## **BIOLOGY (B.S.) LEADING TO PHARM.D.**

Biology (B.S.) majors in the 3+3 pharmacy dual degree complete a minimum of 120 credits to earn a bachelor's degree: 49–51 credits of core courses (https://catalog.salve.edu/undergraduate/curriculum-degree-programs/), 22–33 elective credits, and 83–84 credits (26 courses) in their major (includes courses taken at St. Joseph that transfer over to Salve Regina University to complete B.S. requirements):

Code	Title	Credits
BIO-111	General Biology I	4
BIO-112	General Biology II	4
BIO-210	Microbiology	4
BIO-220	Cell Biology and Chemistry	4
BIO-253	Genetics: Classical, Molecular and Population	4
BIO-305	Human Anatomy	4
BIO-325	Human Physiology	4
BIO-471	Biology Seminar	3
CHM-113	General Chemistry I	4
CHM-114	General Chemistry II	4
CHM-205	Organic Chemistry I	4
CHM-206	Organic Chemistry II	4
MTH-191	Applied Calculus	3-4
or MTH-195	Calculus I	
STA-173	Statistical Methods	3
PHY-201	General Physics I	4
PHY-202	General Physics II	4
ECN-101	Introductory Macroeconomics	3
Total Credits		64-65

## Degree Plan for Biology (B.S.) Leading for Pharm.D.

Course	Title	Credits
First Year		
Fall		
UNV-101	University Seminar	4
& FYT-101	and First Year Studio	
BIO-111	General Biology I	4
CHM-113	General Chemistry I	4
MTH-191 or MTH-195	Applied Calculus or Calculus I	3-4
	Credits	15-16
Spring		
UNV-102	University Seminar II	3
BIO-112	General Biology II	4
CHM-114	General Chemistry II	4
STA-173	Statistical Methods	3
ECN-101	Introductory Macroeconomics	3
	Credits	17
Second Year		
Fall		
RTS-225 or PHL-225	The Quest for the Ultimate: Dialogue with Global Religious Traditions <sup>1</sup>	3
	or Quest for the Good Life	
BIO-220	Cell Biology and Chemistry	4
CHM-205	Organic Chemistry I	4
Literature Core Course		3

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	Credits	17
Spring RTS-225	The Queet for the Ultimeter Dialogue with Clohal	;
or PHL-225	The Quest for the Ultimate: Dialogue with Global Religious Traditions <sup>1</sup>	,
0 220	or Quest for the Good Life	
CHM-206	Organic Chemistry II	
BIO-253	Genetics: Classical, Molecular and Population	
Foreign Language Co	ore Course	;
Visual & Performing	Arts Core Course	;
	Credits	17
Third Year		
Fall		
BIO-210	Microbiology	
BIO-305	Human Anatomy	
PHY-201	General Physics I	•
History Core Course		;
Religious & Theologi	cal Studies Core Course	;
	Credits	18
Spring		
BIO-471	Biology Seminar	;
BIO-325	Human Physiology	
PHY-202	General Physics II	
Social Science Core	Course	
Philosophy Core Cou	irse	:
	Credits	1
Fourth Year		
	rsity of Saint Joseph	
	Introduction to the Profession of Pharmacy <sup>2</sup>	:
Fourth Year at Unive		
Fourth Year at Unive PHRM700	Introduction to the Profession of Pharmacy <sup>2</sup>	:
Fourth Year at Unive PHRM700 PHRM712	Introduction to the Profession of Pharmacy <sup>2</sup> Biochemical Principles in Healthcare 1 <sup>2</sup> Evidence-based Practice 1 Pharmacy Law 1	
Fourth Year at Unive PHRM700 PHRM712 PHRM735	Introduction to the Profession of Pharmacy <sup>2</sup> Biochemical Principles in Healthcare 1 <sup>2</sup> Evidence-based Practice 1	
Fourth Year at Unive PHRM700 PHRM712 PHRM735 PHRM729	Introduction to the Profession of Pharmacy <sup>2</sup> Biochemical Principles in Healthcare 1 <sup>2</sup> Evidence-based Practice 1 Pharmacy Law 1	
Fourth Year at Unive PHRM700 PHRM712 PHRM735 PHRM729 PHRM704	Introduction to the Profession of Pharmacy <sup>2</sup> Biochemical Principles in Healthcare 1 <sup>2</sup> Evidence-based Practice 1 Pharmacy Law 1 Dosage Form Design and Calculations 1 <sup>2</sup>	
Fourth Year at Unive PHRM700 PHRM712 PHRM735 PHRM729 PHRM704 PHRM706	Introduction to the Profession of Pharmacy <sup>2</sup> Biochemical Principles in Healthcare 1 <sup>2</sup> Evidence-based Practice 1 Pharmacy Law 1 Dosage Form Design and Calculations 1 <sup>2</sup> Dosage Form Design and Calculations Laboratory	:
Fourth Year at Unive PHRM700 PHRM712 PHRM735 PHRM729 PHRM704 PHRM706 PHRM705 PHRM709 PHRM771	Introduction to the Profession of Pharmacy <sup>2</sup> Biochemical Principles in Healthcare 1 <sup>2</sup> Evidence-based Practice 1 Pharmacy Law 1 Dosage Form Design and Calculations 1 <sup>2</sup> Dosage Form Design and Calculations Laboratory Dosage Form Design and Calculations 2 Immunization Certification Introductory Pharmacy Practice Experience 1	
Fourth Year at Unive PHRM700 PHRM712 PHRM735 PHRM729 PHRM704 PHRM706 PHRM705 PHRM709 PHRM771 PHRM711	Introduction to the Profession of Pharmacy <sup>2</sup> Biochemical Principles in Healthcare 1 <sup>2</sup> Evidence-based Practice 1 Pharmacy Law 1 Dosage Form Design and Calculations 1 <sup>2</sup> Dosage Form Design and Calculations Laboratory Dosage Form Design and Calculations 2 Immunization Certification Introductory Pharmacy Practice Experience 1 Biochemical Principles in Healthcare 2 <sup>2</sup>	
Fourth Year at Unive PHRM700 PHRM712 PHRM735 PHRM729 PHRM704 PHRM706 PHRM705 PHRM709 PHRM771 PHRM771 PHRM7713 PHRM7720	Introduction to the Profession of Pharmacy <sup>2</sup> Biochemical Principles in Healthcare 1 <sup>2</sup> Evidence-based Practice 1 Pharmacy Law 1 Dosage Form Design and Calculations 1 <sup>2</sup> Dosage Form Design and Calculations Laboratory Dosage Form Design and Calculations 2 Immunization Certification Introductory Pharmacy Practice Experience 1 Biochemical Principles in Healthcare 2 <sup>2</sup> Pharmacy Administration and Pharmacoeconomics	
Fourth Year at Unive PHRM700 PHRM712 PHRM735 PHRM729 PHRM704 PHRM706 PHRM705 PHRM709 PHRM711 PHRM713 PHRM713 PHRM7120 PHRM715	Introduction to the Profession of Pharmacy <sup>2</sup> Biochemical Principles in Healthcare 1 <sup>2</sup> Evidence-based Practice 1 Pharmacy Law 1 Dosage Form Design and Calculations 1 <sup>2</sup> Dosage Form Design and Calculations Laboratory Dosage Form Design and Calculations 2 Immunization Certification Introductory Pharmacy Practice Experience 1 Biochemical Principles in Healthcare 2 <sup>2</sup> Pharmacy Administration and Pharmacoeconomics Fundamentals of Drug Action 1 <sup>2</sup>	
Fourth Year at Unive PHRM700 PHRM712 PHRM735 PHRM729 PHRM704 PHRM706 PHRM705 PHRM709 PHRM711 PHRM713 PHRM713 PHRM7120 PHRM715 PHRM715 PHRM730	Introduction to the Profession of Pharmacy <sup>2</sup> Biochemical Principles in Healthcare 1 <sup>2</sup> Evidence-based Practice 1 Pharmacy Law 1 Dosage Form Design and Calculations 1 <sup>2</sup> Dosage Form Design and Calculations Laboratory Dosage Form Design and Calculations 2 Immunization Certification Introductory Pharmacy Practice Experience 1 Biochemical Principles in Healthcare 2 <sup>2</sup> Pharmacy Administration and Pharmacoeconomics Fundamentals of Drug Action 1 <sup>2</sup> Patient Care Pharmacy Practice 1	
Fourth Year at Unive PHRM700 PHRM712 PHRM735 PHRM729 PHRM704 PHRM706 PHRM705 PHRM709 PHRM711 PHRM713 PHRM713 PHRM720 PHRM715 PHRM715 PHRM730 PHRM730 PHRM708	Introduction to the Profession of Pharmacy <sup>2</sup> Biochemical Principles in Healthcare 1 <sup>2</sup> Evidence-based Practice 1 Pharmacy Law 1 Dosage Form Design and Calculations 1 <sup>2</sup> Dosage Form Design and Calculations Laboratory Dosage Form Design and Calculations 2 Immunization Certification Introductory Pharmacy Practice Experience 1 Biochemical Principles in Healthcare 2 <sup>2</sup> Pharmacy Administration and Pharmacoeconomics Fundamentals of Drug Action 1 <sup>2</sup> Patient Care Pharmacy Practice 1 Basic and Applied Pharmacokinetics <sup>2</sup>	
Fourth Year at Unive PHRM700 PHRM712 PHRM735 PHRM729 PHRM704 PHRM706 PHRM705 PHRM709 PHRM711 PHRM713 PHRM713 PHRM715 PHRM715 PHRM715 PHRM710 PHRM718 PHRM718 PHRM718 PHRM730 PHRM708 PHRM731	Introduction to the Profession of Pharmacy <sup>2</sup> Biochemical Principles in Healthcare 1 <sup>2</sup> Evidence-based Practice 1 Pharmacy Law 1 Dosage Form Design and Calculations 1 <sup>2</sup> Dosage Form Design and Calculations Laboratory Dosage Form Design and Calculations 2 Immunization Certification Introductory Pharmacy Practice Experience 1 Biochemical Principles in Healthcare 2 <sup>2</sup> Pharmacy Administration and Pharmacoeconomics Fundamentals of Drug Action 1 <sup>2</sup> Patient Care Pharmacy Practice 1 Basic and Applied Pharmacokinetics <sup>2</sup> Patient Care Pharmacy Practice 2	
Fourth Year at Unive PHRM700 PHRM712 PHRM735 PHRM729 PHRM704 PHRM706 PHRM705 PHRM709 PHRM711 PHRM713 PHRM713 PHRM715 PHRM715 PHRM715 PHRM730 PHRM708 PHRM731 PHRM731 PHRM731	Introduction to the Profession of Pharmacy <sup>2</sup> Biochemical Principles in Healthcare 1 <sup>2</sup> Evidence-based Practice 1 Pharmacy Law 1 Dosage Form Design and Calculations 1 <sup>2</sup> Dosage Form Design and Calculations Laboratory Dosage Form Design and Calculations 2 Immunization Certification Introductory Pharmacy Practice Experience 1 Biochemical Principles in Healthcare 2 <sup>2</sup> Pharmacy Administration and Pharmacoeconomics Fundamentals of Drug Action 1 <sup>2</sup> Patient Care Pharmacy Practice 1 Basic and Applied Pharmacokinetics <sup>2</sup> Patient Care Pharmacy Practice 2 Operational Pharmacy Practice Laboratory	
Fourth Year at Unive PHRM700 PHRM712 PHRM735 PHRM729 PHRM704 PHRM706 PHRM705 PHRM709 PHRM711 PHRM713 PHRM713 PHRM715 PHRM715 PHRM715 PHRM710 PHRM718 PHRM718 PHRM718 PHRM730 PHRM708 PHRM731	Introduction to the Profession of Pharmacy <sup>2</sup> Biochemical Principles in Healthcare 1 <sup>2</sup> Evidence-based Practice 1 Pharmacy Law 1 Dosage Form Design and Calculations 1 <sup>2</sup> Dosage Form Design and Calculations Laboratory Dosage Form Design and Calculations 2 Immunization Certification Introductory Pharmacy Practice Experience 1 Biochemical Principles in Healthcare 2 <sup>2</sup> Pharmacy Administration and Pharmacoeconomics Fundamentals of Drug Action 1 <sup>2</sup> Patient Care Pharmacy Practice 1 Basic and Applied Pharmacokinetics <sup>2</sup> Patient Care Pharmacy Practice 2 Operational Pharmacy Practice Laboratory Evidence-based Practice 2	
Fourth Year at Unive PHRM700 PHRM712 PHRM735 PHRM729 PHRM704 PHRM706 PHRM705 PHRM709 PHRM711 PHRM713 PHRM713 PHRM720 PHRM715 PHRM730 PHRM731 PHRM731 PHRM734 PHRM734	Introduction to the Profession of Pharmacy <sup>2</sup> Biochemical Principles in Healthcare 1 <sup>2</sup> Evidence-based Practice 1 Pharmacy Law 1 Dosage Form Design and Calculations 1 <sup>2</sup> Dosage Form Design and Calculations Laboratory Dosage Form Design and Calculations 2 Immunization Certification Introductory Pharmacy Practice Experience 1 Biochemical Principles in Healthcare 2 <sup>2</sup> Pharmacy Administration and Pharmacoeconomics Fundamentals of Drug Action 1 <sup>2</sup> Patient Care Pharmacy Practice 1 Basic and Applied Pharmacokinetics <sup>2</sup> Patient Care Pharmacy Practice 2 Operational Pharmacy Practice Laboratory	
Fourth Year at Unive PHRM700 PHRM712 PHRM735 PHRM729 PHRM704 PHRM706 PHRM705 PHRM709 PHRM711 PHRM713 PHRM713 PHRM720 PHRM715 PHRM730 PHRM730 PHRM730 PHRM731 PHRM731 PHRM734 PHRM736  Fifth Year	Introduction to the Profession of Pharmacy <sup>2</sup> Biochemical Principles in Healthcare 1 <sup>2</sup> Evidence-based Practice 1 Pharmacy Law 1 Dosage Form Design and Calculations 1 <sup>2</sup> Dosage Form Design and Calculations Laboratory Dosage Form Design and Calculations 2 Immunization Certification Introductory Pharmacy Practice Experience 1 Biochemical Principles in Healthcare 2 <sup>2</sup> Pharmacy Administration and Pharmacoeconomics Fundamentals of Drug Action 1 <sup>2</sup> Patient Care Pharmacy Practice 1 Basic and Applied Pharmacokinetics <sup>2</sup> Patient Care Pharmacy Practice 2 Operational Pharmacy Practice Laboratory Evidence-based Practice 2 Credits	
Fourth Year at Unive PHRM700 PHRM712 PHRM735 PHRM729 PHRM704 PHRM706 PHRM705 PHRM709 PHRM711 PHRM713 PHRM713 PHRM720 PHRM715 PHRM730 PHRM731 PHRM731 PHRM734 PHRM734	Introduction to the Profession of Pharmacy <sup>2</sup> Biochemical Principles in Healthcare 1 <sup>2</sup> Evidence-based Practice 1 Pharmacy Law 1 Dosage Form Design and Calculations 1 <sup>2</sup> Dosage Form Design and Calculations Laboratory Dosage Form Design and Calculations 2 Immunization Certification Introductory Pharmacy Practice Experience 1 Biochemical Principles in Healthcare 2 <sup>2</sup> Pharmacy Administration and Pharmacoeconomics Fundamentals of Drug Action 1 <sup>2</sup> Patient Care Pharmacy Practice 1 Basic and Applied Pharmacokinetics <sup>2</sup> Patient Care Pharmacy Practice 2 Operational Pharmacy Practice 2 Credits	4
Fourth Year at Unive PHRM700 PHRM712 PHRM735 PHRM729 PHRM704 PHRM706 PHRM705 PHRM709 PHRM711 PHRM713 PHRM713 PHRM720 PHRM715 PHRM730 PHRM730 PHRM736 PHRM736 PHRM736 FIfth Year University of St. Jos	Introduction to the Profession of Pharmacy <sup>2</sup> Biochemical Principles in Healthcare 1 <sup>2</sup> Evidence-based Practice 1 Pharmacy Law 1 Dosage Form Design and Calculations 1 <sup>2</sup> Dosage Form Design and Calculations Laboratory Dosage Form Design and Calculations 2 Immunization Certification Introductory Pharmacy Practice Experience 1 Biochemical Principles in Healthcare 2 <sup>2</sup> Pharmacy Administration and Pharmacoeconomics Fundamentals of Drug Action 1 <sup>2</sup> Patient Care Pharmacy Practice 1 Basic and Applied Pharmacokinetics <sup>2</sup> Patient Care Pharmacy Practice 2 Operational Pharmacy Practice Laboratory Evidence-based Practice 2 Credits	4
Fourth Year at Unive PHRM700 PHRM712 PHRM735 PHRM729 PHRM704 PHRM706 PHRM705 PHRM709 PHRM711 PHRM713 PHRM713 PHRM713 PHRM730 PHRM730 PHRM730 PHRM736 PHRM736 Fifth Year University of St. Jos	Introduction to the Profession of Pharmacy <sup>2</sup> Biochemical Principles in Healthcare 1 <sup>2</sup> Evidence-based Practice 1 Pharmacy Law 1 Dosage Form Design and Calculations 1 <sup>2</sup> Dosage Form Design and Calculations Laboratory Dosage Form Design and Calculations 2 Immunization Certification Introductory Pharmacy Practice Experience 1 Biochemical Principles in Healthcare 2 <sup>2</sup> Pharmacy Administration and Pharmacoeconomics Fundamentals of Drug Action 1 <sup>2</sup> Patient Care Pharmacy Practice 1 Basic and Applied Pharmacokinetics <sup>2</sup> Patient Care Pharmacy Practice 2 Operational Pharmacy Practice 2 Credits  Credits  Credits	3
Fourth Year at Unive PHRM700 PHRM712 PHRM735 PHRM729 PHRM704 PHRM706 PHRM705 PHRM709 PHRM711 PHRM713 PHRM713 PHRM720 PHRM715 PHRM730 PHRM730 PHRM736 PHRM736 PHRM736 FIfth Year University of St. Jos	Introduction to the Profession of Pharmacy <sup>2</sup> Biochemical Principles in Healthcare 1 <sup>2</sup> Evidence-based Practice 1 Pharmacy Law 1 Dosage Form Design and Calculations 1 <sup>2</sup> Dosage Form Design and Calculations Laboratory Dosage Form Design and Calculations 2 Immunization Certification Introductory Pharmacy Practice Experience 1 Biochemical Principles in Healthcare 2 <sup>2</sup> Pharmacy Administration and Pharmacoeconomics Fundamentals of Drug Action 1 <sup>2</sup> Patient Care Pharmacy Practice 1 Basic and Applied Pharmacokinetics <sup>2</sup> Patient Care Pharmacy Practice 2 Operational Pharmacy Practice 2 Credits  Credits  Credits	41

<sup>1</sup> One each semester

Minimum of 120 credits required for undergraduate degree conferral.

University of Saint Joseph course will transfer to Salve Regina University to count toward Biology electives for B.S. degree.

Courses for years five and six to meet degree requirements will be specified by University of Saint Joseph.