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

Salve Regina University along with the University of Saint Joseph offers a pathway for students to earn their Doctor of Pharmacy in six years. Students complete three years of study in biology at Salve Regina, followed by three years in Saint Joseph's Pharm.D. program. Before conferral of the B.S. in Biology from Salve Regina University, the student must request that University of Saint Joseph forward transcripts to verify completion of all required course work. See Pharmacy Dual Degree (https://catalog.salve.edu/undergraduate/academic-programs/pharmacy-3-3-dual-degree/) for more information.

Biology (B.S.) majors in the 3+3 pharmacy dual degree complete a minimum of 120 credits to earn a bachelor's degree, including 41 – 44 credits of core courses (https://catalog.salve.edu/undergraduate/curriculum-degree-programs/) 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-113	Biology I	4
BIO-114	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
or ECN-102	Introductory Microeconomics	
<b>Total Credits</b>		64-65

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

Course	Title	Credits
First Year		
Fall		
FYT-101	First Year Studio	1
UNV-101	University Seminar	3
BIO-113	Biology I	4
CHM-113	General Chemistry I	4
MTH-191	Applied Calculus	3-4
or MTH-195	or Calculus I	
	Credits	15-16
Spring		
UNV-102	University Seminar II	3
BIO-114	Biology II	4

CHM-114	General Chemistry II	4
STA-173	Statistical Methods	3
ECN-101	Introductory Macroeconomics	3
	Credits	17
Second Year		
Fall		
GST-098	Sophomore Studio <sup>4</sup>	1
RTS-225	The Quest for the Ultimate: Dialogue with Global	3
or PHL-225	Religious Traditions	
DIO 000	or Quest for the Good Life	4
BIO-220	Cell Biology and Chemistry	4
CHM-205	Organic Chemistry I	4
Foreign Language Core C	ourse	3
Literature Core Course	- N-	3
•	Credits	18
Spring	TI 0 (C (1 UI)) ( D)   (1 UI)	
RTS-225 or PHL-225	The Quest for the Ultimate: Dialogue with Global Religious Traditions <sup>1</sup>	3
OI FIIL-225	or Quest for the Good Life	
CHM-206	Organic Chemistry II	4
BIO-253	Genetics: Classical, Molecular and Population	4
Foreign Language Core C	·	3
Visual & Performing Arts		3
	Credits	17
Third Year		
Fall		
BIO-210	Microbiology	4
BIO-305	Human Anatomy	4
PHY-201	General Physics I	4
History Core Course	ochician i nyoloo i	3
motory core course		
	Credits	15
Spring	Credits	15
Spring BIO-471		
BIO-471	Biology Seminar	3
BIO-471 BIO-325	Biology Seminar Human Physiology	3
BIO-471 BIO-325 PHY-202	Biology Seminar Human Physiology General Physics II	3 4 4
BIO-471 BIO-325 PHY-202 Social Science Core Cour	Biology Seminar Human Physiology General Physics II se	3 4 4 3
BIO-471 BIO-325 PHY-202	Biology Seminar Human Physiology General Physics II se	3 4 4 3 3
BIO-471 BIO-325 PHY-202 Social Science Core Cour Core Course in RTS or PH	Biology Seminar Human Physiology General Physics II se	3 4 4 3
BIO-471 BIO-325 PHY-202 Social Science Core Cour Core Course in RTS or PH	Biology Seminar  Human Physiology  General Physics II se L  Credits	3 4 4 3 3
BIO-471 BIO-325 PHY-202 Social Science Core Cour Core Course in RTS or PH Fourth Year Fourth Year at University	Biology Seminar Human Physiology General Physics II se IL Credits of Saint Joseph	3 4 4 3 3
BIO-471 BIO-325 PHY-202 Social Science Core Cour Core Course in RTS or PH Fourth Year Fourth Year at University PHRM700	Biology Seminar  Human Physiology  General Physics II se  IL  Credits  of Saint Joseph  Introduction to the Profession of Pharmacy <sup>2</sup>	3 4 4 3 3 17
BIO-471 BIO-325 PHY-202 Social Science Core Cour Core Course in RTS or PH Fourth Year Fourth Year at University PHRM700 PHRM712	Biology Seminar  Human Physiology  General Physics II se  IL  Credits  of Saint Joseph  Introduction to the Profession of Pharmacy <sup>2</sup> Biochemical Principles in Healthcare 1 <sup>2</sup>	3 4 4 3 3 17
BIO-471 BIO-325 PHY-202 Social Science Core Cour Core Course in RTS or PH Fourth Year Fourth Year at University PHRM700 PHRM712 PHRM735	Biology Seminar  Human Physiology  General Physics II  se  L  Credits  of Saint Joseph  Introduction to the Profession of Pharmacy <sup>2</sup> Biochemical Principles in Healthcare 1 <sup>2</sup> Evidence-based Practice 1	3 4 4 3 3 17
BIO-471 BIO-325 PHY-202 Social Science Core Cour Core Course in RTS or PH Fourth Year Fourth Year at University PHRM700 PHRM712 PHRM735 PHRM729	Biology Seminar  Human Physiology  General Physics II  se  L  Credits  of Saint Joseph  Introduction to the Profession of Pharmacy <sup>2</sup> Biochemical Principles in Healthcare 1 <sup>2</sup> Evidence-based Practice 1  Pharmacy Law 1	3 4 4 3 3 17 3 3 3 3
BIO-471 BIO-325 PHY-202 Social Science Core Cour Core Course in RTS or PH  Fourth Year Fourth Year at University PHRM700 PHRM712 PHRM735 PHRM729 PHRM704	Biology Seminar  Human Physiology  General Physics II se  L  Credits  of Saint Joseph  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>	3 4 4 3 3 17 3 3 3 3 2
BIO-471 BIO-325 PHY-202 Social Science Core Cour Core Course in RTS or PH  Fourth Year Fourth Year at University PHRM700 PHRM712 PHRM729 PHRM704 PHRM706	Biology Seminar  Human Physiology  General Physics II se  IL  Credits  of Saint Joseph  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	3 4 4 3 3 17 3 3 3 2 4
BIO-471 BIO-325 PHY-202 Social Science Core Cour Core Course in RTS or PH  Fourth Year Fourth Year at University PHRM700 PHRM712 PHRM735 PHRM729 PHRM704 PHRM706 PHRM705	Biology Seminar  Human Physiology  General Physics II se  IL  Credits  of Saint Joseph  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	3 4 4 3 3 17 3 3 3 2 4 1
BIO-471 BIO-325 PHY-202 Social Science Core Cour Core Course in RTS or PH  Fourth Year Fourth Year at University PHRM700 PHRM712 PHRM735 PHRM704 PHRM706 PHRM706 PHRM705 PHRM709	Biology Seminar Human Physiology General Physics II se  L  Credits  of Saint Joseph 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	3 4 4 3 3 17 3 3 3 4 4 4 4 2
BIO-471 BIO-325 PHY-202 Social Science Core Cour Core Course in RTS or PH  Fourth Year Fourth Year at University PHRM700 PHRM712 PHRM735 PHRM704 PHRM706 PHRM705 PHRM705 PHRM709 PHRM771	Biology Seminar  Human Physiology  General Physics II  se  L  Credits  of Saint Joseph  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	3 4 4 3 3 17 3 3 3 3 2 4 1 4 2 2
BIO-471 BIO-325 PHY-202 Social Science Core Cour Core Course in RTS or PH  Fourth Year Fourth Year at University PHRM700 PHRM712 PHRM735 PHRM704 PHRM706 PHRM705 PHRM705 PHRM709 PHRM771 PHRM713	Biology Seminar  Human Physiology  General Physics II  se  L  Credits  of Saint Joseph  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>	3 4 4 3 3 17 3 3 3 4 1 4 1 4 2 2 3
BIO-471 BIO-325 PHY-202 Social Science Core Cour Core Course in RTS or PH  Fourth Year Fourth Year at University PHRM700 PHRM712 PHRM735 PHRM704 PHRM706 PHRM705 PHRM709 PHRM701 PHRM701 PHRM701 PHRM711 PHRM713 PHRM713	Biology Seminar Human Physiology General Physics II se  L  Credits  of Saint Joseph 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	3 4 4 3 3 17 3 3 3 4 1 4 2 2 3 4
BIO-471 BIO-325 PHY-202 Social Science Core Cour Core Course in RTS or PH  Fourth Year Fourth Year at University PHRM700 PHRM712 PHRM729 PHRM704 PHRM706 PHRM705 PHRM709 PHRM711 PHRM713 PHRM713 PHRM713 PHRM713 PHRM720 PHRM715	Biology Seminar Human Physiology General Physics II se  L  Credits  of Saint Joseph 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 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>	3 4 4 3 3 177 3 3 3 4 1 4 2 2 3 4 4 2
BIO-471 BIO-325 PHY-202 Social Science Core Cour Core Course in RTS or PH  Fourth Year Fourth Year at University PHRM700 PHRM712 PHRM729 PHRM704 PHRM706 PHRM705 PHRM709 PHRM711 PHRM713 PHRM713 PHRM713 PHRM713 PHRM713 PHRM715 PHRM715 PHRM715	Biology Seminar Human Physiology General Physics II se  L  Credits  of Saint Joseph 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 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	3 4 4 3 3 17 3 3 3 4 1 4 2 2 3 4 2 3
BIO-471 BIO-325 PHY-202 Social Science Core Cour Core Course in RTS or PH  Fourth Year Fourth Year at University PHRM700 PHRM712 PHRM735 PHRM704 PHRM706 PHRM705 PHRM709 PHRM711 PHRM713 PHRM713 PHRM720 PHRM715 PHRM715 PHRM715 PHRM730 PHRM708	Biology Seminar Human Physiology General Physics II se  L Credits  of Saint Joseph 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>	3 4 4 3 3 17 3 3 3 3 2 4 4 1 1 4 2 2 3 3 4 4 2 2 3 3 4 4 2 3 3 4 4 4 2 2 3 3 4 4 4 4
BIO-471 BIO-325 PHY-202 Social Science Core Cour Core Course in RTS or PH  Fourth Year Fourth Year at University PHRM700 PHRM712 PHRM735 PHRM704 PHRM706 PHRM705 PHRM709 PHRM711 PHRM713 PHRM713 PHRM713 PHRM715 PHRM715 PHRM715 PHRM730 PHRM708 PHRM731	Biology Seminar Human Physiology General Physics II se  L  Credits  of Saint Joseph 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	3 4 4 3 3 17 3 3 3 4 1 4 2 2 3 4 2 3 4 3
BIO-471 BIO-325 PHY-202 Social Science Core Cour Core Course in RTS or PH  Fourth Year Fourth Year at University PHRM700 PHRM712 PHRM735 PHRM704 PHRM706 PHRM705 PHRM709 PHRM711 PHRM713 PHRM713 PHRM715 PHRM720 PHRM715 PHRM730 PHRM730 PHRM731 PHRM731 PHRM731 PHRM731	Biology Seminar Human Physiology General Physics II se  L  Credits  of Saint Joseph 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	3 4 4 3 3 17 3 3 3 4 1 4 2 2 3 4 2 3 4 2 3 1
BIO-471 BIO-325 PHY-202 Social Science Core Cour Core Course in RTS or PH  Fourth Year Fourth Year at University PHRM700 PHRM712 PHRM735 PHRM704 PHRM706 PHRM705 PHRM709 PHRM711 PHRM713 PHRM713 PHRM713 PHRM715 PHRM715 PHRM715 PHRM730 PHRM708 PHRM731	Biology Seminar  Human Physiology  General Physics II  se  L  Credits  of Saint Joseph  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	3 4 4 3 3 17 3 3 3 4 1 4 2 2 3 4 2 3 4 2 3 1 2
BIO-471 BIO-325 PHY-202 Social Science Core Cour Core Course in RTS or PH  Fourth Year Fourth Year at University PHRM700 PHRM712 PHRM735 PHRM704 PHRM706 PHRM705 PHRM709 PHRM711 PHRM713 PHRM713 PHRM713 PHRM715 PHRM715 PHRM715 PHRM730 PHRM730 PHRM731 PHRM731 PHRM734 PHRM736	Biology Seminar Human Physiology General Physics II se  L  Credits  of Saint Joseph 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	3 4 4 3 3 17 3 3 3 4 1 4 2 2 3 4 2 3 4 2 3 1
BIO-471 BIO-325 PHY-202 Social Science Core Cour Core Course in RTS or PH  Fourth Year Fourth Year at University PHRM700 PHRM712 PHRM735 PHRM704 PHRM706 PHRM705 PHRM709 PHRM711 PHRM713 PHRM713 PHRM715 PHRM720 PHRM715 PHRM730 PHRM730 PHRM731 PHRM731 PHRM731 PHRM731	Biology Seminar Human Physiology General Physics II se  L  Credits  of Saint Joseph 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	3 4 4 3 3 17 3 3 3 4 1 4 2 2 3 4 2 3 4 2 3 1 2

Credits

## Sixth Year

University of St. Joseph <sup>3</sup>			
Credits	0		
Total Credits	145-146		

<sup>1</sup> One each semester

University to count toward Biology electives for B.S. degree.

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

specified by University of Saint Joseph.

This weekend workshop may be taken in either the fall or spring semester of sophomore year.

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.