

COURSE DESCRIPTION

Dept., Number	BISC 163	Course Title	Biological Sciences II Laboratory
Semester hours	1	Course Coordinator	Gail Stratton, PhD, Instructor, Coordinator of Laboratory Programs

Current Catalog Description

Laboratory to accompany BISC 162.

Textbook

Gail Stratton, *Laboratory Manual, BISC 163 Biological Sciences*. Hayden-McNeil Publishing, 2008, ISBN: 978-0-7380-2648-0.

References

Course Outcomes

Upon successful completion of this laboratory course, the students:

1. are able to perform dissection studies of the fetal pig, applying knowledge gained in lecture, laboratory, and text;
2. know macro and micro anatomy of the pig and be able to compare and contrast observations at these levels of observation;
3. can apply anatomical terminology accurately;
4. understand the correlations between form and function at micro and macro level;
5. know the large categories of diversity and be able to understand and explain the methods of categorization;
6. understand the mechanisms of getting nutrients and oxygen, getting rid of wastes and reproducing;
7. can use a compound and dissecting microscope;
8. are able to research a topic in two-person groups using library resources and present and effective verbal presentation on the findings.

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 162

Major Topics Covered in the Course

1. Early Animal Development + Tissues
2. Skin, Muscles and Bones
3. External Anatomy, Digestive & Respiratory Systems
4. Circulatory System
5. Reproductive and Excretory Systems
6. Nervous and Endocrine Systems
7. Bacteria Protista & Fungi
8. Plant Diversity and Life Cycles
9. Plant Anatomy and Development
10. Diversity of Animals

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