

Pseudoscience and Controversial Claims Syllabus & Preassignment

- INSTRUCTOR:** Dr. Timothy J. Lawson
Office Number & Hours: Room CL 12E; MWF 9:00-10:00 & 11:00-12:00
Phone Number: 244-4376 E-mail: tim.lawson@ msj.edu
- CLASS MEETS:** Thursday, 6:30 - 9:20 (Meets only on 1/17, 1/31, 2/14, 2/28, 3/21, 4/4, & 4/18)
- TEXTS:** Lawson, T. J. (2019). *Scientific perspectives on pseudoscience and the paranormal: Reading for general psychology* (2nd ed.). San Diego, CA: Cognella, Inc.
- Ruscio, J. (2006). *Critical thinking in psychology: Separating sense from nonsense* (2nd ed.). Belmont, CA: Thomson Wadsworth.
- ARTICLES:** Additional required articles will be provided in Blackboard for each class period.

COURSE DESCRIPTION & TEACHING METHODOLOGY:

We will examine a variety of controversial therapies, psychological tests, paranormal claims, and other psychological phenomena in this course. Pseudoscientific approaches to gathering evidence for these phenomena will be compared and contrasted with scientific approaches. This course will be taught in a "seminar" format (as opposed to a "lecture" format). This means that class time will be dominated by discussion rather than lecture. Thus, each of you will be responsible for being prepared for each class and being ready to discuss the material/issues you have read. In addition to class discussions, some class periods will include films and guest presenters.

LEARNING OUTCOMES

In the table below, I list the objectives of this course and indicate how they fit with the learning outcomes and performance indicators of the Mount's core curriculum.

Course Objectives	Core Curriculum Learning Outcomes & Performance Indicators	Activities and Assignments that Assess the Outcomes
Describe how social, cultural, and cognitive biases contribute to pseudoscientific beliefs.	<p>Ethics</p> <ul style="list-style-type: none"> • Ethical Self-Awareness: Discuss one's core beliefs and their origins <p>Cultural Competence</p> <ul style="list-style-type: none"> • Cultural Self-Awareness: Articulate the norms and biases of one's own culture 	<ul style="list-style-type: none"> • Quizzes and reaction papers

<p>Explain the difference between science and pseudoscience, and evaluate the scientific validity of pseudoscientific/paranormal claims.</p> <p>Evaluate the validity of a variety of specific therapies, psychological tests, and paranormal claims.</p>	<p>Critical Thinking</p> <ul style="list-style-type: none"> • Information Literacy: Use appropriate scholarly evidence to support a position • Scientific Literacy: Apply scientific evidence or models to support a position 	<ul style="list-style-type: none"> • Quizzes and reaction papers • Class presentation
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QUIZZES:

Six short-answer/essay quizzes covering the reading material, class, and films will be given throughout the semester. All of these quizzes will be “take-home” tests that will be available in the Blackboard site for this course at the end of the evening after class, and they will cover the assigned reading material for that class. Quizzes are due on the following Tuesday by 10:00 a.m. **Late quizzes will be not be accepted.**

REACTION PAPERS/DISCUSSIONS:

During each class session you will participate in an informal class discussion about the assigned readings, and this discussion will be led by YOU. For each class session, you will write a reaction paper (maximum of 2 pages, single-spaced & typed) on the chapters and additional articles you read for that class. You will **hand in the reaction paper on the day that material is discussed in class**, and you will be graded on the quality of the papers and your participation in class. Late reaction papers will not be accepted.

Your reaction paper must have the following sections:

1. *Main Points:* Write 2 brief paragraphs, in your own words, on what you thought were several of the most interesting **main** points, ideas, or concepts in the readings. **Make sure you discuss points made in several of the readings, not just one or two.**
2. *Your Reaction:* Add your own thoughts about the readings. You might include personal examples, points of agreement/disagreement, sections you found confusing, etc.
3. *Items for Class Discussion:* At the end of your paper, write at least **six** items designed to stimulate class discussion (see examples below). You may write questions that reflect your thoughts, insights, or examples (from your personal experience or from the media). Whatever you choose to write must **reflect that you read and understood the material in the chapter(s)**, and it must **be designed to stimulate discussion among the other class members**. Each class discussion will involve class members sharing their thoughts & discussion items, thus each of you will be responsible for the class discussion.

Poor Discussion Questions: (1). I thought that Ruscio’s statements about health food were interesting. What do you think? (NOTE: This question would not stimulate much discussion). (2). List 10 characteristics of pseudoscience. (NOTE: This is too similar to an exam question, write questions that you would ask in an informal discussion).

Good Discussion Question: Ruscio said that "extraordinary claims require extraordinary evidence," but why does the evidence have to be extraordinary? (NOTE: This question suggests that you carefully read and thought about the readings, and it is likely to stimulate some discussion among class members).

CLASS PRESENTATION:

During the last class, you will give an in-class oral presentation on a topic related to one of the major “class topics” in course schedule. You should find at least three articles related to your topic and base your presentation on those articles. At least two of the articles should be from a scientific journal or other scientific periodicals (e.g., *Skeptical Inquirer*, *Scientific American*, etc.). The presentation should last no more than 15 minutes (make sure you practice your presentation to make sure it lasts only 15 minutes, because time will pass more quickly than you think). You should hand in copies of your articles along with a Powerpoint file that contains the content of your presentation. More specific presentation guidelines, grading criteria, and possible presentation topics can be found on the Blackboard site for this course.

QUIZ AND FINAL GRADES:

Your grade for a quiz will be based on the obtained percentage of the maximum score for that quiz (i.e., 90%=A, 80%=B, 70%=C, etc.). Final course grades will be based on a weighted average of the percentage points you obtained on the 6 quizzes, 6 reaction papers, and class presentation. The quizzes will be worth a total of 66% (11% each) of your final grade. The 6 reaction papers/discussions will be worth a total of 24% (4% each) of your final grade. The class presentation will be worth 10% of your final grade.

College Incomplete Grade Policy: An "I" (incomplete) grade is only assigned by an instructor for a student who has made significant academic progress in the course (which I define as completing 75% of the course or more), but for a serious reason has not fulfilled all requirements. This petition may be approved or denied by the instructor. “I” Grade Petitions are available in each academic department. The request must be initiated by the last week of classes. For more details visit the [incomplete grade policy](#) in the college catalog.

CLASS ATTENDANCE:

Because this is a seminar class that meets only seven times, class attendance is required of all students. A portion (25%) of the grade you receive for each reaction paper will be based on the extent of your class participation. Also, some of the quizzes will contain questions specific to the films we will see in class.

TEMPORARY ILLNESS, INJURY, OR PREGNANCY:

If a serious, but temporary, medical condition, or pregnancy or pregnancy-related condition, results in you anticipating missing more than one week of class (consecutive class sessions), you might be eligible to request modifications to the course syllabus. For more details, please read the [university policy on temporary illness, injury, or pregnancy](#).

ACADEMIC HONESTY:

You should become familiar with the [Mount's policy on academic honesty](#). I assume that students approach exams and assignments in an honest manner (i.e., all of your work is your own and not copied or paraphrased from someone else's work). In all of your papers, make sure you **use your own ideas and words**. Do not share your paper with other students prior to handing it in. Copying or paraphrasing the information or language of another source is considered plagiarism (unless you use a direct quote with quotation marks and cite the author, year of publication, and page number for the quote; however, quotes should be used very sparingly). **For the exams, make sure you work independently from others to obtain and write your answers. You may use your books or other readings to help you answer the exam questions, but you should not obtain your answers by**

seeking input from other students. I take academic dishonesty very seriously, and I will follow the Handbook guidelines for penalties if I discover any dishonesty.

STUDENTS WITH DISABILITIES:

If you have specific physical, psychological, or learning disabilities and require accommodations, please let me know early in the semester so that your learning needs may be appropriately met. The college provides academic adjustments and auxiliary aids for students with physical or mental impairments that substantially limit or restrict one or more major life activities such as walking, seeing, hearing, or learning. Students with disabilities should contact Meghann Littrell, the Director of Learning Center & Disability Services, to present documentation and develop individualized accommodation plans (244-4524, Meghann.Littrell@msj.edu, Learning Center, Room 156 Seton). Students who have already registered with MSJ Disability Services are encouraged to discuss their accommodations with their course faculty at the beginning of each semester. Additional information can be found at the [Mount's web site for disability services](#).

COLLEGE COURSE WITHDRAWAL POLICY:

Students are responsible for dropping a course if they no longer intend to complete it. Please be aware of the following policy regarding the timing of dropping a course:

Week 1-5: No record of dropped class

Week 6-10: Grade of "W" for dropped class

Week 11+: No drops accepted

For more information on the course withdrawal policy, please consult the [Mount's web page on course withdrawal](#).

TENTATIVE COURSE SCHEDULE:

<u>Date</u>	<u>Class Topic</u>	<u>Reading Assignment</u>
Jan. 17	Science vs. Pseudoscience & Methodological/Statistical Reasoning	Ruscio: p. xxiii-xxix & Ch.1, 2, 8 Lawson: Readings 1.1, 7.2, 7.3 See Additional Readings (below)
Jan. 31	Controversial Therapies, Interventions, & Disorders: Part I	Ruscio: Ch. 3, 5, 6, 7, 12 Lawson: 3.3
Feb. 14	Controversial Therapies, Interventions, & Disorders: Part II	Ruscio: Ch. 4 Lawson: 4.1, 4.2, 9.2, 9.3 See Additional Readings (below)
Feb. 28	Controversial Psychological Tests, Interviewing Techniques, & Criminal Profiling	Ruscio: Ch. 10, 13, 14 Lawson: 2.2, 8.1, 8.2, 8.3, 8.4, 10.3
Mar. 21	Consciousness, Repressed Memories & Multiple Personalities	Ruscio: Ch. 15 Lawson: 3.1, 5.2, 6.2, 6.3, 9.1 See Additional Readings (below)

Apr. 4 Paranormal Phenomena

Ruscio: Ch. 16
Lawson: 5.3, 7.1
See Additional Readings (below)

Apr. 18 Presentations

PREASSIGNMENT:

Read the material assigned for the first class. Write a reaction paper (see earlier section on reaction papers) on these readings, bring your paper to the first class, and be prepared to participate in a class discussion on the readings.

Additional Readings (Tentative List)

Class 1: Science Versus Pseudoscience

Tavris, C. (2003, February 28). Mind games: Psychological warfare between therapists and scientists. *Chronicle of Higher Education*, 49(25), pp. B7-B9.

Class 2: Controversial Therapies, Interventions, and Disorders (Part I)

No additional readings

Class 3: Controversial Therapies, Interventions, and Disorders (Part II)

Eye Movement Desensitization and Reprocessing (EMDR)

Rosen, G. M., McNally, R. J., & Lilienfeld, S. O. (1999). Eye movement magic: Eye movement desensitization and reprocessing a decade later. *Skeptic*, 7, 66-69.

Facilitated Communication

Lilienfeld, S. O., Marshall, J., Todd, J. T., & Shane, H. C. (2014). The persistence of fad interventions in the face of negative scientific evidence: Facilitated communication for autism as a case example. *Evidence-based Communication Assessment and Intervention*, 8, 62-101. doi: 10.1080/17489539.2014.976332

Therapeutic Touch

Ledwith, S. P. (1995, July). Therapeutic touch and mastectomy: A case study. *RN*, 58, 51-53.

Class 4: Controversial Psychological Tests, Interviewing Techniques, and Criminal Profiling

No additional readings

Class 5: Consciousness, Repressed Memories, and Multiple Personalities

Consciousness

Wiseman, R. (2010). Out-of-body experiences. In *Paranormality: Why we see what isn't there* (pp. 32-51). London: Spin Solutions Ltd.

Repressed and False Memories

Loftus, E. F. (1995, March-April). Remembering dangerously. *Skeptical Inquirer*, 19, 20-29. Retrieved from http://www.csicop.org/si/show/remembering_dangerously

Class 6: Paranormal Phenomena

Extrasensory Perception (ESP)

Hyman, R. (1996, March-April). Evaluation of the military's twenty-year program on psychic spying. *Skeptical Inquirer*, 20, 21-23.

Nickell, J. (2002, November-December). Psychic pets and pet psychics. *Skeptical Inquirer*, 26, 12. Retrieved from http://www.csicop.org/si/show/psychic_pets_and_pet_psychics/

Shaffer, R., & Jadwiszczok, A. (2010, March-April). Psychic defective: Sylvia Browne's history of failure. *Skeptical Inquirer*, 34, 38-42.

Psychic Abilities: Possible Tactics

Hyman, R. (2007). Talking with the dead, communicating with the future and other myths created by cold reading. In Della Salla, S. (Ed.), *Tall tales about the mind: Separating fact from fiction*. New York: Oxford University Press.

Nickell, J. (2001, November-December). John Edward: Hustling the bereaved. *Skeptical Inquirer*, 25, 19-22. Retrieved from http://www.csicop.org/si/show/john_edward_hustling_the_bereaved/

Randi, J. (2011). *The art of "cold reading."* Retrieved from <http://www.randi.org/library/coldreading/index.html>.