Often the science presented by the mass media is shallow and one-sided. To understand whether the news has value, one must critically evaluate it. While the non-scientist may find this a daunting proposition, developing the skills to do so is straightforward. The underlying theme of this First Year Seminar is to learn how the Socratic method can be used to extract information from news reports and discuss scientific developments knowledgeably. Readings and discussions will form the basis for developing a questioning mind and an objective attitude toward science in general.

**Required text books:**

1. *Voodoo Science* by Robert Park  
2. *Cantor’s Dilemma* by Carl Djerassi  
3. *Surely You’re Joking Mr. Feynman!* by Richard Feynman  
4. *Zen and the Art of Motorcycle Maintenance* by Robert Pirsig

**Attendance:**
Graded work will be based on the information covered and assigned during class and in-class discussions. It is therefore necessary to attend all classes. Some of what we do in class will require the use of your laptop.

**Class participation:**
Since this is a seminar course, a large portion of your grade will be based on participation in class discussions. You should prepare for each “seminar” by reading, thinking, researching, and being ready to discuss the topics at hand. You will be called on randomly—be prepared every day!

**Grading:**
Class discussion (35%), oral presentations (35%), and final report (30%). Letter grades will be determined based on a student’s overall percentage using a 90, 80, 70, etc. scale where 90% of the total points will equate an A, >80% a B, >70% a C, >60 a D, and <59% an F. Plus and minuses will be used in borderline cases.

*Class Discussion:* The class discussion portion of your grade will be based on your in-class presentations and participation in discussions when you are not presenting. Thus, you must talk, share, and actively participate in this class to do well.
News Articles: You will be assigned current/recent news articles appearing in popular media sources (e.g., newspaper, magazines, online). Your job will be to lead a class discussion about your article (e.g., what you liked and didn’t like about it, what is true vs. false vs. questionable, a general description of the science in it, how you went about researching facts from fiction, etc.)

Research Projects: A major research project topic of some controversy will be assigned to you early in the semester. Topics may include nuclear and other energies, vaccinations, genetic engineering of crops, global warming, organic vs. conventionally grown food, etc. You will then conduct both library and online research on your topic to determine and describe the relevant factors that should be considered in forming opinions about the controversy. Your research project will require you to both conduct research and lead in-class discussions on the political/media influence and science related to your topic. Starting about half way through the semester, you will present (orally) your research and discovery processes to the class. This will culminate with an end-of-semester formal oral presentation and written report (in the format of a Scientific American article). The presentation and report will be graded based on the depth and quality of both the research and the presentation.

Field Trips: We will take at least a couple of field trips to learn from experts doing work related to some of the research project topics. Example trips may include visiting the Shearon Harris Nuclear Power Plant, a local organic vegetable farm, a vaccination clinic, etc.

Graduate Research Consultant (GRC): Your GRC, Danielle Slomberg, is a Graduate Research Consultant, and will both lead some classes in my absence and assist you with your research projects. The Office for Undergraduate Research sponsors the GRC Program for First Year Seminars. I encourage you to visit www.unc.edu/depts/our to learn about other ways that you might engage in research, scholarship and creative performance while you are at Carolina.