



### Academic Learning Compact

Degree Program: **Physics (BS)** (CIP Code 40.0801)

Intended Program Student Learning Outcomes	Academic Learning Compact(s)	Direct and Indirect Measures	
		Direct Method of Assessment	Indirect Method of Assessment
Students will be able to apply basic theoretical and experimental skills in the main areas of physics such as classical mechanics, quantum mechanics, and electromagnetism and mathematical tools such as vector algebra, calculus, and differential equations necessary for physics research.	Critical Thinking, Discipline Specific Knowledge	Direct - Course Embedded Assessment Direct - Exam (Item Analysis)	Indirect - Departmental Survey

Student will demonstrate collaboration skills (i.e., responsible and effective communication with team members) in physics classroom as well as lab settings.	Communication	Direct - Reflective Journals	Indirect - Departmental Survey
Students will conduct community outreach to educate the public about physics research and to recruit local-area high schools into the STEM areas.	Communication, Discipline Specific Knowledge	Direct - Activity Record	Indirect - Satisfaction Survey
Students will be able to effectively disseminate physics research work as poster or talks in (departmental, regional as well as national) scientific meetings and in writing for peer review publications.	Communication, Discipline Specific Knowledge	Direct - Course Embedded Assessment Direct - Other	Indirect - Departmental Survey
Student will actively engage in supervised research in on-campus physics labs and in summer research programs.	Discipline Specific Knowledge	Direct - Activity Record	Indirect - Departmental Survey