

ASTR - Astronomy Courses

ASTR B1 Physics of the Cosmos

3 units

Prerequisites: BC placement into reading level 06 or successful completion of ACDV B50 or ACDV B61 or equivalent with a grade of C or better.

Recommended: BC placement into writing level 06 and math level 02.

Description: Introductory course emphasizing the application of physics to understand the physical processes on the Earth and beyond the Earth and how we know those processes are occurring while still being bound to the Earth (or our solar system). The process and philosophy of science are examined from the astronomical perspective. Among topics included: the motions, properties, and evolution of the Sun, planets (including exoplanets), stars, galaxies, and the universe and how we know about them; the analysis of electromagnetic radiation; atomic structure; astronomical instruments; brief history of astronomy; Newton's law of gravity; general relativity.

Hours: 54 lecture

Transferable: CSU, UC, and private colleges; IGETC 5.A; CSU GE B.1; BC GE B.1

ASTR B2 Life in the Universe

3 units

Prerequisites: BC placement into reading level 06 or successful completion of ACDV B50 or ACDV B61 or equivalent with a grade of C or better.

Recommended: BC placement into writing level 06 or successful completion of ENGL B50, ENGL B53 or EMLS B50 or equivalent with a grade of C or better and BC placement into math level 02 or successful completion of ACDV B72 or equivalent with a grade of C or better.

Description: Introductory course on the scientific search for life in the universe. The process and philosophy of science are examined from the astronomical and biological perspectives. Among topics included: the definition and nature of life, the formation and development of the Earth and life on the Earth, other places in our solar system that might have habitats for life, habitable zones around other stars, how we detect extrasolar planets, how we could detect biological activity on extrasolar planets, the search for extraterrestrial intelligence, interstellar travel, and implications of making contact.

Hours: 54 lecture

Transferable: CSU, UC, and private colleges; IGETC 5.A; CSU GE B.1; BC GE B.1

ASTR B3 Solar System

3 units

Prerequisites: BC placement into reading level 06 or successful completion of ACDV B50 or ACDV B61 or equivalent with a grade of C or better.

Recommended: BC placement into reading level 06.

Description: Introductory course on the Sun, Earth, other planets, moons, rings, comets, asteroids, and extra-solar planets, formation and development of the Earth and solar system, and possibility of life on other worlds.

Hours: 54 lecture

Transferable: CSU, UC, and private colleges; IGETC 5.A; CSU GE B.1; BC GE B.1