



North Iowa Area Community College Course Outline

Please follow the included instructions when completing this form. Direct questions to Division Chair. After Course Outline is completed, please submit to Division Chair for review, who then submits to Administrative Assistant to the Vice President for Academic Affairs for review by the Curriculum and Academic Affairs Council (CAAC).

Prepared by: Heather Rissler

Date Approved by CAAC: September 9, 2019

Course Title: Introductory Biology

Course Number: BIO-102

Equivalent Prior Course Numbers: 70-101; BIOL-101

Academic Division/Department: Natural Science

Credits – Semester Hours (s.h.):

Contact Hours As defined by the Iowa Department of Education in consultation with Division Chair/Registrar (see attached instructions).

Lecture:	45	1 s.h. = 15 contact hours
Lab:	0	1 s.h. = 30 contact hours
Clinical Practice:	0	1 s.h. = 45 contact hours
Work Experience:	0	1 s.h. = 60, 75, 90, or 105 contact hours
Total:	45	

Prerequisite(s):

None

Corequisite(s):

None

Course Description:

Study of organismic biology including organization, metabolism, and reproduction of living systems. Includes evolutionary patterns, inheritance, ecosystems, and structure-function relationships among organisms.

Required Textbook(s) and Other Required Materials:

Concepts of Biology, by Sylvia Mader, McGraw-Hill

Higher Education, 2013 (3rd Edition)

Purpose of Course Check one [X] in consultation with Division Chair.

☒	Arts and Sciences (General Education)
☐	Arts and Sciences
☐	Career and Technical (General Education)
☐	Career and Technical
☐	Developmental

If course is offered only in specific semesters, please explain below:

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Maximum number of weeks for which the course is offered:

16

[Do not edit the following section. Managed by Academic Affairs]

Is this a Core Competency Anchor Course? YES ☐ NO ☐

If “Yes,” list Core Competency Student Learning Outcome Numbers being taught and assessed in this course (2.2, 3.1, etc.)

(Example) 2.2 [Press Tab to create new rows for each SLO]

Student Learning Outcomes (SLOs):

Students who successfully complete this course will be able to:

A. General education goals

1. Students will demonstrate knowledge and understanding of scientific concepts and processes required for personal decision making and responsible participation in civic affairs (*scientific literacy*).
2. Students will demonstrate goal-directed reasoning to arrive at valid conclusions, meaningful solutions, and informed evaluations (*critical thinking*).

B. Discipline specific goals

1. Describe organismal classification and the general organization of both prokaryotic and eukaryotic cells and explain the functions of the major organelles.
2. Describe the process and function of both mitotic and meiotic cell division.
3. Describe the life cycles and patterns of reproduction for both plants and animals.
4. Explain how traits are passed from one generation to the next.
5. Describe the structure of DNA and explain its function in a cell.
6. Describe the process of evolution and evidence for evolutionary change.
7. Explain how both plants and animals transport substances within their bodies.
8. Explain how both plants and animals obtain and utilize nutrient molecules.
9. Explain how organisms interact with the environment and each other.