

Hagerstown Community College
MASTER SYLLABUS

COURSE: PHS 105-01 - Descriptive Astronomy - 3 credits

INSTRUCTOR: Rodney L. Martin

SEMESTER/YEAR: Spring 2018

COURSE DESCRIPTION: This is an introductory course offered at the HCC Campus covers the structure and operation of the universe. Topics include celestial motions, gravitation, stellar processes, and celestial bodies.

TEXTBOOK: *ASTRO3 and free open source software Stellarium 9781337097505*

STUDENT LEARNING OUTCOMES:

On completion of this course, the student will be able to:

1. identify constellations in the sky,
2. locate planets in the sky,
3. use coordinate systems to locate objects,
4. demonstrate use of an astronomical telescope,
5. describe forms of electromagnetic radiation and their roles in astronomy,
6. identify characteristics of celestial objects in our solar system,
7. identify characteristics of celestial objects in deep space,
8. explain motions of celestial objects,
9. review theories of star formation and cosmology and access,
10. process, analyze and synthesize scientific information.

Total Hours of Coursework:

	Direct Faculty Instruction (in-Class)	Student work outside of class
"Lecture" time (3 credits)	37.5 h	
4 Lecture Exams Prep time LSC/Home	(included in lecture time)	40 h (exam prep)
Group Project		10 h
Sky computer activities		25+ h
Participation in class activities	(Included in lecture time)	
TOTAL	112.5+ hours (may exceed minimum of 112.5 h for 3 credits)	

Services for students with disabilities: Students may receive reasonable accommodations if they have a diagnosed disability and present appropriate documentation. Students seeking accommodations are required to contact the Disability Support Services (DSS) office as early as possible. Students may contact a DSS staff member for an appointment at dss@hagerstowncc.edu or at 240-500-2530.