

## Biology: Molecular Biology 4-Year Pathway 2024-2025

Fall Freshman Courses (14 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	GE area 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 109</b>	Introductory Chemistry	3	B1
Spring Freshman Courses (15 units total)	Course or GE Title	Units	GE/Major
<b>HCOM 125, CAD 101B or (CAD 102 + 90)</b>	Critical Reading and Writing	3	A2
<b>MATH 150</b>	Calculus I	4	B4, major
<b>CHEM 110 +CHEM 110L</b>	General Chemistry I & Chem 1 Lab	4+1	B1, B3, major
<b>Any C1 GE course</b>	Arts General Education course	3	C1
Fall Sophomore Courses (16 units total)	Course or GE Title	Units	GE/Major
<b>HCOM200, HCOM202, BIO131 or ENSTU130</b>	Critical Thinking GE	3	A3 (or A1)
<b>CHEM 111 &amp; CHEM 111L</b>	General Chemistry II & Chem II Lab	4+1	Major
<b>BIO 211 &amp; BIO 211L (211D optional)</b>	Ecology, Evolu, Biodiv & Plants & lab	4+1	B2, 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 Hist US1 w/ C2 or F
Spring Sophomore Courses (17 units total)	Course or GE Title	Units	GE/Major
<b>BIO 210 &amp; BIO 210L</b>	Cell & Molec Bio & Animal Physio& Lab	4+1	Major
<b>CHEM 211 &amp; CHEM 211L</b>	Organic Chemistry I & OCHEM 1 lab	3+2	Major
<b>PHYS 220</b>	Physics I with Lab	4	Major
<b>HDFS 200, KIN 161, KIN 263</b>	Area E Lifelong Learning &Self-Devel	3	E
Fall Junior Courses (16 units total)	Course or GE Title	Units	GE/Major
<b>CHEM 310</b>	Biochemistry I	3	Major
<b>STAT 250</b>	Applied Stats for Science & Tech	4	Major
<b>BIO 330 or BIO 332 or BIO 341 or BIO 370</b>	Physiology or Evolutionary Biol course	3	Concentration
<b>Additional C1 or C2 course (if needed)</b>	Lower-division Arts or Humanities	3	GE C1 or C2
<b>SL210S, ED212S, HCOM260S, SBS212S</b>	Civics/Service Learning GE course	3	DCSL, US 2,3
Spring Junior Courses (14 units total)	Course or GE Title	Units	GE/Major
<b>BIO 311</b>	Genetics	4	UDB, core
<b>BIO 301</b>	Research & Technical Writing in Biology	3	GWAR, core
<b>BIO 320 or BIO 322</b>	Microbiology or Plant Pathology	4	Rsch method
<b>PSY 100 or other Social Science GE course</b>	Lower-division DGSS course	3	DGSS
Fall Senior Courses (14 units total)	Course or GE Title	Units	GE/Major
<b>Major Elective (or course for minor)</b>	Major Elective	4	Major
<b>BIO 378S or BIO 379S</b>	Health Sci Svc Lrn or Biology Svc Learn	3	UDSL, Major
<b>BIO 320, 322, 330,332, 370, 380, 410, 412, 413, 414, 421, 425, 430, 444 or 461; CHEM 350 or 410; MSC1 331</b>	Additional BIO course not previously taken	3-4	Add'l Biology Course
<b>SPAN 340 or 350 or JAPN 340 or 350</b>	UD C with World Culture & languages	3	UDC, WCL
Spring Senior Courses (15 units total)	Course or GE Title	Units	GE/Major
<b>Integrative Learning/Capstone</b>	See catalog	4	Concentration
<b>Major Elective (or course for minor)</b>	Major elective	4	Concentration

<b>Major Elective (or course for minor)</b>	Major elective	4	Concentration
<b>Any upper-division Social Sciences UDD</b>	UD Social Sciences	3	UDD
	<b>Total BIO Molec Biol 4 yr pathway:</b>	<b>121</b>	