Department Learning Goals:

The Department of Physics and Astronomy has the goal that our graduates will:

- Be able to model physical systems in ways that allow deeper understanding and useful predictions, while recognizing the limitations of these models
- Recognize and contribute to the productive contributions that Physics makes to technology, culture and society
- Be lifelong learners capable of developing new skills and learning new knowledge that will support their personal and professional development

BS/BA Program Learning Outcomes:

**PLO1:** Students will be able to formulate specific research questions and design and/or interpret experiments that address these questions

**PLO2:** Students will be able to demonstrate an understanding of a breadth of physics concepts by solving physics problems related to these concepts.

**PLO3:** Students will be able to demonstrate laboratory, modeling, computational and/or data analysis skills relevant to physics research.

**PLO4:** Students will be able to communicate scientific content and thinking effectively as evidenced by productive collaboration with peers, well-reasoned professionally formatted written papers and visual and oral presentations.

**PLO5:** Students will be able to demonstrate an understanding of how work in physics influences technology, society and culture.
MS Program Learning Outcomes:

**PLO1:** Students will be able to formulate specific research questions, design and perform experiments and research that address these questions.

**PLO2:** Students will demonstrate a deep understanding of physics concepts by applying those concepts to research in physics.

**PLO3:** Students will be able to apply laboratory, modeling, computational and/or data analysis skills to their physics research.

**PLO4:** Students will be able to communicate scientific content and thinking effectively as evidenced by productive collaboration with peers, well-reasoned professionally formatted written research papers and visual and oral presentations of research topics.

**PLO5:** Students will be able to demonstrate an understanding of how work in physics influences technology, society and culture.