

# BIOLOGY, B.S.

## Requirements

Code	Title	Hours
<b>General Education Program</b>		
Writing (WR)		3
Quantitative Literacy (QR)		3-4
Oral Communications (OC)		3
Fitness/Health (FH)		2-3
Information, Technology & Media Literacy (ITML)		3
Religious Studies (RS)		3
Freshman Seminar (FS)		1
Humanistic & Creative Expression (HCE)		6
Natural & Physical World (NPW)		6-10
CHE-1201	General Chemistry I	
CHE-1202	General Chemistry II	
Philosophical, Ethical & Moral Dimensions (PEM)		6
Environment & Human Experience (SEH)		6
World Heritage & Global Perspectives (WHG)		6
<b>Biology Major</b>		
BIO-1201	General Biology I	5
BIO-1202	General Biology II	5
BIO-2250	Introduction to Cell Biology	4
BIO-3303	Genetics	4
BIO-4998	Biology Seminar	1
BIO Distribution, select one course in each group <sup>1</sup>		15-16
Select one course from Group A below		
Select one course from Group B below		
Select one course from Group C below		
Select one BIO course 2000 or higher		
CHE-2101	Organic Chemistry I	5
CHE-2102	Organic Chemistry II	5
CHE-3001	Biochemistry	4
MAT-2202	Calculus I	4
Select one of the following courses:		3-4
MAT-2203	Calculus II	
MAT-2301	Statistics	
PHY-2001	General Physics I	4
PHY-2002	General Physics II	4
General Electives <sup>2</sup>		13
<b>Total Hours</b>		<b>124-132</b>

The successful completion of BIO-4998 Biology Seminar satisfies the College's Comprehensive Examination/Thesis requirement.

<sup>1</sup> Three of these electives must be four credit laboratory courses.

<sup>2</sup> All majors are strongly encouraged to become conversant in a language other than English.

## Group A – Population Biology Ecology and Evolution

Code	Title	Hours
Select one of the following courses:		
BIO-2203	Invertebrate Zoology	
BIO-2204	Ecology	
BIO-2280	Biological Evolution	
BIO-3302	Botany	
BIO-4005	Topic: Parasitology	
<b>Total Hours</b>		<b>4</b>

## Group B – Molecular and Cellular Biology

Code	Title	Hours
Select one of the following courses:		
BIO-2206	Histology	
BIO-3310	Advanced Cell Biology	
BIO-3320	Molecular Biology	
BIO-4405	Immunology	
BIO-4480	Bioinformatics	
<b>Total Hours</b>		<b>4</b>

## Group C – Organismal Biology

Code	Title	Hours
Select one of the following courses:		
BIO-2202	Comparative Anatomy	
BIO-2210	Developmental Biology	
BIO-3300	Microbiology	
BIO-3350	Physiology	
BIO-4409	Neurobiology	
BIO-4420	Virology	
BIO-4403	Endocrinology	
BIO-4450	Pharmacology	
<b>Total Hours</b>		<b>3-4</b>

The General Education Program is the academic cornerstone of St. Francis College and affirms its mission to graduate educated, well-rounded students to enter and participate in a changing and culturally diverse world.

As an integrated program of studies, it focuses on developing the skills expected of a liberally educated person. It provides students with a broadly-based foundation outside their areas of specialization, an understanding of how various disciplines intersect and differ, and assists in cultivating a disposition for lifelong learning.

## Institutional Learning Outcomes:

1. Demonstrate sensitivity to creative expression
2. Communicate ideas and information through written, oral, visual and digital media
3. Employ critical and analytical skills
4. Value diverse perspectives of the human experience
5. Implement information, technology and media literacy
6. Demonstrate quantitative literacy

## **Foundation Courses- First Year College (18 credits)**

To ensure refinement of basic reasoning and cognitive skills needed for successful completion of any college degree program, the general education program requires 18 credits in foundational courses targeting student learning outcomes (SLOs) in writing; quantitative reasoning; oral communications; information, technology, and media literacy; fitness or health; religious studies; and the Freshman Seminar. Each student is required to successfully complete one course in each of the areas of the First Year College.

## **Bodies of Knowledge (30 credits)**

A selection of 30 credits in broad areas of inquiry, designated as Bodies of Knowledge, allow students the flexibility to gain breadth and depth in a field outside of a major. Each student is required to successfully complete two different courses in each of the five Bodies of Knowledge.