# DEPARTMENT OF CHEMISTRY AND PHYSICS PHYSICS

## **Bachelor of Science in Applied Physics**

#### MISSION STATEMENT

Through dynamic and innovative classroom instruction and exciting research programs, the Chemistry and Physics Department supports the University's mission while striving to provide students with both a broad understanding of the fundamentals of physics and practical laboratory training so that our graduates are prepared for a productive career in post-graduate studies and for a broad spectrum of professional careers.

The Department of Chemistry and Physics recognizes the importance of research to both the physics education of our undergraduates and to the professional development of the faculty. Faculty scholarship is essential for a physics faculty member to acquire and maintain their motivation, as well as the tools and the ideas to serve students effectively. Thus, the department strongly encourages majors to participate in research with faculty and to present their results at regional and national meetings.

### **GOALS**

**Goal 1 – Basic Knowledge:** Students will demonstrate a depth of knowledge and the comprehension of the core concepts of physics.

**Outcome:** Students will demonstrate a functional knowledge of all basic areas of physics (mechanics, electricity and magnetism, thermodynamics and quantum mechanics).

**Goal 2 – Applied Skills:** Physics graduates will demonstrate quantitative, qualitative, and technical skills central to physics.

#### **Outcomes:**

- Students will be able to solve a variety of physics related problems. These problems would be similar to ones they would encounter in graduate school.
- Students will be able integrate knowledge of modern instrumentation to perform and interpret the results of quantitative and qualitative projects in a laboratory setting.

**Goal 3 – Science and Society:** Graduates will be successful in securing and maintaining postgraduate employment, gaining admission to and completing graduate programs in Physics.

**Outcome:** Students will be able to execute a plan for entrance into post-graduation education or secure employment in a relevant field.