ASTRONOMY

4239.R000.Y

Length of course:	Yearlong
Grade level:	10 - 12
Prerequisites or approval required:	Biology and IPC or Chemistry (Can be concurrently enrolled in Chemistry)

Short description of topics and/or key concepts covered in the course:

In Astronomy we discuss an incredibly wide variety of topics from all topics of science including formation and future of the Earth and Sun, lunar geology, the inner and outer planets, Mars exploration, comets and meteors, robotic rovers, astrobiology and the search for complex life beyond Earth, supernovae, black holes, galaxy formation, the big bang, ancient cultures, space inventions, the private space industry and the large scale structure of the universe! Students come out of the class with a much deeper understanding of our place in the Universe and the science that has taken our knowledge beyond our fragile, unique planet. The class assignments are similar to earning merit badges in the scout programs. Each six weeks the majority of badge assignments are completed together as a class with a few chosen by the students in a self-paced manner.

Assessments to expect per 6-weeks:

All work is teacher and peer reviewed
5-6 Intensive reports based on notes, labs, articles and other activities
1 Intensive notebook check
1 evening observation event (attendance is suggested but not required)

Average time required for homework, study, and/or practice per week:

The majority of the course work will be completed in class. Out of class work is dependent upon current project endeavors and individual student goals. Students should anticipate spending 1 – 3 hours per week finishing their reports.

Summer reading/practice requirements:

1-2 hours per week keeping up with current topics in Astronomy
Visit an observatory or find some type of opportunity to visit a science museum