

Academic Learning Compact

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

Intended Program Student Learning Outcomes	Direct and Indirect Measures	
	Direct Method of Assessment	Indirect Method of Assessment
Outcome 1: [Communication Skills] 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.	<u>Direct Measure(s)</u> Seminar presentations/research papers	<u>Indirect Measure(s)</u> Departmental survey
Outcome 3: [Communication Skills] Student will demonstrate collaboration skills (i.e., responsible and effective communication with team members) in physics classroom as well as lab settings.	<u>Direct Measure(s)</u> Research experience	<u>Indirect Measure(s)</u> Departmental survey
Outcome 2: [Critical Thinking Skills] 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.	<u>Direct Measure(s)</u> Grading with criteria or rubric	<u>Indirect Measure(s)</u> Departmental survey
Outcome 4: [Content/Discipline Knowledge and Skills] Student will actively engage in supervised research in on-campus physics labs and in summer research programs.	<u>Direct Measure(s)</u> Research seminar presentations	<u>Indirect Measure(s)</u> Departmental survey
Outcome 5: [Content/Discipline Knowledge and Skills] Students will conduct community outreach to educate the public about physics research and to recruit local-area high schools into the STEM areas.	<u>Direct Measure(s)</u> Community service participation	<u>Indirect Measure(s)</u> Student Satisfaction survey