## Biology (2012-2013)

## Plant 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 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) <sup>3</sup>	3	WRT 150: Strategies in Writing	4
Gen Ed.	3	MTH 123: Trigonometry <sup>3</sup>	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
CHM 231: Introductory Organic Chemistry	4	CHM 232: Biological Chemistry	4
$Or^1$		Or	
CHM 241: Organic Chemistry for Life Science I	4	CHM 242: Organic Chemistry for Life Science II	4
Gen Ed.	3	MTH Cognate <sup>2</sup>	3
Gen Ed.	3	Gen Ed.	3
Total	14	Total	14
Fall Semester – Year Three	credits	Winter Semester – Year Three	credits
BIO 405/406: Cell and Molecular Bio. w/lab (SWS)	6	BIO 303: Plants and Fungi	4
PHY 220: General Physics I <sup>3</sup>	5	PHY 221: General Physics II <sup>3</sup>	5
BIO 333: Systematic Botany	3	Gen Ed or Theme	3
Elective	1	Gen Ed.	3
Total	15	Total	15
Fall Semester – Year Four	credits	Winter Semester – Year Four	credits
BIO Elective <sup>4, 5</sup>	3	BIO 495:Evolutionary Biology	3
Elective	3	BIO 403: Plant Structure and Function	4
Elective	3	Elective	3
Gen Ed. or Theme	3	Elective	3
Gen Ed. or Theme	3	Gen Ed. or Theme	3
Total	15	Total	16*

<sup>\*</sup>The block tuition rate is for 12-15 credits. You will pay additional tuition for any credits over 15.

## Notes:

## Special Notes:

- A. This is a **general** curriculum guide and will not work for everyone, especially those students who have AP, IB or CLEP credit. For students without high school chemistry, CHM 109 is strongly encouraged.
- 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. Students must complete a total of two courses with an SWS attribute.

<sup>&</sup>lt;sup>1</sup> If you plan to attend graduate or professional school, you will want to complete the CHM 241/242 sequence.

<sup>&</sup>lt;sup>2</sup> Choose one of the following to complete the math cognate for the Major: MTH 125: Survey of Calculus, MTH 201: Calculus and Analytical Geometry, or STA 215: Introductory Applied Statistics.

<sup>&</sup>lt;sup>3</sup> MTH 122/123 are prerequisites for PHY 220 and not part of the Biology major. PHY 221 is not required, but students planning to attend graduate school, professional school, or secondary teacher certification should complete the physics 220/221 sequence.

<sup>&</sup>lt;sup>4</sup>Students must choose at least one animal biology course as an elective.

<sup>&</sup>lt;sup>5</sup> The following courses may be of interest when selecting the Plant Biology Emphasis: BIO 323 Aquatic Plants, BIO 413 Freshwater Algae, BIO 423 Plant Biotechnology, BIO 573 Plants of the Great Lakes Region (with permission).