Syllabus: *Prefix and course name*

Course Information	
Course Prefix/Number: Bio 100N Semester: Spring 2019 Class Days/Times: **Tuesdays and Thursdays 9:00-11:45 am**	Credit Hours: 4 (Including labs) Course Title: Biology Concepts Room: I-We:mta Ki:, Room 5 (IWK 5)

Instructor Information: Name: Teresa DeKoker	Phone/Voice Mail: E-mail: tdekoker@tocc.edu Office location: N/A Office hours: Before or after class in : I-We:mta Ki:, Room 5 (IWK 5)

Course Description:

Basic principles and concepts of biology. Includes methods of scientific inquiry, cell structure, chemistry, metabolism, reproduction, genetics, molecular biology, evolution, ecology, and current issues in biology.

Student Learning Outcomes (SLOs) :

After completion of the course students will be able to:

1. Perform activities to demonstrate improvement in the general education goals of communication, critical thinking and mathematics.
2. Describe characteristics of living organisms that distinguish them from non-living constituents of the biosphere.
3. Utilize scientific methods to formulate and answer questions and discuss strengths and limitations of findings.
4. Describe and explain the properties and roles of biologically important molecules, including proteins, carbohydrates, lipids, and nucleic acids.
5. Describe the structure and function of cells and cellular components in single and multicellular organisms.
6. Describe how energy is acquired and used by living organisms.
7. Describe how traits are inherited and apply patterns of inheritance (heredity).
8. Explain the molecular biology of genes and their expression.
9. Describe potential impacts of genetic technologies on society.
10. Explain how the flow of energy through an ecosystem influences its structure.
11. Describe how organisms interact with each other and their environment.
12. Apply biological and ecological principles to discuss current issues in human health, and human impact on the environment.

Course Structure:
Please see the outline below for the general course structure.

Course Assessment: Course assessment consists of exams, discussions, short written assignments, hands-on activities, informal in-class assessment, laboratory projects, presentations, and research papers. Study guides will be available to help you prepare for exams. In accordance with my teaching philosophy, in which I believe student learning occurs primarily through hands-on, real world application of course materials, exams count for less than 50% of the final grade (although they are still an important aspect of course assessment and grade). I welcome student feedback about the course anytime.

Texts and Materials:

Required Texts: Essentials of Biology, 5th Edition by Sylvia Mader & Michael Windelspecht

Evaluation and Grading:

Evaluation:

Evaluation	Points	Percentage of total grade
Exams	200 (2 @ 100 pts)	20%
Labs and participation	300 pts	30%
Quizzes, Readings & Homework Assignments	400 pts	40%
Final Presentation	100	10%
TOTAL	1000	100%

100-90	**A**
89-80	**B**
79-70	**C**
69-60	**D**
59 + below	**F**

***Himdag* Cultural Component:**

The theme of this course is the Himdag value of kinship relationships (T-I:migi) which explains the unity of life on Earth. During the course, the students have an opportunity to compare and contrast the O'odham way of knowing and the Western scientific way of knowing through stories, reflective writing and discussion. Diabetes and nutritional content of traditional foods are topics in this course since these are relevant issues for Tohono O'odham students and are important to the student's well-being (T-Apedag).

Policies and expectations-

Course Policies Requirements: (1) Attend class regularly; (2) Complete in-class and out-of-class assignments and submit to the instructor; (3) Attend all field trips; (4) Take all exams; (5) Complete all class projects & presentations.

Attendance: You are expected to arrive to class on time and actively participate each class period. Quizzes and exams are given out at the beginning of class time. Field trips and class activities begin at the start of class and may be missed if you do not arrive to class on time. Because exams, lab work and/or other assignments potentially occur every class period, points potentially will be lost each class period missed. If you miss all or a portion of a class, then you are solely responsible for obtaining missed class material from fellow students. Complete attendance is mandatory during student project presentations; otherwise presentation points will be forfeited. Four unexcused absences may result in withdrawal. You may request to be excused from class for religious observances and practices, for illness, for travel or for personal or family emergency. If you will be absent or have been absent, please notify the instructor as soon as possible.

Make-up policy: If you have an excused absence and miss an exam, you can make it up within two days of the exam date. Late assignments that can be made up will be accepted but will be penalized 25%. Laboratories cannot be made up. At the instructor's discretion, extra credit opportunities and optional activities may be provided.

Academic Integrity: Violations of scholastic ethics are considered serious offenses by Tohono O'odham Community College, the Student Services Department, and by your instructor. Students may consult the TOCC Student Handbook sections on student code of conduct, on scholastic ethics and on the grade appeal procedure. Copies are available at Tohono O'odham Community College.

All work done for this class must be your own. While you may discuss assignments with other class members, the final written project must clearly be your own. You may use work from books and other materials if it is properly cited. Copying from a book without proper reference or from a person under any circumstances will result in an "F" for the assignment, and at the instructor's discretion, possibly an "F" for the course.

ADA Compliance:
Tohono O'odham Community College strives to comply with the provisions of the Americans with Disabilities Act and Section 504 of the Rehabilitation Act. If you have a learning problem, physical disability, or medical illness that requires you to have any special arrangements, please inform your instructor at the beginning of the semester so your academic performance will not suffer because of the disability or handicap.

Classroom Behavior:

- Because of insurance limitations, non-registered visitors are not allowed at class sessions or on field trips.
- Possession of drugs, alcohol or firearms on college property is illegal.
- Food and beverages are allowed in classrooms.
- Pets, **cell phones**, pagers and other electronic devices that distract students are **not allowed in classrooms**.
- Students creating disturbances that interfere with the conduct of the class or the learning of others will be asked to leave.

Course Feedback:

All assignments, written papers and quizzes will be graded and returned to the students one week after the assignment is due. E-mail and phone messages will be returned within two days. A student or the instructor may request a student conference at any time during the semester. A mid-semester grade report will be provided to each student by March 29th.

Instructor Withdrawals:
Students who have missed four consecutive classes, not submitted any assignments nor taken any quizzes by the 45th day census report are assumed NOT to be participating in the class and will be withdrawn. Students may withdraw from class at any time during the first 2/3 of the semester without instructor permission and without incurring any grade penalty. Please be sure to withdraw yourself by March 29th, if you do not expect to complete the class, otherwise you may receive an "F" grade.

Incomplete (I) grade:
Incomplete "I" grades are not awarded automatically. The student must request an "I" from the instructor who can choose to award an incomplete only if all three of the following conditions are met:

1. The student must be in compliance with the attendance policy.
2. There must be an unavoidable circumstance that would prohibit the student from completing the course.
3. The student must have completed over 75% of the course requirements with at least a "C" grade.

Incompletes are not a substitute for incomplete work due to frequent absences or poor academic performance.

Incomplete grades that are not made up by the end of the ninth week of the following semester will be automatically changed to an "F" if the agreed upon work, as stipulated on the written form signed by the instructor and the student when the "I" grade is awarded, is not completed.

Final Grades: Students will receive a grade transcript from the college mailed to the address given with registration materials at the end of the semester when all grades have been recorded.

SPECIAL NOTE TO STUDENT:
For privacy and security reasons, instructors are advised **NOT** to give grades over the telephone. Grades will only be emailed with written permission from the student.

Your instructor will make every attempt to follow the above procedures and schedules, but they may be changed in the event of extenuating circumstances.

Students submitting assignments through the mail or by email are advised to make copies for their own protection.

If you move during the semester, please file a change of address form with the Student Services Office, and inform your instructor.

GOOD LUCK!

Course Outline:	Schedule
I. The Nature and Science of Biology (Ch.1) A. Characteristics of Living Things B. Scientific Processes C. APA Writing Style	Weeks-1-2 (January 14-25)
II. The Chemical and Molecular Foundations of Life (Ch.2&3) A. Fundamentals of General and Organic Chemistry B. Atoms C. Carbohydrates, Lipids, Proteins and Nucleic acids	Weeks 3-4 (January 28-Feb 8)
III. The Cell (Ch.5&6) A. Inside the cell B. Energy	Weeks 5-6 (February 11-22)
IV. Energy, Patterns of Inheritance (Ch.7, 8 & 10) A. Photosynthesis B. Cellular Respiration C. Inheritance	Weeks 7-8 (Feb 25-March 8)
V. Molecular Biology(Ch.11&12) A. Genetics B. DNA Structure and Function C. Biotechnology	Weeks 9-10 (March 11-22)
V. Evolution & Diversity of Life (Ch. 14,15&16) A. Principles of Evolution B. Diversity of Life	Week 11-12 (March 25-April 5)
VI. Ecology (Ch. 30&31) A. Populations, Communities & Ecosystems B. Organismal Structure and Function	Week 13-14 (April 8-19)
VII. Current Issues in Biology (Ch. 32) A. Human Impact on the Biosphere B. Conservation Biology C. Sustainability D. Human Health	Week 15-16 (April 22-May 3)
VIII Final Exam	Week 17 (May 6-10)

DISCLAIMER: This syllabus is designed to evolve and change throughout the semester based on class progress and interests. You will be notified of any changes as they occur.