INSTRUCTOR INFORMATION

Name: Dr. Benson Morrill
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Phone: 540-674-3600, ext. 4348
Office: Godbey Hall 37
Office hours: By Appointment only (face-to-face, Godbey 37)
Office hours: Monday & Wednesday, 9:30 pm – 10:30 pm
Via email or Google Chat – dendroaspis03@gmail.com

IMPORTANT:
☑️ The recommended browser to use with the current version of Blackboard is Mozilla Firefox. Other browsers are inconsistent in their performance with Blackboard. When taking tests or quizzes, USE a wired connection.
☑️ Check your VCCS email regularly and respond/keep in touch with your instructor.

COURSE DESCRIPTION

Description: This course explores fundamental characteristics of living matter from the molecular level to the ecological community with emphasis on general biological principles. It also introduces the diversity of living organisms; as well as their structure, function and evolution.

Credits: 4
Submissions: 31
Proctored Assessments: 6
Online Activities: Required

Prerequisite: None

COURSE MATERIALS


Note: NRCC assumes no liability for virus, loss of data, or damage to software or computer when a student downloads software for classes.

The Student’s Guide to Distance Education is available at http://www.nr.edu/de/pdf/stuguide.pdf.
COURSE INFORMATION

Prepared By: Benson Morrill

Approved By: Dr. Janice Shelton

A. INTRODUCTION

This is a Distance Education course designed specifically for those students whose learning styles are best served by providing instructional opportunities beyond the traditional classroom setting.

This course is the first semester of a two-semester sequence. Together, the two semesters of General Biology fulfill requirements for a year of laboratory science.

B. COURSE OBJECTIVES

Upon the successful completion of this course, the student will be able to:

- Independently design, perform, and formally report on experimental tests on aspects of nature by utilizing the scientific process and problem solving skills.
- Demonstrate the ability to communicate scientific information and theory in writing.
- Recognize and interpret given sets of data or models and construct logical conclusions.
- Use knowledge of biological principles and theories to evaluate the impact of social, political and economic policies on the biosphere.
- Explain the cell theory and cell reproduction processes. Describe the usual components of prokaryotic and eukaryotic cells.
- Distinguish among the various types of energy needed and used by living organisms.
- Explain the physical processes required for movement of substances into and out of cells.
- Compare and contrast the processes of photosynthesis and cellular respiration.
- Describe and differentiate among basic inheritance patterns with Mendelian and non-Mendelian genetics. Analyze and solve given genetic problems to determine the most likely pattern of inheritance represented.
- Describe the processes of DNA replication, transcription and translation. Use knowledge of those processes to explain mechanisms used to control gene expression in prokaryotic and eukaryotic cells.
- Describe the major tenets of and the lines of evidence supporting the theory of evolution. Explain processes of natural selection, including sexual selection and other behavioral traits that have evolved.
- Describe the differences between microevolution and macroevolution. Explain the use of evolutionary trees in helping to categorize biodiversity.
- Compare and contrast the three domains of life and describe the characteristics of those domains.
C. COURSE CONTENT

- Inorganic chemistry
- Organic chemistry
- Cell structure and function
- Photosynthesis
- Cellular respiration
- Structure and function of DNA
- DNA technologies
- Mendelian genetics
- Inheritance patterns
- Evolution

D. GRADING/EVALUATION

<table>
<thead>
<tr>
<th>Component</th>
<th>Weight</th>
<th>Grading Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average of Labs (10)</td>
<td>25%</td>
<td></td>
</tr>
<tr>
<td>Average of four highest Tests (5)</td>
<td>40%</td>
<td>90 -100 = A</td>
</tr>
<tr>
<td>Comprehensive Final Exam (1)</td>
<td>15%</td>
<td>80 - 89 = B</td>
</tr>
<tr>
<td>Intro Email/Discussion Questions</td>
<td>10%</td>
<td>70 - 79 = C</td>
</tr>
<tr>
<td>Chapter Quizzes (10)</td>
<td>10%</td>
<td>60 - 69 = D</td>
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<tr>
<td></td>
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<td>59 or less = F</td>
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</tbody>
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Grading Scale:

- 90 -100 = A
- 80 - 89 = B
- 70 - 79 = C
- 60 - 69 = D
- 59 or less = F

Tests must be taken in the DE Testing Center located within the library in Martin Hall, at the NRV Mall Site, or through an approved proctor. Please check Course Schedule and take the tests on or before the scheduled dates to remain on track for successful completion of this course.

E. WITHDRAWAL POLICY

Student Initiated Withdrawal Policy

A student may drop or withdraw from a class without academic penalty during the first sixty percent (60%) of a session. For purposes of enrollment reporting, the following procedures apply:

a. If a student withdraws from a class prior to the termination of the add/drop period for the session, the student will be removed from the class roll and no grade will be awarded.

b. After the add/drop period, but prior to completion of sixty percent (60%) of a session, a student who withdraws or is withdrawn from a course will be assigned a grade of "W." A grade of "W" implies that the student was making satisfactory progress in the class at the time of withdrawal, that the withdrawal was officially made before the deadline published in the college calendar, or that the student was administratively transferred to a different program.

c. After that time, if a student withdraws from a class, a grade of "F" will be assigned. Exceptions to this policy may be made under documented mitigating circumstances if the student was passing the course at the last date of attendance.
A retroactive grade of “W” may be awarded only if the student would have been eligible under the previously stated policy to receive a “W” on the last date of class attendance. The last date of attendance for a distance education course will be the last date that work was submitted.

Late withdrawal appeals will be revised and a decision made by the Coordinator of Admissions and Records.

**No-Show Policy**
A student must either attend face-to-face courses or demonstrate participation in distance learning courses by the last date to drop for a refund. A student who does not meet this deadline will be reported to the Admissions and Records Office and will be withdrawn as a no-show student. No refund will be applicable, and the student will not be allowed to attend/participate in the class or submit assignments. Failure to attend or participate in a course will adversely impact a student’s financial aid award.

**Instructor Initiated Withdrawal**
Since attendance is not a valid measurement for Distance Education (DE) courses, a student may be withdrawn due to non-performance. A student should refer to his/her DE course plan for the instructor’s policy.

In accordance with the No-Show Policy, a student who has not attended class or requested/accessed distance learning materials by the last day to drop the class and receive a refund must be withdrawn by the instructor during the following week. No refund will be applicable.

The student will be notified of the withdrawal by the Admissions and Records Office. An appeal of reinstatement into the class may be approved only by the instructor.

**F. CHEATING/PLAGIARISM POLICY**
A grade of zero will be awarded to any writing assignments or tests that show cheating or plagiarism. To plagiarize is “To use and pass off as one’s own the ideas or writings of another.” (Definition adapted from the American Heritage Dictionary.) Remember that plagiarism includes lifting words or ideas from Internet sites, as well as copying from print sources.

**G. DIVERSITY STATEMENT**
The NRCC community values the pluralistic nature of our society. We recognize diversity including, but not limited to, race, ethnicity, religion, culture, social class, age, gender, sexual orientation and physical or mental capability. We respect the variety of ideas, experiences and practices that such diversity entails. It is our commitment to ensure equal opportunity and to sustain a climate of civility for all who work or study at NRCC or who otherwise participate in the life of the college.
New River Community College does not discriminate on the basis of race, color, national origin, sex, disability, or age in its programs and activities. The following person has been designated to handle inquiries regarding the non-discrimination policies: Dr. Mark C. Rowh, Vice President for Workforce Development and External Relations, 217 Edwards Hall, 540-674-3600, ext. 4241.

H. **DISABILITY STATEMENT**

If you are a student with a documented disability who will require accommodations in this course, please register with the Disability Services Office located in the Advising Center in Rooker Hall for assistance in developing a plan to address your academic needs.