Spring 2024 Syllabus
ASTR 151: A Journey Through the Solar System

General Information:

Instructor: Dr. Nau Raj Pokhrel

Office: 214 Nielsen Physics Building, UTK

Email: npokhrel@utk.edu or, via the Canvas message system

Phone: (865) 974-5697

Classroom: Nielsen 415

Class Time: Monday, Wednesday, & Friday from 12:40 PM to 1:30 PM

Office Hours: Tuesday & Thursday from 11:10 AM to 12:30 PM

Wednesday from 11:30 AM to 12:30 PM

Or by email appointment

Communication: The majority of classroom communication will be conducted via Canvas for this class. To ensure a prompt response from me, follow the email policy:

- Please put "**ASTR 151 (MWF)**" in the subject line of all course-related emails. This practice will help me identify course-related emails and respond promptly.
- You can expect delays in responding to emails; I will try to minimize such delays, but do not email me on the evening an assignment is due or before an exam expecting an immediate response. If you don't get a response after a couple of days or according to urgency, please resend the email.
- Before emailing me with questions about the course, please ensure that the information is not already provided in the course syllabus or on Canvas.

Course Description & Goals:

Course Overview: ASTR 151 is a 3 credit-hour introductory astronomy course that satisfies the general education requirement for non-science majors. In this course, we study the Earth's nearest astronomical neighbors- including the sun, planets, asteroids, and comets. The course also covers seasons, solar and lunar eclipses, the motion of the planets in the night sky, recent planetary space probe discoveries, development of our modern understanding of the origin and evolution of our solar system and its place in the universe, discovery of extrasolar planets in distant solar systems.

Pre/corequisites: The course doesn't have any pre/corequisites. However, a minimum of mathematical analysis is expected.

You will need the following resources for the course:

1. Pearson Mastering Astronomy for the Cosmic Perspective (10th Edition) by Bennett et al. This is the **inclusive access** content. **You don't need to pay it separately, and you don't need any access code**. For the first-time registration, you can go to any HW link in the assignment module of Canvas and proceed.
2. The Cosmic Perspective (10th Edition) by Bennett et al, Pearson**. If you prefer eText, it is included in the Pearson Mastering Astronomy, you don't need to purchase the print Textbook.** If you prefer the print textbook, you can have one, ***but you do not need to purchase the current edition of the textbook***. The material does not change significantly between editions and any recent edition will meet your needs for the course.
3. **PointSolutions (Clicker) Registration:** *We will be using the clickers in almost all lectures**, but the hardware clicker won't be used. So, make sure you have downloaded the app, and it is ready by the first class.*** Follow the link provided on Canvas in the Module section to register your app. You just need to follow the link and log in to the website. If you see our course on the website, your registration is complete! Note that **you must use your UTK email ID** to register. Otherwise, your score won't be integrated into Canvas. For detailed information and support, visit the UTK OIT website. **(Click Here for the Website Link).**

Class Schedule: The following is a class schedule along with lecture topics, assignments, etc. **This is a tentative schedule** and might differ as our class speed. Any changes, and notices made in the classes/announcements supersede the schedule.

Day	Week	Chapter	Topics	HW
24-Jan	1	Introduction/ Chapter 1	Syllabus Review/ A Modern View of the Universe	HW 1 (Ch 1)
26-Jan		Chapter 1/2	Discovering the Universe for yourself	
29-Jan	2			
31-Jan				
1-Feb				HW 2 (Ch 2)
5-Feb	3	Chapter 3	The Science of Astronomy	
7-Feb				
9-Feb				HW 3 (Ch 3, S1)
12-Feb	4	Chapter 3/S1	Celestial Timekeeping and Navigation	
14-Feb				
16-Feb		Chapter 4	Making Sense of the Universe	HW 4 (Ch 4)
19-Feb	5			
21-Feb				
23-Feb				
26-Feb	6			
28-Feb		Chapter 5	Lights and Matter	
1-Mar		**Mid-Term Exam I Review Quiz**		

4-Mar	7	**Mid-Term Exam I (Chapters 1-4, S1)**		
6-Mar		Chapter 5	Lights and Matter	HW 5 (Ch 5, 6)
8-Mar				
11-Mar	8	**Spring Break**		
13-Mar				
15-Mar				
18-Mar	9	Chapter 5/6	Lights and Matter/Telescopes	
20-Mar				
22-Mar		Chapter 6/7	Our Planetary System	
25-Mar	10			
27-Mar		Chapter 7/8	Formation of the Solar System	HW 6 (Ch 7, 8)
29-Mar		**Spring Recess**		
1-Apr	11	Chapter 8/9	Planetary Geology	
3-Apr				
5-Apr		Chapter 9/10	Planetary Atmosphere	HW 7 (Ch 9)
8-Apr	12	**Mid-Term Exam II Review**		
10-Apr		**Mid-Term Exam II (Chapters 5- 9)**		
12-Apr		Chapter 10/11	Jovian Planet System	HW 8 (Ch 10,11)
15-Apr	13			
17-Apr		Chapter 11/12	Asteroids, Comets, and Dwarf Planets	
19-Apr				
22-Apr	14	Chapter 12/13	Other Planetary Systems	HW 9 (Ch 12, 13, 14)
24-Apr				
26-Apr		Chapter 13/14	Our Star	
29-Apr	15	**Mid-Term Exam III Review**		
1-May		**Mid-Term Exam III (Chapters 10- 14)**		
3-May		Course Wrap-up		
6-May	16	**Final Exam Review**		
8-May		**Study Day**		
15-May	**WED**	**Final Exam (1:00 PM - 2:30 PM) Cumulative (Chapters 1-14, S1)**		

Grading & Evaluation:

Clicker Quizzes & Discussion Participation: In the class meeting, you will be responding to quizzes during the lectures. Clicker response grade is divided equally into participation (50%) and the correct response (50%). Your participation in the discussion forum on Canvas also includes the participation grade.

Homework Assignments: You will be assigned homework on Mastering Astronomy. You can access them via the link provided on Canvas Assignments. You will have three attempts for each Homework, and the highest grade will be the HW grade. The assignments will be due on the indicated due date under the assignment module on Canvas.

Mid-term Exams: There will be THREE midterm tests. The tentative dates for the midterms are indicated on the schedule. ***Please note that these dates are subject to change as we progress through the course material but they will be finalized at least a week prior so that you can plan accordingly.*** Each midterm exam will be 45 minutes in length.

Final Exam: The final exam will be given on the day as scheduled by the registrar's office (see the schedule). If you determine that you have a conflict with that time or have three or more exams scheduled on that day, please let me know as soon as possible. The Final Exam will be two hours in length and cumulative in scope, covering all the course materials discussed in the semester.

Grading Scheme:

Grades: Your grade is calculated based on many elements of the course. See the table below for details on this.

Course Element	%
Mid-term Exam I	10%
Mid-term Exam II	10%
Mid-term Exam III	10%
Final Exam	20%
Homework	35%
In-class Quiz/Discussion Participation	15%
Total	100%

Letter grade will be obtained using the conversion below:

%	Grade
90% and above	A
87% - 89%	A-
83% - 86%	B+
80% - 82%	B

77% - 79%	B-
73% - 76%	C+
70% - 72%	C
67% - 69%	C-
63% - 66%	D+
60% - 62%	D
57% - 59%	D-
< 57%	F

(Note: The instructor reserves the right, when necessary, to alter the grading policy, change examination dates, and modify the syllabus and course content. Modifications will be announced in class. Students are responsible for announced changes.**)**

Other Information:

Class Rules: Students need to follow the following guidelines and classroom etiquette to ensure a positive and respectful learning environment for everyone:

- **Arrive to the class on time:** Don't make it a habit to join late.
- **Cell Phones/Technology**: Be respectful. The use of electronic devices for academic work is fine but the use of electronic devices for other purposes is not. Turn off your cell phones when we are not using them for quizzes. While on the computers social networking is not allowed. Repeated abuse will result in being dismissed from that class and asked to return next week. No credit will be given for such dismissal.
- **Avoid side conversations**: The noise is distracting to other students, and you will impact the learning environment, so avoid private conversations in the classroom.
- **Be respectful:** Act in a matured/polite manner and be respectful of the learning process, your instructor, your classroom, and your fellow students. Respect to the learning environment is projected in many ways including your body language e.g., do not put your feet/legs on the back of the seats in front of you.
- **Raise your hand:** If you have a question or comment during the class, please raise your hand.
- **Share the air:** If you have been dominating the discussion or participating disproportionately, let others participate. Alternatively, if you haven't said much, you are encouraged to participate more.
- **Use respectful and socially inclusive language.**

How to succeed and get a good grade in the class: The number of lecture hours in this class are not enough to cover all parts of the syllabus in detail. Hence reading assignments and homework are provided. A good portion of success in this class depends on coming class to prepared, actively participating during the class, and completing homework as assigned.

- Please communicate with me on time if you have any questions so that we can work together for success.
- Read the course material before coming to the class.
- In the class, participate actively and respond to all the clicker questions so you can earn your quiz/participation credit.
- Follow the class rules and behavior etiquette while in the class.
- Complete all the assignments on time.

Your Feedback/Suggestions on the course: You are encouraged to provide feedback on any aspect of the course all through the semester using any communication method you prefer. Your **grades will not be impacted by any feedback** you provide, they will be purely based on your coursework and lab work. However, your discretion in these matters is expected. You will also have an opportunity to give feedback at the end of the semester through the Course Evaluation System. Your feedback is critical in improving the course. Each year I take the information provided in feedback seriously so please take the time to fill out the feedback forms in a thoughtful manner.

Students with disabilities:

The University of Tennessee, Knoxville, is committed to providing an inclusive learning environment for all students. If you anticipate or experience a barrier in this course due to a chronic health condition, a learning, hearing, neurological, mental health, vision, physical, or other kind of disability, or a temporary injury, you are encouraged to contact Student Disability Services (SDS). An SDS Coordinator will meet with you to develop a plan to ensure you have equitable access to this course. If you are already registered with SDS, please contact your instructor to discuss implementing accommodations included in your course access letter.

Student Disability Services Contact Information:

1534 White Avenue, Blount Hall First Floor, Knoxville, TN 37996

Phone: (865) 974-6087 Fax: (865) 974-9552 Email: sds@utk.edu

Website: https://sds.utk.edu/

For additional important information (Academic integrity, civility statement, UT alerts, …) please see the Campus Syllabus (Click here to download the Campus Syllabus).