

**LAGUARDIA COMMUNITY COLLEGE
CITY UNIVERSITY OF NEW YORK
NATURAL SCIENCES DEPARTMENT**

SCP 140 - Topics in Astronomy

**INSTRUCTOR:
OFFICE
E-MAIL
OFFICE HOURS**

COURSE DETAILS This course provides an overview of the cosmos, with an emphasis on the process of science. During the course of the semester we will cover topics such as the night sky, planet and solar system formation, stellar evolution, black holes, and modern cosmology. This is a lecture course with activities and homework assignments.

**CLASS HOURS/
CREDITS** 3 hours / 3 credits

TEXT *The Essential Cosmic Perspective* (7th edition), Bennet, Donahue, Schneider, and Voit.
ISBN 10: 0-321-92808-3
ISBN 13: 978-0-321-92808-5

EXAMS There will be two midterm exams and one final (noncumulative) exam.

LABS We will have in-class labs throughout the semester. During the lab sessions, we will explore topics in astronomy in a hands-on, group setting. There are no make-ups for the labs.

**SPACE MISSION
ASSIGNMENT** You will deliver a 5 minute oral presentation about a current space mission (for example, the Hubble Space Telescope), which will be recorded as a video. Your instructor will arrange the in-class recording sessions. Detailed guidelines for the Space Mission Assignment will be provided.

GRADING	3 Exams (200 points each)	600 points
	Labs	200 points
	Homework	200 points

	TOTAL	1000 points

DISABILITIES In coordination with the Office for Students with Disabilities (OSD), reasonable accommodations will be provided for qualified students with disabilities. Please meet with me the first week of class to make arrangements. Jhony Nelson, Director of the Office for Students with Disabilities can be contacted at jhonym@lagcc.cuny.edu, or in person at Room M-102.

**ACADEMIC
INTEGRITY
POLICY:** Instructors of this course are required to implement the College Policy regarding cheating on examinations and quizzes. A complete statement of the policy is available at the student counseling services, and the College Catalog.

**COLLEGE-WIDE
ASSESSMENT**

All Pathways courses will be depositing work for *anonymous* assessment this semester; this has no bearing on your grade. For SCP140, the Space Mission assignment will be deposited. For a tutorial on how to deposit student work, go to: <http://eportfolio.lagcc.cuny.edu/support/tutorials.htm> and find the section called, "Assessment for Students." Click on the adobe flash button for "Depositing Assessment Artifact in Digication Instructions for Students." You will see a brief video on how to deposit.

Lecture Schedule (approximate):

Class	Lecture Topic	Chapters Covered
1	Introduction to the Course Overall View of the Universe The Scientific Method	1, 2
2	Understanding the Night Sky: Seasons and Eclipses The Copernican Revolution Lab: Phases of the Moon	3
3	Understanding Gravity and Motion Telescopes Origin of the Solar System Lab: Building Galileo's Telescope	4, 5
4	The Electromagnetic Spectrum and Light Solar System Formation (Nebular Theory) Lab: Spectroscopy	5, 6
5	Comparative Planetology Terrestrial Planets Exam 1	6, 7
6	Climate Change Jovian planets Space Mission Topic Due	7, 8
7	Asteroids, Comets, Dwarf Planets Extrasolar Planets	9, 10
8	The Sun Properties of Stars	11, 12
9	The Hertzsprung-Russell Diagram Stellar Evolution: The Birth of Stars Exam 2	12, 13
10	Stellar Evolution: The Life and Death of Stars Space Mission Presentations	13, 14
11	Galaxies Space Mission Presentations	15, 16
12	The Big Bang Theory, Dark Matter, and Dark Energy, Structure Formation Lab: The Hubble Ultra Deep Field	17, 18
	(During finals week)	Exam 3

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