**SYLLABUS: BIO K100 - Basic Biology**

Three Rivers Community College, 574 New London Turnpike, Norwich, Connecticut 06360

Fall Semester 2019

Instructor: Daryl Simmons

Phone: (860) 215-9509

e-mail: [dsimmons@trcc.commnet.edu](mailto:dsimmons@trcc.commnet.edu) <- - - BEST WAY TO CONTACT ME

Office: C114

Office Hours: Tuesday, 3:00-5:00 PM; Wednesday, 2:00-4:00 PM ;

Thursday, 12:30-2:00 PM or by appointment

During the semester, I check email throughout the day during the week, and at least once a day on weekends. Please feel free to email me at any time.

**Required Text(s):**

In order to minimize student costs, this course uses a free Open Educational Resource (OER) book found online at: <https://openstax.org/details/books/concepts-biology>

On the webpage, you can download a pdf or order a print copy. For anyone preferring a hard copy of the text, you can also check online resources such as Amazon where prices have ranged from $28 and upwards.

**Course Description:**

This is a 3 credit hour survey course that will introduce students to basic biological concepts. Course will cover the basics of structural and chemical bases of life, cell structure, genetics, evolution, diversity, classification, and ecology

Prerequisite’s: Eng K101/101s placement & Math 095

**Course Outcomes:**

-Use and understand basic biological vocabulary/terminology.

-Demonstrate understanding of the scientific method and apply sound scientific reasoning to address real-world biology related issues.

-Identify characteristics of living things and demonstrate understanding of the connections between genetics, adaptation, evolution, ecology, and the diversity of life.

-Differentiate fact from opinion in regard to biological sciences.

**COLLEGE CLOSING**: For weather related closings call the college. Do **NOT** contact your instructor about college closings. **myCommNet Alert:**

myCommNet Alert is a system that sends text messages and emails to anyone signed up in the event of a campus emergency. Additionally, TRCC sends messages when the college is delayed or closed due to weather. All students are encouraged to sign up for myCommNet Alert.

A tutorial is available on the Educational Technology and Distance Learning Students page of the web site. <http://cdnapi.kaltura.com/index.php/extwidget/preview/partner_id/1053412/uiconf_id/11735071/entry_id/1_63tt1sjc/embed/dynamic>

**Technology:**

During class, turn off your cell phone or other electronic equipment.

Students are expected to have access to a computer outside of class in order to access Blackboard.

Emails to the instructor will only be answered if they originate from student accounts.

**Attendance Policy:**

Attendance will be taken at each lecture and lab session. Students are expected to attend class and be on time for each lecture. If absent, it is the student’s responsibility for obtaining lecture materials. If a class is missed due to circumstances beyond your control, please be sure to notify your instructor.

YOU are responsible for the material.

**METHODS OF STUDENT EVALUATION; GRADING POLICIES**

A. The student's grade for the course represents their ability to master course objectives, attitude, rate of improvement, proficiency and knowledge of course material.

B. Final course letter grades are determined by the total points accumulated. Students can estimate their progress toward a letter grade during the semester by using the Table 1 below after calculating their point percentage.

C. Points are obtained by the following methods of evaluation and are shown tabulated below in Table 2. The course is worth 580 total points.

**Table 1.** Percentages of points accumulated by students and the corresponding letter grades.

|  |  |  |
| --- | --- | --- |
| Letter Grade\* | Percentages for Letter Grade | |
| A | 100 | 94 |
| A- | 93.999... | 90 |
| B+ | 89.999... | 87 |
| B | 86.999... | 84 |
| B- | 83.999... | 80 |
| C+ | 79.999... | 77 |
| C | 76.999... | 74 |
| C- | 73.999... | 70 |
| D+ | 69.999... | 67 |
| D | 66.999... | 64 |
| D- | 63.999… | 60 |
| F | 59.999... | 0 |

*\* The instructor reserves the right to use subjective evaluation, especially in cases where the final percentage score is on a borderline between grades*

**Table 2.** How points are accumulated

|  |  |  |
| --- | --- | --- |
|  | Point Value (each) | Total points |
| 4 unit tests | 100 | 400 |
| 8 best quizzes | 10 | 80 |
| Topic report:  Outline  First Draft  Final submission | 25  25  50 | 100 |

D. Exam and quiz questions for lecture and/or laboratory material may consist of

multiple choice, true/false, fill in the blank, matching, or identification. Some questions might be reserved as an extra credit option.

There is no comprehensive final exam.

Quizzes: 1. Your best 8 quizzes count

2. **There are NO makeups for missed quizzes**.

A missed quiz will count as a low score to be dropped.

E. Absence on examination days:

Students are required to take exams as scheduled

Any missed exams can be made up on the day of the last exam.

F. Final letter grades for the course are determined by adding the total number of course points accumulated during the semester and dividing the total by 9.05 to get the percentage used in Table 1 above.

**Notice**: Used of Anti-plagiarism Detection Software SafeAssign, TurnItIn or other anti-plagiarism detection software products may be used in this course. Anti-plagiarism detection software products assist faculty and students in preventing and detecting plagiarism.

The Professor will promptly notify the College of the discovery of the incident.

First-time violations may result in an "F" being assigned for the course in which the violation occurs and the placement of a letter in the student's file. A second violation may result in dismissal from the College.

The student may appeal any decision to the Dean of Student Services who will render a final decision after appropriate investigation.

**Procedure for Withdrawing from the Course(s):**

A student who finds it necessary to discontinue a course must complete a

withdrawal form obtained from the Registrar's Office. The student may need to have the instructor's or their advisor's signature in order to withdraw and receive a "W" grade for the course. **Students who do not withdraw but stop attending will be assigned a "F"** **grade**, signifying failure and no credit. F grades count as courses attempted and may adversely affect the good standing status of the student receiving the grade.

**Disabilities Statement:**

**ACCOMMODATIONS**: Students with learning disabilities should contact the Learning Specialist, Matt Liscum, at 860-215-9265 or via email at [mliscum@trcc.commnet.edu](mailto:mliscum@trcc.commnet.edu) as soon as possible to ensure timely accommodations. Students with physical disabilities should contact Elizabeth Willcox at 860-215-9289 or via email at [ewillcox@trcc.commnet.edu](mailto:ewillcox@trcc.commnet.edu) to facilitate accommodations. All testing accommodations MUST be discussed with the instructor in a timely manner, that is, *at least* one to two class meetings **prior** to any scheduled test for which accommodations are needed.

**Academic Dishonesty:**

Academic integrity is essential in all aspects of college coursework and learning. I have zero tolerance for academic dishonesty. It is expected that **YOU** complete all your assigned ALEKS work. Communication or collaboration of ANY sort is ABSOLUTEY PROHIBITED during any exam. Academic Misconduct is punishable in a number of ways, including a score of a zero on the assignment where the cheating took place, a grade of an F in the course and/or possible censure on your permanent record. All cases of academic dishonesty will be referred to the Academic Dean. Do not let yourself come under the suspicion of academic dishonesty.)

**BOARD OF REGENTS FOR HIGHTER EDUCATION AND CONNECTICUT STATE COLLEGES AND UNIVERSITIES POLICY REGARDING SEXUAL MISCONDUCT REPORTING, SUPPORT SERVICES AND PROCESSES POLICY**

**Statement of Policy for Public Act No. 14-11: An Act Concerning Sexual Assault, Stalking and Intimate Partner Violence on Campus:**

“The Board of Regents for Higher Education (BOR) in conjunction with the Connecticut State Colleges and Universities (CSCU) is committed to insuring that each member of every BOR governed college and university community has the opportunity to participate fully in the process of education free from acts of sexual misconduct, intimate partner violence and stalking. It is the intent of the BOR and each of its colleges or universities to provide safety, privacy and support to victims of sexual misconduct and intimate partner violence.”

**Title IX clause**

**UNITED STATES DEPARTMENT OF EDUCATION AND OFFICE OF CIVIL RIGHTS TITLE IX STATEMENT OF POLICY:**

“Title IX of the Education Amendments of 1972 (Title IX) prohibits discrimination based on sex in education programs and activities in federally funded schools at all levels. If any part of a school district or college receives any Federal funds for any purpose, all of the operations of the district or college are covered by Title IX.

Title IX protects students, employees, applicants for admission and employment, and other persons from all forms of sex discrimination, including discrimination based on gender identity or failure to conform to stereotypical notions of masculinity or femininity. All students (as well as other persons) at recipient institutions are protected by Title IX – regardless of their sex, sexual orientation, gender identity, part-or full-time status, disability, race, or national origin-in all aspects of a recipient’s educational programs and activities.”

If any student experiences sexual misconduct or harassment, and/or racial or ethnic discrimination on Three Rivers Community College Campus, or fears for their safety from a threat while on campus, please contact Vicki Baker, the Diversity Officer and Title IX Coordinator: 860-215-9208 (vbaker@trcc.commnet.edu)

**Digication:**

All students are required to maintain a learning portfolio in Digication that uses the (Three Rivers) College Template. Any questions regarding Digication should be directed to the chair of the General Education Committee, Mike Stutz.

**ACCEPTANCE POLICY**: After reading this syllabus, choosing to stay registered for this course exemplifies your acceptance of the syllabus and all policies and consequences outlined in the syllabus. If you do not agree with any of the terms in the syllabus, you are free to withdraw.

**Disclaimer**

The instructor has the right to change/modify this syllabus at any time with proper notification to the class.

**Revisions to the Syllabus**

The instructor reserves the right to revise the academic schedule, objectives, and/or topical outline contained in this syllabus

**Topic Paper:**

You are required to submit a paper that is not more than 5 pages long.

If you have no idea of a topic, you may use one of ideas for topics below.

Unit 1 Topic: Discovery of DNA

<https://www.youtube.com/watch?v=o_-6JXLYS-k> (6 mins)

<https://www.youtube.com/watch?v=1vm3od_UmFg&feature=youtu.be> (18 mins)

<https://www.youtube.com/watch?v=BIP0lYrdirI> (4 mins)

Unit 2 Topic: Biotechnology

<https://www.youtube.com/watch?v=GGEiaDau7hU&feature=youtu.be> (17 mins)

Unit 3 Topic: Eugenics

<https://www.youtube.com/watch?v=JeCKftkNKJ0> (12 mins)

<https://www.youtube.com/watch?v=5JcYEXeK0g8> (8 mins)

Unit 4 Topic: Climate Change

<https://www.youtube.com/watch?v=EYR0ng1noZ4&feature=youtu.be> (2mins)

<https://www.youtube.com/watch?v=vCkDxD0DV0Q> (7 mins)

<https://www.youtube.com/watch?v=1drkFgHbcWY> (33 mins)

***Unit 1, Chapters 1-5***

The Cellular Foundation of Life. Our opening unit introduces students to the sciences, including the process of science and the underlying concepts from the physical sciences that provide a framework within which learners comprehend biological processes. Additionally, students will gain solid understanding of the structures, functions, and processes of the most basic unit of life: the cell.

***Unit 2, Chapters 6-10:***

Cell Division and Genetics. Our genetics unit takes learners from the foundations of cellular reproduction to the experiments that revealed the basis of genetics and laws of inheritance.

Molecular Biology and Biotechnology. Students will learn the intricacies of DNA, protein synthesis, and gene regulation and current applications of biotechnology and genomics.

***Unit 3, Chapters 11-15***

Evolution and the Diversity of Life. The core concepts of evolution are discussed in this unit with examples illustrating evolutionary processes. Additionally, the evolutionary basis of biology reappears throughout the textbook in general discussion and is reinforced through special call-out features highlighting specific evolution-based topics. The diversity of life is explored with detailed study of various organisms and discussion of emerging phylogenetic relationships between and among bacteria, protist kingdoms, fungi, plants, and animals.

***Unit 4, Chapters 19-21***

Ecology. Ecological concepts are broadly covered in this unit, with features highlighting localized, real-world issues of conservation and biodiversity.

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Digication:

All students are required to maintain an online learning portfolio in Digication that uses the college template. Through this electronic tool students will have the opportunity to monitor their own growth in college-wide learning. The student will keep his/her learning portfolio and may continue to use the Digication account after graduation. A Three Rivers General Education Assessment Team will select and review random works to improve the college experience for all. Student work reviewed for assessment purposes will not include names and all student work will remain private and anonymous for college improvement purposes. Students will have the ability to integrate learning from the classroom, college, and life in general, which will provide additional learning opportunities. If desired, students will have the option to create multiple portfolios.

**Lecture outline and schedule**

|  |  |  |
| --- | --- | --- |
| **WEEK** | **DATE** | **Chapters and material** |
| 1 | 8/27  8/29 | Ch 1 Introduction to Biology |
| 2 | 9/3  9/5 | Ch 2 Chemistry of Life  Ch 1 quiz |
| 3 | 9/10  9/12 | Ch 3 Cell Structure and Function  Ch 2 quiz |
| 4 | 9/17  9/19 | Ch 4 How Cells Obtain their Energy  Ch 5 Photosynthesis  Ch 3 Quiz |
| 5 | 9/24  9/26 | **Unit Test 1 Chapters 1-5**  **Topic paper outline due**  Ch 6 Reproduction at the cellular level |
| 6 | 10/1  10/3 | Ch 7 The Cellular Basis of Inheritance  Ch 6 quiz |
| 7 | 10/8  10/10 | Ch. 8 Patterns of Inheritance  Ch 9 Molecular Biology & Ch 10 Biotechnology  Ch 7 quiz |
| 8 | 10/15  10/17 | **TEST 2 Chapters 6-10**  **Topic paper first draft due**  Ch 11 Evolution and It’s Processes |
| 9 | 10/22  10/24 | Ch 12 Diversity of Life  Ch 11 quiz |
| 10 | 10/29  10/31 | Ch. 13 Diversity of Microbes, Fungi, and Protists  Ch 12 quiz |
| 11 | 11/5  11/7 | Ch 14 Diversity of Land Plants  Ch 13 quiz |
| 12 | 11/12  11/14 | **Test 3 Chapters 11-15**  **Topic paper #3 due**  Ch 15 Diversity of Animals |
| 13 | 11/19  11/21 | Ch 19 Population and Community Ecology  Ch 15 quiz |
| 14 | 11/26 | Ch 20 Ecosystems and the Biosphere  Ch 19 quiz |
| 15 | 12/3  12/5 | Ch 21 Conservation and Biodiversity  Ch 20 quiz |
| 16 | 12/10 | **Unit Test #4 Chapters 19, 20, & 21** |

**Academic Calendar: FALL 2019 Standard 15 Week Session**

|  |  |  |
| --- | --- | --- |
| **Aug 26** | | Registration deadline andlast day to drop classes for full tuition refund |
| **Aug 27** | | Classes begin, add and drop periods begin |
| **Sep 2** | | **Labor Day - college closed** and  last day for students to add a class - online **(Aug 30 in person)** |
| **Sep 3-6** | | Welcome Week |
| **Sep 9** | | Last day to drop classes and partial tuition refund |
| **Sep 17** | | Constitution Day observed (classes in session) |
| **Sep 20** | | Professional Day (classes in session) |
| **Sep 24** | | Last day to select audit option |
| **Oct 21** | | Mid-term Grades Due |
| **Nov 4** | | Advising day (classes in session)  Registration begins for Winter '19 Intersession and  registration begins for Spring '20 Semester for Continuing Degree-Seeking Students and New Students with Veteran Status |
| **Nov 5** | | Advising day (classes in session)  Last day to withdraw from classes, last day to select pass/fail option, and last day to submit incomplete work from Spring '19 and Summer '19 |
| **Nov 8** | | Registration begins for New Student and Non Degree-Seeking Student Registration for Winter '19 Intersession and Spring '20 Semester, and last day to apply for spring graduation (May '20) |
| **Nov 27** | | College open - no classes in session |
| **Nov 28-Dec 1** | | **Thanksgiving recess** |
| **Dec 15** | | Last day of 15 Week Session |
| **Dec 17** | | Final grades due to Registrar's office (by noon) |
| **Dec 20** | | Grades available on web |
|  |