Biology (2010-2011)

Aquatic Sciences

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- Year One	credits
BIO 120: General Biology I (Gen Ed)	4	BIO 121: General Biology II	4
MTH 110: Algebra	4	CHM 115: Principles of Chemistry I (Gen Ed)	5
WRT 150: Strategies in Writing	4	MTH 122: College Algebra (Gen Ed)	3
Gen Ed.	3	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	PHY 220: General Physics I	5
MTH 123: Trigonometry	3	STA 215: Introductory Applied Statistics	3
Gen Ed.	3	Gen Ed.	3
Total	15	Total	15
Fall Semester – Year Three	credits	Winter Semester – Year Three	credits
BIO 440: Limnology ⁵	4	BIO Elective ³	3
CHM 231: Introductory Organic	4	CHM 232: Biological Chemistry	4
Chemistry		Or^2	
Or^2		CHM 242: Organic Chemistry for Life	4
CHM 241: Organic Chemistry for Life	4	Science II	
Science I		WRT 305: Writing in the Disciplines ⁴	3
PHY 221: General Physics II ¹	5	Gen Ed. or Theme	3
Gen Ed or Theme	3	Gen Ed. or Theme	3
Total	16	Total	16
Fall Semester – Year Four	credits	Winter Semester – Year Four	credits
BIO 450: Stream Ecology ⁵	4	BIO 405/406: Cell and Molecular Biology	6
BIO Elective ³	3	w/lab	
BIO Elective ³	3	BIO 495:Evolutionary Biology	3
Elective	3	Gen Ed. or Theme	3
Gen Ed. or Theme	3	Gen Ed. or Theme	3
Total	16	Total	15

Notes:

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. Remember to fulfill your 2 SWS requirements; 1 can be taken in the gen ed program and 1 in your major.
- D. 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.
- E. 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

Prepared by CLAS Academic Advising Center – 2/4/10

¹ PHY 221 is not required, but students planning to attend graduate school, professional school, or secondary teacher certification should complete a full year of physics.

² If you plan to attend graduate or professional school, you will want to complete the CHM 241/242 sequence.

³ Three courses must be chosen as your electives from the following three categories: <u>Category 1</u>: BIO 362 Fisheries Biology – OR – BIO 442 Fish Ecology; <u>Category 2</u>: BIO 232 Natural History of Invertebrates – OR – BIO 402: Aquatic Insects; <u>Category 3</u>: BIO 323 Aquatic Plants – OR – BIO 413 Freshwater Algae. BIO 323, 362, 440, and 450 are offered in the fall. BIO 232, 372, 402, 413 and 442 are offered in the winter.

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

⁵ BIO 440 and BIO 450 are offered alternating Fall semesters.