

NATURAL SCIENCES MAJOR

MAJOR OBJECTIVES

In addition to fulfilling the Science-Mathematics Departmental objectives:

- Students majoring in **Biochemistry, Biology, Chemistry and Natural Sciences** are expected to:
 - Formulate questions about nature that are amenable to scientific investigations
 - Utilize current information retrieval technology to effectively search the scientific literature and to be conversant with current developments
 - Apply modern approaches, techniques and instrumentation in designing and conducting experiments
 - Use appropriate software packages for instrumental control and data manipulation

Important Notes

- 40% of major requirements must be completed at Judson.
- At least 18 hours of major requirements must be upper division.

Gen Eds Required by Major

- Any Mathematics course of 3 hours or more (fulfills Gen Ed Mathematics Requirement)
- Any Science course (with Lab) of 4 hours or more (fulfills Gen Ed Science Requirement)
- SCM319 Junior Science Seminar (1 c.h.) (fulfills Gen Ed GEN301 Requirement)

Major Requirements

Code	Title	Hours
Biology/Chemistry/Physics		
Select two of the following sequences:		16
Sequence A		
BIO171	Principles of Biology w/Lab	
Select one from the following:		
BIO172	Prin of Organismal Biology w/Lab	
BIO177	Environmental Science w/Lab	
SAP3** Dpt-approved course ¹		
Sequence B		
CHM153	General Chemistry I w/Lab	
CHM154	General Chemistry II w/Lab	
Sequence C		
PHY237	General Physics I w/Lab	
PHY238	General Physics II w/Lab	
Mathematics		
MAT211	Functions and Calculus I	3-5
or MAT215	Calculus w/Analytic Geometry I	
MAT216	Calculus w/Analytic Geometry II (or approved Math elective)	4
SCM Seminars		
SCM219	Sophomore Science Seminar	1
SCM319	Junior Science Seminar	1
SCM419	Senior Science Seminar	1

Science/Mathematics Electives	
Select 20 hours of the following: ²	20
Mathematics Elective	
Biology Elective	
Chemistry Elective	
Biochemistry Elective	
Physics Elective	
Physical Science Elective	
Total Hours	46-48

¹ Shedd Aquarium, Morton Arboretum, Au Sable Institute of Environmental Studies, etc.

² At least 16 of the 20 hours of SCM electives must be upper division. SCM181* Science Models Concepts courses are not applicable. MAT110/111 Mathematics Models and MAT112 Mathematics for Elementary Education may not apply.

Bachelor of Science in Natural Sciences (Four-Year Plan)

Academic planning is the student's responsibility. This Graduation Plan is designed to be a guide to assist students as they plan their course selections. This is only a suggested schedule, and is not a substitute for a student's Degree Audit, nor the Program Requirements in the Judson University Catalog. Actual course selections should be made with the advice and approval of an academic advisor. Students should become familiar with the catalog in effect at the time at which they entered the institution. Course requirements and sequencing may vary with AP courses, transfer courses, English/math placement, or other conditions.

A full-time course load for undergraduate students is 12-18 credits per semester. Illinois residents receiving state aid should register for 15 hours per semester.

Course	Title	Hours
First Year		
First Semester		
ENG101	Expository Writing (or ACT/SAT placement)	3
MAT211 or MAT215	Functions and Calculus I or Calculus w/Analytic Geometry I	3-5
GEN101 or ESS101	Questions of Life: Entering the Judson Conversation (<24 transfer hours) ¹ or Wellness	1
Physical Activity course		1
Science Sequence 1 ²		4
Hours		12-14
Second Semester		
BST110	Intro to the Christian Bible	3
MAT216	Calculus w/Analytic Geometry II	4
Science Sequence 1 ²		4
Any Elective		3
Hours		14
Second Year		
First Semester		
Gen Ed Visual and Performing Arts Elective		3
THS110	Christian Faith: Understanding and Application	3
SCM219	Sophomore Science Seminar	1
Science Sequence 2 ²		4
Any Electives		6
Hours		17

2 Natural Sciences Major

Second Semester

PSY111 or SOC151	Introduction to Psychology or Introduction to Sociology	3
SPC120	Foundations of Speech	3
Science Sequence 2 ²		4
Any Electives		6
Hours		16

Third Year

First Semester

Gen Ed Biblical Studies Elective		3
HIS261 or HIS262	History of Civilization I or History of Civilization II	3
Upper Div Sci/Math Electives ²		8
Hours		14

Second Semester

ENG102	Critical Thinking and Writing (or ACT/SAT placement)	3
SCM319	Junior Science Seminar ³	1
Any Science/Math Electives ²		4
Any Electives		6
Hours		14

Fourth Year

First Semester

GEN401	The Good Life: Continuing the Conversation	3
SCM419	Senior Science Seminar	1
Upper Div Sci/Math Electives ²		4
Any Electives		9
Hours		17

Second Semester

MAT311	Probability and Statistics w/Lab	4
Upper Div Sci/Math Electives ²		4
Any Electives		6
Hours		14
Total Hours		118-120

¹ First-time students (those entering college directly from high school) should take GEN101; transfer students should take ESS101

² see major audit

³ GEN301 equivalent