

CSU Chico
 Assessment Plan – Department of Physics
BS in Physics

SLO	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022
<p>1. Demonstrate an understanding of basic and advanced concepts of classical and modern physics. These areas include, mechanics, electricity and magnetism, quantum mechanics, waves & optics, and thermodynamics and statistical mechanics.</p> <p>1a Explain physics concepts and laws to others.</p>			X		
<p>1b Apply physics knowledge to solve real-world problems.</p>	X				
<p>1c Represent physical concepts and processes in multiple ways, including diagrams, graphs, mathematical equations, and verbal explanations.</p>		X			
<p>2. Employ scientific reasoning to investigate the physical world.</p> <p>2a Build a model of physical situations, including making appropriate assumptions, simplifications, estimations, and mathematical formulations. Students should also understand the limitations of these models.</p>			X		
<p>2b Design and implement experiments to empirically investigate physical phenomena including defining the problem, testing models, using instruments to make measurements, analyzing data, and drawing conclusions.</p>	X				
<p>2c Use computational methods to simulate, analyze, and present data from physical systems.</p>					X

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2d Evaluate the validity of experimental and/or calculated results.				X	
3. Communicate physics in a professional setting. 3a Effectively communicate their findings and thoughts in conventional scientific style, including in writing, orally, and graphically.		X			
4. Demonstrate effective professional workplace skills. 4a Work productively in teams.			X		
4b In the context of problem solving or conducting an investigation, recognize gaps in their knowledge and be able to marshal diverse resources to fill those gaps.				X	
4c Generate a professional network including peers, alumni, and mentors.				X	
4d Plan and manage complex projects.					X