Vassar Biochemistry

Vassar College's interdepartmental program in Biochemistry provides a study of biochemistry and molecular biology built upon a solid foundation in chemistry and biology. The major engages students in courses in biochemistry, cell & molecular biology, genetics, protein chemistry, physical chemistry, and organic chemistry. Experimental approaches to problems in biochemistry are emphasized throughout the program, with laboratory classes and opportunities for students to engage in intensive work related to biochemistry.

Major requirements (10 classes plus 0.5 intensive)

Chemistry (3 credits)	
General Chemistry	CHEM 125
Organic Chemistry	CHEM 244 and 245
Biology (4 credits)	
Energy Flow in Biological Systems	BIOL 107
Information Flow in Biological Systems	BIOL 108
One genetics course	BIOL 238, 244, or 248
One cell biology course	BIOL 202, 205, 218, 232, 323, 324, 370, 386, 387, or 388
Cross-listed course (1 credits)	
Biochemistry	BIOL/CHEM 272
Advanced coursework (2 credits)	
Biophysical Chemistry	BIOC 326 or CHEM 350
Biochemistry Senior Seminar	BIOC 356

Biochemistry Intensive (at least 0.5 credit)
Students must elect at least 0.5 unit of Intensive credit (graded or ungraded) from a list of Biochemistry-related intensives offered within the natural sciences or Math, chosen in consultation with their adviser.

Recommended (but not required) courses, especially for those planning to continue on in graduate or medical school:
Math (single variable calculus and statistics)
Physics (111/112 or 113/114)

Planning advice

By the end of your first year, you should have completed CHEM 125 and BIOL 107. Although it is possible to start later on either one and still graduate on time with the major, if you plan to study a semester abroad your junior year (which we encourage!), you should complete CHEM 125 by the end of your first year so you can take CHEM 244/245 your second year.

By the end of your second year, you should have completed BIOL 108 and ideally you will have also completed CHEM 244 and 245 and possibly BIOL/CHEM 272 or genetics.

By the end of your third year, you should have completed BIOL/CHEM 272 and ideally also the genetics and cell biology requirements. Recommended classes (physics and math) could be completed by this point as well.

Your senior year you will likely take BIOC 326, BIOC 356, and your senior BIOC intensive along with any other remaining requirements for the major that you haven't yet taken (e.g. cell biology requirement).

See the Vassar Biochemistry website for more information on how to declare a major

Biochemistry Program Faculty

In recognition of the different and complementary perspectives underlying the interdisciplinary study of Biochemistry, the Biochemistry program includes faculty from both the Chemistry and Biology departments, who teach and conduct research in different areas of biochemistry (http://biochemistry.vassar.edu/).

Zachary Donhauser	Professor of Chemistry and Director of Biochemistry
Colin Echeverría Aitken	Assistant Professor of Biology
Eric Eberhardt	Associate Professor of Chemistry
David Esteban	Associate Professor of Biology
Jennifer Herrera	Lecturer in Chemistry
Sarjit Kaur	Professor of Chemistry
Jennifer Kennell	Associate Professor of Biology
Krystle McLaughlin	Assistant Professor of Chemistry
Nancy Pokrywka	Professor of Biology
Rebecca Pollet	Assistant Professor of Chemistry
Jodi Schwarz	Associate Professor of Biology
Christopher Smart	Associate Professor of Chemistry
J. William Straus	Associate Professor of Biology
Joseph Tanski	Professor of Chemistry

Any of the faculty listed can answer questions about the program and/or serve as major advisers