

BIOLOGY: Pre-Professional Studies – Pre-Health 2

Pre-PT, Pre-OT, Pre-Chiro

MILLIKIN UNIVERSITY

[B.S. Degree, Biology: Pre-Professional Studies, Pre-Health 2] - 8 Semester Plan

Semester #1	Term: _____	Hours	Spg/Fall/Evry	Semester #2	Term: _____	Hours	Spg/Fall/Evry
BI 105/155: Ecology and Evolution & Lab		4		BI 205 Cellular Biology & Lab		4	
CH 121/151: Gen Chem & Intro Chem Lab I		4		CH 203/205: Essen of Organic and Biochemistry & Lab		4	
IN 140: University Seminar		3		PS 130: Introductory Psychology		3	
EN 181: University Writing		3		___ ___ : Elective (or 3 credits)		4	
MA 110: College Algebra		3					
Semester Total		17		Semester Total		15	
Cumulative Total		17		Cumulative Total		32	
Semester #3	Term: _____	Hours	Spg/Fall/Evry	Semester #4	Term: _____	Hours	Spg/Fall/Evry
BI 206: Anatomy and Physiology I		4		BI 207: Anatomy and Physiology II		4	
CO 200: Public Speaking		3		CH 122/152: Gen Chem II & Intro Chem Lab II		4	
EN 281: Writing in the Disciplines		3		US Structural Studies		3	
PS 240: Lifespan Development		3		BI 240: Analysis of Biological Data (or other Data Analysis course)		3	
US Cultural Studies		3					
Semester Total		16		Semester Total		14	
Cumulative Total		48		Cumulative Total		62	
Semester #5	Term: _____	Hours	Spg/Fall/Evry	Semester #6	Term: _____	Hours	Spg/Fall/Evry
BI 200: Genetics with Lab		4		BI ___ : Biology Content Category		4	
International Cultures & Structures		3		International Cultures & Structures		3	
Global Studies		3		PY 112/172: College PY II & Physics Lab II		3	
PY 111/171: College PY I & Physics Lab I		4		BI 392 : Research		1	
				ES 310: Kinesiology		3	
Semester Total		14		Semester Total		18	
Cumulative Total		76		Cumulative Total		94	
Semester #7	Term: _____	Hours	Spg/Fall/Evry	Semester #8	Term: _____	Hours	Spg/Fall/Evry
BI ___ : Biology Content Category		4		BI 482: Senior Seminar		1	
NU 102: Medical Terminology (Not Required)		3		BI ___ : Biology Content Category		4	
___ ___ : Elective		3		EN ___ : Literature OR Elective		3	
___ ___ : History Elective		3		___ ___ : Elective		3	
				___ ___ : Creative Arts		3	
Semester Total		13		Semester Total		14	
Cumulative Total		107		Cumulative Total		121	

Major Requirements:

Core (12 Credits)	<ul style="list-style-type: none"> • BI105/155 Ecology & Evolution • BI205 Cell Biology • BI200 Genetics
Research (1 credit)	<ul style="list-style-type: none"> • BI391 or 392 Research
Senior Seminar (1 credit)	<ul style="list-style-type: none"> • BI481 or 482 Senior Seminar
Upper-level Content Courses (19-20 credits)	<ul style="list-style-type: none"> • BI 206 A&P I • BI 207 A&P II • Ecology Content • Cell/Molec Bio Content • Systems Content
Mathematics (6-10 credits)	<ul style="list-style-type: none"> • MA110 College Algebra • Data Analysis course (must complete ONE) <ul style="list-style-type: none"> ○ BI 240 Analysis of Biological Data ○ MA130 Elementary Probability and Statistics with Spreadsheets ○ CH232/CH253 Analytical Chemistry with Lab ○ CS135 Introduction to Computer Science ○ Other course approved by department chair
Chemistry (12-19 credits)	<ul style="list-style-type: none"> • CH121/151 Gen Chem 1 • CH122/152 Gen Chem 2 • Select ONE: <ul style="list-style-type: none"> ○ CH203/205 Essentials of Organic & Biochem ○ CH301/251 Organic Chemistry
Physics (8 credits)	<ul style="list-style-type: none"> • PY111/171 College Physics 1 • PY112/172 College Physics 2
Required Supportive Skills Coursework (9 credits)	<ul style="list-style-type: none"> • PS130 Intro to Psychology • PS240 Lifespan Development • ES310 Kinesiology

Content Courses: *Students must select at least 1 from each category, for a total of 3, PLUS take BI 206 & 207. Must earn a C- or better*

Ecology	Cell/Molecular	Systems
BI 314 Ecology	BI 302 Histology	BI 301 Comparative Anatomy
BI 320 Field Ecology	BI 304 Developmental Biology	BI 303 Entomology
BI 323 Animal Behavior	BI 312 Immunology	BI 306 Comparative Animal Physiology
BI 335 Physiological Ecology	BI 330 Microbiology	BI 322 Neurobiology
BI 340 Conservation Biology	BI 407 Molecular Genetics	BI 325 Vertebrate Biology
BI 380 Ecological Journeys		BI 326 Plant Biology
BI 404 Evolution		BI 206 & BI 207 Human Anatomy & Physiology I & II # <i>(must take both to count as one Content Course)</i>

General Education Requirements:

University Studies Courses (37-39 credits)	<ul style="list-style-type: none"> • IN140 University Seminar • EN181 University Writing • EN281 Writing in the Disciplines • US Cultural Studies • US Structural Studies • Global Studies • International Cultures & Structures <i>(must complete 2)</i> • Creative Arts • Natural Science with a Lab Experience <i>(met through the major)</i> • Public Speaking (CO 200) • Quantitative Reasoning <i>(met through math course for the major)</i>
College of Arts & Sciences Distribution (6 credits)	<ul style="list-style-type: none"> • Literature course • History course

required for most PT/OT/Chiro graduate programs

*this major is best suited for those planning to pursue a career in Physical Therapy, Occupational Therapy, or Chiropractic Medicine