

Biology (2011-2012)

Secondary Teacher Certification

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

-Student needs MTH 110 prerequisite-

Fall Semester – Year One	credits	Winter Semester- Year One	credits
BIO 120: General Biology I (<i>Gen Ed</i>)	4	BIO 121: General Biology II	4
Gen Ed.	3	CHM 115: Principles of Chemistry I (<i>Gen Ed</i>)	5
MTH 110: Algebra	4	MTH 122: College Algebra (<i>Gen Ed</i>) ⁴	3
WRT 150: Strategies in Writing	4	Gen Ed.	3
Total	15	Total	15
Fall Semester – Year Two	credits	Winter Semester – Year Two	credits
BIO 215: General Ecology	4	BIO 375/376: Genetics/Genetics Lab	4
CHM 116: Principles of Chemistry II	5	BIO elective	3
PSY 101: Introduction to Psychology (<i>Gen Ed</i>)	3	ED 315: Diverse Perspectives on Ed.* (<i>Gen Ed</i>)	3
MTH 123: Trigonometry ⁴	3	PSY 301: Child Development*	3
		MTH Cognate ¹	3
Total	15	Total	16[#]
Spring Semester – Year Two	credits	Summer Semester – Year Two	credits
Minor Elective	3	Minor Elective	3
Gen Ed.	3	Gen Ed.	3
Fall Semester – Year Three	credits	Winter Semester – Year Three	credits
CHM 231: Introductory Organic Chemistry <i>Or</i> ²	4	CHM 232: Biological Chemistry <i>Or</i> ²	4
CHM 241: Organic Chemistry for Life Science I	4	CHM 242: Organic Chemistry for Life Science II	4
PHY 220: General Physics I ⁴	5	PHY 221: General Physics II	5
ED 337: Intro to Learning and Assessment*	3	Gen Ed.	3
Minor Elective	3	Minor Elective	3
Total	15	Total	15-16[#]
Spring Semester – Year Three	credits	Summer Semester – Year Three	credits
Minor Elective	3	Minor Elective	3
Fall Semester – Year Four	credits	Winter Semester – Year Four	credits
BIO 405/406: Cell and Molecular Bio. w/lab (<i>SWS</i>)	6	BIO 495: Evolutionary Biology	3
BIO elective ³	4	BIO elective ³	4
Gen Ed. or Theme	3	BIO elective	3
Minor Elective	3	Gen Ed. or Theme	3
		Minor Elective	3
Total	16[#]	Total	16[#]
Fall Semester – Year Five	credits	Winter Semester – Year Five	credits
ED 331: Methods and Strategies for Secondary Teaching	5	ED 431: Student Teaching, Secondary	10
ED 310: Organizing and Managing Classroom Environments	3	ED 485: The Context of Educational Issues	3
ED 321: Content Area Literacy	3		
ED 370: Technology in Education**	3		
ED 379: Universal Design for Learning: Secondary**	3		
Total	17[#]	Total	13

[#]The block tuition rate is for 12-15 credits. You will pay additional tuition for any credits over 15.

Notes:

* These courses are Education Major prerequisites. Student must have a minimum GPA of 2.7 in these classes, and both their major and minor. Classes must be completed prior to applying to the College of Education. A student selecting secondary education **must also have a teachable minor. Consult with your advisor!**

** ED 370 and/or ED 379 may be taken during or after Assisting but must be taken before Student Teaching.

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 If you plan to attend graduate or professional school, you will want to complete the CHM 241/242 sequence.

³ One biology elective must be taken from an animal biology course and one from a plant biology course.

⁴ MTH 122/123 are prerequisites for PHY 220 and not part of the Biology major.

Special Notes:

- A. This is a **general** curriculum guide and will not work for everyone, especially those students who have AP or CLEP credit.
- B. 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.
- C. Complete a total of two courses with an *SWS* attribute. The two *SWS* courses may not be taken from the same department or school. One must be from outside the student's major unit.

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>

Prepared by CLAS Academic Advising Center –3/8/2011