# NORTH CENTRAL TEXAS COLLEGE

# COURSE SYLLABUS

## **COURSE AND INSTRUCTOR INFORMATION**

**Course title: BIOLOGY FOR SCIENCE MAJORS I**

**Course prefix, number, and section number: BIOL 1406.0340**

**Semester/Year of course: Spring 2024**

**Semester start and end dates: January 16 thru May 11, 2024**

**Modality (Face to face/Synchronous or Asynchronous online/Hybrid): Online**

**Class meeting location, days, and times: Online**

**Lab meeting location, days, and times: Online**

**Semester credit hours: 4**

**Course description:** Fundamental principles of living organisms will be studied, including physical and chemical properties of life, organization, function, evolutionary adaptation, and classification. Concepts of cytology, reproduction, genetics, and scientific reasoning are included. Laboratory activities will reinforce the fundamental principles of living organisms, including physical and chemical properties of life, organization, function, evolutionary adaptation, and classification. Study and examination of the concepts of cytology, reproduction, genetics, and scientific reasoning are included.

**Course prerequisites:** MATH 1314 Successful completion of College Algebra or concurrent enrollment in higher-level mathematics is recommended.

**Required course materials: *Text:*** *Campbell Biology*, 12th ed., using ebook with My Lab and Mastering

**Textbook Publisher Website**: You will need to purchase an access code for mastering. You need to connect to mastering through CANVAS which will take you directly to my course and you will need the access code to access the course. This is NECCESARY to perform the assigned homework, which represent 20% of your grade.

**Lab Kit:** You will need to purchase a lab kit from Carolina Biological. Information is in the Start Here Module of the course.

**Name of instructor: Robert Fenton**

**Office location: Online**

**Telephone number:** 940-668-4252 – Wendy Perkins, Division Assistant

**E-mail address: rfenton@nctc.edu**

**Office hours for students: Available by appointment in Denton or Corinth**

## **SYLLABUS CHANGE DISCLAIMER**

The faculty member reserves the right to make changes to this published syllabus if it is in the best interest of the educational development of this class. Any such changes will be announced as soon as possible in person and/or writing.

## **SUMMARY OF COURSE ASSIGNMENTS**

**List of graded assignments:**

**Homework: 20%**

**Labs: 30%**

**Exams: 30%**

**Final Exam: 20%**

**Final grade scale:**

**90-100: A**

**80-89: B**

**70-79: C**

**60-69: D**

**<59: F**

**Late work policy: 5% Late penalty per day for late lab reports**

Unit exams will be taken online using Respondus **Webcam** Lockdown Browser or at a NCTC Testing Center. In the interest of being fair to all students, NO MAKE-UP EXAMS will be given. Chapter Assignments and Labs are due the date of the Unit Exam and access will close.

**SEE CANVAS FOR THE COMPLETE COURSE CALENDAR, OUTLINE, DETAILED DESCRIPTION OF GRADED WORK, AND OTHER RELATED MATERIAL.**

## **COURSE POLICIES**

**Academic Integrity Policy:** Scholastic dishonesty shall include, but is not limited to cheating, plagiarism, academic falsification, intellectual property dishonesty, academic dishonesty facilitation and collusion. Faculty members may document and bring charges against a student who is engaged in or is suspected to be engaged in academic dishonesty. See Student Handbook, “Student Rights & Responsibilities: Student Conduct ([FLB(LOCAL)]”.

Consequences for academic dishonesty may include:

1. Loss of grade for the assignment of exam
2. Grade of “F” for the course and removal from class

**AI Writing and Acceptable Use:** Submitting work generated by ChatGPT or any other AI language tool on assignments is considered academic dishonesty, even if cited as a source.  Instructors use AI detectors to enforce this policy.  The writing assignments in this course require generating new knowledge, rather than just recombining existing information.  AI does not generate original research, and the information may contain factual errors.

AI may be used in brainstorming, or developing a research question.  Generally speaking, students are not authorized to use artificial intelligence and related products like large language model applications to produce work for this class EXCEPT on assignments that the instructor has identified and for which the student will have received significant guidance on the appropriate use of such technologies.  Students should not, however, construe this limited use as permission to use these technologies in any other facet of their coursework. Students who submit AI generated content as original work will be subject to the same disciplinary actions listed above in the college's academic integrity policy.

**Attendance Policy:** Regular and punctual attendance is expected of all students in all classes for which they have registered. All absences are considered to be unauthorized unless the student is absent due to illness or emergencies as determined by the instructor. It is the student responsibility to provide documentation as to the emergency for approval and judgement by the faculty member. Approved college sponsored activities are the only absences for which a student should not be held liable and only when provided by a college official ahead of the absence. Valid reasons for absence, however, do not relieve the student of the responsibility for making up required work. Students will not be allowed to make up an examination missed due to absence unless they have reasons acceptable to the instructor. A student who is compelled to be absent when a test is given should petition the instructor, in advance if possible, for permission to postpone the exam. Student will be dropped from a class by the Registrar upon recommendation of the instructor who feels the student has been justifiably absent or tardy a sufficient number of times to preclude meeting the course’s objectives. Persistent, unjustified absences from classes or laboratories will be considered sufficient cause for College officials to drop a student from the rolls of the College.

**Withdrawal Policy**

A student may withdraw from a course on or after the official date of record. It is the student’s responsibility to initiate and complete a Withdrawal Request Form.

**Last day to withdraw from the course with a “W” is:** Monday, April 1, 2024.

* **Student Learning Outcomes:**
* **Lecture:**
* Describe the characteristics of life.
* Explain the methods of inquiry used by scientists.
* Identify the basic requirements of life and the properties of the major molecules needed for life.
* Compare and contrast the structures, reproduction, and characteristics of viruses, prokaryotic cells, and eukaryotic cells.
* Describe the structure of cell membranes and the movement of molecules across a membrane.
* Identify the substrates, products, and important chemical pathways in metabolism.
* Identify the principles of inheritance and solve classical genetic problems.
* Identify the chemical structures, synthesis, and regulation of nucleic acids and proteins Describe the unity and diversity of life and the evidence for evolution through natural selection
* **Lab:**
* Apply scientific reasoning to investigate questions and utilize scientific tools such as microscopes and laboratory equipment to collect and analyze data.
* Use critical thinking and scientific problem solving to make informed decisions in the laboratory.
* Communicate effectively the results of scientific investigations.
* Identify the basic properties of substances needed for life.

**Core Objectives:**

Critical Thinking

Communication

Teamwork

Empirical and Quantitative Analysis

## **COLLEGE POLICIES**

**STUDENT HANDBOOK**

Students are expected to follow all rules and regulations found in the Student Handbook.

**ADA STATEMENT**

NCTC will adhere to all applicable federal, state and local laws, regulations and guidelines with respect to providing reasonable accommodations to afford equal educational opportunity. It is the student’s responsibility to contact the Office for Students with Disabilities to arrange appropriate accommodations. See the OSD Syllabus Addendum.

**STUDENT SERVICES**

NCTC provides a multitude of services and resources to support students. See the Student Services Syllabus Addendum for a listing of those departments and links to their sites.

**SYLLABUS ADDENDUMS**

**See Canvas Start Here Module**

## **QUESTIONS, CONCERNS, or COMPLAINTS**

The student should contact the instructor to deal with any questions, concerns, or complaints specific to the class. If the student and faculty are not able to resolve the issue, the student may contact the chair or coordinator of the division. If the student remains unsatisfied, the student may proceed to contact the instructional dean.

**Name of Chair/Coordinator:** Jaime Noles

**Office location:** Gainesville 408

**Telephone number:** 940-668-7731 ext. 4930

**E-mail address:** jnoles@nctc.edu

**Name of Instructional Dean:** Mary Martinson

**Office location:** Gainesville 1403

**Telephone number:** 940.668.7731 ext. 4377

**E-mail address:** mmartinson@nctc.edu