

# Biology to B.S. Biology + Teaching Credential Freshman Pathway 2024-2025

Fall Freshman Courses (16 units total)	Course or GE Title	Units	GE/Major
<b>FYS 191 or 143 or other FYS</b>	First Year Seminar w/ GE area F or C2	3	F or C2, FYS
<b>MATH 130 (w MATH 30 if needed)</b>	Precalculus (w co-req support course)	5	B4
<b>HCOM 110 (or GE area A3)</b>	Fundamentals of Speaking and Listen	3	A1 (or A3)
<b>CHEM 110 +CHEM 110L</b>	General Chemistry I & Chem 1 Lab	4+1	B1, B3, major
Spring Freshman Courses (15 units total)	Course or GE Title	Units	GE/Major
<b>HCOM 125 or (CAD 102 + 90)</b>	Critical Reading and Writing	3	A2
<b>MATH 150</b>	Calculus I	4	B4, major
<b>CHEM 111 &amp; CHEM 111L</b>	General Chemistry II & Chem II Lab	4+1	Major
<b>Any C1 GE course</b>	Arts General Education course	3	C1
Fall Sophomore Courses (15 units total)	Course or GE Title	Units	GE/Major
<b>HCOM 200, HCOM 202, or BIO 131</b>	Critical Thinking GE	3	A3
<b>PHYS 220</b>	Physics 1 with lab	4	Major
<b>BIO 211 &amp; 211L</b>	Ecology, Evolution, Biodiv & Plants & lab	5	Major
<b>US History with GE area C2 or F SBS 114 or HCOM 243, SBS 249</b>	US History course with GE area C2 or F	3	US History US1, C2 or F
Spring Sophomore Courses (17 units total)	Course or GE Title	Units	GE/Major
<b>BIO 210 &amp; BIO 210L,</b>	Ecology, Evolution, Biodiv & Plants & lab	4+1	B2, B3, Major
<b>CHEM 211 &amp; CHEM 211L</b>	Organic Chemistry I & OCHEM 1 lab	3+2	Major
<b>SL210S, ED212S, HCOM260S, SBS212S</b>	Civics/Service Learning GE course	3	DCSL, US2&3
<b>PHYS 221 (spring only)</b>	Physics 2 with lab	4	concentration
Summer soph/junior Courses (6 units)	Course or GE Title	Units	GE/Major
<b>SPED 560</b>	Inclusionary Practices	3	concentration
<b>HDFS 200, KIN 161, KIN 263</b>	Area E Lifelong Lrng &Self-Devel	3	E
Fall Junior Courses (186units)	Course or GE Title	Units	GE/Major
<b>BIO 330</b>	Physiology or Evolutionary Biol course	3	Concentration
<b>GEOL 210</b>	Earth Science for teachers	3	Concentration
<b>BIO 341</b>	Evolutionary Biol & Population Genetics	3	Concentration
<b>BIO 311</b>	Genetics	4	UDB, major
<b>SPAN 312, 350, 340, or JAPN 350</b>	UDC with language	3	UDC, WCL
Spring Junior Courses (18 units)	Course or GE Title	Units	GE/Major
<b>STAT 250</b>	Applied Stats for Science & Tech	4	Major
<b>BIO 320</b>	Microbiology	4	Concentration
<b>BIO 301</b>	Research & Technical Writing in Biology	3	GWAR, Core
<b>BIO 340</b>	Ecology	4	UDB, major
<b>SBS 384S (spring only)</b>	Anthropology of Bilingual Education	3	UDD, UDSL
Summer Jr/Sr Courses( 6 units)	Course or GE Title	Units	GE/Major
<b>ED 607</b>	Adolescent Development & Learning	3	Cred
<b>ED 628</b>	Secondary Pedagogy & Linguistic Diversity	3	Cred
Fall Senior Courses 17 units)	Course or GE Title	Units	GE/Major
<b>ED 510</b>	Positive Behavior & Intervention	3	Cred
<b>ED 605A</b>	Secondary Curric & Instruction: Science	3	Credential
<b>ED 624</b>	Stage 1 Supervised Secondary Teaching	8	Credential
<b>ED 624A</b>	Stage 1 Supervised Secondary Tch Seminar	3	Credential
Spring Senior Courses (17 units)	Course or GE Title	Units	GE/Major
<b>ED 627</b>	Second Language & Literacy Development	3	Credential
<b>ED 643</b>	Educational Measurement & Evaluation	3	Credential
<b>ED 625</b>	Stage 2 Supervised Secondary Teaching	8	Credential
<b>ED 625A</b>	Stage 2 Supervised Secondary Tch Seminar	3	Credential
<b>BIO B.S. + Credential</b>			