Goal: Graduates understand the fundamental physical relationships (laws) in the universe and are proficient in their application to diverse physical situations. Specifically, graduates understand and can proficiently apply:

1.1 Laws of Mechanics
1.2 Laws of Electricity and Magnetism
1.3 Laws of Thermodynamics and Statistical Mechanics
1.4 Principles of Wave Phenomena
1.5 Quantum Mechanics

Goal: Graduates are able to effectively write and speak concerning these fundamental laws. Specifically, graduates can:

2.1 Deliver a coherent spoken seminar on a topic in physics.
2.2 Interact productively with others in investigating physical phenomena.
2.3 Write a clear and concise technical report.
Goal: Graduates possess the technical skills necessary to investigate the fundamental laws, their implications and their applications. Specifically, graduates can effectively:

3.1 Apply analytical and computational mathematical techniques to analyze physical problems.
3.2 Apply laboratory techniques to investigate physical situations.

Goal: Graduates are aware of the importance of honesty, curiosity, healthy skepticism, mutual respect, open-mindedness and service to others in maintaining a vital community. Specifically, graduates are aware that:

4.1 Honesty, curiosity, healthy skepticism, and open-mindedness are absolutely crucial in scientific investigation.
4.2 Mutual respect is essential in the collaborative project of scientific investigation.
4.3 Service to others is necessary to both promote a humane scientific community and to engender a peaceful and just larger human community.