Department of Biological Sciences
Bachelor of Science
Major in Biology - Concentration in Zoology

I. General Information

A. A minimum of 45 hours in the biological sciences is required. You must satisfy all core and concentration requirements plus elect a sufficient number of upper division courses to complete this 45-hour requirement.

B. General Education requirements are to be fulfilled as outlined in the class schedule published each term for all bachelor degrees in the College of Liberal Arts and Sciences.

C. At least 45 hours of college credit must be earned in courses numbered 300 or above, and you must have an accumulative GPA of 2.0 to meet university graduation requirements.

D. You must have a minimum GPA of 2.2 for all of the required biology courses for the 45 hours counted towards the degree.

E. A basic understanding of mathematics and physical science is essential to all biologists. It is strongly recommended that courses in these areas be elected in addition to those required.

F. You are expected to confer with your academic advisor each term to review progress towards graduation and to discuss the biology courses you should take the next term. In consultation with your advisor, you must prepare and submit an application for degree during the junior year. This application must be approved by the chair.

G. Some required courses are taught either during alternate terms or years so you should plan ahead to avoid delaying graduation.
II. **Biology Requirements (45 hours)**

GB 140-141........ Principles of Biology and Lab................................. 4  
BO 212-213........ Biology of Plants and Lab........................................ 4  
ZO 214-215........ Biology of Animals and Lab........................................ 4  
MC 316-317........ Microbiology and Lab.............................................. 4  
GB 425-426........ General Genetics and Lab......................................... 4  
EB 480............... Principles of Ecology.............................................. 3  
EB 481............... Field Ecology.......................................................... 2  
ZO 556-557........ Natural History of Vertebrates and Lab........................ 4  
GB 480............... Senior Experience in Biology.................................. 1  

An anatomy or physiology course  
(ZO 515/516 or 570 or 717 or 760 or 762)........................................... 3-5  
An invertebrate zoology course (ZO 440-441 or ZO 546-547).............. 4  
Upper division electives in biology................................................... 6-8  

TOTAL 45

III. **Physical Science and Math Requirements (23-25 hours)**

CH 123-124........ Chemistry I and Lab............................................... 5  
CH 126-127........ Chemistry II and Lab............................................... 5  
CH 370-371........ General Organic Chemistry and Lab........................... 5  
PH 140-141........ College Physics I and Lab...................................... 5  
MA 165............... Basic Calculus..................................................... 5  

OR  
MA 161............... Calculus I............................................................. 5  

OR  
PY 520............... Statistics I......................................................... 3  

OR  
GB 750............... Research Design and Analysis................................ 3  

TOTAL 23-25

*Biology Web Site: http://biology.emporia.edu*

(Updated September 23, 2009)