## WHY PHYSICS? WHY ANDREWS?

## WHY STUDY PHYSICS?

- PHYSICS IS THE MOST FUNDAMENTAL OF THE SCIENCES. Physics is concerned with the most basic building blocks of everything, from quarks to quasars. The study of physics is the attempt to discover the pieces making up the universe and how they interact with each other. It could be said that all the other sciences are based on the study on physics.
- IT CAN MAKE YOUR DREAMS MATERIALIZE. Whether you are the hands-on type who just loves the fun experiments and demonstrations, a serious computer whiz who thrives when surrounded with the very latest hardware, a dreamer of dreams who wants to sketch out reality in exotic mathematical forms, a visionary who aspires to impact society, or the more practical type who wants to see an effective product on the market, it can be confidently said that physics will be an excellent preparation for you.
- IT'S THE "SWISS ARMY KNIFE" DEGREE. Some say it is the "Liberal Arts Degree of Technology." Physics majors acquire many valuable skills and mental habits that work well in practically any profession. These include problem solving, interpersonal skills, technical writing, management skills, advanced computer skills, experience with special equipment and procedures, business principles, and statistical concepts. Physics majors can go on to pursue careers in medicine, law, economics, business, and engineering of all stripes (mechanical, electrical, environmental, and computer engineering).
- IT MAXIMIZES YOUR OPTIONS. A physics-based career path will give you great opportunities for mental stimulation, creativity, and fascination. While the unique strengths of our discipline can transform you into an "explicit physicist" in academia or in industry, it is less widely known how effectively it can pave the way for excellence in other areas, making you a "hidden physicist". Physics majors have gone on to great jobs like fighter pilot, volcano tour guide, and video game designer as well as prime minister, stock analyst, and entrepreneur.
- It's fun, interesting and exciting. It gives you a deeper appreciation for the world around you. According to a recent American Institute of Physics' (AIP) report, the majority of students major in physics for shear enjoyment. Studying physics is the difference between looking at a rainbow and saying "Look at all the pretty colors!", and understanding the interactions between photons and electrons that occur when light strikes spherical water droplets in the sky that you perceive as a multicolored arc in the sky. Physics models lasers, superconductors, black holes, quantum phenomena, cosmology, and relativity. It also addresses questions like "Why is the sky blue, why are sunsets red, and why does ice float?" Physicists are always trying to understand the world around them in macroscopic and microscopic realms and in short and long time spans. They invent or acquire cool toys to help them.

## WHAT MAKES STUDYING PHYSICS AT ANDREWS SO SPECIAL?

- **WE'RE SMALL.** You won't get lost in the shuffle. You'll have ample opportunities to interact directly with all five PhD professors, each with an active research agenda. We offer full BS degrees in physics and in biophysics with all the benefits of a small, tutorial environment. We pride ourselves in our collaborative, mentoring atmosphere.
- **WE'RE FAMILY.** We develop the whole person. You'll have unique opportunities to develop your communication skills through presentations and networking. Academic forums and faculty home environments will help you develop your spiritual priorities and religious world views. And of course, you will make lifelong friendships in "226", the special study area set aside for our majors. After you graduate, you'll have a lifetime email home with us, too, and keep track of your student and teachers friends through the departmental newsletter *Wavelength*.
- **WE WORK HARD TOGETHER.** We believe in students working side-by-side with teachers. Majors typically assist in up-to-date teaching laboratories to supplement your income and experience. They also take advantage of the individual research they can do with the professors. What better way to prepare for the physics workplace?
- **WE REWARD EXCELLENCE.** Most majors qualify for departmental scholarships. These make great additions to your resume. Our students typically excel and we like to recognize that.