

Physics

Physics involves the study of matter and energy and their interaction. Physicists study nature at its most fundamental level, with theories that encompass a tremendous range, from elementary particles to the edge of the visible universe. As a physics student, you will learn the laws of nature and see them in action in mechanics, sound, electricity and magnetism, optics, thermodynamics, relativity and quantum theories. Your introduction to physics in small classes at Cottey will prepare you for further study in physics, chemistry, biophysics, astronomy, geology or geophysics, atmospheric science, engineering and medicine.

Career Opportunities

A knowledge of physics is a prerequisite for study in chemistry, geology, astronomy, meteorology, oceanography and engineering. Physics has direct applications in transportation, communication and entertainment technologies, medicine, environmental science, and engineering. Many careers that are directly related to physics degrees are based in research and development. Because of this, a Ph.D. is often required; however, many physics majors find careers in areas that are not closely related to their major, but somewhat related. Some of these occupational areas are: engineering including electrical, nuclear, environmental, aerospace, and computer engineering, astronomy, computer programming and systems analysis.

Internship and Directed Study Opportunities

As a physics major, your chances to gain real world learning experiences through internships and directed studies are very important.

Students at Cottey College participate in internships throughout the year with a variety of businesses, organizations, and non-profit agencies. A successful internship provides students with an opportunity to apply their classroom learning to the workplace.

Employers and graduate schools agree that students who have put classroom concepts and skills to work in a "real world" environment are more realistic and productive than those who have not.

With the assistance of faculty and the transfer and career planning

Get Involved

Want to have fun and develop your leadership skills and your resume at the same time? Then get involved at Cottey College and in the Nevada community.

Cottey College has more than 35 student clubs and organizations in which to be involved. Plus, the Nevada and surrounding community offer an abundance of service opportunities.

Here are a few activities on campus you might consider pursuing as a physics major: Explorers club for the outdoor enthusiast, Students Against a Vanishing Environment (S.A.V.E.) to help preserve the environment, Cottey Computer Club (CCC) to learn more about computers and technology.

Activities off campus include: volunteering at one of the local schools, the parks department, or the Osage Prairie YMCA.

coordinator, physics majors can find a variety of local and national internship experiences.

Opportunities exist locally to intern with various health care facilities, non-profit organizations, and government agencies.

Directed study opportunities are available in all disciplines. Under the supervision of faculty, students can pursue academic credit on a topic or project that is related to, but beyond the scope of, regular course offerings.

Directed study topics can be tailored to your interests, whether it is conducting individual scientific research, studying girls' punk music, or conducting advanced computer programming.

Physics (4-Semester Sample Schedule)

Students should consult the catalog of the college to which they plan to transfer for specific requirements in their major. This suggested schedule is designed to provide the Associate in Science degree candidate with the appropriate Cottey College core curriculum and enough coursework in their field to complete the 62 hours required for an A.S. degree. *Schedules may vary based on available classes and interests.*

First Year Fall Semester	Credit Hrs.	First Year Spring Semester	Credit Hrs.
ENG101 English Composition I	3	ENG102 English Composition II	3
*MAT201 Calculus I**	4	*MAT 202	4
*CHE103 General Chemistry I	5	*CHE104 General Chemistry II	5
Physical Activity	1	Physical Activity	1
Social Science (ECO, HIS, POL)	3	PHI 112 Intro Logic	3
Second Year Fall Semester	Credit Hrs.	Second Year Spring Semester	Credit Hrs.
PHY 201 General Physics	5	Fine Arts Theory	3
Social Science	3	*PHY202 General Physics II	5
*MAT 203 Calculus III	4	*MAT 204 Differential equations	3
*CSC 110 Computer Science intro	3	*CSC 201 Programming	3
Electives	1-3	Electives	0 to 2

* Courses recommended for major

**This plan assumes that an incoming freshman is already interested in majoring in Physics, and is ready for Calculus I. Students should consult the catalog of the college to which they plan to transfer for specific requirements in their major. This suggested schedule is designed to provide the Associate in Science degree candidate with the appropriate Cottey College core curriculum and enough coursework in her field to complete the 62 credit hours required for an A.S. degree. Schedules may vary based on student's preparation level and interest.

Faculty Advising

Preparing a class schedule, investigating majors, and researching transfer institutions can be confusing for a first-year student. At Cottey College, academic advising assists the individual student in clarifying and achieving her educational goals.

Each student is assigned a full-time faculty member as an academic advisor. Together the advisor and student devise a balanced academic program, which encompasses the student's educational

and career ambitions. The advisor reviews all registration decisions, the advisee's academic progress, and suggests transfer and career options.

This personalized approach to student advising allows the student to take responsibility for her own academic program, while tapping into faculty expertise.

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