Department of PHYSICS

In the Physics Department at Marshall University, the introductory courses are scheduled such that there are no more than 50 students per section. Upper division courses contain even smaller numbers of students, meaning you get more attention from your professors.

Physics majors are strongly encouraged to get involved in research early in their studies. Research topics span a wide range of subjects, from colliding black holes to application of nanoparticles interacting at liquid interfaces, and the methodology can be theoretical, computational, experimental, or observational.

The Department of Physics offers competitive scholarships. These require students to have declared physics as their first major and to maintain a 3.0 GPA.

ADMISSION TO THE COLLEGE OF SCIENCE Full admission to the College of Science requires a 21 ACT Math score and a 21 ACT Composite score, or a 530 SAT Math score and a 1060 SAT Composite score. If your scores are less than this, you may be admitted as a pre-major until you earn grades of at least "C" in College Algebra and English Composition.







Marshall University College of Science Department of Physics www.marshall.edu/physics

Science Building 251 One John Marshall Drive Huntington, WV 25755 304-696-6738

HAVE QUESTIONS? NEED ANSWERS?

Contact Dr. Sean P. McBride, Assistant Professor mcbrides@marshall.edu 304-696-2758

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COLLEGE OF SCIENCE Department of Physics



EMILY SUTHERLAND Major: Applied Physics & Applied Mathematics Class of 2019



CURIOUS I AM A SON OF MARSHALL.

DILLON BUSKIRK Major: Applied Physics & Applied Mathematics Class of 2018

PROGRAMS OF STUDY

The Physics Department offers the following degrees:

- Bachelor of Science (B.S.) in Physics
- Bachelor of Science in Physics with several different areas of emphasis: Applied, Bio Physics, Medical Physics, and Medical Imaging.

The Department also works closely with the College of Education and Professional Development, which offers a B.A. in Secondary Education through the Physics 9-Adult program. It is within this program where the Physics Department ensures students are well prepared to become teachers with a strong background in Physics.

In addition to a minor offered in Physics, the Physics Department also provides an emphasis of study in Physics for the Master of Science (M.S.) in Physical and Applied Science.

Average MCAT Scores* by Selected Majors, 2012

	Physical Science	Biological Science	Verbal Reasoning	Number of Applicants
Economics	10.8	10.8	9.9	633
Physics	11.1	10.4	9.8	228
Biomedical Engineering	11.1	10.6	9.6	1,147
Mathematics	10.6	10.4	9.3	340
Electrical Engineering	10.9	10.1	9.4	135
Neuroscience	10.1	10.6	9.5	1,615
English	9.6	10.1	10.2	380
Biochemistry	10.1	10.4	9.0	2,864
Chemistry	9.5	10.0	9.0	2,113
Microbiology	9.2	10.1	8.8	759
Psychology	9.1	9.6	9.1	2,327
Biology	9.0	9.7	8.7	13,605
Premedical	8.3	8.9	8.1	587
All Majors	9.5	9.9	9.0	44,464

*Sorted by total score. Based on test takers who applied to Medical School. Applicants are allowed to take the MCAT exam more than once; these averages are computed using each applicant's most recent MCAT exam scores.

Source: Compiled by the Statistical Research Center based on data collected by the Association of American Medical Colleges.

http://www.aip.org/statistics

A course of study in physics prepares students for a wide variety of career paths, such as engineering in the private sector or the health professions. For example, students who major in physics and apply to medical school achieve higher scores on the MCAT exam when compared to other majors as shown in the above table. Students interested in medical related professions should contact the Physics Department about the Medical Physics or Bio-Physics Areas of Emphasis, these degree plans give a great mix of Physics, Chemistry, and Biology needed to be successful in these fields.



Marshall University prides itself in both excellence in research and teaching. Marshall's success is partly due to having world-class faculty who are not only experts in their fields of research, but these researchers are also interacting with students in the classroom, passing on their knowledge. The Physics Department is no different. With Marshall being "just the right size university," as many students say, the department is successful in having a low student to faculty ratio to enhance the educational experience of our next generation of scientists in the classroom.

The Physics Department has a wide range of research opportunities available for both undergraduate and graduate students interested in pursuing research. The topics are very diverse spanning the range from nanoparticles, soft condensed matter research, water filtration, laser and phonon physics, new materials for solar energy conversion, optics and holography, remote sensing, colliding black holes, young sun-like stars, theoretical condensed matter and solid state physics and more - just ask or email one of our faculty.

Get Involved: The Society of Physics Students (SPS) is a professional association open to anyone interested in physics. At the global level, members include majors in astronomy, chemistry, computer science, engineering, geology, mathematics, medicine, and other fields. Within SPS is Sigma Pi Sigma, the national physics honor society, which elects members on the basis of outstanding academic achievement. marshall.edu/physics/ society-physics-students/



Challenge yourself. Be a son or daughter of Marshall.