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.

-Assumes that the MTH 110 prerequisite has been fulfilled-

Fall Semester – Year One	credits	Winter Semester- Year One	credits
BIO 120: General Biology I (*Gen Ed*)	4	BIO 121: General Biology II	4
CHM 115: Principles of Chemistry I (*Gen Ed*)	5	CHM 116: Principles of Chemistry II	5
MTH 122: College Algebra *(Gen Ed)*[4]	3	WRT 150: Strategies in Writing	4
Gen Ed.	3	Gen Ed.	3
Total	**15**	***Total***	**16[#]**
Fall Semester – Year Two	**credits**	**Winter Semester – Year Two**	**credits**
BIO 215: General Ecology	4	BIO 375/376: Genetics/Genetics Lab	4
MTH 123: Trigonometry[4]	3	CHM 232: Biological Chemistry ***Or***[2]	4
CHM 231: Introductory Organic Chemistry ***Or***[2]	4	CHM 242: Organic Chemistry for Life Science II	4
CHM 241: Organic Chemistry for Life Science I	4	MTH Cognate[1]	3
PSY 101: Introduction to Psychology *(Gen Ed)*	3	ED 315: Diverse Perspectives on Education *(Gen Ed.)**	3
Total	**14**	***Total***	**14**
Spring Semester – Year Two	**credits**	**Summer Semester – Year Two**	**credits**
Minor Elective	3	Minor Elective	3
Fall Semester – Year Three	**credits**	**Winter Semester – Year Three**	**credits**
BIO 405/406: Cell and Molecular Bio. w/lab *(SWS)*	6	PHY 221: General Physics II	5
PHY 220: General Physics I[4]	5	Gen Ed.	3
ED 337: Introduction to Learning and Assessment*	3	Gen Ed.	3
PSY 301: Child Development*	3	Gen Ed.	3
Total	**17[#]**	***Total***	**14**
Spring Semester – Year Three	**credits**	**Summer Semester – Year Three**	**credits**
Minor Elective	3	Minor Elective	3
		Minor Elective	3
Fall Semester – Year Four	**credits**	**Winter Semester – Year Four**	**credits**
BIO elective[3]	4	BIO 495:Evolutionary Biology	3
BIO elective	3	BIO elective[3]	3
Gen Ed. or Theme	3	BIO elective	3
Gen Ed. or Theme	3	Minor Elective	3
Minor Elective	3	Minor Elective	3
Total	**16[#]**	***Total***	**15**
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