

Honors Freshman Seminar (HNRS 101) Skepticism and the Scientific World View Fall 2010 Francis Marion University

Instructor: Travis Knowles

Office: SAB 115 (Provost's Office); MSB 201-D Contact Info: tknowles@fmarion.edu 661-1408

Office hours: MWF 9:00-10:00 and by appointment

Required books: How to Think About Weird Things

(6th ed.) by Schick and Vaughn. *Denialism* by Michael Specter.

Mistakes Were Made (but not by me) by Carol

Tavris and Elliot Aronson.

The purpose of this course is to introduce you to the methods of science, and especially its foundational philosophy of *scientific skepticism*. Our goals are to learn the techniques for detecting pseudoscience; to examine pseudoscientific claims with skeptical thought; and to explore the limits and biases of personal experience. We will also discuss the value of a skeptical approach to human experience in general.

The class is designed to be reading- and discussion-based. There will be weekly assignments from the texts, web pages, blogs, podcasts, and/or in-class videos. Check the class web page < http://blackboard9.fmarion.edu > for updates and specific assignments not on this syllabus.

We will try to follow this tentative schedule:

Date	Topic/Assignment
Aug 25	Introduction
Aug 27-Sep 3	Logical and physical impossibilities; S/V Ch 1-2
Sep 6, 8	Arguments good, bad, and weird; S/V Ch 3
Sep 10, 13	Knowledge, belief, evidence; S/V Ch 4
Sep 15, 17	Personal experience; S/V Ch 5
Sep 20, 22	Science and its pretenders; S/V Ch 6
Sep 24, 27	Case studies in the extraordinary; S/V Ch 7
Sep 29, Oct 1	Relativism, truth and reality; S/V Ch 8
Oct 4, 6	Denialism discussion
Oct 8	Denialism: Special discussion with guest presenters

Oct 11, 13	Denialism concluded
Oct 15	Midterm Exam
Oct 18, 20	Video / article discussion
Oct 22, 25	Video / article discussion
Oct 27, 29	Guest lecture / article discussion
Nov 1-2	Fall Break; no classes
Nov 3, 5	Guest lecture / article discussion
Nov 8, 10	Video / article discussion
Nov 12, 15	Mistakes Were Made discussion
Nov 17, 19	Mistakes Were Made
Nov 22, 24	Mistakes Were Made concluded
Nov 29, Dec 1	Class presentations
Dec 3, 6	Class presentations
Dec 10	Final Exam (11:45 a.m. — 1:45 p.m.)

It is a good idea to get ahead in the reading assignments. Start reading Specter's *Denialism* and Tavris and Aronson's *Mistakes Were Made* well in advance of the discussion dates.

Important dates to remember:

November 1-2: Fall Break (no classes)

November 25-28: Thanksgiving Holiday (begins at 12:30 p.m., Nov. 24)

September 17: Last day to withdraw from a course without academic penalty November 19: Last day to withdraw from a course (with grade of "W" or "F")

Grading: Your grade in this class will be based on three components:

- 1) Attendance and participation (20%). I will be looking for evidence that you have completed the reading assignments. The class will be discussion-based, and we will keep the tone relaxed and conversational. I want you all to contribute to the discussion without fear or apprehension about whether you are "right or wrong." I will look for evidence of your reading through a variety of mechanisms, including classroom participation and occasional brief writing assignments. I will also assign leaders to help me with book discussions.
- 2) Two exams, a midterm and a final (50%, or 25% each). The exams will be in discussion format; the questions will be general and applied. For example, I may pose hypothetical situations and ask you to analyze them using the skeptical thinking "toolkit" we learn in class. I will assess the quality and strength of your arguments, not "right or wrong" answers. Please note the exam dates: October 15 and December 10 (during exam week). Missing either exam will require written documentation of debilitating illness, or death in the immediate family.
- 3) An in-class **presentation** on a pseudoscience, hoax, or "extraordinary claim" of your choice (**30%**). You will research the claim using traditional and electronic sources, and construct a PowerPoint presentation of 8-10 minutes in length to be presented during the last two class periods. I will require in a list of the references you use (books, magazine articles, web pages), following a standard citation style.

Attendance: Since attendance and participation are key grading components, it goes without saying that I expect you to attend class and to be on time. Out of respect for the class, please turn off all cell phones, pagers, text messagers, laptops, iPods, and other electronic devices during class time. Please do not schedule doctor's (or other) appointments during class time.

<u>Academic Integrity</u>: "Violations of the academic integrity policy strike at the very heart of the University and the teaching and learning process" (FMU *Student Handbook*). All cases of academic dishonesty, including cheating, will result in a grade of "zero" on the assignment or test at issue, and a report filed with the Office of the Provost. Review the "Code of Student Conduct" in the *Student Handbook* carefully.