### Outcome | Assessment Methods
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1. Students will demonstrate basic conceptual understanding of topics, for example, special relativity, wave-particle duality, properties of quantum mechanical wavefunctions, and limitations of classical physics. | Final exam questions  
Mid-term exam questions
2. Students will apply their numerical and computational skills to solve complex problems involving, for example, Lagrangian mechanics, non-inertial reference frames, time evolution of a quantum state (computational), operators and commutators, spin, Maxwell’s equations, and Laplace’s equation (computational). | Final exam  
Homework assignments/projects
3. Students will perform an advanced experimental project and data analysis, including, for example, distinguishing statistical and systematic errors, propagating errors, and representing data graphically. | Formal project report  
Oral presentation of project
4. Students will successfully pursue graduate education after completing BS in physics. | Survey  
Exit interviews
5. Students will demonstrate a basic understanding of the research process. | Research proposal  
Homework assignment
6. Students will apply modern techniques and methodologies to collect/produce data as well as to analyze and interpret it. | Research reports  
Survey
7. Students will demonstrate the ability to communicate their research findings to the department. | Research reports  
Oral presentation of research