

Biology: Teacher Preparation 4-Year Pathway

Fall Freshman Courses (14 units total)	Course or GE Title	Units	GE/Major
FYS 148	Schooling in the Public Imagination	3	C2, FYS
MATH 130 (w MATH 30 if needed)	Precalculus (w co-req support course)	5	B4
HCOM 120 or ENSTU 120	Critical Reading and Writing	3	A2
CHEM 109	Introductory Chemistry	3	B1
Spring Freshman Courses (15 units total)	Course or GE Title	Units	GE/Major
HCOM 110	Fundamentals of Speaking & Listening	3	A1
MATH 150	Calculus I	4	B4, major
CHEM 110	General Chemistry I	4	B1, major
CHEM 110L	General Chemistry I Lab	1	B3, major
Any C1 GE course	Arts General Education course	3	C1
Fall Sophomore Courses (15 units total)	Course or GE Title	Units	GE/Major
HCOM200, HCOM202, BIO131 or ENSTU131	Critical Thinking GE	3	A3
CHEM 111	General Chemistry II	4	Major
CHEM 111L	General Chemistry II Lab	1	Major
PHYS 220	Physics I with Lab	4	Major
HCOM 251 or 265 or SBS 111 or 112 or 246	US History GE	3	DHIST, US1
Spring Sophomore Courses (16 units total)	Course or GE Title	Units	GE/Major
BIO 210	Cell & Molec Bio & Animal Physiol	4	B2, Major
BIO 210L	Cell & Molec Bio & Animal Physiol LAB	1	B3, Major
CHEM 211	Organic Chemistry I	5	Major
SL210S or ED212S	Civics/Service Learning GE course	3	DCSL, US2&3
HDFS 200, KIN 161, KIN 263, PSY 210	Area E Lifelong Lrng & Self-Develop	3	E
Fall Junior Courses (16 units total)	Course or GE Title	Units	GE/Major
BIO 211	Ecology, Evolution, Biodiv & Plants	4	Major
BIO211L	Ecology, Evolution, Biodiv & Plants Lab	1	Major
STAT 250	Applied Stats for Science & Tech	4	Major
PHYS 221	Physics II	4	Conc
Social Science GE course	Lower-division DGSS course	3	DGSS
Spring Junior Courses (16 units total)	Course or GE Title	Units	GE/Major
BIO 340	Ecology	4	UDB, conc
BIO 320	Microbiology	4	Conc
BIO 301	Research & Technical Writing in Biology	2	GWAR, Core
GEOL 210	Introduction to Earth Science	3	Conc
SPAN 340 or 350 or JAPN 340 or 350	UD C with World Culture & languages	3	UDC, WCL
Fall Senior Courses (16 units total)	Course or GE Title	Units	GE/Major
BIO 330	Vertebrate Physiology	3	UDB, Major
BIO 341	Evolutionary Biol & Population Genetics	3	Conc
BIO 379S	Biology Service Learning	3	UDSL, Conc
MSCI 337 or ENVS 307	Robotics-Ecol Rsch or Energy/Climate	3	conc
Teacher Preparation Elective	Concentration Elective	3	Conc
BIO494	Biology Capstone Internship	1	conc
Spring Senior Courses (12 units total)	Course or GE Title	Units	GE/Major
BIO311	Genetics	4	UDB, Major
BIO 493	Biology Education Capstone	1	Conc
BIO 494	Biology Capstone Internship	1	Conc
HCOM 343 353,369,393, HDFS 320,321; LS 310,362; PH417; or SBS 304,320,364	UD Social Science with Ethnic Studies	3	UDD, ES
Additional C1 or C2 course	Lower-division Arts or Humanities course	3	C1 or C2
Total BIO Teacher Prep 4-yr pathway:		120	