

EXPLORE.  
PURSUE.  
REALIZE.



The Hood College

## Department of Chemistry and Physics

[www.hood.edu/chemphys](http://www.hood.edu/chemphys)



## The Department of Chemistry and Physics

Studying the sciences at a small liberal arts college provides you with distinct advantages—you will have direct interaction with faculty in a small class setting, hands-on experience with modern laboratory equipment and instrumentation, and the opportunity to do research with faculty members.

Our faculty are experts in their fields, committed teachers and mentors who are dedicated to helping you fulfill your academic and professional ambitions. Our classes involve more than lectures; they stress active participation, team learning and experiments in an innovative curriculum. At Hood, all labs are taught by faculty, not student assistants.

Nearly 100 percent of our graduates are working in their chosen career field or are pursuing advanced degrees. Many of our graduates go on to join competitive graduate programs in chemistry, biochemistry, public health and chemical engineering at institutions such as U.C. Berkeley, U.C. Irvine, Johns Hopkins University, Dartmouth University, Penn State University, the University of Maryland, Northwestern University, Montana State University, UNC Chapel Hill, and the University of Nebraska. Several of our graduates have successfully completed post-professional training in public health, including medical school, veterinary school, P.A. school, and pharmacy school.

## Majors, Minors and Concentration

### Majors and Concentration

- **Biochemistry** Major (B.A.)
- **Chemistry** Major (B.A.)
- **Environmental Science and Policy** Major (B.A.),  
**Environmental Chemistry** Concentration

### Minors

- **Chemistry** Minor
- **Physics** Minor



**"My research internship at USAMRIID at Fort Detrick was very valuable because it allowed me to take knowledge I gained in the classroom and apply it directly to my internship."**

**-Maisha Khan '19**

## Beyond the Classroom

Some of the nation's top government research agencies and biotechnology firms are located within a short drive of Hood, giving you access to work experiences, research opportunities, lectures and conferences.

Students in our programs have completed internships at a number of nearby institutions, including the U.S. Army Medical Research Institute for Infectious Diseases, the Frederick National Laboratory for Cancer Research, the National Institutes of Health, the National Institute of Standards and Technology, the U.S. Department of Agriculture, the U.S. Food and Drug Administration, as well as some local biotechnology companies.

But even before you move beyond campus, you will have amazing opportunities for research on campus—working side-by-side with experienced faculty for senior-level honors projects, taking part in the Summer Research Institute, and presenting at scientific meetings.

## Faculty-Mentored Research

The physical sciences are hands-on disciplines, and nothing prepares you for the next step—whether it be graduate school or your career—like real-world experience. You'll have the opportunity to take part in research in a nearby laboratory or on campus with a Hood faculty member. Some of our faculty research interests include:

Dr. Kevin Bennett: the study of electrospray ionization fundamentals related to analysis of complex mixtures with liquid chromatography-mass spectrometry

Dr. Susan Ensel: the synthesis of botulinum neurotoxin inhibitors, the isolation/identification of natural products and the development of green chemistry laboratory experiments

Dr. Allen Flora: student projects in computational physics including Applications of Computational Fluid Dynamics and Image Transformation

Dr. Dana Lawrence: the research of zinc-binding proteins that are important in virus-host cell interactions

Dr. Christopher Stromberg: ultrafast time-resolved spectroscopy of molecules that are potential catalysts for the production of hydrogen





## About Hood

Founded in 1893 in Frederick, Maryland, Hood College is a coeducational, independent, liberal arts college, which offers bachelor's, master's and doctoral degrees and post-baccalaureate certificates. Home to approximately 1,200 undergraduate students from 25 states and 15 countries, Hood offers 32 majors, 50 minors, and pre-professional preparation in medicine, veterinary science, pharmacy, dentistry and law. Hood students experience small class sizes, where they receive individual attention from supportive faculty. With its proximity to Washington, D.C., Baltimore and the I-270 biotech corridor, Hood gives its students access to countless internships and research opportunities.

At Hood, we are challenging students to improve their critical thinking, communication and collaborative skills and preparing them not just for their first jobs, but for their careers. For high-achieving students, we offer a four-year honors program with a living and learning setting expanding the curriculum with an emphasis on interdisciplinary education through discussion-based seminars, collaborative projects and experiential learning opportunities. Eighty-five percent of first-year students live on campus; more than 40 campus clubs and organizations as well as 22 NCAA Division III athletic teams and two club-level athletic teams create an active and vibrant campus environment.

Hood, in addition to its exceptional undergraduate programs, also offers 19 master's degrees, 10 certificate programs and two doctoral programs. Our graduate programs are designed to work in tandem with our bachelor's degrees so that students can take advantage of five-year, dual-degree programs. Hood is located in a fantastic college town; students are within walking distance of shops, galleries and restaurants and a vibrant downtown. A tremendous alumni network offers students and graduates mentoring, connections, guidance and advice. The Princeton Review, U.S. News & World Report and many other publications have recognized Hood as an affordable top-tier institution.

**Hood College**  
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