ASTRONOMY 001-003 Fall 2024 (TTh 8.30-10am)
Syllabus + Info
Professor Sheth

TEXT: *The Cosmic Perspective, 9/e.*

Homeworks and quizzes are posted on Canvas and must be completed/submitted online.

Date Lecture #	Bennett		Homework and Exams
Aug 27 #1	Ch 1: A modern view of the Universe		
Aug 29 #2	Ch 2: Discovering the Universe for Yourself		Homework #1 OUT: Chap 1-3
Sep 03 #3	Ch 2: Continued		
Sep 05 #4	Ch 3: The Science of Astronomy S1: sections: 1		QUIZ 1 (Chap 2)
Sep 10 #5	Ch 3: Continued Ch 4: Making Sense of the Universe		
Sep 12 #6	Ch 4: Continued		QUIZ 2 (Chap 3) Homework #1 DUE Homework #2 OUT: Chap 4, 5
Sep 17 #7	Ch 5: Light and Matter		
Sep 19 #8	Ch 5: Continued Review for first midterm		
Sep 24 #9	Ch 6: Telescopes		QUIZ 3 (Chap 4 - 5) Homework #2 DUE
Sep 26	MIDTERM 1: Chapters 1, 2, 3, S1, 4, 5		
Oct 01 #10	Ch 7: Our Planetary System Ch 8: Formation of the Solar System		Homework #3 OUT Chap 6-13
Oct 03	Fall Break		
Oct 08 #11	Ch 9 - 10: Planetary Geology & Atmospheres: Earth and the Other Terrestrial Worlds		
Oct 10 #12	Ch 9-10: Comtinued Ch 11: Jovian Planet Systems		
Oct 15 #13	Ch 12: Asteroids, Comets and Dwarf Planets Ch 13: Other Planetary Systems		QUIZ 4 (Chap 6 - 10)
Oct 17 #14	Ch 14: Our Star		Homework #3 DUE Homework #4 OUT: Chap 14-17
Oct 22 #15	Ch 15: Surveying the Stars		QUIZ 5 (Chap 11 -14)
Oct 24 #16	Ch 15: Continued Ch 16: Star Birth		
Oct 29 #17	Ch 17: Star Stuff Review for second midterm		QUIZ 6 (Chap 15 – 17) Homework #4 DUE
Oct 31	MIDTERM 2: Chapters 6-17		

Date Lecture #	Bennett		Homework and Exams
Nov 05 #18	Ch 18: The Bizarre Stellar Graveyard S3: sections 1, 2, 3 and 4		
Nov 7 #19	Ch 18: Continued		
Nov 12 #20	Ch 19: Our Galaxy		QUIZ 7 (Chap 18) Homework #5 OUT: Chap 18-23
Nov 14 #21	Ch 20: Galaxies and the Foundation of Modern Cosmology		
Nov 19 #22	Ch 21: Galaxy Evolution		
Nov 21 #23	Ch 22: The birth of the Universe		QUIZ 8 (Chap 19 - 21)
Nov 26 #24	Ch 23: Dark Matter and Dark Energy		
Dec 03 #25	Ch 23: The Fate of the Universe		QUIZ 9 (Chap 22 - 23)
Dec 05	Review		Homework #5 DUE
Dec ??	3-5pm: FINAL EXAM: Cumulative		

COURSE INFO

Instructor: Ravi K Sheth **E-mail: shethrk@upenn.edu**

Text: The Cosmic Perspective, 9th Ed. (you do NOT need MasteringAstronomy access)

Webpage/Syllabus: http://canvas.upenn.edu/

Class hours: Tu/Th 8.30-10am in DRL A6
Office hours: Tu 10 – 11am or by appointment (just email me)
TA/Grader: TBA E-mail: tba@sas.upenn.edu

Course slides will be posted on Canvas (under the Files tab) prior to each class.
Assignments and quizzes must be completed/submitted online as .pdf files (on Canvas).

Grading:

- Midterm Exam 1: 15%	Midterm Exam 2: 15%	Final exam: 30%
- Quizzes: 15%	Homework: 20%	Observing lab: 5%

– **Exams:** Two midterms and one final. The final exam is cumulative (i.e. it will cover the material of the full semester).

Midterm #1: Thursday September 26
Midterm #2: Thursday October 31
Final: -----day December ??

– **Quizzes:** Nine quizzes, each 20 minutes long, to be completed on Canvas between 10am and midnight on the date listed on the Syllabus.
Each quiz consists of ten questions. On Canvas, each answer appears to count as
2 points (correct) or 0 points (wrong or not completed).
To give some credit for completion, at the end of semester I will use
yourCanvasScore + (20 – yourCanvasScore)/2.
If you do not submit the quiz at all your score will be 0. This makes each question worth:
2 points (correct) 1 point (wrong but submitted) 0 (not completed)

– **Homework:** Schedule on syllabus. Assignments/solutions posted on Canvas.
Assignments will typically consist of about 10 problems and possibly computer-based exercises as well. Solutions will be posted soon after the homework is due.
No late homework will be accepted.
Each homework problem is worth 4 points, and is graded on the following scale:
0 (missing or totally wrong) 1 (something there, mostly wrong)
2 (good try, partly right) 3 (almost, but not quite, correct)
4 (totally right)

– **Observing lab**: You are required to attend one observing session at the DRL observatory and complete the associated assignment which counts about as much as one homework set. The labs will be coordinated by Simon Dicker (sdicker@sas.upenn.edu), who will provide sign-up sheets (likely on Canvas). There is no make-up available for missing the observing session once the observing window for your class/session has closed.

Collaboration and academic integrity:

For some students, solving problems is the most challenging part of this class. The only way to prepare for an exam is to solve problems on your own. Thus, while we encourage challenging discussion between students, homework assignments must be the direct products of a single individual's effort. To ensure that everyone is treated fairly, the class will adhere to the University policy on Academic Integrity which is available at:

https://catalog.upenn.edu/pennbook/code-of-academic-integrity/

You should review the policy. If you are unsure about how the policy applies to a given situation, please ask for clarification before you proceed.

Students are sometimes confused about how the policy applies to collaboration on assignments. I encourage you to discuss the assignments and challenge each other while studying. However, what you submit must be your own work. For example, if you are a member of a study group working on a homework assignment, you should consider doing all the work on a blackboard with no paper to copy the answers. In this way you can all work together to see how the problem is done, but then go your separate ways to complete the assignment on your own.

The University policy is clear. If you provide answers to your work to another student, it is considered cheating and is subject to the same penalties.

Again, if you have any questions regarding the Academic Integrity Policy, please feel free to ask.

Diversity:

As a member of the Department of Physics and Astronomy (PHAS), I embrace human diversity and intend equity and inclusion in our community and our classroom. I encourage you to view:

https://www.physics.upenn.edu/index.php/diversity

if you need support or have suggestions for how our efforts in PHAS can improve.