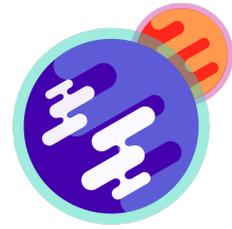


Astronomy 1101

MWF 11:15-12:05 Uris G01



Mission:

This course is designed to give you an introduction to the field of astronomy at a basic and broad level with deep dives into a couple topics of current interest. Along with learning about all of the interesting objects that make up the universe we will also look at the history, observational techniques, physical processes, and implications within astronomy. The outline of this course will be to tackle a unique topic each week culminating with a homework and review of the material. This course is meant for students who have an interest in astronomy but do not plan on pursuing it as a major. While this course is designed to teach astronomy the main goal of this intro course is to inspire interest in science and how the methods employed by scientist can be used every day to make better decisions.

Goals:

- Gain the foundational knowledge of astronomy
- Apply the scientific method to solve problems
- Analyze the role of astronomy in our modern lives

Professor:

Jack Madden
jmadden@astro.cornell.edu
Office hours MWF 4:30-5:30 Room 514

I am a PhD candidate researching the atmospheres of recently discovered planets to determine their potential for harboring life. My main work is done using computer simulations of climate using information based off telescopic observations of exoplanets, atmospheric physics, and chemistry.

Resources:

The book: The Cosmic Perspective 6th Edition; Bennet et al.

The book will be used as a reference and provide some homework questions

The website: Blackboard

We'll be using blackboard to post notes, course material, and grades

Grading:

Assignment	Points Each	Total
10 Homeworks	25	250
10 Reviews	25	250
4 Exams	75	300
Sections		200
		1000

You can calculate your grade at any time by counting the total points you have earned on your assignments and dividing by the total possible points

Assignments:

Review

These reviews are short assignments to give you the opportunity to review material and condense it into an easy to reference guide.

Late policy: Reviews are to be collected in class on Mondays and the maximum possible points will be reduced by 1 for each day late after Monday.

Homeworks

These assignments are designed to dig deeper into the material to gain a practical grasp of the subject. Along with questions based off recent lectures there will also be questions on recent events in astronomy.

Late policy: Homeworks are meant to be collected in class on Fridays and will not be accepted after 5pm that day.

Exams

Exams will consist of multiple choice questions and open-ended responses. The final exam will be cumulative. We will provide extra office hours before each exam.

Make-up policy: A make-up exam time will be scheduled closer to the exam day for those who have contacted me with a reason (such as academic travel or medical note) that they are unable to make the regular exam time.

Sections

Sections will be a time to work on homework and reviews with a TA in a small group. This portion of your grade will be based off of productivity and participation in these sections. 10 points will be awarded per section you attend up to 100 points and the remaining 100 points will be based on participation.

January							February							March						
	1	2	3	4	5	6					1	2	3					1	2	3
7	8	9	10	11	12	13	4	5	6	7	8	9	10	4	5	6	7	8	9	10
14	15	16	17	18	19	20	11	12	13	14	15	16	17	11	12	13	14	15	16	17
21	22	23	24	25	26	27	18	19	20	21	22	23	24	18	19	20	21	22	23	24
28	29	30	31				25	26	27	28				25	26	27	28	29	30	31

April							May						
1	2	3	4	5	6	7			1	2	3	4	5
8	9	10	11	12	13	14	6	7	8	9	10	11	12
15	16	17	18	19	20	21	13	14	15	16	17	18	19
22	23	24	25	26	27	28	20	21	22	23	24	25	26
29	30						27	28	29	30	31		

Review due
Homework due
Exam day

Week	Topics	Chapters
1 (1/24-26)	Whirlwind tour and our place in the universe	1,2
2 (1/29-2/2)	Astronomy as a tool and a science	3, S1
3 (2/5-9)	Energy: light/motion/matter	4,5,6
4 (2/12-16)	Recap and Exam (weeks 1-4)	
5 (2/21-23)	Planets	7,8
6 (2/26-3/2)	Stars	14,15,16,17
7 (3/5-9)	Galaxies and the grand scale	19,20,21
8 (3/12-16)	Recap and Exam (weeks 5-8)	
9 (3/19-23)	The birth and evolution of the universe	22,23
10 (3/26-30)	Space and Time	S2, S3
11 (4/9-13)	Black holes and Dark Energy	23, S4
12 (4/16-20)	Recap and Exam (weeks 9-12)	
13 (4/23-27)	Current unanswered questions astronomy	
14 (4/30-5/4)	How astronomy will impact your future	
15 (5/7-9)	Pulling it all together	