

Biology (2010-2011)

Genetics and Cell/Molecular

This is a **general curriculum** guide and is not applicable to every student and is not a replacement for meeting with your advisor.

-Student is starting in MTH 110-

Fall Semester -Year One	Credits	Winter Semester	Credits
BIO 120: General Biology I (<i>Gen Ed</i>)	4	BIO 121: General Biology II	4
MTH 110: Algebra	4	CHM 115: Principles of Chemistry I (<i>Gen Ed</i>)	5
WRT 150: Strategies in Writing	4	MTH 122: College Algebra (<i>Gen Ed</i>)	3
Gen Ed.	3	Gen Ed.	3
Total	15	Total	15
Spring Semester - Year One	Credits	Summer Semester - Year One	Credits
Chemistry 116: Principles of Chemistry II	5	Gen Eds.	6
Fall Semester - Year Two	Credits	Winter Semester - Year Two	Credits
BIO 215: General Ecology	4	BIO 375/376: Genetics/Genetics Lab	4
CHM 241: Organic Chemistry for Life Science I	4	CHM 242: Organic Chemistry for Life Science II	4
MTH 123: Trigonometry	3	MTH Cognate ¹	3
Gen Ed.	3	Gen Ed.	3
Total	14	Total	14
Spring Semester - Year Two	Credits	Summer Semester - Year Two	credits
Gen. Ed.	3		
Fall Semester - Year Three	Credits	Winter Semester - Year Three	Credits
BIO 405/406: Cell and Molecular Biology w/lab	6	BIO elective ³	3
PHY 220: General Physics I	5	BIO elective ³	3
CHM 461: Biochemistry	4	PHY 221: General Physics II ²	5
Total	15	WRT 305: Writing in the Disciplines ⁴	3
		Total	14
Fall Semester - Year Four	Credits	Winter Semester - Year Four	Credits
BIO 422: Embryology OR	3	BIO 495: Evolutionary Biology	3
BIO 432: Comparative Animal Physiology	4	BIO 490/499: Internship/Research	3
BIO 426: Nucleic Acids Laboratory	3	BIO 423: Plant Biotechnology	3
BIO 490/499: Internship/Research	3	Gen Ed. or Theme	3
CHM 462: Techniques in Biochemistry	3	Gen Ed. or Theme	3
Gen Ed. or Theme	3		
Total	15-16	Total	15

Notes:

¹ One course must be selected from MTH 125: Survey of Calculus, MTH 201: Calculus and Analytical Geometry, or STA 215: Introductory Applied Statistics.

² PHY 221 is not required, but is strongly recommended.

³ Must select 2 out of the following classes: BIO 411: Genetics of Development and Cancer / 414: Molecular Biology of the Gene / 416: Advanced Genetics Laboratory.

⁴ Students who pass out of WRT 305 have room to take a GenEd, Theme, or elective course in this semester.

Special Notes:

- This is a **general** curriculum guide and will not work for everyone, especially those students who have AP or CLEP credit.
- Courses that have (*Gen Ed*) written after them are classes that are required in the major and also fulfill a section of the general education program.
- Remember to fulfill your 2 SWS requirements; 1 can be taken in the gen ed program and 1 in your major.
- Some classes are in multiple sections within the gen ed. If you take a course that can be counted in two categories, you can open up 1-2 more spots for biology electives.
- If your career goal is genetic counseling, a different set of courses may be more appropriate. Contact your advisor for assistance in course selection.
- You must have **120 credits** to graduate from Grand Valley State University.

It is imperative to meet with your faculty advisor or an advisor in the CLAS Academic Advising Center early in your career. The CLAS Academic Advising Center is located in C-1-140 MAK, 616-331-8585.

Online at: <http://www.gvsu.edu/clasadvising>
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