

Biology: Molecular Biology 4-Year Pathway 2023-2024

Fall Freshman Courses (14 units total)	Course or GE Title	Units	GE/Major
FYS 143 or other FYS	Philosophy of Nonviolence	3	C2, FYS
MATH 130 (w/ MATH 30 if needed)	Precalculus (w/ co-req support course)	5	B4
HCOM 110 (or GE area A3)	Fundamentals of Speaking and Listen	3	A1 (or A3)
CHEM 109	Introductory Chemistry	3	B1
Spring Freshman Courses (15 units total)	Course or GE Title	Units	GE/Major
HCOM 125, CAD 101B or (CAD 102 + 90)	Critical Reading and Writing	3	A2
MATH 150	Calculus I	4	B4, major
CHEM 110 +CHEM 110L	General Chemistry I & Chem 1 Lab	4+1	B1, 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 ENSTU130	Critical Thinking GE	3	A3 (or A1)
CHEM 111 & CHEM 111L	General Chemistry II & Chem II Lab	4+1	Major
PHYS 220 (or BIO 210 & 210L)	Physics I with Lab	4	Major
US History with GE area F HCOM 243 or SBS 249	US History course with GE area F	3	US History US1 with F
Spring Sophomore Courses (16 units total)	Course or GE Title	Units	GE/Major
BIO 210 & BIO 210L (or PHYS 220) Whichever not taken previously	Cell & Molec Bio & Animal Physio& Lab	4+1	B2, B3, Major
CHEM 211 & CHEM 211L	Organic Chemistry I & OCHEM 1 lab	3+2	Major
SL210S, ED212S, HCOM260S, SBS212S	Civics/Service Learning GE course	3	DCSL, US2&3
HDFS 200, KIN 161, KIN 263	Area E Lifelong Lrng &Self-Devel	3	E
Fall Junior Courses (15 units total)	Course or GE Title	Units	GE/Major
BIO 211 & BIO 211L (211D optional)	Ecology, Evolu, Biodiv & Plants & lab	4+1	Major
STAT 250	Applied Stats for Science & Tech	4	Major
Additional C1 or C2 course (if needed)	Lower-division Arts or Humanities	3	C1 or C2
PSY 100 or other Social Science GE course	Lower-division DGSS course if	3	DGSS
Spring Junior Courses (16 units total)	Course or GE Title	Units	GE/Major
BIO 311	Genetics	4	UDB, core
CHEM 310	Biochemistry I	3	Concentration
BIO 320 or BIO 322	Microbiology or Plant Pathology	4	Rsch meth
BIO 301	Research & Technical Writing in Biology	2	GWAR, Core
SPAN 340 or 350 or JAPN 340 or 350	UD C with World Culture & languages	3	UDC, WCL
Fall Senior Courses (14 units total)	Course or GE Title	Units	GE/Major
BIO 330 or BIO 332 or BIO 341 or BIO 370	Physiology or Evolutionary Biol course	3	Concentration
BIO 378S or BIO 379S	Health Sci Svc Lrn or Biology Svc Learn	3	UDSL, Major
BIO 320 or 322 or 344L or 380 or 425 or 430 or 444 or 461 or CHEM 310L or CHEM 350	Additional BIO Research Methods	4	2 nd Rsch meth
BIO 421 + BIO 492 or other Integ Learning	Integrative Learning/Capstone	4	Concentration
Spring Senior Courses (15 units total)	Course or GE Title	Units	GE/Major
BIO 320, 322, 330, 370, 380, 410, 412, 413, 414, 421, 425, 430, 444, 461, or CHEM 350, CHEM 410, or MSCI 331	Additional Molec Biol concentration course not counted previously for other requirement	4	Concentration
Group A Elective (or course for minor)	Major elective from Group A	3	Group A elect
Group A Elective (or course for minor)	Major elective from Group A	3	Group A elec
Group B elective (or course for minor)	Major elective from Group B	2	Grp A or B elec
Any upper-division Social Sciences UDD	UD Social Sciences	3	UDD
Total BIO Molec Biol 4-yr pathway:		120	