Physics BS
2017-2018 Student Learning Outcomes

Outcome		Assessment Methods
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*