

## **Department of Biological Sciences**

### **Bachelor of Science**

### **Major in Biology – Pre-Medical & Pre-Osteopathy Curriculum**

#### **I. General Information**

- A. Pre-Medical students are advised by a four-member interdepartmental Pre-Medical Advisory Committee. A Pre-Medical student who elects to major in Biology will be advised by Dr. Dwight Moore who is a member of this committee. Other members of the committee are Dr. Lynnette Sievert, Dr. Michael Keck, and Dr. Arthur Landis.
- B. The curriculum presented here is based primarily on entrance requirements for the University of Kansas Medical School, as most of our students make application to that institution. Students applying to other institutions may find that the school of their choice requires fewer physical science and mathematics courses, in which case they may substitute additional biology courses.
- C. The curriculum presented here also meets the entrance requirements for the Kansas City College of Osteopathic Medicine to which many of our students also apply. At present KCCOM does not require a college calculus course. It does, however, require Organic Chemistry I and II.
- D. General education requirements must be met, as specified in the General Catalog of the College. These include 45 hours of courses at the 300 level or higher.
- E. Pre-Medical students need to score well on the nationally administered Medical College Admission Test.
- F. Most successful Pre-Medical students in recent years have had GPAs of 3.5 or higher.
- G. Pre-Medical students should consider joining the University Honors Program and the Caduceus society (organization for pre-health majors).
- H. Students must have a minimum grade point average of 2.2 for all biology courses on the major contract to graduate as a biology major.

(OVER)

**II. Required Biology Courses (45 hours)**

		<u>Hours</u>
GB 140-141.....	Principles of Biology and Lab.....	4
ZO 214-215.....	Biology of Animals and Lab.....	4
BO 212-213.....	Biology of Plants and Lab.....	4
ZO 362-363.....	Human Anatomy and Physiology & Lab.....	5
MC 316-317.....	Microbiology and Lab.....	4
GB 425.....	General Genetics.....	3
GB 426.....	General Genetics Lab.....	1
EB 480.....	Principles of Ecology.....	3
ZO 515-516.....	Vertebrate Structure & Develop. & Lab.....	5
MC 540.....	Cell Biology.....	3
	or	
ZO 762.....	Environmental Physiology.....	3
	or	
ZO 570.....	Mammal Physiology.....	3
	Upper division biology electives.....	9
	(CH574-575 or CH 560-561 may count as a biology elective)	

**III. Required Physical Science and Math Courses (33-35 hours)**

PH 140-141.....	College Physics I and Lab.....	5
PH 143-144.....	College Physics II and Lab.....	5
CH 123-124.....	Chemistry I and Lab.....	5
CH 126-127.....	Chemistry II and Lab.....	5
CH 572-573.....	Organic Chemistry I and Lab.....	5
CH 574-575.....	Organic Chemistry II and Lab.....	5
MA 165.....	Basic Calculus.....	5
	or	
MA 161.....	Calculus.....	5
	or	
PY 520.....	Statistics.....	3

**IV. Recommended Medical School (8-10 hours)**

*University of Kansas Medical School*

CH 560-561.....	Biochemistry and Lab.....	5
	KU Medical School Statistics highly recommended.....	5

Biology Web Site: <http://biology.emporia.edu>