



PHYSICS

Major & Minor

Department site: <http://www.stetson.edu/artsci/physics/>

Interested in investigating the fundamental principles that govern the behavior of the physical universe?

Physicists seek to understand phenomena ranging from the infinitesimal to the grand—from how two ‘up’ quarks and one ‘down’ quark are held together to form a proton, to how the Big Bang led to the distribution of galaxies observed in the universe today. You might imagine a bewildering number of fundamental principles to explain the diversity in the phenomena displayed in the universe. However, the reality is that it takes only a few.

Physics is challenging, but it is also richly rewarding. You will be urged to train your mind to look at the world in a different way, and to become a master at applying logic and advanced mathematics to problems.

An undergraduate degree in physics leads to many interesting careers in research and development, manufacturing, and teaching. As a liberal arts degree, it also is excellent training for careers in medicine, business, finance, and government. Students interested in pursuing graduate level studies find themselves well prepared for a variety of graduate programs including physics, engineering, and medical school.

Faculty

The Physics Department has four physicists on the faculty. They are:

- George Glander, Ph.D., University of Wisconsin-Madison, who specializes in surface science - low energy electron diffraction
- Anthony Jusick, Ph.D., University of Florida, an authority in space and atmospheric physics
- Thomas Lick, Ph.D., Ohio University, who specializes in the luminescence of insulators and electron paramagnetic resonance
- Kevin Riggs, Ph.D., University of Minnesota, a specialist in the magnetic properties of thin films and musical acoustics

Faculty members maintain open office hours and encourage students to drop by anytime to discuss physics, their coursework, Senior Project, career goals, or any other concerns.

Special Features

At Stetson, the Physics Department tailors your course of study to fit your needs and goals. Class sizes are small and faculty members provide personalized help. We offer a very supportive learning environment.

Students have access to department facilities for extended hours, including the labs, the computer lab, and the physics reading room. Students are often involved in faculty research, an opportunity not generally afforded undergraduates at major universities. You will learn from hands-on experience in state of the art research facilities. There are a multitude of opportunities for research on campus and off campus at such locations as Argonne National Lab, University of Central Florida, Auburn, and Vanderbilt.

Your senior year you will work on a senior project, possibly doing professional-level research with a faculty mentor. You will follow the entire cycle of professional research, beginning with the project proposal process and culminating in various research presentation opportunities including Stetson’s Undergraduate Research and Creative Arts Symposium, and the possibility of publication of your work is also an option.

Contact:

George Glander,
Department Chair
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Full Time Faculty: 4

Degrees Offered:

Bachelor of Science in Physics

Our Graduates Attend:

- Yale University
 - University of Illinois-Urbana/Champaign
 - University of Dayton
 - University of Wisconsin-Madison
 - Auburn University
 - Wake Forest University
 - University of Arizona
 - University of North Carolina
 - University of Florida
 - Vanderbilt University
 - Florida State University
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Stetson has active chapters of the Society of Physics Students (SPS) and the physics honor society, Sigma Pi Sigma. The Physics Department also regularly hosts guest physicists who come to give campus-wide public lectures and visit classes.

Course Information

Students who are interested in majoring in physics start their coursework with a survey of topics in classical physics such as Newtonian mechanics, heat, waves, electromagnetism, and optics, then are introduced to subjects such as special relativity, quantum mechanics, and atomic and nuclear physics.

Subsequent courses for the major focus on many of the same topics, but go into much more depth and harness more sophisticated mathematical techniques to describe phenomena and solve problems. Integrated laboratory work is designed to introduce students to the standard experimental methods that physicists employ to collect and analyze data.

Internship Opportunities

Students may apply for a Stetson Undergraduate Research Experience (SURE) grant that pays a stipend for students to do research during the summer. Many of our students also participate in programs funded by federal agencies such as the National Science Foundation and the Department of Energy. These pay a stipend and travel expenses for summer research internships at a variety of universities and national laboratories around the country.

Career Opportunities

Studying Physics at Stetson can open the door to an exciting future in any number of fields. Employers value a degree in physics because graduates learn to think analytically, and to solve problems and express themselves effectively. Many of our majors go on to graduate school in a wide array of fields ranging from physics and engineering to medical school teaching. Others choose to go directly into research in either industry or in academics.

Graduates are employed as faculty in universities, medical schools, and high schools; by companies such as IBM, Honeywell, and Martin Marietta; and by government agencies such as the Department of Defense and Oak Ridge National Laboratories.

Clubs and Organizations

Society of Physics Students (open to physics majors, physics minors, and all students at Stetson enrolled in 200-level physics courses and above) and Sigma Pi Sigma, the physics honor society.

Department Awards

The George L. Jenkins Prize in Physics is awarded annually to the top student enrolled in the introductory physics course and is funded by the family of George L. Jenkins, former chair of the Physics Department.

The Jack Gibson Endowed Physics Research Award is presented annually to the student who demonstrates excellence in the senior project sequence. This award was established in 2008 by Physics Department alumnus Jack Gibson.