BIOL 1010
Introduction to Biology I

Instructor Information
Instructor:
E-Mail:
Phone:
Office:
Office Hours:

Course Description
An introduction to biology course. Topics include cell structure and function, organic molecules and energy pathways, genetics, evolution, and the principles of ecology. This course does not fulfill the science requirement for biology majors. Credit for BIOL 1110 and BIOL 1010 may not be used together to satisfy the general education natural science requirement.

The laboratory component of the course is integrated into the lectures (i.e., there is no separate lab time)

Credit: 4 credits, 3 class hours, 3 lab hours

Prerequisite: Level 2 placement in English and Reading.

Course Outcomes & Topics
1. Course Outcomes
   - Describe the basic characteristics of life.
   - Apply the scientific method.
   - Explain the structure of atoms, chemical bonding, properties of water, and the groups of organic molecules associated with life.
   - Distinguish prokaryotic from eukaryotic cells by describing cell organelles and their functions and by differentiating types of cell division and their significance.
   - Explain the energy requirements of cells, the central role of ATP, the generation of ATP during cellular respiration, the production of food by photosynthesis, and the role of enzymes in controlling chemical processes in cells.
   - Explain and apply the principles of heredity as first developed by Gregor Mendel and extended by other both in regard to chromosome behavior and to the statistical ratios of traits among offspring.
   - Understand the chemical and physical structure of the gene, its operation in the synthesis of polypeptides, and its significance in genetic engineering.
   - Describe the evidence for evolution and illustrate the basic tenets of population and species evolution.
   - Explain interactions between organisms and their environment as energy and matter flows through ecosystems and discuss environmental problems and their solutions.
2. Course Topics
   - Chemistry
   - Organic Chemistry
   - The Cell
   - Energy & Enzymes
   - Cellular Respiration
   - Photosynthesis
   - Cell Division
   - Meiosis
   - DNA Synthesis
   - Transcription, Protein Synthesis
   - Viruses and Jumping Genes
   - Genetic Engineering, Recombinant DNA
   - Genetics
   - Evolution
   - Microevolution
   - Macroevolution
   - Ecology

3. Lab Topics
   - The same topics addressed during the lecture will be covered during the lab.

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**Required Materials**

I. Textbook

II. Introduction to Biology I Lab Manual. NSCC Bookstore. NSCC WEB CLASS DOES NOT USE THE LAB MANUAL, ONLY ON GROUND CLASSES.

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**Course Policies *** Subject to change at the instructor’s discretion**

**Attendance Policy**

Each Instructor will provide information regarding his/her attendance policy. Failure to attend class will result in a final course grade of “FA” or “FN” (see explanation below), depending on the individual instructor’s course policy.

- FA = failure, attendance-related (unofficial withdrawal) Last recorded date of attendance required
- FN = failure, never attended class (unofficial withdrawal)

**Assessment and Grading**

***Subject to change at the instructor’s discretion***

**Lecture Tests**

- Lecture tests will be multiple choice, short answer, matching, fill-in-the-blank, true-false or picture/diagram labeling.
- Lecture tests will account for 60% of the total course grade.
No make-up lecture tests will be allowed.

**Assignments/Essays/Presentation**
- Assignments covering a variety of topics will be given during the course of the semester. The format of the material will be at the discretion of the instructor.
- Assignments will account for 20% of the total course grade.
- Late assignments will not be accepted.
- Make-ups will not be allowed.

**Laboratory Practical Exams**
- Laboratory practical exams will be given.
- Lab practical exams will be identification on lab models, photographs, drawings or preserved animal specimens.
- Laboratory practical exams will account for 20% of the total course grade.
- Laboratory practical make-up examinations will NOT be given.
- Final calculation of the course grade will be based on the following percentages:
  - 60% - Lecture tests
  - 20% - Assignments/Essays/Presentations
  - 20% - Laboratory Practical Exams

**Grading Scale**
- A = 89.5-100.0
- B = 79.5-89.5
- C = 69.5-79.5
- D = 59.5-69.5
- F = below 59.5

There will be NO dropped grades; however, extra credit will be offered throughout the semester. The final exam cannot be made up under any circumstances. Lab activities and exams cannot be made up and an absence will result in a 0 for that day's lab activity. Class attendance and participation will be taken into consideration for grades on the borderline.

**Safety Issues**
The instructor will go over new regulations regarding safety in lab classes. You must turn in a signed copy of the regulations, and you will have a copy to keep.

**Student Communication Channels**
It is the student’s responsibility to check NS Online (D2L) and MyNSCC email on a regular basis. These are the official communication channels between the college and students. Students are responsible for the information communicated through those channels. NS Online contains specific course information and MyNSCC contains information important for other purposes.

**ADA Statement**
Nashville State complies with the Americans with Disabilities Act. Contact the Access Center if you wish to request any special accommodations for courses in which you are enrolled. Such services must have proof of documentation that is not over 3 years old. Please contact the Access Center’s Coordinators at 615-353-3721 or 615-353-3741 if you would like to arrange ADA accommodations.
**Classroom Behavior**

Nashville State Community College has a zero tolerance policy for disruptive conduct in the classroom. Students whose behavior disrupts the classroom will be subject to disciplinary sanctions. The instructor has primary responsibility for control over classroom behavior and maintenance of academic integrity. He/she can order temporary removal or exclusion from the classroom of any student engaged in disruptive conduct or in conduct which violates the general rules and regulations of the College. Disruptive behavior in the classroom may be defined as, but is not limited to, behavior that obstructs or disrupts the learning environment (e.g., offensive language, harassment of students and professors, repeated outbursts from a student which disrupt the flow of instruction or prevent concentration on the subject taught, failure to cooperate in maintaining classroom decorum, etc.), the continued use of any electronic or other noise or light emitting device which disturbs others (e.g., disturbing noises from beepers, cell phones, palm pilots, lap-top computers, games, etc.). Please be aware that children are not allowed in class or unattended on campus.

**Academic Dishonesty (Honor Code)**

Any form of academic dishonesty, cheating, plagiarizing, or other academic misconduct is prohibited. “Plagiarism may result from: (1) failing to cite quotations and borrowed ideas, (2) failing to enclose borrowed language in quotation marks, and (3) failing to put summaries and paraphrases in your own words” (A Writer’s Reference 331). Academic dishonesty may be defined as, but is not limited to, intentionally trying to deceive by claiming credit for the work of another person, using information from a web page or source without citing the reference, fraudulently using someone else’s work on an exam, paper, or assignment, recycling your own work from another course, purchasing papers or materials from another source and presenting them as your own, attempting to obtain exams/materials/assignments in advance of the date of administration by the instructor, impersonating someone else in a testing situation, providing confidential test information to someone else, submitting the same assignment in two different classes without requesting both instructor’s permission, allowing someone else to copy or use your work, using someone else’s work to complete your own, altering documents, transcripts or grades, and forging a faculty/staff member’s signature. In addition to other possible disciplinary sanctions that may be imposed through regular college procedures as a result of academic dishonesty the instructor has the authority to assign an “F” or a “Zero” for the exercise, paper, or examination or to assign an “F” for the course.

**NOTE:** This syllabus is meant simply as a guide and overview of the course and dates of assessments, etc. are subject to change at the instructor’s discretion.