

## COURSE DESCRIPTION

Dept., Number	BISC 161	Course Title	Biological Sciences I Laboratory
Semester hours	1	Course Coordinator	Gail Stratton, PhD, Instructor, Coordinator of Laboratory Programs

### Current Catalog Description

Laboratory to accompany BISC 160.

### Textbook

Gail Stratton, Lab Exercises, Biological Sciences I, 2006-7.

### References

### Course Outcomes

Upon successful completion of this laboratory course, the students are able to:

1. demonstrate appropriate use of the scientific method
2. write a laboratory report using the elements of scientific writing
3. demonstrate competence in basic biological information.

### Relationship between Course Outcomes and Program Outcomes

The ABET/CAC criteria for computer science require 30 credit hours of science and mathematics appropriate for the discipline. The BSCS program meets this criterion by requiring 14 hours of natural science courses intended for majors in those fields, including a two-course sequence with associated laboratories in one field, and 18 hours of mathematics beyond the precalculus level. Biology 160 and 162 and their associated laboratories, Biology 161 and 163, form one option for satisfying the laboratory science requirement. The course outcomes are related to the expectations for the role of natural science in the BSCS curriculum.

### Prerequisites by Topic

Corequisite of BISC 160, Biological Sciences I lecture course.

## Major Topics Covered in the Course

### Primary lab exercises:

1. Scientific investigations
2. Microscopes and cells
3. Osmosis and diffusion
4. Enzymes
5. Photosynthesis
6. DNA structure, simulation
7. Molecular genetics
8. Meiosis and human genetics
9. Genetics problems
10. Corn genetics, Chi square
11. Population genetics

## Assessment Plan for the Course

The instructor assesses the student performance related to the course outcomes by using examinations, quizzes, homework assignments, laboratory worksheets, and laboratory reports.

How Data in the Course are Used to Assess Program Outcomes (unless adequately covered already in the assessment discussion under Criterion 4)

The conduct of this course is not governed by the ABET program faculty. No data are collected that are used to assess program outcomes directly.

## Estimate Curriculum Category Content (Semester hours)

Science 1 hour