

# Biology (2010-2011)

## Animal Emphasis

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 requirement has been fulfilled-**

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
CHM 115: Principles of Chemistry I ( <i>Gen Ed</i> )	5	CHM 116: Principles of Chemistry II	5
MTH 122: College Algebra ( <i>Gen Ed</i> )	3	WRT 150: Strategies in Writing	4
Gen Ed.	3	Gen Ed.	3
<b>Total</b>	<b>15</b>	<b>Total</b>	<b>16</b>
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	3	<b>CHM 232: Biological Chemistry</b>	4
<b>CHM 231: Introductory Organic Chemistry</b>	4	<i>Or<sup>2</sup></i>	
<b>CHM 241: Organic Chemistry for Life Science I</b>	4	<b>CHM 242: Organic Chemistry for Life Science II</b>	4
Gen Ed.	3	MTH Cognate <sup>1</sup>	3
<b>Total</b>	<b>14</b>	Gen Ed.	3
Gen Ed.	3	Gen Ed.	3
<b>Total</b>	<b>17</b>	<b>Total</b>	<b>17</b>
Fall Semester – Year Three	credits	Winter Semester – Year Three	credits
BIO 222: Natural History of Vertebrates	3	BIO 232: Natural History of Invertebrates	3
BIO 405/406: Cell and Molecular Biology w/lab	6	PHY 221: General Physics II <sup>3</sup>	5
PHY 220: General Physics I	5	WRT 305: Writing in the Disciplines <sup>4</sup>	3
<b>Total</b>	<b>14</b>	Gen Ed. or Theme	3
		<b>Total</b>	<b>14</b>
Fall Semester – Year Four	credits	Winter Semester – Year Four	credits
BIO 432: Comparative Animal Physiology	4	BIO 302: Comparative Vertebrate Anatomy	4
BIO elective <sup>5</sup>	3	BIO 495: Evolutionary Biology	3
Elective	3	Elective	3
Gen Ed. or Theme	3	Gen Ed. or Theme	3
Gen Ed. or Theme	3	Gen Ed. or Theme	3
<b>Total</b>	<b>16</b>	<b>Total</b>	<b>16</b>

**Notes:**

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

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

<sup>3</sup> 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

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

<sup>5</sup> One elective must be selected from the plant biology category.

**Special Notes:**

- This is a **general** curriculum guide and will not work for everyone, especially for those who have AP or CLEP credit.
- Courses that have (*Gen Ed*) written after them are specific courses that are required in the major and also fulfill a section of the general education program.
- Remember to fulfill your 2 SWS requirements. These must be taken from two different schools or departments.
- Some classes are in multiple sections within the general education program. If you take a course that can be counted in two categories, this can open up 1-2 more spots for biology electives.
- The following courses may be of interest when selecting an Animal Biology Emphasis: BIO 342: Ornithology, BIO 352: Animal Behavior, BIO 362: Fisheries Biology, BIO 372: Aquatic Insects, BIO 422: Embryology, BIO 442: Fish Ecology, BIO 572: Field Zoology (with permission), BMS 208: Human Anatomy, BMS 309: Laboratory in Human Anatomy, BMS 290: Human Physiology, BMS 291: Lab in Human Physiology.
- 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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