

# B.S. in Biology: Pre-Physician's Assistant - CWILT

First Year					
Fall	Credits	Interim	Credits	Spring	Credits
BIO124/BIO124D Integrative Biology: Cells, Genes, Change/Lab or BIO128/BIO128D Integrative Biology: Metabolism, Energy, Biodiversity/Lab	4	GES160 Inquiry Seminar	3	BIO124/BIO124D Integrative Biology: Cells, Genes, Change/Lab or BIO128/BIO128D Integrative Biology: Metabolism, Energy, Biodiversity/Lab	4
CHE113/CHE113D General Chemistry I/Lab or CHE208/CHE208D Accelerated General Chemistry/Lab	4			CHE214/CHE215 General Chemistry II/Lab	4
PSY230M Introduction to Statistical Methods & Experimental Design	4			GES130 Christianity & Western Culture	4
GES140 Introduction to Wellbeing	3			PSY100 Introduction to Psychology	3
	<b>15</b>		<b>3</b>		<b>15</b>
Second Year					
Fall	Credits	Interim	Credits	Spring	Credits
BIO218 Biology in a Changing World	3	Contemporary Western Life and Thought (L) course	3	CHE226/CHE227 Organic Chemistry II/Lab	4
CHE224/CHE225 Organic Chemistry I/Lab	4			THE201 Christian Theology	3
BIB101 Introduction to the Bible	3			GES125 Introduction to the Creative Arts	4
Leisure and Lifetime Sports (Q) course	1			Biology environmental area choice	4
Artistic Experience (A) course	0-3				
	<b>11-14</b>		<b>3</b>		<b>15</b>
Third Year					
Fall	Credits	Interim	Credits	Spring	Credits
BIO399 Introduction to Research	1	World Cultures (U) course	3	BIO216/BIO217 Human Physiology/Lab	4
BIO214/BIO215 Human Anatomy/Lab	4			Physics II elective	4
Physics I elective	4			Comparative Systems (G) course	3
Science, Technology and Society (K) course	3			Interpreting Biblical Themes (J) course	3
Second Language (S) course <sup>1</sup>	4				
	<b>16</b>		<b>3</b>		<b>14</b>
Fourth Year					
Fall	Credits	Interim	Credits	Spring	Credits
BIO481 or BIO496 Internship in Biology or Biology Research	1-3	Interim Off or BIO409 Advanced Human Gross Anatomy	0-4	BIO499 Biology Symposium	0
BIO495 Biology Seminar	2			BIO481 or BIO497 Internship in Biology or Advanced Biology Research	1-3
CHE304/CHE305 Essentials of Biochemistry/Lab	4			BIO244/BIO245 Pathophysiology and Pharmacology/Lab	4
BIO332/BIO333 Genetics/Lab	4			or BIO354/BIO355 Cell Biology/Lab	4
Cross-Cultural Experience (Z) course	0-3			or BIO362/BIO363 Developmental Biology/Lab	4
Elective (HAS375 Biomech.; HAS379 Int. Hum. Phys; BIO384/387 Immunology/Lab)	3-4			BIO234/BIO235 Microbiology/Lab	4
				GES420P Bioethics	3
	<b>14-20</b>		<b>0-4</b>		<b>12-14</b>
<b>Total Credits 122-133</b>					

1. Students must complete through the second semester of a first-year language course or equivalent.

This program assumes the student will use BIO124/BIO124D to meet the general Laboratory Science requirement.

Most financial aid packages stipulate 12 credits/semester; Minnesota state grants are reduced when credit falls below 15 credits/semester. (Interim may be split between fall & spring for the state grant purposes only.)

Pre-requisite courses for most PA school programs

Recommended courses for most PA school programs

## B.S. in Biology: Pre-Physician's Assistant - Humanities

First Year					
Fall	Credits	Interim	Credits	Spring	Credits
BIO124/BIO124D Integrative Biology: Cells, Genes, Change/Lab or BIO128/BIO128D Integrative Biology: Metabolism, Energy, Biodiversity/Lab	4	GES147 Humanities II: Renaissance and Reformation	4	BIO124/BIO124D Integrative Biology: Cells, Genes, Change/Lab or BIO128/BIO128D Integrative Biology: Metabolism, Energy, Biodiversity/Lab	4
CHE113/CHE113D General Chemistry I/Lab or CHE208/CHE208D Accelerated General Chemistry I/Lab	4			CHE214/CHE215 General Chemistry II/Lab	4
GES145 Humanities I: Greco-Roman through Middle Ages	4			GES244 Humanities III: European Enlightenment and American Culture to 1877	4
GES140 Introduction to Wellbeing	3			BIB101 Introduction to the Bible	3
	15		4		15
Second Year					
Fall	Credits	Interim	Credits	Spring	Credits
BIO218 Biology in a Changing World	3	Elective	3	CHE226/CHE227 Organic Chemistry II/Lab	4
CHE224/CHE225 Organic Chemistry I/Lab	4			Biology environmental area choice	4
GES246 Humanities IV: Modern and Contemporary Western Culture	4			Mathematics area choice	3
Leisure and Lifetime Sports (Q) course	1			Second Language (S) course <sup>1</sup>	4
Artistic Experience (A) course	0-3				
	12-15		3		15
Third Year					
Fall	Credits	Interim	Credits	Spring	Credits
BIO399 Introduction to Research	1	Comparative Systems (G) course	3	Biology molecular area choice	4
BIO214/BIO215 Human Anatomy/Lab	4			Physics II elective	4
Physics I elective	4			Interpreting Biblical Themes (I) course	3
World Cultures (U) course	3			BIO216/BIO217 Human Physiology/Lab	4
	12		3		15
Fourth Year					
Fall	Credits	Interim	Credits	Spring	Credits
BIO481 or BIO496 Internship in Biology or Biology Research	1-3	Interim Off or BIO409 Advanced Human Gross Anatomy	0-4	BIO499 Biology Symposium	0
BIO495 Biology Seminar	2			BIO481 or BIO497 Internship in Biology or Advanced Biology Research	1-3
Science, Technology and Society (K) course	3			Elective	4
CHE304/CHE305 Essentials of Biochemistry/Lab	4			BIO244/BIO245 Pathophysiology and Pharmacology/Lab	4
BIO332/BIO333 Genetics/Lab	4			or BIO354/BIO355 Cell Biology/Lab	4
Cross-Cultural Experience (Z) course	0-3			or BIO362/BIO363 Developmental Biology/Lab	4
				BIO234/BIO235 Microbiology/Lab	4
				GES420P Bioethics	3
	14-19		0-4		16-18
<b>Total Credits 122-133</b>					

1. Students must complete through the second semester of a first-year language course or equivalent.

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Most financial aid packages stipulate 12 credits/semester; Minnesota state grants are reduced when credit falls below 15 credits/semester. (Interim may be split between fall & spring for the state grant purposes only.)

Pre-requisite courses for most PA school programs

Recommended courses for most PA school programs