

**APPLYING PSYCHOLOGICAL SCIENCE – PSY 1133**  
**TR 12:30 pm – 1:45 pm, ED 001**  
**SYLLABUS, FALL 2017**

---

“Extraordinary claims require extraordinary evidence.”

David Hume

“Keeping an open mind is a virtue, but not so open that your brains fall out.”

James Oberg

---

Instructor: Caleb W. Lack, Ph.D.

Office: Old North 107

Office Hours: 2 pm to 3:30 pm Tuesdays and Thursdays, 1-3 pm Wednesdays

Phone: 405-974-5456

Email: [clack@uco.edu](mailto:clack@uco.edu) or [professor.lack@gmail.com](mailto:professor.lack@gmail.com) (do not use D2L)

Web: <http://www.caleblack.com>

**REQUIRED TEXTBOOK**

Lack, C.W., & Rousseau, J. (2016). *Critical Thinking, Science, & Pseudoscience: Why You Can't Trust Your Brain*. New York: Springer. ISBN 978-0826194190

**GOALS & OBJECTIVES**

From the university catalog:

*This course will expose students to the philosophy of science that underlies why psychological science operates the way it does to understand human behavior. In addition, students will be exposed to the ways psychological science is applied in everyday life and the careers various fields of psychology can encompass. This includes how to apply empirical, scientific modes of thinking in explaining the causes of various phenomena, from everyday human behavior to supposedly paranormal events.*

My goal for this course is to have each student leave with increased critical thinking and reasoning skills and the ability to apply those skills in her or his environment. You will become skilled in differentiating between scientific and pseudoscientific explanations of things such as psychic abilities, alien abduction, astrology, recovered memories, and the healing properties of various alternative medicines and techniques. In addition, you will come to understand the various ways in which we can be fooled, both by others and by ourselves, thanks to the way the human brain processes information.

### CLASS HINTS AND TIPS

This course will include a mixture of lecture, in-class exercises, and discussion designed to assist your learning. When lecturing, I will be using PowerPoint slides to illustrate my lectures and assist you in your note taking. I post the complete PowerPoint slides online (@ [www.caleblack.com](http://www.caleblack.com)). Therefore, it would be best if you concentrate on listening and taking notes about what we discuss in class, rather than try to copy down all of the information on the slides.

There will be a fair number of readings for this course, from both the required text and the supplemental materials. While it is not necessary for you to memorize all of the information, it is strongly recommended that you read all assigned materials *before* class. Also, as a significant portion of points available in this course will come from in-class exercises and discussions, attendance is crucial.

Finally, there is one more rule for in-class. If your cell phone rings or I catch you texting during my course, the following will happen. For the first offense, you will be required to come to the front of the classroom and apologize to everyone for disrupting their learning, wasting their time, and wasting my time. For the second offense, you will be required to leave the classroom for the rest of the day. For the third offense, your grade will be dropped a letter grade. For the fourth offense, you will be removed from the course.

### GRADING

There are a total of 1000 points available in this class. These points will come from the following areas.

- **Media Critiques, 150 points:** For five topics, we will watch a video from either a skeptical or non-skeptical point of view. It is your job to carefully analyze these and determine what you see as their strengths and weaknesses, as well as what pieces of critical thinking are/are not violated. Each critique should be approximately 500 words.
- **Exercises, 250 points:** These exercises will be assignments either carried out during class time or assigned in class and turned in the next class period. Each one will be worth 50 points and, if missed, cannot be made up.
- **Reflection questions, 100 points:** At the conclusions of each chapter are a handful of “Questions for Reflection.” You will choose a single question from the presented options and write a 300+ word response, turning in a physical, typed copy to our TAs. There are 13 chapters with reflection questions at the end, but you only have to turn in 10 reflection questions across the semester. Please be sure to include what chapter and what question you are answering each time (e.g., “Chapter 6, question 2”).
- **Final Project, 500 points:** The major chunk of points for the class will come from your final project, the theme of which will be “Educating the Public about Pseudoscience.” To that end, you will be preparing and running a booth on campus during the semester that serves to educate those on campus about why your topic is a pseudoscience and why that’s important. You will be teaming up with one other student and hosting the booth together. Booths will be required to have handouts, signage that draws people in, some type of activity to participate in, and you should be prepared to

interact with passers-by in an intelligent fashion. More information will be gone over in class about this. You will be graded on the following aspects:

- **Booth presentation, 300 points:** On the day of the fair, you and your partner will man the booth from 10 am until 2 pm. This will include engaging passers-by, telling them what your topic is, and demonstrating the topic via an activity.
- **Booth materials, 100 points:** On the day of the fair, you should document what you did via photographs, video recordings, and more. You will then upload these and other materials (such as your handouts) into the D2L Dropbox.
- **Booth reflection, 100 points:** You will write a 1000 word reflection paper about the Pseudoscience in Health Fair. *What is a reflection paper?* A reflection paper is something that reflects your *personal* insights, opinions, or observations; in this case, that means thinking about how planning and running the booth, and visiting the other booths, resulted in changes (or not) to your thoughts, beliefs, and behaviors. Here are some guidelines - [https://www.iirp.edu/pdf/IIRP-Reflection-Tip\\_Sheet.pdf](https://www.iirp.edu/pdf/IIRP-Reflection-Tip_Sheet.pdf)

The grade breakdowns will be as follows: A – 900+ points, B – 800-899 points, C – 700-799 points, D – 600-699 points, F – 599 points and below.

### CLASS OUTLINE (SUBJECT TO CHANGE)

(CTSP = Critical Thinking, Science, & Pseudoscience)

<b>Week 1</b>	<b>Introduction to course / Why do we need critical thinking?</b>
<i>Readings</i>	Syllabus CTSP preface & chapter 1
<i>Assignments</i>	Exercise #1 – What do you think science is? Reflection paper #1
<b>Week 2</b>	<b>What is science?</b>
<i>Readings</i>	CTSP chapter 2
<i>Assignments</i>	Reflection paper #2 Have partners chosen for the booth and names given to the professor
<b>Week 3</b>	<b>What is pseudoscience?</b>
<i>Readings</i>	CTSP chapter 3
<i>Assignments</i>	Exercise #2 – Pseudoscience in the Media Media Critique #1 – <a href="#">Enemies of Reason</a> Reflection paper #3 Have topic chosen for the booth and approved by the professor

<b>Week 4</b>	<b>What is critical thinking?</b>
<i>Readings</i>	CTSP chapter 4
<i>Assignments</i>	Reflection paper #4
<b>Week 5</b>	<b>Why can't we trust our brains?</b>
<i>Readings</i>	CTSP chapter 5
<i>Assignments</i>	Exercise #3 – My Own Worst Biases Reflection paper #5
<b>Week 6</b>	<b>Why can't we trust our world?</b>
<i>Readings</i>	CTSP chapter 6
<i>Assignments</i>	Exercise #4 – Fooled you! Reflection paper #6 Media Critique #2 – <a href="#">Moon Landing : Hoax or Reality?</a>
<b>Week 7</b>	<b>Aliens, abductions, and UFOs</b>
<i>Readings</i>	CTSP chapter 7
<i>Assignments</i>	Exercise #5 - Alien Autopsy Reflection paper #7 Media Critique #3 – <a href="#">Dan Ackroyd's Unplugged on UFOs</a>
<b>Week 8</b>	<b>Psychic Powers</b>
<i>Readings</i>	CTSP chapter 8
<i>Assignments</i>	Reflection paper #8
<b>Week 9</b>	<b>Cryptozoology</b>
<i>Readings</i>	CTSP chapter 9
<i>Assignments</i>	Reflection paper #9 Media Critique #4 – <a href="#">Bigfoot: The New Evidence</a>
<b>Week 10</b>	<b>Evaluating alternative medicine</b>
<i>Readings</i>	CTSP chapter 10
<i>Assignments</i>	Reflection paper #10
<b>Week 11</b>	<b>Alt-Med for physical health</b>
<i>Readings</i>	CTSP chapter 11
<i>Assignments</i>	Media Critique #5 – <a href="#">War on Health</a> Reflection paper #11

**Week 12****Meet with TAs and group members during class  
(LACK OUT OF THE COUNTRY)***Assignments*

During class this week, you should meet in the classroom with your group members to put final plans on your booth. TAs will be available to help and answer questions.

**Week 13****Pseudoscience in mental health***Readings*

CTSP chapter 12

*Assignments*

Reflection paper #12

**Week 14****Catch-up day (THANKSGIVING BREAK)****Week 15****Pseudoscience in Health Fair***Assignments*

Run your on-campus booth on the assigned day, visit the booths up on the days you are not running yours

Turn in booth materials via D2L Dropbox

**Week 16****Wrapping it up***Reading*

CTSP chapters 13, 14, & afterword

*Assignments*

Turn in booth reflection paper via D2L Dropbox

**Finals Week****Reflection paper #13 due**

---

## UNIVERSITY POLICY

***Student Etiquette:*** Students will be expected to maintain a level of conduct described in the University Student Handbook and may be dismissed from the class if policies are not followed. Part of professional training is learning to behave professionally, including high levels of ethical conduct. Dishonesty includes cheating, violating the integrity of examination, plagiarism, or knowingly furnishing false information to the University or staff. Classroom misconduct includes disrespect for faculty or fellow students or disruption of the class by any means. Students are expected to be on time for class so as to avoid the disruption of learning and participation in discussion.

***Special Accommodations:*** The University of Central Oklahoma complies with Section 504 of the Rehabilitation Act of 1973 and the American with Disabilities Act of 1990. Students with disabilities who need special accommodations must make their requests by contacting the assistant director of Disability Support Services, Kimberly Fields at 974-2549. The office is located in the Nigh University Center, Room 309. Students should also notify the instructor of special accommodation needs by the end of the first week of class.”

***Non-payment of tuition:*** Please be aware of the following:

“If you do not pay your fees by the deadline, you’ll be assessed a \$40 late payment penalty; and interest charges if the debt extends beyond a month. **You will not be dropped from classes for non-payment. If you do not or cannot attend class, you must withdraw, or risk receiving ‘F’s on your transcript, in addition to owing tuition and fees.**”

***Emergencies during final examinations:*** If an emergency occurs that prevents the administration of a final examination, the student’s final course grade will be calculated based on the work in the course completed to that point in time and the faculty member’s considered judgment. Final exams will not be rescheduled, and a grade of “I” will not be given as a result of the missed exam. This applies to situations when the administration of the final was impossible, not when an individual student is unable to take a scheduled final.

**Please review the Student Information Sheet available online at:**

<http://www.uco.edu/academic-affairs/files/aa-forms/StudentInfoSheet.pdf>

---

The College of Education and Professional Studies is committed to helping students learn by providing a range of transformative learning experiences in discipline knowledge and in the five core areas: leadership; research, creative and scholarly activities; service learning and civic engagement; global and cultural competencies; and health and wellness.