

Introductory Remarks To Ast 309L And Answers to Typical Questions

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As I say on the course syllabus, this course will basically follow the Evans text from start to finish. I will, however, be passing out handouts of copies of newspaper articles and, perhaps, a few short magazine articles off and on that present new results related to the class. I find this class a great deal of fun to teach because it combines so many different topics together. The course revolves around an equation (discussed in Chapter 1) called the “Drake Equation” which looks on the surface as an attempt to calculate how many intelligent extra-terrestrial civilizations exist with whom we might be able to communicate. In fact, the main point of this equation is to illuminate the various issues worth thinking about when we ask the question, “Is there anyone else out there?” After some introductory material to get us thinking about what we mean by life, we start out reviewing some basic astronomy which I’m hoping you will remember most of from your introductory astronomy classes. (If, in spite of the course prerequisite, you choose to take this class without having had some intro Astronomy course, I will leave it up to you to decide if that is the best choice!). After that, we cover topics in: planetary and solar system astronomy; biology and biochemistry; geology, paleontology, and evolution; some more detailed planetary astronomy; history (!) and the future of man on the Earth; and finally, interstellar communication and travel, including UFO’s.

The tests typically consist of 25 - 30 multiple choice questions and a few essay questions of which you can usually skip one. Your final grades will be curved based on the raw average of the best 4 of your 5 test grades. After each test, I will tell you what the curve would be if I were forced to give you a letter grade based on that one test. This should help you have a feeling for how you are doing. In general, I find that the final curve at the end of the course is a few points more forgiving than the raw scores, but not more than that.

I am quite open to questions and suggestions for topics to cover if there is time. I will have a small box available each class for you to drop questions or comments into after each class (anonymously if you prefer). As far as “office hours” go, in general I am happy to see you in my office any time you can catch me. Typically I am in my office or lab between 9am and late afternoon with the exception of my exercise times (lunchtime MWF, and late afternoon TTh) and times of meetings and seminars in the Astronomy Department. By far the best thing to do if you want to see me is to arrange a meeting time by phone or just ask me at the end of some class what a good time would be to meet.

Every few times that I teach this class I receive a question about reconciling the material in this class with someone’s religious beliefs. This class takes a scientific look at the issues related to the possible existence of life elsewhere in the universe than just Earth. I will assume that if you are taking this class, you will consider the possibility that life does, indeed, exist in other places, possibly even life as intelligent as we are. (In fact, the material presented, will make it very hard to believe that we are alone in the universe). In the course of our discussions, we will also be reviewing how intelligent life came to be on the Earth, based on geological, paleontological, and archeological evidence, since so far, life on this planet is our only data point for estimation of the properties and chronology of life anywhere.