

Physics 103 – Spring 2004

General Astronomy

Professor:	Phone	E-mail
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Office: Duke 108		

Class meeting:

Lecture: Tuesday and Thursday 1:00 – 2:20 pm Duke 102

Lab: Wednesday or Thursday 7:00 pm – 9:50 pm Duke 102

Office Hours:

Monday and Wednesday 3:00 – 4:30 pm

(and by prior appointment with instructor)

Texts

“Stars, Galaxies, & Cosmology: The Cosmic Perspective” by Bennett et al. (3rd edition; Addison Wesley, 2002)

“Universe Down to Earth” by Neil de Grasse Tyson (Columbia University Press, 1994)

Goals

1. What is science? How does it work?
 - Why is science different from philosophy or religion?
 - Why is a scientific “theory” different from a conspiracy “theory?”
2. Learn about the Scientific Method through study of Astronomy:
 - How do we know there are planets around other stars?
 - How are stars and planets born, live, and die?
 - What are black holes?
 - Where did the Universe come from and where is it going?
 - Are we alone in the Universe?

Final Exam

The final exam will be Thursday, April 22nd 9:00 am – 12:00 pm.

Class Web Site

http://newton.uor.edu/FacultyFolder/tyler_nordgren/Astronomy/

Organization

Lectures: Lectures are each Tuesday and Thursday. Readings out of the texts, or other sources, will be assigned each lecture to be completed by the following lecture. Each lecture will be given as a review to what was in the reading assigned for that day. Be sure to do the reading.

Lecture notes will be placed on the web approximately one week prior to lecture. Astronomy is a subject based on images (pretty pictures) and I want you to have access to them. **THE LECTURE NOTES DO NOT REPLACE COMING TO CLASS!** You will be responsible for the notes, what we do in class, and the assigned readings.

Homework: Each lecture a homework assignment will be given out along with the reading assignment. It is due the next lecture at the **beginning** of class. You will receive the graded homework the lecture after that. While several questions may appear on each assignment, only one question (which I pick) will be graded. If your answer to that question is fully correct, you will receive full credit for that homework assignment. If your answer is NOT fully correct you will have the opportunity to submit a revised answer at the **next lecture** for full credit. Keep in mind that a new assignment is still given out each. If the answer is still not correct on the second try you get no credit. If you turn in a revised homework more than one class period after it was returned, you get no credit.

Be sure to clearly write the assignment number at the top of each homework assignment in order to avoid confusion on your part and mine.

No late homework is accepted.

At the end of the semester I will drop one or two homework grades. This means that if you miss an assignment during the semester, you are in luck; it won't hurt you. However, miss more than one and you put yourself in risk of failing the course.

Quizzes: A short quiz will be given in class on most Thursdays to help assess how well you are keeping up in class. There are no make-up quizzes so skip a class at your own peril.

Labs: Labs are Tuesday or Wednesday evenings. They are each week. Lab will be spent working in small groups exploring some deeper aspect of the material presented in class. Bring a calculator and be sure you know how to use it.

On occasion we will take a telescope outside during lab. You will be required to draw what you see through the telescope. Twice during the semester we will travel to the mountains during lab to observe with the telescopes in a dark location. You are required to attend these. If you cannot make these nights, drop the course now. Since we obviously cannot observe if the weather is cloudy, there is a designated back-up date. See the schedule below and on the class web page.

On the class web page there are driving directions and instructions on appropriate clothing to wear. It is cold in the mountains. If you are not dressed appropriately you will be sent home and receive no credit for that night.

During the semester you will be given hand-outs for use at the observing lab and be asked to draw things you see in the sky and through the telescope. Keep these together. These will be your **Observing Notes** and will count towards your final grade.

Exams: Three exams will be given during the course of the semester. Your lowest grade is dropped. We all have bad days. Just make sure you don't have more than one. Each exam covers only the material covered in class between it and the previous exam. The final exam is inclusive of the whole semester. The date of the final is set and cannot be changed by me. Don't even ask.

Class Citizenship: This is a measure of the respect with which you treat your fellow classmates and myself. Showing up late to lab so that your lab partners have to explain to you what we are doing is rude to them. Attending class only to sleep through it is rude to me.

Grading

Homework	20%
Quizzes	10%
Labs	20%
Observing notes	5%
Class citizenship	5%
Exams	20%
Final Exam	20%

Exam Dates:

Exam #1: February 5

Exam #2: February 26

Exam #3: March 30

Final Exam: April 22, 9:00 am

Observing Labs

Obs. Night	Back-up Night
Feb 18 or 19	Feb 25 or 26
April 14 or 15	None