty if you wish to request a make-up.

Policy Related to Required Class Attendance:

Attendance is considered an integral part of the learning experience as class discussions and lectures will include valuable material covered in the examinations that is not otherwise covered in the textbook. Thus, class attendance will be taken, and students are expected to attend all classes and participate in class discussions to have exposure to this information. If students must be absent, they will be responsible for any missed material by acquiring lecture notes from other students who attended. You can expect that class slides will, in most cases, be on Canvas, however, not every lecture has slides that will accompany it and not all information will be on slides. Some material presented in lectures will not be in the texts and will be included on examinations. Thus, reduced attendance can be expected to result in a lower course grade. 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>.

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>

DESCRIPTION OF COURSE CONTENT

Topical Outline/Course Schedule:

Listed below is a *moderately flexible* schedule of classes and accompanying reading assignments. Readings as listed are subject to change within 7 days prior to the class date. Students are expected to complete required readings prior to class so they can maximally benefit from presentations and to facilitate participation in discussions. *I WILL pop quiz the class if it is detectibly lethargic.* I understand the reading list is heavy; I have provided a list of **OPTIONAL** (i.e., not-required) readings each week for those of you who are inclined to learn more detailed/advanced stuff above-and-beyond the basic required readings. Your choice, but surprise me and your classmates with your advanced knowledge....

Class #	Date	Topic	Readings	Assignment(s) Due
1	Aug 22	<ul style="list-style-type: none"> ■ Course Orientation ■ Introduction to Cognitive Psychology & 	<ul style="list-style-type: none"> ▪ Smith & Kosslynn (2007)—Ch1 ▪ Perves (2008)—Ch 2 ▪ Feinberg & Farah (2005) <p><u>Optional readings:</u></p> <ul style="list-style-type: none"> ▪ Drew et al. (2013) ▪ Perves (2008)—Ch 3 	Out-of-Class quiz on syllabus due by 5PM Aug 28. I'm hoping to

		<p><i>Cognitive Neuroscience</i> ■ Intro to Methods in Cognitive Psychology/Neuroscience & Experimental Neuropsychology (part 1)</p>	<ul style="list-style-type: none"> ▪ Rorden (2004) ▪ Tsay (2013) 	<p>have this set up via Canvas by Aug. 30.</p>
2	Aug 29	<p>■ Methods in Cognitive Psychology/Neuroscience & Experimental Neuropsychology (part 2)</p>	<p><i>Readings from last week plus:</i></p> <ul style="list-style-type: none"> ▪ Purves (2008)—Ch 3 ▪ Banich (2011)—Ch 3 (pp. 59-88) <p><u>Optional readings:</u></p> <ul style="list-style-type: none"> ▪ Banich (2011)—Ch 4 ▪ Luck (2005)—Ch 1 ▪ Walsh & Cowey (2000) 	N/A
	Sept 5	<p><u>No class: Perlstein out of town</u></p>	<u>N/A</u>	N/A
3	Sept 12	<p>■ “The lesion method in cognitive neuropsychology”</p> <p>Guest Speaker: Dr. Dawn Bowers 1:50-2:50PM (Clinical & Health Psychology), “The lesion method in cognitive neuropsychology.”</p>	<ul style="list-style-type: none"> ▪ Banich (2011)—Ch 3 (pp. 53-59) <p><u>Optional readings:</u></p> <ul style="list-style-type: none"> ▪ Gazzaniga (2002)—Chs 3 & 5 ▪ Perves (2008)—Chs 4 & 5 ▪ Quiroga et al. (2005) 	N/A
4	Sept 19	<p>■ Spatial Cognition & Attention</p> <p>Guest Speaker: Dr. Mingzhou Ding 1-1:50PM (Biomedical Engineering) “Neuronal mechanisms of attentional control: Recent advances.”</p>	<ul style="list-style-type: none"> ▪ Text: Smith & Kosslyn—Ch 3 ▪ Banich (2011)—Ch 11 ▪ Rorden & Karmath (2004) <p><u>Optional readings:</u></p> <ul style="list-style-type: none"> ▪ Knight & Stuss (2002) ▪ Knudsen (2007) ▪ Liu et al (2016) ▪ Liu et al (2017) ▪ Posner (2012) ▪ Posner & Rothbart (2007) ▪ Rajan et al (2018) ▪ Umiltà (2001) ▪ Wang et al. (2016) ▪ Wen et al. (2013) ▪ Wen et al. (2012) ▪ See also for synesthesia: http://www.apa.org/monitor/mar01/synesthesia.aspx 	N/A
5	Sept 26	<p><u>Debate/Discussion #1: “Functional neuroimaging can</u></p>	<p><u>Debate Readings:</u></p> <ul style="list-style-type: none"> • TBD – reminder, please send me your groups’ readings <u>1-week in</u> 	

		(pro)/cannot (con) completely replace lesion methods for informing theories of cognition.” (See description of debate format above.)	<u>advance so I can make them available to the class and upload them to canvas</u> for all to read to facilitate everyone’s participation.	
6	Oct 3	<p>■ <i>Spatial Cognition & Attention (cont.)</i></p> <p><u>Guest Speaker:</u> Dr. Kenneth Heilman 1:50-2:50PM (UF, Department of Neurology), “<i>Visuospatial attention and attentional disorders.</i>””</p>	<ul style="list-style-type: none"> • TBD 	N/A
7	Oct 10	<p>■ <i>Executive Functions & Working Memory</i></p>	<p><i>Readings from last week plus:</i></p> <ul style="list-style-type: none"> • Text: Smith & Kosslyn—Ch 6 • Baddeley (2000) pp. 83-88 (section on working memory) • Stuss (2011) • Gratton et al. (2017) <p><u>Optional readings:</u></p> <ul style="list-style-type: none"> • Banich (2011)—Ch 12 • Cohen, Perlstein et al. (1997) • Corbetta & Shulman (2002) • Kimberg et al. (2000) • Larson et al. (2006) • Miller & Cohen (2001) • Miyake et al. (2000) • Perlstein et al. (2003) 	N/A
	Oct 17	<p>■ <i>Emotion & Cognition</i></p>	<ul style="list-style-type: none"> • Text: Smith & Kosslyn—Ch 8 • Lazarus (1982) <p><u>Optional readings:</u></p> <ul style="list-style-type: none"> • Feldman Barrett et al. (2019) • TBD 	N/A
8	Oct 24	<p>■ <i>Language Comprehension & Production</i></p> <p><u>Guest Speaker:</u> Dr. Lori Altmann (Speech, Language and Hearing Sciences), 1-2:30pm????</p>	<ul style="list-style-type: none"> ▪ Text: Smith & Kosslyn—Ch 12 <p><u>Optional readings:</u></p> <ul style="list-style-type: none"> ▪ Banich (2011)—Ch 9 ▪ Gazzaniga (2002)—Ch 9 	Research Topic Description

		<p>Research Topic Description Due. Please email to me by 5PM (use filename and subject heading <Last Name>"-CBB Research Topic")</p>		
9	Oct 31	<p>■ Memory</p> <p>Guest Speaker: Dr. Russell Bauer (Clinical & Health Psychology) 1-3pm</p>	<ul style="list-style-type: none"> ▪ Text: Smith & Kosslyn—Chs 4 & 5 ▪ Banich (2011)—Ch 10 ▪ Baddeley (2000) pp. 77-83 ▪ Murphy et al. (2019) <p>Optional readings:</p> <ul style="list-style-type: none"> ▪ Brown & Craik (2000) ▪ Cabeza & St. Jacques (2007) ▪ Dodson & Schacter (2001) ▪ Johnson (2006) ▪ Moscovitch et al. (2006) ▪ Parkin (2001) ▪ Ryan & Cohen (2003) 	N/A
10	Nov 7	<p>■ Reasoning, Problem Solving & Decision Making</p> <p>Debate/Discussion #2: "Repressed memories are more likely to represent memory distortions (Pro) rather than true, unearthed recollections of past experience (Con)." (See description of debate format above.)</p>	<ul style="list-style-type: none"> ▪ Text: Smith & Kosslyn—Chs 9 & 10 ▪ Purves (2008)-Ch 25 <p>Podcast: (Hidden Brain) Podcast: https://www.npr.org/2018/03/12/592986190/daniel-kahneman-on-misery-memory-and-our-understanding-of-the-mind</p> <p>Optional reading:</p> <ul style="list-style-type: none"> ▪ Tsay (2013) ▪ Loken (2006) ▪ Weber & Johnson (2009) <p>Debate Readings:</p> <ul style="list-style-type: none"> ▪ TBD – reminder, please send me your groups' readings <u>1-week in advance so I can make them available to the class and upload them to canvas</u> for all to read to facilitate everyone's participation. <p>Also, see the link weblink listed under Debate 2 references in reference section below.</p>	<p>Take-home Exam 1 to be distributed by email through Canvas (Due 11/14)</p>
11	Nov 14	<p>Exam 1 Due</p> <p><i>Reasoning, Problem Solving, Decision Making (cont). + NIH's Research Domain Criteria (RDoC)</i></p> <p>Guest Speaker: Dr. Peter Lang (NIMH Center for the Study of Emotion and</p>	<p>Readings from last week plus:</p> <p>RDoC readings:</p> <ul style="list-style-type: none"> ▪ Lang (2016) ▪ Kozak & Cuthbert (2016) ▪ Also visit NIMH's RdoC website: https://www.nimh.nih.gov/research-priorities/rdoc/index.shtml <p>Optional readings:</p> <ul style="list-style-type: none"> ▪ Iacono (2016) ▪ Lilienfeld (2014) ▪ Patrick & Hajcak (2016) 	<p>Exam 1 Due Please email to me by 5PM (use subject heading <Last Name>"-CBB Exam 1")</p>

		Attention; Clinical & Health Psychology) Time TBD (1-2pm????)		
12	Nov 21	Debate/Discussion #3: "There is no emotion without cognition." (Pro= Emotion is dependent on cognition (there is <i>no</i> emotion without cognition;" Con = Emotion is independent of cognition (i.e., there <i>is</i> emotion without cognition). <i>(See description of debate format above.)</i>	Debate Readings: <ul style="list-style-type: none"> TBD – reminder, please send me your groups' readings <u>1-week in advance so I can make them available to the class and upload them to canvas</u> for all to read to facilitate everyone's participation. Also, see the link weblink listed under Debate 3 references in reference section below.TBD	
	Nov 28	No Class—UF Holiday; Thanksgiving	N/A	Please send me an email indicating that you have completed the evaluation. Thank you!
	Dec 5	No Class—UF "Reading Days" (12/05-12/06) **Research Proposals Due** Please email to me by 5PM 12/06 <i>(subject heading in email should read: <Last Name>"-CBB Proposal")</i> <i>I will email the <u>final exam</u> to you by noon—please email back to me by 5PM on Monday, DEC 13</i>		Research Proposal Due Take-home Exam 2 to be distributed by email through Canvas (Due 11/12)
	Dec 12	No Class—UF "Finals Week" (12/07-12/13)		Exam 2 Due

		<p>*Take-Home Exam #2* due to me by 5PM Dec 12; please email to me by 5PM (use filename "<Last Name>"-CBB-quiz#2" & and email subject heading should read: <Last Name>"-CBB Quiz#2")</p>		
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Assigned and Optional Readings

(Under construction—references will be revised/added as the course progresses). All readings should be completed prior to the assigned class date.

Allen, P.A., Lien, M-C, Ruthruff, E. (2011). Cognition and emotion: Neuroscience and behavioral perspectives. *Journal of Cognitive Psychology*, 23(6), 667-668. I recommend you read the entire volume of all relevant papers in this special issue on cognition and emotion.

Baddeley, A. (2000). Short-term and working memory. In E. Tulving & F.I.M. Craik (Eds.), *The Oxford Handbook of Memory*, pp. 77-92. New York: Oxford University Press.

Banich, M.T., & Compton, R.J. (2011). *Cognitive Neuroscience (3rd Edition)*. Belmont, CA: Wadsworth. (selected chapters)

Boissoneault, J., Frazier, I., Lewis, B., & Nixon S.J. (2016). Effects of age and acute moderate alcohol administration on electrophysiological correlates of working memory maintenance. *Alcoholism: Clinical and Experimental Research*, 40(9), 1874-1883.

Brown, S.C., & Craik, F.M. (2000). Encoding and retrieval of information. In E. Tulving & F.I.M. Craik (Eds.), *The Oxford Handbook of Memory*, pp. 93-107. New York: Oxford University Press.

Cabeza, R., & St. Jacques, P. (2007). Functional neuroimaging of autobiographical memory. *Trends in Cognitive Neuroscience*, 11(5), 219-227.

Cacioppo, J.T., & Gardner, W.L. (1999). Emotion. *Ann. Rev. Psychol.*, 50, 191-214.

Coltheart, M. (2013). How can functional neuroimaging inform cognitive theories?. *Perspectives on Psychological Science*, 8(1), 98-103.

Corbetta, M., & Shulman, G.L. (2002). Control of goal-directed and stimulus-driven attention in the brain. *Nature Reviews Neuroscience*, 3, 201-215.

Cohen, J.D., Perlstein, W.M., Braver, T.S., Nystrom, L.E., Noll, D.C., Jonides, J., & Smith, E.E. (1997). Temporal dynamics of brain activation during a working memory task. *Nature*, 386, 604-608.

Dodson, C.L., & Schacter, D.L. (2001). Memory distortion. In B. Rapp (Ed.), *The Handbook of Cognitive Neuropsychology: What deficits reveal about the human mind* (pp. 445-461). Baltimore: Johns Hopkins University Press.

- Dolcos, F., Iordan, A.D., & Dolcos, S. (2011). Neural correlates of emotion-cognition interactions: A review of evidence from brain imaging investigations. *Journal of Cognitive Psychology*, 23(6), 669-694.
- Drew, T., Vő., M.L., & Wolfe, J.M. (2013). The invisible gorilla strikes again: Sustained inattentive blindness in expert observers. *Psychological Science* [epub ahead of print].
- Duncan, S., & Feldman-Barrett, L. (2007). Affect is a form of cognition: A neurobiological analysis. *Cognition and Emotion*, 21(6), 1184-1211.
- Eysenck, M.W. (2012). General knowledge. In M.W. Eysenck, *Fundamentals of Cognition (2nd Ed.)*, Chapter 7, pp. 214-241. NY: Psychology Press.
- Eysenck, M.W., & Keane, M.T. (2005). Concepts and categories. In M.W. Eysenck & M.T. Keane, *Cognitive Psychology: A Student's Handbook (5th Ed.)*, Chapter 9, pp. 293-313. NY: Psychology Press.
- Eysenck, M.W., & Keane, M.T. (2000). Cognition and emotion. In M.W. Eysenck & M.T. Keane (Eds.), *Cognitive Psychology: A Student's Handbook (4th Ed.)*, Chapter 18, pp. 489-512. Philadelphia, PA: Psychology Press.
- Feldman Barrett, L., Adolphs, R., Marsella, S., Martinez, A.M., & Pollak, S.D. (2019). Emotional expressions reconsidered: Challenges to inferring emotion from human facial movements. *Psychological Science in the Public Interest*, 20(1), 1-68.
- Feinberg, T.E., & Farah, M.J. (2005). A historical perspective on cognitive neuroscience. In M.J. Farah & T.E. Feinberg (Eds.), *Patient-based approaches to cognitive neuroscience, 2nd Ed.*, pp. 3-20. Cambridge MA: MIT Press.
- Gazzaniga, M.S., Ivry, R.B., & Mangun, G.R. (2002). *Cognitive Neuroscience: The Biology of the Mind (2nd Edition)*. NY: W.W. Norton. (selected chapters)
- Goldstone, R.L. & Kersten, A. (2003). Concepts and categorization. In A.F. Healy & R.W. Proctor (Eds.), *Handbook of Psychology, Vol. 4: Experimental Psychology*, pp. 599-621. Hoboken, NJ: John Wiley & Sons.
- Gratton, G., Cooper, P., Fabiani, M., Carter, C.S., & Karayanidis, F. (2017). Dynamics of cognitive control: Theoretical bases, paradigms, and a view for the future. *Psychophysiology*, <https://doi.org/10.1111/psyp.13016>.
- Hoffmann, F., Viding, E., Puetz, V. B., Gerin, M. I., Sethi, A., Rankin, G., & McCrory, E. J. (2018). Evidence for Depressogenic Spontaneous Thoughts and Altered Resting-State Connectivity in Adolescents With a Maltreatment History. *Journal of the American Academy of Child & Adolescent Psychiatry*, 57(9), 687-695.
- Iacono, W.G. (2016). Achieving success with the Research Domain Criteria (RDoC): Going beyond the matrix. *Psychophysiology*, 53, 308-311.
- Izard, C.E. (2009). Emotion theory and research: Highlights, unanswered questions, and emerging issues. *Ann. Rev. Psychol.*, 60, 1-25.
- Johnson, M.K. (2006). Memory and reality. *American Psychologist*, 61, 760-771.

- Kimberg, D.Y., D'Esposito, M., & Farah, M.J. (2000). Frontal lobes II: Cognitive issues. In M.J. Farah and T.E. Feinberg (Eds.), *Patient-Based Approaches to Cognitive Neuroscience*. (pp. 317-326). MA: MIT Press. (unfortunately I do not have a copy of this pdf that you can print).
- Knight, R.T., & Stuss, D.T. (2002). Prefrontal cortex: The present and future. In *Principles of Frontal Lobe Function*, D.T. Stuss and R.T. Knight (Eds.), New York: Oxford University Press, pp. 573-597.
- Knudsen, E.I. (2007). Fundamental components of attention. *Annual Review of Neuroscience*, 30, 57-78.
- Kozak, M.J., & Cuthbert, B.N. (2016). The NIMH research domain criteria initiative: Background, issues, and pragmatics. *Psychophysiology*, 53, 286-297.
- Lang, P.J. (2016). Closing the divide: Psychological science, basic and applied (pp. 445-449). In R.J. Sternberg, S.T. Fiske, & D.J. Foss (Eds.), *Scientists Making a Difference: One Hundred Eminent Behavioral and Brain Scientists Talk about Their Most Important Contributions*. NY: Cambridge University Press.
- Larson, M.J., Perlstein, W.M., Demery, J.A., & Stigge-Kaufman, D.A. (2006). Cognitive control impairments in traumatic brain injury. *Journal of Clinical and Experimental Neuropsychology*, 28, 968-986.
- Larson, M.J., Perlstein, W.M., Stigge-Kaufman, D., Kelley, K.G., & Dotson, V.M. (2006). Affective context-induced modulation of the error-related negativity. *Neuroreport*, 17, 329-333.
- Lazarus, R.S. (1982). Thoughts on the relations between emotion and cognition. *American Psychologist*, 37, 1019-1024.
- Lewis, B., Boissoneault, J., Frazier, & Nixon, S.J. (2016). Effects of age and acute moderate alcohol administration on neurophysiology during simulated driving. *Alcoholism: Clinical and Experimental Research*, 40(12), 2519-2527.
- Levine, D.S. (2009). Brain pathways for cognitive-emotional decision making in the human animal. *Neural Networks*, 22, 286-293.
- Lilienfeld, S.O. (2014). DSM-5: Centripetal scientific and centrifugal antiscientific forces. *Clinical Psychology Science and Practice*, 21(3), 269-279.
- Liu, Y., Bengson, J., Huang, H., Mangun, G.R., & Ding, M. (2016). Top-down modulation of neural activity in anticipatory visual attention: Control mechanisms revealed by simultaneous EEG-fMRI. *Cerebral Cortex*, 26, 517-529.
- Liu, Y., Hong, X., Bengson, J.J., Kelly, T.A., Ding, M., & Mangun, G.R. (2017). Deciding where to attend: Large-scale network mechanisms for underlying attention and intention revealed by graph-theoretic analysis. *Neuroimaging*, 157, 45-60.
- Loken, B. (2006). Consumer psychology: Categorization, affect, and persuasion. *Annual Review of Psychology*, 57, 453-485.
- Logothetis, N. (2008). What we can do and what we cannot do with fMRI. *Nature*, 453, 869-878.

- Luck, S.J. (2005). *An Introduction to the Event-Related Potential Technique*. Cambridge, MA: MIT Press. (selected chapters)
- Mahon, B.Z., & Caramazza, A. (2009). Concepts and categories: A cognitive neuropsychological perspective. *Annual Review of Psychology*, *60*, 27-51.
- Miller, E.K., & Cohen, J.D. (2001). An integrative theory of prefrontal cortex function. *Annual Review of Neuroscience*, *24*, 167-202.
- Miyake, A., Friedman, N.P., Emerson, M.J., Witzki, A.H., & Howerter, A. (2000). The unity and diversity of executive functions and their contributions to complex "frontal lobe" tasks: A latent variable analysis. *Cognitive Psychology*, *41*, 49-100.
- Moscovitch, M., Nadel, L., Winocur, G., Gilboa, A., & Rosenbaum, R.S. (2006). The cognitive neuroscience of remote episodic, semantic, and spatial memory. *Current Opinion in Neurobiology*, *16*, 179-190.
- Murphy, G., Loftus, E.F., Grady, R. F., Levine, L.J., & Greene, C.M. (2019). False memories for fact new during Ireland's abortion referendum. *Psychological Science*, published online.
- Ochsner, K., & Gross, J.J. (2005). The cognitive control of emotion. *Trends in Cognitive Sciences*, *9*(5), 242-249.
- Parkin, A.J. (2001). The structure and mechanisms of memory. In B. Rapp (Ed.), *The Handbook of Cognitive Neuropsychology: What deficits reveal about the human mind* (pp. 445-461). Baltimore: Johns Hopkins University Press.
- Patrick, C.J., & Hajcak, G. (2016). Reshaping clinical science: Introduction to the Special Issue on Psychophysiology and the NIMH Research Domain Criteria (RDoC) initiative. *Psychophysiology*, *53*, 281-285.
- Pham, M.T. (2007). Emotion and rationality: A critical review and interpretation of empirical evidence. *Review of General Psychology*, *11*(2), 155-178.
- Perlstein, W.M., Cole, M.A., Larson, Kelly, K.G., Seignourel, P., & Keil, A. (2003). Steady-state visual evoked potentials reveal frontally-mediated working memory activity in humans. *Neuroscience Letters*, *342*, 191-195.
- Perlstein, W.M., Elbert, T., & V.A. Stenger (2002). Dissociation in human prefrontal cortex of affective influences on working memory-related activity. *PNAS*, *99*(3), 1736-1741.
- Phelps, E.A., & LeDoux, J.E. (2005). Contributions of the amygdala to emotion processing: From animal models to human behavior. *Neuron*, *48*, 175-187.
- Pessig, J.J., & Tarr, M.J. (2007). Visual object recognition: Do we know more now than we did 20 years ago? *Annual Review of Psychology*, *58*, 75-96.
- Posner, M.I. (2012). Imaging attentional networks. *Neuroimage*, *61*, 450-456.
- Posner, M.I., & Rothbart, M.K. (2007). Research on attention networks as a model for the integration of psychological science. *Annual Review of Psychology*, *58*, 1-23.

- Purves, D., Brannon, E.M., Cabeza, R., Huttel, S.A., LaBar, K.S., Platt, M.L. & Worldorff, M.G. (2008). *Principles of Cognitive Neuroscience*. Sunderland, MA: Sinauer Assoc. (selected chapters)
- Quiroga, R.Q., Reddy, L., Kreiman, G., Koch, C., & Fried, I. (2005). Invariant visual representation by single neurons in the human brain. *Nature*, *435*, 1102-1107.
- Rajan, A., Siegel, S.N., Liu, Y., Bengson, J., Mangun, G.R., & Ding, M. (2018). Theta oscillations index frontal decision-making and mediate reciprocal frontal-parietal interactions in willed action. *Cerebral Cortex*, doi: 10.1093/cerecor/bhy149.
- Rorden, C., & Karnath, H-O. (2004). Using human brain lesions to infer function: A relic from a past era in the fMRI age? *Nature Reviews Neuroscience*, *5*, 813-819.
- Ryan, J.D., & Cohen, N.J. (2003). Evaluating the neuropsychological dissociation evidence for multiple memory systems. *Cognitive, Affective, and Behavioral Neuroscience*, *3*, 168-185.
- Sperber, C., & Karnath, H. (2018). On the validity of lesion-behavior mapping methods. *Neuropsychologia*, *115*, 17-24.
- Storbeck, J. & Clore, G.L. (2007). On the interdependence between cognition and emotion. *Cognition and Emotion*, *21*, 1212-1237.
- Stuss, D.T. (2011). Functions of the frontal lobes: Relation to executive functions. *Journal of the International Neuropsychological Society*. *17*, 1-17.
- Taylor, J.G. & Fragopanagos, N.F. (2005). The interaction of attention and emotion. *Neural Networks*, *18*, 353-369.
- Tsay, C-J. (2013). Sight over sound in the judgment of music performance. *PNAS* [epub ahead of print]. <http://www.pnas.org/content/early/2013/08/16/1221454110.full.pdf+html?with-ds=yes>
- Umiltà, C. (2001). Mechanisms of attention. In Rapp, B. (Ed.), *The Handbook of Cognitive Neuropsychology: What deficits reveal about the human mind*, pp. 135-158. Baltimore: Johns Hopkins University Press.
- Walsh, V., & Cowey, A. (2000). Transcranial magnetic stimulation and cognitive neuroscience. *Nature Reviews: Neuroscience*, *1*, 73-79.
- Wang, C., Rajagovindan, R., Han, S.-M., & Ding, M. (2016). Top-down control of visual alpha oscillations: Sources of control signals and their mechanisms of action. *Frontiers in Human Neuroscience*, Vol *10*, Article *15*, 1-14.
- Ward, J. (2010). *The Student's Guide to Cognitive Neuroscience*, 2nd Ed. New York: Psychology Press. (selected chapters)
- Weber, E., & Johnson, E.J. (2009). Mindful judgment and decision making. *Annual Review of Psychology*, *60*, 53-85.
- Wen, X., Liu, Y., Yao, L., Ding, M. (2013). Top-down regulation of default mode activity in spatial visual attention. *The Journal of Neuroscience*, *33*(15), 6444-6453.
- Wen, X., Yao, L., Liu, Y., & Ding, M. (2012). Causal interactions in attention networks predict behavioral performance. *The Journal of Neuroscience*, *32*(4), 1284-1292.

**Student-provided DEBATE-RELATED READINGS – to be PROVIDED by students in debate groups
WITHIN 1 WEEK PRIOR TO THE RELEVANT DEBATE CLASS**

Debate 1 / Sept. 26: *"Functional neuroimaging can (PRO)/cannot (CON) completely replace lesion methods for informing theories of cognition"*

Readings: PRO (Team:)

1)

Readings: CON (Team:)

1) .

Debate 2 / Nov. 7: *"Repressed memories are more likely to represent memory distortions rather than true, unearthed recollections of past experience."*

- See weblink: http://www.ted.com/talks/elizabeth_loftus_the_fiction_of_memory.html

Readings: PRO (Team:)

2)

Readings: CON (Team:)

2) .

Debate 3 / Nov. 21: *"There is no emotion without cognition (CON) or, emotion is dependent upon cognition (PRO)."*

Readings: PRO (Team:)

3)

Readings: CON (Team:)

3)

STUDENT EXPECTATIONS, ROLES, AND OPPORTUNITIES FOR INPUT

Expectations Regarding Course Behavior:

- Please refrain from using electronic devices during class lectures except for taking notes and completing in-class assignments, as it is distracting and inconsiderate of other students and the instructor. Cell phones must be placed on silent or turned off during class. Any use of a cell phone during class (i.e., chatting, texting) will be considered a violation of this policy as it disrupts other students from learning. Students who violate this policy will be asked to leave and will lose 1% of their final grade per violation. Please speak to the instructors prior to the beginning of class if you experience an emergency that requires you to leave the room to take a phone call.
- Please 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.

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 professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available at <https://gatorevals.aa.ufl.edu/students/>. Students will be notified when the evaluation period opens, and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via <https://ufl.bluera.com/ufl/>. Summaries of course evaluation results are available to students at <https://gatorevals.aa.ufl.edu/public-results/>.”

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>

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