



## BIOL 1055

**Division:** Natural Science and Mathematics

**Department:** Biology

**Course:** BIOL 1055

**Title:** Human Biology Laboratory

**Catalog Description:**

This course is the laboratory component for BIOL 1050, Human Biology. This course is for students whose major course of study is not in the sciences. This course will partially satisfy Natural Science GE.

**General Education Requirements:** Life Science

**Semesters Offered:** Fall

**Credit/Time Requirement:** Credit: 1; Lecture: 0; Lab: 2

**Clock/Hour Requirements:** 0

**Offered for Non-Credit:** No

**Corequisites:** BIOL 1050

**Justification:**

BIOL 1055 allows for student application of the principles discussed in BIOL 1050 with an emphasis on investigative learning.

The Human Biology Laboratory (BIOL 1055) satisfies the natural science laboratory GE requirement for Snow College. This component is optional, but in order to count as a laboratory experience, it must be taken concurrently with BIOL 1050.

**Student Learning Outcomes:**

On successful completion of this course, students will:

- have a basic foundation in understanding the scientific method as a systematic way of acquiring knowledge
- have a basic foundation in human anatomy and physiology at the molecular, cellular, systemic, and organism levels, and relate this knowledge to human evolution, human ecology, as well as current and common personal and social issues such as substance abuse, eating disorders, physical fitness, etc.
- Specific objectives are made available to students with the expectation that these objectives will prepare students for effective application in their daily lives.

**Content:**

This laboratory course will include:

- scientific method as a way of learning
- chemicals of life
- introduction to microscopy and cells
- tissue and homeostasis
- digestion and nutrition
- cardiovascular system and blood
- musculoskeletal systems
- nervous system
- the senses, general and special
- reproduction and development
- cell division and DNA
- immunity
- urinary and respiratory systems

### **General Education Outcomes:**

#### 1) Read effectively, constructively, and critically.

Students read the text and laboratory manual throughout the course. Lab reports include: \_ Identification of anatomical structures \_ Identify the biological processes of identified structures \_ Correlate processes demonstrated in laboratory exercises with the appropriate corresponding biological process

#### 2) Write clearly, informatively, and persuasively.

Portions of the lab reports require the student to express an understanding of the physical, functional, and physiological principles studied in that exercise. The student must be able to communicate in writing his or her understanding and logical thought process.

#### 4) Retrieve, evaluate, interpret, and deliver information through a variety of traditional and electronic media.

Laboratory students will use microscopes, other lab equipment and supplies, and computers to conduct lab exercises and to obtain data, and then to analyze that data.

#### 7) Apply scientific reasoning to a variety of contexts.

Students will demonstrate scientific reasoning in conducting laboratory exercises based on testable hypothesis, and evaluate their acquired data in supporting or refuting the hypothesis. In class discussion they will share their finding and observations with their classmates and evaluate their findings.

### **Key Performance Indicators:**

- Evaluation will be based on practical lab quizzes: 0-70%
- lab reports: 0-35%

- lab participation: 0-20%
- lab final exam: 10-35%.
- Since multiple faculty members teach the lab course, teaching styles will vary, as will evaluation methods. The biology department allows a variable number of quizzes and tests, projects, etc. in the evaluation process.
- Students cannot miss more than two labs. Students missing more than two laboratories will fail the course.

**Representative Text and/or Supplies:**

L. Cook, P. Gardner, T. Gardner, *Biology 1055 Laboratory Manual*, current edition, self published or published by the Biology Department.

**Optimum Class Size:** 16

**Maximum Class Size:** 24

**Signatures:**

I hereby submit this course syllabus:

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Allan Stevens, , Professor

I hereby find this course consistent with the goals and resources of the Biology Department:

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Allan Stevens, , Professor, Chair

I hereby find this course consistent with the goals and resources of the Natural Science and Mathematics Division:

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Dan Black, EdD, Associate Professor, Dean

I have discussed the need for library resources related to this class with the person submitting the syllabus:

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Lynn Anderson, MLIS, Technical Services Librarian (Main Campus)

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Michelle Olsen, MLS, Campus Librarian (Richfield Campus)