# **Optometry Affiliate Program**

Villanova University offers students interested in the field of optometry the opportunity to earn a Bachelor of Science degree and a Doctor of Optometry degree in a combined seven-year program in affiliation with Salus University (Pennsylvania College of Optometry).

Students spend their first three years on Villanova's campus where they will study along with other Villanova students, majoring in either Biology, Biochemistry, or Comprehensive Science. After having completed all the Liberal Arts/Humanities core curriculum courses, all of the prerequisites for optometry school admission, and most of the major's curriculum requirements, the students will move to the Salus University campus in the fourth year where the first-year professional school courses will also be given credit at Villanova for completion of the Bachelor's degree.

Students who matriculate into the program are also required to meet the following conditions during the Villanova portion of their program:

- 1. Students must maintain a minimum cumulative overall GPA of 3.0.
- 2. Students must receive a grade of C or better in all optometry school pre-requisite courses (a C- is less than a C). The majority of required courses for matriculation at Salus must be completed at Villanova.
- 3. Students must take the Optometry Admission Test (OAT) and achieve scores of 300 or higher on each section.
- 4. Shadowing an optometrist is expected to build career and professional readiness.

Failure to meet these minimum requirements may result in release from the program.

# Salus University - Biology Major Combined- BS/OD degree

Biology majors will be required to complete all College of Arts and Sciences core courses, all pre-requisites for optometry school admission, as well as a minimum of 19 Biology course credits at Villanova prior to transition to professional school at the end of the third year. In addition to General Biology I and II, students must complete Genetics, Microbiology with lab (required for Salus admission), and at least one additional upper level course (3000 level or above) to meet the 19 Biology course credit minimum.

### Freshman year

Fall	Spring	
ACS 1000: Humanities Seminar	3 ACS 1001: Hur	manities Seminar 3
Intermediate Language I	3 Intermediate La	anguage II 3
MAT 1312: Biocalculus	3 MAT 1313: Sta	tistics 3
CHM 1151 General Chemistry I	4 CHM 1152: Ge	neral Chemistry II 4
CHM 1103: General Chemistry I Lab	1 CHM 1104: Ge	neral Chemistry II Lab 1
BIO 2105: General Biology I	4 BIO 2106: Gen	eral Biology II 4
	18	18

### Sophomore Year

Fall		Spring	
PHY 1100 + 1101: Gen Physics I + Lab	4	PHY 1103 + 1104: Gen Physics II + Lab	4
CHM 2211: Organic Chemistry I	3	CHM 2212: Organic Chemistry II	3
CHM 2201: Organic Chem I Lab	1	CHM 2202: Organic Chem II Lab	1
ENG: Sophomore Writing Seminar	3	ETH 2050: Ethics	3
Humanities or Social Science*	3	Humanities or Social Science*	3
Humanities or Social Science*	3	Humanities or Social Science*	3
	17		17

17

#### Junior Year

Fall		Spring	
BIO 3351: Genetics	4	BIO 3595: General Microbiology <sup>†</sup>	4
Advanced Biology elective**	3 or 4	Humanities or Social Science*	3
Humanities or Social Science*	3	Free Elective***	3
Humanities or Social Science*	3	Free Elective***	3
Free Elective***	3	Free Elective***	3
	16 or 17		16

- Theology 1000 plus advanced course (2000 or higher)
- Philosophy 1000
- History Course
- Fine Arts elective
- Social Sciences two courses

† One course in Microbiology is required as a pre-requisite for admission to Salus University.

- \*\* Advanced Biology electives may be filled by any course numbered 3000 or higher. It is recommended that students add a Biology elective that serves to prepare them for the optometry school curriculum.
- \*\*\* Free electives are courses in any subject area; these courses may be used to satisfy requirements for a minor or concentration.

AP or IB credit will affect the credit load and course sequencing. A list of exams can be found in the Liberal Arts & Sciences publication Enchiridion. 4th year credits will be completed at Salus University and then transferred to Villanova to complete the requirements for an undergraduate degree from Villanova.

<sup>\*</sup> Must satisfy the prescribed Core Requirements of the College of Liberal Arts & Sciences.

# Salus University - Biochemistry Major Combined- BS/OD degree

Biochemistry majors will be required to complete all College of Arts and Sciences core courses and all pre-requisites for optometry school admission prior to transition to professional school at the end of the third year.

### Freshman year

Fall		Spring	
ACS 1000: Humanities Seminar	3	ACS 1001: Humanities Seminar	3
Intermediate Language I	3	Intermediate Language II	3
MAT 1312: Biocalculus or MAT 1500: Calculus I	3 or 4	MAT1313: Statistics	3
CHM 1151/1103: General Chemistry I	4	CHM 1152: General Chemistry II	4
CHM 1103: General Chemistry I Lab	1	CHM 1104: General Chemistry II Lab	1
BIO 2105: General Biology I	4	BIO 3351: Genetics	4
	18 or 19		18

## Sophomore Year

Fall		Spring	
CHM 2211/2201: Organic Chemistry I + lab	4	CHM 2212/2202: Organic Chemistry II + lab	4
PHY 1100 + 1101 General Physics I + Lab	3	PHY 1102 + 1103 General Physics II + Lab	4
BIO 3595: General Microbiology	4	BIO 4505: Molecular Biology	4
ENG: Sophomore Writing Seminar	3	ETH 2050: Ethics	3
Humanities or Social Science*	3	Humanities or Social Science*	3
	17		18

#### Junior Year

Fall		Spring	
CHM 4621: Biochemistry I	3	CHM 4622: Biochemistry II	3
CHM 4603: Biochem Tech & Prac lab	1	CHM 4604: Biochem Tech. & Pract. II	1
CHM 3417: Biophysical Chemistry	3	CHM 4623: Biochemistry III	3
CHM 3514/3503: Bioanalytical Chem + lab	4	Humanities or Social Science*	3
Humanities or Social Science*	3	Humanities or Social Science*	3
Humanities or Social Science*	3	Humanities or Social Science*	3
	17		16

<sup>\*</sup>Must satisfy the prescribed Core Requirement of the College of Liberal Arts & Sciences

- Theology 1000 plus advanced course numbered 2000 or higher
- Philosophy 1000
- History course
- Fine Arts elective
- Social Sciences two courses

† One course in Microbiology is required as a pre-requisite for admission to Salus University.

AP or IB credit will affect the credit load and course sequencing. A list of exams can be found in the Liberal Arts & Sciences publication Enchiridion. 4th year credits will be completed at Salus University and then transferred to Villanova to complete the requirements for an undergraduate degree from Villanova.

# Salus University- Comp. Sciences Major Combined-BS/OD degree

Comprehensive Science majors will be required to complete all College of Arts and Sciences core courses and all pre-requisites for optometry school admission prior to transition to professional school at the end of the third year.

## Freshman year

Fall		Spring	
ACS 1000: Humanities Seminar	3	ACS 1001: Humanities Seminar	3
Intermediate Language I	3	Intermediate Language II	3
MAT 1500: Calculus I	4	MAT 1505: Calculus II	4
CHM 1151: General Chemistry I	4	CHM 1152: General Chemistry II	4
CHM 1103: General Chemistry I Lab	1	CHM 1104: General Chemistry II Lab	1
BIO 2105: General Biology I	4	BIO 2106: General Biology II	4
	19		19

## Sophomore year

Fall		Spring	
CHM 2211: Organic Chemistry I	3	CHM 2212: Organic Chemistry II	3
CHM 2201: Organic Chemistry I Lab	1	CHM 2202: Organic Chemistry II Lab	1
PHY 1100 + 1101: General Physics I + Lab	4	PHY 1102 + 1103: General Physics II + Lab	4
MAT 4310: Statistical Methods	3	ETH 2050: Ethics	3
ENG: Sophomore Writing Seminar	3	Humanities or Social Science*	3
Humanities or Social Science*	3	Humanities or Social Science*	3
	17		17

### Junior year

Fall		Spring	
CSC 1051: Algorithms & Data Structures	3	CHM 4611: Survey of Biochemistry	3
BIO 3595: Microbiology + Lab <sup>†</sup>	4	Advanced science elective**	3 or 4
MAT elective***	3	Humanities or Social Science*	3
Humanities or Social Science*	3	Humanities or Social Science*	3
Humanities or Social Science*	3	Free elective***	3
	16		15 or 16

<sup>\*</sup> Must satisfy the prescribed Core Requirement of the College of Liberal Arts & Sciences

- Theology 1000 plus advanced course (2000 or higher)
- Philosophy 1000
- History course
- Fine Arts elective
- Social Sciences two courses

† One course in Microbiology is required as a pre-requisite for admission to Salus University.

AP or IB credit will affect the credit load and course sequencing. A list of exams can be found in the Liberal Arts & Sciences publication Enchiridion. 4th year credits will be completed at Salus University and then transferred to Villanova to complete the requirements for an undergraduate degree from Villanova.

<sup>\*\*</sup> The advanced science elective may be filled by any course numbered 3000 or higher. It is recommended that students select an upper level Biology course as preparation for the optometry school curriculum.

<sup>\*\*\*</sup> one Mathematics course selected from the following: MAT 2500, MAT 2705, or CSC 1300

<sup>\*\*\*</sup> A free elective is a course in any subject area; it may be used to satisfy requirements for a minor or concentration.