



**BACHELOR of SCIENCE in Molecular Biotechnology (#738)**

Biology Department  
 Ogden College of Science and Engineering  
 Western Kentucky University

The suggested program of study shown below should be used in consultation with your advisor(s). Every student will finish with a unique plan of his/her own depending on the electives selected. Successful continuation in the major requires completion of BIOL 120/121 and 122/123 with a "C" or higher.

**SAMPLE – Finish in Four Plan**

FIRST YEAR			
Fall Semester		Spring Semester	
BIOL 120/121 or BIOL 122/123	4	BIOL 122/123 or 120/121	4
MATH 116 or higher	3	MATH 117 or higher	3
ENG 100	3	BIOL 312 Bioinformatics	4
BIOL 212 Genome Discovery	2	CHEM 120/121 College Chem I and Lab	5
BIOL 388* Contemporary Issues	0	BIOL 388* Contemporary Issues	0
COMM 145 Public Speaking	3		
<b>TOTAL CREDIT HOURS</b>	<b>15</b>	<b>TOTAL CREDIT HOURS</b>	<b>16</b>

SECOND YEAR			
Fall Semester		Spring Semester	
BIOL 226/227 Microbial Biology	4	BIOL 319/322 Intro to Cell/Molec and lab	4
BIOL 327/337 Genetics and Lab	4	BIOL 388* Contemporary Issues	0
BIOL 388* Contemporary Issues	0	BIOL 399 or 369**	1
CHEM 222/223 College Chem II and Lab	5	CHEM 340/341 Organic Chem I and lab	5
Colonnade Exploration: Social and Behavioral Science	3	ENG 200 Introduction to Literature	3
		HIST 101 or 102	3
<b>TOTAL CREDIT HOURS</b>	<b>16</b>	<b>TOTAL CREDIT HOURS</b>	<b>16</b>

THIRD YEAR			
Fall Semester		Spring Semester	
BIOL 350 Recomb Genetics	3	BIOL 382 Biostatistics	3
BIOL 388* Contemporary Issues	0	BIOL 388* Contemporary Issues	0
BIOL 399 or 369**	1	BIOL 399 or 369**	1
CHEM 342/343 Organic Chem II and Lab	5	BIOL 446/447 Biochem I and Lab	5
PHYS 231/232	4	PHYS 322/233 Biophysics II and Lab	4
Colonnade Exploration: Arts & Humanities	3	Writing in the Disciplines (ENG 300 or PSYS 300 or GEOG 300 or COMM 200)	3
<b>TOTAL CREDIT HOURS</b>	<b>16</b>	<b>TOTAL CREDIT HOURS</b>	<b>16</b>

FOURTH YEAR			
Fall Semester		Spring Semester	
BIOL 388* Contemporary Issues	0	BIOL 388* Contemporary Issues	1
BioTech Elective –see Molec Biotech Advisor	3	BIOL 489 Professional Aspects	1
BioTech Elective—see Molec Biotech Advisor	3	BIOL 411 Cell Biology	3
Colonnade Connections	3	BioTech Elective—see Molec Biotech Advisor	3
Colonnade Connections	3	AMS 371 or 390 or 430	3
		Colonnade Connections	3
<b>TOTAL CREDIT HOURS</b>	<b>12</b>	<b>TOTAL CREDIT HOURS</b>	<b>14</b>

**Total Credit Hours: 121\*\*\***

For more details and courses offered in the Colonnade General Education program visit the [website](#).

**World Language Requirement:** Language Proficiency of novice-high before completing 60 credit hours is required (or completion of 2nd level of a language). Two credits (or equivalent) of a single world language in High School satisfies this WKU requirement.

\*BIOL 388: Examination of recent advances, ethics and career opportunities in Biotechnology through discussions, seminars and field trips. All majors will take this course together every semester with credit bearing in the last semester. The course meets a few times in a semester.

\*\*BIOL 369 or 399: Students have the opportunity to choose a 369 Cooperative Internship in place of 399 Research in Biology or take both. The internship or research course can also be taken during the summer.

\*\*\*Only 120 hours are required for the major, but many courses in the electives contain a lab which may bring the hours above 120.

**For more Information:**    **Department:** Biology  
**Website:** <http://www.wku.edu/biology/mbiotech/>  
**Phone:** (270) 745-3696  
**Email:** [molecular.biotechnology@wku.edu](mailto:molecular.biotechnology@wku.edu)  
**Course Descriptions:** <http://www.wku.edu/undergraduatecatalog/>