

# BACHELOR OF SCIENCE IN BIOLOGY/BACHELOR OF SCIENCE IN PSYCHOLOGICAL SCIENCE

This program provides an integrated dual degree program leading to the Bachelor of Science in Biology and the Bachelor of Science in Psychological Science while maintaining the integrity and program content of each individual degree program.

This program has two main target audiences:

1. Pre-health students (pre-MD, pre-clinical psychologist or psychiatrist) who are interested in neurological or behavioral issues. A challenging dual degree program will be an asset in the professional school application process, and this program will provide an excellent preparation for the MCAT.
2. Students interested in moving on to graduate school in studies at the interface of biology and psychology, such as neuroscience, brain science, or cognitive science.

## Required Courses

Code	Title	Credit Hours		Credit Hours
<b>Biology Requirements (34)</b>			or PSYC 203	Undergraduate Statistics for the Behavioral Sciences
BIOL 107	General Biology Lectures	3	<b>Psychological Science Requirements (28)</b>	
BIOL 109	General Biology Laboratory	1	PSYC 204	Research Methods in Behavioral Science 4
BIOL 115	Human Biology	3	PSYC 221	Introduction to Psychological Science 3
BIOL 117	Human Biology Laboratory	1	PSYC 301	Industrial Psychology 3
BIOL 210	Microbiology	3	or PSYC 303	Introduction to Psychopathology
BIOL 214	Genetics	3	PSYC 310	Social Psychology 3
BIOL 225	Microbiology Laboratory	2	PSYC 320	Applied Correlation and Regression 3
BIOL 401	Introductory Biochemistry	3	or PSYC 409	Psychological Testing
BIOL 402	Metabolic Biochemistry	3	PSYC 414	Neural and Biological Bases of Behavior 3
BIOL 404	Biochemistry Laboratory	3	PSYC 426	Cognitive Science 3
or BIOL 431	Animal Physiology Laboratory		PSYC 435	Child Development 3
or BIOL 446	Cell Biology Laboratory		or PSYC 436	Adult Development
BIOL 430	Human Physiology	3	or PSYC 312	Human Motivation and Emotion
BIOL 445	Cell Biology	3	or PSYC 423	Learning Theory
BIOL 451	Biological Literature	2	PSYC 485	Senior Capstone Project I 3
BIOL 495	Biology Colloquium	1	or PSYC 312	Human Motivation and Emotion
<b>Biology Electives (6)</b>			or PSYC 423	Learning Theory
Select six credit hours			or PSYC 435	Child Development
<b>Chemistry Requirements (18)</b>			or PSYC 436	Adult Development
CHEM 124	Principles of Chemistry I with Laboratory	4	<b>Psychological Science Electives (9)</b>	
CHEM 125	Principles of Chemistry II with Laboratory	4	Select nine credit hours 9	
CHEM 237	Organic Chemistry I	4	<b>Introduction to the Profession (2-3)</b>	
CHEM 239	Organic Chemistry II	3	BIOL 100	Introduction to the Profession 2-3
CHEM 247	Analytical Chemistry	3	or PSYC 100	Introduction to the Profession
<b>Physics Requirements (11)</b>			<b>Computer Science Requirement (2)</b>	
PHYS 123	General Physics I: Mechanics	4	CS 105	Introduction to Computer Programming 2
PHYS 221	General Physics II: Electricity and Magnetism	4	or CS 110	Computing Principles
PHYS 224	General Physics III for Engineers	3	<b>Interprofessional Projects (IPRO) (6)</b>	
<b>Mathematics Requirements (13-14)</b>			See Illinois Tech Core Curriculum, section E 6	
MATH 151	Calculus I	5	<b>Humanities and Social Sciences Requirements (12)</b>	
MATH 152	Calculus II	5	See Illinois Tech Core Curriculum, sections B and C <sup>1</sup> 12	
MATH 425	Statistical Methods	3-4	<b>Total Credit Hours 141-143</b>	

<sup>1</sup> B.S. Biology/B.S. Psychological Science students have a reduced humanities and social sciences requirement because six credit

2 Bachelor of Science in Biology/Bachelor of Science in Psychological Science

hours of social sciences are satisfied by six credit hours of psychology "S" designated courses.

## Bachelor of Science in Biology/ Bachelor of Science in Psychological Science Curriculum

Humanities Elective (300+)	3 Psychological Science Elective	3
<b>18</b>		<b>17</b>

**Total Credit Hours: 141-143**

<b>Year 1</b>		
<b>Semester 1</b>	<b>Credit Semester 2</b>	<b>Credit Hours</b>
	<b>Hours</b>	
BIOL 100 or PSYC 100	2-3 BIOL 115	3
BIOL 107	3 BIOL 117	1
PSYC 221	3 PSYC 301	3
CHEM 124	4 CHEM 125	4
MATH 151	5 MATH 152	5
	CS 105 or 110	2
<b>17-18</b>		<b>18</b>

<b>Year 2</b>		
<b>Semester 1</b>	<b>Credit Semester 2</b>	<b>Credit Hours</b>
	<b>Hours</b>	
BIOL 109	1 BIOL 210	3
BIOL 214	3 BIOL 225	2
PSYC 310	3 Psychological Science Elective	3
CHEM 237	4 CHEM 239	3
PHYS 123	4 PHYS 221	4
Humanities 200-level Course	3 Humanities Elective (300+)	3
<b>18</b>		<b>18</b>

<b>Year 3</b>		
<b>Semester 1</b>	<b>Credit Semester 2</b>	<b>Credit Hours</b>
	<b>Hours</b>	
BIOL 445	3 BIOL 430	3
Biology Elective	3 BIOL 495	1
PSYC 414	3 PSYC 204	4
PHYS 224	3 PSYC 320 or 409	3
IPRO Elective I	3 MATH 425 or PSYC 203	3-4
Social Sciences Elective	3 IPRO Elective II	3
<b>18</b>		<b>17-18</b>

<b>Year 4</b>		
<b>Semester 1</b>	<b>Credit Semester 2</b>	<b>Credit Hours</b>
	<b>Hours</b>	
BIOL 401	3 BIOL 402	3
BIOL 404, 431, or 446	3 BIOL 451	2
Psychological Science Elective	3 CHEM 247	3
PSYC 426	3 PSYC 435 or 436	3
Biology Elective	3 PSYC 485	3