

BIOLOGY MAJOR – Pre Medicine & Molecular Biology (BIOLPM.BS)

<u>Required Courses</u>		<u>Hrs.</u>	<u>Prereq.</u>	<u>Rec.Yr.</u>
BIOL 115	Intro to Biology Profession	1	Coreq BIOL 163/163L or BIOL 164/164L	Fr
BIOL 163/163L	Prin of Molecular Biology + lab	3/1		Fr
BIOL 164/164L	Prin of Organismal Biology + lab	3/1	C- or better in BIOL 163	Fr
BIOL 215/215L	Biostatistics + lab	3/1	placement in FQINQ or completion of MATH 101; C- or better in BIOL 164	Soph
BIOL 250/250L	Genetics + lab	3/1	C- or better in BIOL 163, 164 for Bio maj; C- or better in BIOL 163 for Biochem maj; CHEM 221, 223L highly recommended	Soph
BIOL 252/252L	Physiology + lab	3/1	C- or better in BIOL 163, 164	Soph
BIOL 254/254L	Research Methods in Bio + lab	3/1	C- or better in BIOL 163, 164, 215, 252 for Bio Maj; C- or better in MATH 115, ENVS 130 for Env Sci	Soph
BIOL 310/310L	Ecology + lab	3/1	BIOL 254/254L, CHEM 161, 163L	Jr/Sr
BIOL 3**	Biology elective,	4		Soph-Sr
<u>One Biodiversity course selected from:</u>				
BIOL 315/315L	Botany + lab	3/1	BIOL 215/215L, 254/254L	Jr
BIOL 316/316L	Vertebrate Zoology + lab	3/1	BIOL 254/254L	Jr
BIOL 317/317L	Invertebrate Zoology + lab	3/1	BIOL 163/163L, 164/164L	Jr
BIOL 322/322L	Mammalogy + lab	3/1	BIOL 215/215L, 254/254L	Jr
<u>One Integrative course selected from:</u>				
BIOL 305	Toxicology	3	BIOL 151/151L, 152/152L	Jr
BIOL 320/320L	Animal Behavior + lab	3/1	BIOL 254/254L	Jr
BIOL 344	Evolution	3	BIOL 250/250L	Jr
BIOL 360/360L	Prin of Microbiology + lab	3/1	BIOL 250/250L; CHEM 221, 223L	Jr
<u>One Molecular course selected from:</u>				
BIOL 325	Molecular Embryology	3	BIOL 250/250L	Jr/Sr
BIOL 354/354L	Molecular Cell Biology	3/1	BIOL 250/250L, CHEM 221, 223L	Jr/Sr
BIOL 374	Immunology	3	BIOL/CHEBI/CHEM/EXSC maj; CHEM 221/223L	Jr
BIOL 395	Biology Internship	1	BIOL 254/254L	Jr
<u>OR</u>				
BIOL 398/498	Biology Research	1-2	BIOL 254/254L; CHEM 221, 223L	Jr/Sr
BIOL 401	Final Year Portfolio Showcase	1	Coreq BIOL 497	Sr
^A BIOL 497	Seminar	2	Sr Stand or P/Faculty; Coreq BIOL 401	Sr
CHEM 161	Accel Gen Chem for Sci Majors	3	HS Chemistry and placement or CHEM 105, 107L; Coreq CHE 163L	Fr/Soph
CHEM 163L	Accel Gen Chem for Sci Majors Lab	1	HS Chemistry and placement or CHEM 105, 107L; Coreq CHEM 161	Fr/Soph
<u>OR</u>				
CHEM 131	General Chemistry Sci Maj I	3	Coreq CHEM 133L	Fr/Soph
<i>*Prerequisite: Must have passed at least one year of high school chemistry or one semester of college chemistry equivalent to CHEM 105/107L or above AND at least one of the following: MATH ACT score of 20, MATH SAT score of 500, grade of C or better in one of the classes: MATH 103, 110, 112, 115, 130, 161. AND</i>				
CHEM 133L	General Chemistry Sci Maj I Lab	1	Coreq CHEM 131	
CHEM 132	General Chemistry Sci Maj II	3	C- or better in CHEM 131, 133L; Coreq CHEM 134L	Fr/Soph
CHEM 134L	General Chemistry Sci Maj II Lab	1	Coreq CHEM 132	
CHEM 221	Organic Chemistry I	3	C- or better in CHEM 161, 163L or 131, 133L, 132, 134L; Coreq CHEM 223L	Soph
CHEM 223L	Organic Chemistry Lab	1	C- or better in CHEM 161, 163L or 131, 133L, 132, 134L; Coreq CHEM 221	
CHEM 222	Organic Chemistry II	3	C- or better in CHEM 221, 223L; Coreq CHEM 224L	Soph
CHEM 224L	Organic Chemistry II Lab	1	C- or better in CHEM 221, 223L; Coreq CHEM 222	Soph
<u>Two of the following lab courses:</u>				
BIOL 354/354L	Molecular Cell Biology + lab	3/1	BIOL 250/250L, CHEM 222, 224L	Jr/Sr
BIOL 360/360L	Principles of Microbiology + lab	3/1	BIOL 250/250L; CHEM 221, 223L	Jr
BIOL 388/488	Approved special topics w/lab	3-4		
CHEM 350/351L	Biochemistry I & Lab	4	C- or better CHEM 222, 224L or BIOL 354	Jr/Sr
CHEM 352/353L	Biochemistry II & Lab	4	C- or better CHEM 350, 351L; Coreq CHEM-353L	Jr/Sr
CHEM 388/488	Approved special topics w/lab	3-4		
PHYS 151/161	Gen Physics/Gen Phys. w/Calc + lab	3/1		
PHYS 152/162	Gen Physics II/Gen Phys. w/Calc + lab	3/1		
<u>One of the following courses:</u>				
BIOL 325	Molecular Embryology	3	BIOL 215/215L, 254/254L	Jr
BIOL 335	Germes, Outbreaks, Pandem. & People	3		
BIOL 374	Immunology	3	BIOL/BIOCHEM/CHEM/EXSC maj; CHEM 221, 223L	Jr/Sr
BIOL 388/488	Approved special topics non-lab	3		
CHEM 388/488	Approved special topics non-lab	3		Jr/Sr
EXSC 240	Fund. Of Human Nutrition	3		
EXSC 303	Org. & Adm. Health Professions	3		
HSCI 210	Intro. To Epidemiology	3		

^ASatisfies advanced writing requirement

70-77 total hours

NAME: _____

**B.S. Degree: Biology Major (for students entering in Fall 2026/Spring 2027)
Pre-Med & Molecular Biology Concentration**

In the "WHAT" column, enter the specific course number when applicable--e.g. HIST 121. In the "WHEN" column, enter the term and year in which the requirement is satisfied--e.g., sp '20.

Liberal Arts Core	
WHAT	WHEN
_____	ENGL 101* w/ C (2.0) [3 hrs]
_____	ENGL 110 w/ C (2.0)* [3 hrs]
_____	COMM 211 w/ C (2.0) [3 hrs]
_____	Dept senior seminar/writing course
_____	Met by: _____ BIOL 497 [2 hrs]
_____	FYEX 101 [3 hrs]
_____	FYEX 102 [1 hr]
_____	FYEX 103/104/105/106/107 [1 hr]
_____	FYEX 103/104/105/106/107 [1 hr]
_____	Foundational Scientific Inquiry [3-4 hrs]
_____	Foundational Quantitative Analysis [3-4 hrs]
_____	Foundational Humanities & Liberal Arts [3 hrs]
 <i>No more than two lens courses may come from same departmental prefix and one lens must be taken at 300 level or above.</i>	
_____	Ethical/Spiritual Explor Lens (ETSP) [3 hrs]
_____	Aesthetic Expression Lens (AEXP) [3 hrs]
_____	Per & Soc Well Being Lens (PSWB) [3 hrs]
_____	Cultural Perspectives Lens (CEXP) [3 hrs]
_____	Experimental Inquiry Lens (EXIN) [3 hrs]
_____	39 - 41 Total semester hours
_____	120 semester hours required for graduation

*Enter NA (not applicable) if waived upon admission

➤Except in specifically approved majors, a maximum of 52 hours in an academic discipline may count toward graduation. Three hours over the limit may count to accommodate an internship in the discipline.

For students classified as transfers, FYEX course requirements are dependent upon total transferrable credit hours.

Biology Major – Pre-Med & Molecular Biology	
WHAT	WHEN
_____	BIOL 115 [1 hr]
_____	BIOL 163 [3 hrs]
_____	BIOL 163L [1 hr]
_____	BIOL 164 [3 hrs]
_____	BIOL 164L [1 hr]
_____	BIOL 215 [3 hrs]
_____	BIOL 215L [1 hr]
_____	BIOL 250 [3 hrs]
_____	BIOL 250L [1 hr]
_____	BIOL 252 [3 hrs]
_____	BIOL 252L [1 hr]
_____	BIOL 254 [3 hrs]
_____	BIOL 254L [1 hr]
_____	BIOL 310 [3 hrs]
_____	BIOL 310L [1 hr]
_____	BIOL elective, 300 level or above [4 hrs]
_____	BIOL 325/354/374 [3-4 hrs]
_____	BIOL 315/316/317/322 [4 hrs]
_____	BIOL 305/320/344/360 [3-4 hrs]
_____	BIOL 395/398/498 w/C (2.0) [1-2 hrs]
_____	BIOL 401 [1 hr]
_____	BIOL 497 [2 hrs]
_____	CHEM 161 [3 hrs]
_____	CHEM 163L [1 hr]
_____	<u>OR</u>
_____	CHEM 131 [3 hrs]
_____	CHEM 133L [1 hr]
_____	CHEM 132 [3 hrs]
_____	CHEM 134L [1 hr]
_____	CHEM 221 [3 hrs]
_____	CHEM 223L [1 hr]
_____	CHEM 222 [3 hrs]
_____	CHEM 224L [1 hr]
_____	BIOL 354/360//388 w/lab/488 w/lab/ CHEM 350+351L/CHEM 352+353L/388 w/lab /488 w/lab/ PHYS 151/ 161/152/162 [4hrs]
_____	BIOL 354/360//388 w/lab/488 w/lab/ CHEM 350+351L/CHEM 352+353L/388 w/lab /488 w/lab/ PHYS 151/ 161/152/162 [4hrs]
_____	BIOL 305/325/335/54//374/388/488/ CHEM 388/488/EXSC 240/303/HSCI 210 [3 hrs]
_____	70 – 77 semester hours

➤Only six hours of any minor may overlap with the required credit hours of a student's chosen major. The overlap constraint is not applicable to courses that majors or minors MUST take in others departments.

➤Students may not receive credit for BIOL 111 & 112 and BIOL-163 and 164.