

Department of Biological Sciences

Bachelor of Science

Major in Biology –

Microbial & Cellular Biology Concentration

I. General Information

- A. A minimum of 45 hours in the biological sciences is required. You must satisfy all 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 biology courses required to graduate as a biology major.
- E. A basic understanding of mathematics and physical sciences 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 undergraduate application for degree during the junior year. This application must be approved by the chair.
- G. Note that Chemistry I is a prerequisite for MC 350-351, MC 316-317, and 362-363. Some required courses are taught either during alternate terms or years so you should plan ahead to avoid delaying graduation.

(OVER)

II. Biology Requirements (45 hours)

<u>Course</u>		<u>Hours</u>
GB 140-141	Principles of Biology and Lab	4
MC 350-351	Molecular and Cellular 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
ZO 362-363	Human Anatomy & Physiology and Lab...	5
MC 540-541	Cell Biology and Lab	4
MC 549-550	Immunology and Lab	5
MC 562-563	Pathogenic Microbiology and Lab	<u>5</u>
	TOTAL	45

III. Physical Science Requirements (23-25 hours)

<u>Course</u>		<u>Hours</u>
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	<u>3</u>
	TOTAL	23-25

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

(Updated October 20, 2006)