



## Course Goals

Students will work to refine their skills in:

- **Critical analysis and synthesis of empirical literature**
- **Leading discussion and presentation**
- **Collaboration with peers**
- **Formal and informal writing**

To accomplish these goals, students will work to:

- Describe and explain the major terminology, theories, and research methods used when studying anxiety.
- Read, present, discuss, and reflect upon empirical studies on anxiety.
- Provide a critical analysis of the literature, through daily written analyses and exams, that includes a synthesis of findings with concepts discussed in the literature and in class.

## Requirements of the Course

### EXAMS

The goal of exams is to **organize and synthesize** the literature we are reading, not memorize multiple citations and results.

To facilitate this goal, there will be two “open article” essay exams in this class, plus a cumulative final essay exam. Exams will cover the readings and any material presented in class (including critical analyses and class discussion). Exams will be worth **230 points total**.

### READINGS

**ARTICLES:** All of the articles we will read are posted on Canvas. Click the icon on the right to access Canvas.



**IMPORTANT:** Please **have articles and critical analysis papers with you in class** (in hard copy or electronic form). We will draw heavily from the articles and analyses during our discussion, so it is important that you have copies with you.

### LEADING DISCUSSION

Students will work in small groups to lead discussion on several research articles during the term. Your primary objectives when Leading Discussion include:

- Providing a **brief overview** of the article and its findings.
- Stimulating class discussion of the article by posing **several good questions** and discussion points for the class to consider.
- Being prepared to **answer questions** about your article – remember, you are the expert on that article for the day. This means **you will need to prepare in advance**, so that you have time to **find supplemental information** that aids in your personal understanding of the concepts related to your article.

A handout further describing how to Lead Discussion is posted on Canvas. Leading Article Discussions will be worth **60 points total** (10 points per discussion).

### CRITICAL ANALYSES

Each student will hand in a critical analysis paper for 30 articles discussed in class (you may omit the 3 GHG leads discussion on). Critical Analyses should be typed and posted to Canvas BEFORE class. These analyses should include:

- **A brief summary of the article.** This summary will generally be a short paragraph). It should focus on KEY points from the article (i.e., critical items that will help you recall what was important about that particular article).
- **An analysis and synthesis of the article.** This critique can be as detailed as you want, but will generally be about ½ to 1 page (single-spaced).

This writing assignment will provide numerous opportunities to hone your critical analysis/synthesis skills and help you organize and reflect upon your thoughts about the literature we are reading. It will also be **very** helpful when taking exams in this class. A handout further describing Critical Analyses is posted on Canvas. Critical Analyses will be worth **60 points total** (2 points each).

# Grading

Assignment	Points
Critical Analysis Papers (30 total)	60
Leading Discussion (6 total)	60
Exam #1	70
Exam #2	75
Final Exam	85
<b>Total</b>	<b>350</b>

## Accommodations

If you have a documented disability, please let me know what I can do to facilitate your learning in this class. Students requiring special accommodations for this course must first contact the Office for Disability Services (Director: **Pamela Moschini, Ext. 3825**). Provide me with the appropriate documentation and I will make every effort to meet your needs.

**AN IMPORTANT NOTE ABOUT GRADING:** A grade of C is indicative of average work in this class. If you want to earn a grade in the A-range (exceptional) or B-range (very good), then you need to be prepared to work hard and produce stellar work. Based on my past experiences, students who earn better than average grades come to class consistently and are actively engaged, earn solid grades on their exams, produce work that is well-thought-out and that involves a high level of intellectual sophistication, and consistently offer comments during class that enrich the discussion.

Grade	%	Grade	%	Grade	%	Grade	%
A	94-100	B+	87-89	C+	77-79	D+	67-69
A-	90-93	B	84-86	C	74-76	D	63-66
		B-	80-83	C-	70-73	F	0-62

# The Fine Print

## Be an active participant

Being an active participant in this seminar means that you will:

- **Come to every scheduled class and group meeting.**
- **Consistently contribute to class activities and discussions.**
- **Turn in graded and non-graded work on time.**

Active engagement in class is a key factor in learning, and therefore, your participation in this course will play an important role in grades. Failure to participate (as defined above) will result in a lower grade in this class (by as much as one letter grade).

**Bottom line: Come to class prepared and be an active participant!**

## Turn in assignments and take exams on time

Be sure to plan accordingly so that you can turn in all assignments on time. **Critical Analyses will not be accepted late** (please plan ahead for printing or computer problems and have copies of your analyses ready by class time). **Late exams will lose one letter grade per day.**

If you know that you will need to miss class for a legitimate reason (leaving early for break or for a vacation is NOT a legitimate excuse), please let me know early, so that we can arrange for you to turn things in before you leave.

## Use your laptop for class activities only

My policy regarding electronic devices in the classroom typically involves banning them. There is ample evidence showing that **performance drops significantly when students attempt to multitask with electronic devices during class** [click [HERE](#) for more info].

It will be important that you have articles and critical analysis papers with you for every class. However, given the College's policy on printing (i.e., students have a limit to their free printing), I will make an exception regarding article and critical analyses. Instead of printing every article and critical analysis paper, you **may use your laptop or tablet for classroom discussion of articles and may upload your critical analysis papers to Canvas.**

Students who use a phone or laptop during class for non-class activities will be asked to put it away; if this happens repeatedly, they will be asked to leave.

## Show academic integrity in your work

All assignments in this class are pledged work under the Academic Integrity Code ([click here for AIC description](#)). I encourage you to study with other students in class and to discuss class materials with other students. However, **your tests and written assignments should be your work alone.** Students found to be breaking the AIC will receive a zero on the assignment, and depending on the circumstances, may receive a failing grade for the class. Additionally, in accordance with the AIC, please write and sign your name by the following statement on all written assignments: "I pledge that I have complied with the Academic Integrity Code in this work." If you have any questions or concerns about how the AIC applies to work in this class, I am happy to discuss this with you.

# Schedule

This is an approximate guide. Material may be added or deleted throughout the semester, as time permits. If changes are made, they will be announced in class and/or via email as soon as possible.

Date	Day	Readings/Assignments	Topics
Aug 28	Mon	Introduction to the Course Symptoms and Diagnosis of Anxiety Disorders	
Aug 30	Wed	Introduction to the Course - Part II Symptoms and Diagnosis of Anxiety Disorders	
Sept 4	Mon	<b>SMALL GROUP DISCUSSION:</b> Specific Phobia and Social Anxiety Disorder <b>BOOK DISCUSSION:</b> Smith (2012). Monkey mind: A memoir of anxiety. <b>EPISODE I</b>	Symptoms and Diagnosis
Sept 6	Wed	<b>SMALL GROUP DISCUSSION:</b> Panic Disorder and Agoraphobia <b>BOOK DISCUSSION:</b> Smith (2012). Monkey mind: A memoir of anxiety. <b>EPISODE II</b>	Symptoms and Diagnosis
Sept 11	Mon	<b>SMALL GROUP DISCUSSION:</b> Generalized Anxiety Disorder and Posttraumatic Stress Disorder <b>BOOK DISCUSSION:</b> Smith (2012). Monkey mind: A memoir of anxiety. <b>EPISODE III</b>	Symptoms and Diagnosis
Sept 13	Wed	<b>ARTICLE 1:</b> Hofmann et al. (2012). The efficacy of cognitive behavioral therapy: A review of meta-analyses. [GROUP 1] <b>ARTICLE 2:</b> Kaczkurkin & Foa (2015). Cognitive-behavioral therapy for anxiety disorders: An update on the empirical evidence. [GROUP 2]	Cognitive Behavioral Therapy (CBT)
Sept 18	Mon	<b>ARTICLE 3:</b> Delgado et al. (2008). Neural circuitry underlying the regulation of conditioned fear and its relation to extinction. [GROUP 3] <b>ARTICLE 4:</b> Tovote et al. (2015). Neuronal circuits for fear and anxiety. [GROUP 4]	Neural Underpinnings of Fear and Anxiety

Sept 20	Wed	<p><b>ARTICLE 5:</b> Marin et al. (2014). Device-based brain stimulation to augment fear-extinction: Implications for PTSD treatment and beyond. [GROUP 5]</p> <p><b>ARTICLE 6:</b> Isserles et al. (2013). Effectiveness of deep transcranial brain stimulation combined with a brief exposure procedure in post-traumatic stress disorder - A pilot study. [GROUP 1]</p>	EXT: Deep Brain Stimulation and TMS
Sept 25	Mon	<p><b>ARTICLE 7:</b> Peña et al. (2013). Rapid remission of conditioned fear expression with extinction training paired with vagus nerve stimulation. [GROUP 2]</p> <p><b>ARTICLE 8:</b> Mitra &amp; Sapolsky (2010). Gene therapy in rodent amygdala against fear disorders. [GROUP 3]</p>	EXT: Vagus Nerve Stimulation and Gene Therapy
Sept 27	Wed	<p><b>ARTICLE 9:</b> Foster &amp; Neufeld (2013). Gut-brain axis: How the microbiome influences anxiety and depression. [GROUP 4]</p> <p><b>ARTICLE 10:</b> Luczynski et al. (2016). Adult microbiota-deficient mice have distinct dendritic morphological changes: Differential effects in the amygdala and hippocampus. [GROUP 5]</p>	Microbiota-Gut-Brain Axis
Oct 2	Mon	<p><b>ARTICLE 11:</b> Sarkar et al. (2016). Psychobiotics and the manipulation of bacteria-gut-brain signals. [GROUP 1]</p> <p><b>ARTICLE 12:</b> Burokas et al. (2017). Targeting the microbiota-gut-brain axis: Prebiotics have anxiolytic and antidepressant-like effects and reverse the impact of chronic stress in mice. [GROUP 2]</p>	Microbiota-Gut-Brain Axis
Oct 4	Wed	<b>EXAM 1</b>	
Oct 9	Mon	<b>Fall Break: No Classes</b>	
Oct 11	Wed	<p><b>ARTICLE 13:</b> Nader et al. (2000). Fear memories require protein synthesis in the amygdala for reconsolidation after retrieval. [GHG]</p> <p><b>ARTICLE 14:</b> Diaz-Mataix et al. (2011). Sensory-specific associations stored in the lateral amygdala allow for selective alteration of fear memories. [GROUP 3]</p>	Reconsolidation
Oct 16	Mon	<b>ARTICLE 15:</b> Brunet et al. (2008). Effect of post-retrieval propranolol on psychophysiologic responding during subsequent script-driven traumatic imagery in post-traumatic stress disorder. [GROUP 4]	Reconsolidation

		<b>ARTICLE 16:</b> Haubrich et al. (2015). Reconsolidation allows fear memory to be updated to a less aversive level through the incorporation of appetitive information. [GROUP 5]	
Oct 18	Wed	<b>ARTICLE 17:</b> Soeter & Kindt (2015). An abrupt transformation of phobic behavior after a post-retrieval amnesic agent. [GROUP 1] <b>ARTICLE 18:</b> Björkstrand et al. (2015). Disruption of memory reconsolidation erases a fear memory trace in the human amygdala: An 18-month follow-up. [GROUP 2]	Reconsolidation
Oct 23	Mon	<b>ARTICLE 19:</b> Dunsmoor et al. (2015). Novelty-facilitated extinction: Providing a novel outcome in place of an expected threat diminishes recovery of defensive responses. [GROUP 3] <b>ARTICLE 20:</b> Sevenster et al. (2013). Prediction error governs pharmacologically induced amnesia for learned fear. [GHG]	Reconsolidation
Oct 25	Wed	<b>ARTICLE 21:</b> Pitman et al. (2011). Systemic mifepristone blocks reconsolidation of cue-conditioned fear; Propranolol prevents this effect. [GROUP 4] <b>ARTICLE 22:</b> Meir Drexler et al. (2015). Effects of cortisol on reconsolidation of reactivated fear memories. [GROUP 5]	Reconsolidation
Oct 30	Mon	<b>ARTICLE 23:</b> Monfils et al. (2009). Extinction-reconsolidation boundaries: Key to persistent attenuation of fear memories. [GROUP 1] <b>ARTICLE 24:</b> Schiller et al. (2013). Extinction during reconsolidation of threat memory diminishes prefrontal cortex involvement. [GROUP 2]	Reconsolidation: Non-pharmacological
Nov 1	Wed	<b>ARTICLE 25:</b> Steinfurth et al. (2014). Young and old Pavlovian fear memories can be modified with extinction training during reconsolidation in humans. [GROUP 3] <b>ARTICLE 26:</b> James et al. (2015). Computer game play reduces intrusive memories of experimental trauma via reconsolidation-update mechanisms. [GROUP 4]	Reconsolidation: Non-pharmacological

Nov 6	Mon	<p><b>ARTICLE 27:</b> Lee et al. (2007). Effectiveness of a meditation-based stress management program as an adjunct to pharmacotherapy in patients with anxiety disorder. [GROUP 5]</p> <p><b>ARTICLE 28:</b> Boettcher (2014). Internet-based mindfulness treatment for anxiety disorders: A randomized controlled trial. [GROUP 1]</p>	Meditation
Nov 8	Wed	<p><b>ARTICLE 29:</b> Weibel et al. (2017). Does loving-kindness meditation reduce anxiety? Results from a randomized controlled trial. [GROUP 2]</p> <p><b>ARTICLE 30:</b> Hoge et al. (2017). The effect of mindfulness meditation training on biological acute stress responses in generalized anxiety disorder. [GROUP 3]</p>	Meditation
Nov 13	Mon	<p><b>Society for Neuroscience Meeting:</b> No Class</p> <p>Work on <b>EXAM 2</b></p>	
Nov 15	Wed	<p><b>Society for Neuroscience Meeting:</b> No Class</p> <p>Work on <b>EXAM 2</b></p>	
Nov 20	Mon	<p><b>ARTICLE 31:</b> Hölzel et al. (2013). Neural mechanisms of symptom improvements in generalized anxiety disorder following mindfulness training. [GHG]</p>	Meditation
Nov 22	Wed	<p><b>Thanksgiving Break:</b> No Class</p>	
Nov 27	Mon	<p><b>ARTICLE 32:</b> Streeter et al. (2010). Effects of yoga versus walking on mood, anxiety, and brain GABA levels: A randomized controlled MRS study. [GROUP 4]</p> <p><b>ARTICLE 33:</b> Streeter et al. (2012). Effects of yoga on autonomic nervous system, gamma-aminobutyric acid, and allostasis in epilepsy, depression, and post-traumatic stress disorder. [GROUP 5]</p>	Yoga
Nov 29	Wed	Anxiety in the Movies	
Dec 4	Mon	Anxiety in the Movies	

Dec 6	Wed	Course Wrap-Up	
Finals Week		<b>CUMULATIVE FINAL EXAM</b>	

**ARTICLE DISCUSSION GROUPS**

**GROUP 1:** Erin Beebe and Jackelin Meijia Delcid

**GROUP 2:** Shelby MacPhail and Langston Gering

**GROUP 3:** Elizabeth Vlattas and Jessica-Ann Golbitz

**GROUP 4:** Sarah Geisler and Rosemary Corcoran

**GROUP 5:** Sarah Prince and Taj Singh