

Program SLOs

Physics/Physical Science/Astronomy

A.S. Degree – Physics

Program Student Learning Outcomes From the 2005 PrOF (Program Review)

P-SLO 1: Successfully complete and transfer all core and general education requirements in physics, astronomy and physical science to a four-year university to satisfy lower-division program requirements. Students will have the skills and knowledge to successfully complete future courses for which CRC physics and astronomy courses are prerequisites. Students should be able to meet all their lower-division physics/astronomy/physical science needs at CRC.

P-SLO 2: Demonstrate understanding of the principle areas of physics, physical science and astronomy including concepts and methods of inquiry at an appropriate level. Subjects include, but are not limited too, the scientific method, Newtonian Mechanics, Electricity and magnetism, thermodynamics, mechanical and electromagnetic waves, modern physics, and introductions to geology, chemistry and astronomy.

P-SLO 3: Successfully solve conceptual and numerical problems of a physical nature through the recognition of type of problem, analysis of relevant information, proper application of concepts and techniques applying math through pre-algebra, trigonometry, and/or calculus-levels as appropriate. Students will show improvement in problem solving skills as they progress through a course or the program.

P-SLO 4: Effectively communicate in speech and writing the fundamental concepts and techniques of physics and the physical sciences at an appropriate level.

P-SLO 5: Demonstrate appropriate lab skills including the proper use of basic measuring devices. Students will read and accurately interpret lab directions and analyze data for relevance and adherence to theory.

P-SLO 6: Students will choose and use appropriate tabular and/or graphical methods to present data and use this effectively to determine trends, physical constants, etc.