

PHARMACEUTICAL SCIENCE B.S.

A Bachelor's of Science in Pharmaceutical Science (BSPS) prepares students to work in entry-level technical positions in the pharmaceutical, government, and academic research industries. The BSPS program is for anyone interested in a career in drug research and development, pharmaceutical marketing, or drug regulation.

Students in the BSPS program will be exposed to areas such as the chemistry of medicines, drug discovery, product development, and ethical considerations in research and practice. Those enrolled will have opportunities to use basic chemistry, mathematics, and biological training in a wide range of specialized research opportunities in the School of Pharmacy's state-of-the-art research laboratory.

Since the BSPS is an undergraduate degree, graduates with this degree are not eligible for licensure or to practice as a pharmacist without further education. However, graduates often go on to pursue graduate school or progress into professional degree programs such as pharmacy, medicine, allied health, or law.

****This program will not be offered during the 2023-2024 Academic Year****

Code	Title	Credits
	Major Requirements (Specific Area of Concentration)	26
	Major Requirements (Other Academic Areas)	52
	Liberal Arts and Science Electives	42
Total Credits		120

Course Requirements for the Major In the specific areas of concentration

Code	Title	Credits
PPS-301	Principles of Pharmaceutical Sciences I	2
PPS-302	Principles of Pharmaceutical Sciences II	3
PPS-304	Pharmaceutical Dosage Forms	3
PPS-306	Principles of Pharmaceutical Sciences Practicum	2
PPS-401	Principles of Pharmaceutical Sciences III	2
PPS-402	Principles of Pharmaceutical Sciences IV	2
PPS-403	Drug Discovery and Development	2
PPS-404	Individualized Medicine: Informatics and Pharmacogenomics	2
PPS-405	Laboratory Research in the Pharmaceutical Sciences I	3
PPS-406	Laboratory Research in the Pharmaceutical Sciences II	3
Total Credits		24

In other academic areas required for the major

Code	Title	Credits
BIO-101	Introductory Biology I	4
BIO-101L	Intro Bio Lab I	0
BIO-102	Introductory Biology II	4
BIO-102L	Intro Bio Lab II	0
BIO-107	Human Anatomy & Physiology I	3

BIO-107L	Human Anatomy & Physiology Laboratory	1
BIO-108	Human Anatomy & Physiology II	3
BIO-108L	Human Anatomy & Physiology II Lab	1
CHE-101	General Chemistry I	3
CHE-101L	General Chemistry Laboratory	1
CHE-102	General Chemistry II	3
CHE-102L	General Chemistry Laboratory II	1
CHE-219	Organic Chemistry	3
CHE-219L	Organic Chemistry Lab	1
CHE-220	Organic Chemistry II	3
CHE-220L	Organic Chemistry II Lab	1
MAT-123	Introduction to Applied Statistics	4
MAT-125	Calculus I	4
PHY-101	General Physics I	3
PHY-101L	Gen Physics Lab I	1
PHY-112	Introduction to Physics	3
PHY-112L	Introduction to Physics Lab	1
PHY-112 & 112L	Introduction to Physics and Introduction to Physics Lab ¹	4
or PHY-102 & 102L	General Physics II and Gen Physics Lab II	
Total Credits		52

¹ General Physics II (PHY-102) requires completion of Calculus II (MAT-126) as well.

Additional Core Curriculum Requirements

Required professional pharmacy program pre-requisites are shown in parentheses () and/or denoted by asterisk (*).

Humanities

Code	Title	Credits
ENG-111	Introduction to Literature: Acad Writing	3
ENG-112	Humanities Seminar	3
PHI-201	Ethics in Theory & Action	3
or RS-201	Religion & Social Responsibility	
Total Credits		9

Code	Title	Credits
Five courses selected from the following areas with choices made from at least three of the five areas.		
LIT	Literature Elective	3
Fine Arts	Fine Arts Elective	3
PHI	Philosophy Elective	3
RS	Religious Studies Elective	3
Foreign Language	Foreign Language Elective	3
Total Credits		15

Social Sciences

Code	Title	Credits
Four courses are required, one from each of the following areas:		
SOC-101	Principles of Sociology (either course accepted as a prerequisite)	3

or PSY-101	General Psychology	
Select one of the following:		3
HIS-103	Comparing World Civilizations	
HIS-111	Growth of Western Culture	
HIS-203	American History to 1865 ¹	
HIS-204	American History Since 1865	
Select one of the following:		3
ECO-201	Macroeconomics (accepted as a prerequisite)	
ECO-202	Microeconomics (accepted as a prerequisite)	
PSC-201	American Government & Economics	
Total Credits		9

¹ Required professional pharmacy program pre-requisite

Computer Science

Code	Title	Credits
CSC	Computer Science Elective	3
Total Credits		3

Electives

Code	Title	Credits
Electives	Free Electives	9
Total Credits		9

Admissions Requirements

D'Youville selects students who are academically well-rounded and committed to meeting the challenges of a high-quality education. Students entering the BSPS program directly after high school should be prepared to enter into this competitive and rigorous mathematics and science-based degree.

Admission requirements for applicants entering as freshman are as follows:

Code	Title	Credits
Admission Requirements		

SAT and ACT Tests are not required, but will be considered if requested by the candidate.

A high school average of at least 85 percent, or 2.85 on a 4.0 scale.

Transfer students are required to have a minimum of C or better in each of the courses for which credit is transferred.