

**Course Prefix/Number/Title:** BIOL 111 Concepts of Biology, Number of Credits: 4 semester credits **Instructor:** Raquel Dugan-Dibble

Office: NSC 128 (Classroom) or Molberg 21

**Office Hours:** By appointment

Office Phone: 701.228.5481

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Lecture Days/Times: MWF from 10:00am-10:50am; Location: NSC Room # 128

Lab Days/Time: Tues 1-2:50 p.m. NSC Room #128

**Course Description:** This course is a study of nature, diversity, and classification of life, cells and cell processes, genetics, evolution, and ecology. The course is an introductory level, non-majors transferable class designed to meet requirements of a lab science.

**Textbook Requirement:** Scientific American Biology for a Changing World. Schuster et al. 3<sup>rd</sup> Ed. ISBN 9781319050573.

Course lecture slides may be available on the course page. If you would like to print them off that will be your responsibility to do so prior to class. All laboratory information will be printed in the form of handout that you will keep and turn in.

#### Materials for Lecture (Required):

- 1. 2 or 3 inch ring binder
- 2. Access to a hole punch, printer, paper
- 3. Email and blackboard (course materials, handouts, and announcement)
- 3. Pen or something to write with

#### Lab Materials (Required):

- 1. Notebook
- 2. Pen or something to write with

3. Folder/0.5 inch binder with your name and the course written on it to turn in handouts and reports.

#### Prerequisites: none

Course Objectives--Demonstrate an understanding and proficiency in the following:

1. To be able to understand the theories and concepts of cell biology, genetics, ecology, and evolution

2. To be familiar with the resources and methods used to acquire scientific data

3. To be able to demonstrate an orderly approach to the solution of a problem

4. To be able to relate past knowledge to an understanding of modern biology

5. To have acquired an awareness of new scientific developments and their potential implications

### **General Education Competency:**

Goal 1: Applies the scientific methods of inquiry.

Performance Indicator 1: Utilizes the scientific process to solve problems.

Performance Indicator 2: Interprets experimental data to draw logical conclusions.

Goal 2: Demonstrates an understanding of the natural environment.

Performance Indicator 1: Predicts the effects of biotic and abiotic factors on the environment.

Goal 3: Applies scientific information in everyday life.

Performance Indicator 1: Utilizes scientific information in daily decision-making.

Performance Indicator 2: Recognizes the role of science in nature and society.

# **Relationship to Campus Theme:**

• Class announcement/discussion on news items about technological developments in biology and how that influences the discipline as well as the societal aspects.

- Covers DNA analysis, genetic engineering, and DNA fingerprinting.
- Knowledge on cell structure and function related to microscope development discussed.

• Interject technological developments and how they influence scientific development and societal issues.

# **Course Requirements and Grading:**

- A = 100-90%
- B = 89.5-80%
- C = 79.5-70%
- D = 69.5-60%
- F = below 59.5%

\*Please do not request rounding of grades of grade changes. If there are extra points available in the course you will be notified.

Below is a table of course requirements. This is subject to slight modification based on the discretion of the instructor.

Requirements	Points each	Total
4 Unit Exams	100	400
2 Midterm/Final Exam	75	150
10 Blackboard	5	50
Simulations/Assignments		
2 Lab Exams	50	100
(Midterm/Final)		
12 Lab Handout	15	180
Submissions		
2 Formal Lab Reports	25	50
14 Lab Participation	5	70
8 Post Lab Quizzes	5	40
1 Small Group Project	50	50
Presentation		
3 Current Events	10	30
Submission		
3 In-class Activities	20	60
2 Assessments	5	10
		Approx. 1190 total
		points

### **Course Outline:**

Lecture

	Chapters
Unit 1: What is Life Made of? Chemistry, Cells, Energy	Ch 1-6
Exam 1	
Unit 2: How Does Life Perpetuate? Cell Division and Inheritance	Ch 7-13
Exam 2	
Midterm	
How Does Life Change Over Time? Evolution and Diversity	Ch 14-20
Exam 3	
What Makes Up Our Environment? Ecology	Ch 21-24
Exam 4	Final Exam

\*For a schedule of academic deadlines please reference the academic calendar on the DCB Website at: https://www.dakotacollege.edu/academics/academic-calendar.

## **Classroom Policies:**

- Participation is required in both lecture and lab.
- Any lecture printout you want will need to be printed from Blackboard prior to the start of class.
- Late assignments are not accepted. Please check Blackboard often and make note of dates presented in class.
- Lab Handout/Report Turn In: Turn in of labs should be done on or before the following the lab day. There will be a basket for turn in inside my office door during office hours and available for 5 min at the start of the next lab. Labs will not be accepted after the first 5 min of class. Your lab work should be unique to you. Your partner may have different information based off of their thoughts or interpretations and should always be written in the students own words. Identical lab handouts/reports will not be accepted. If you were not present for lab one week you are not eligible to turn in a handout or lab report.
- Excused absences will be for only the following reasons and still need to be discussed with me via email, text, or phone call: sickness with a doctor's note must be emailed to me, passing of a close family member, if you're an athlete and need to miss class for a game.
- All requests for absences need to be reported to me immediately. If you do not let me know why you have missed a class or discuss with me in advanced your participation for that day will result in a ZERO. You need to make advanced arrangements with me—the SOONER THE BETTER. You need to speak with me if you know you will be gone so we can schedule make up assignments.
- Missing an exam: If you know you will be gone during an exam day you need to let me know THREE days in advanced. If you miss an exam and I am not aware that you were going to miss it then your grade for that exam will result in a ZERO. There will be no make-up exams for those who do not inform me of their absences on exam days. All other makeup exams typically are in a different format and generally harder than the original.

**Blackboard policy**: You are responsible for checking blackboard and doing coursework on blackboard for this class unless otherwise completed in class. If you do not do the assignments on blackboard you will get a ZERO for those assignments. Blackboard assignments must be completed by the time and date indicated by each assignment. Late assignments will not be accepted so plan accordingly and complete early if necessary.

**Electronic Device Policy**: Electronic devices will only be used in class for answering in-class questions and review participation. You will be instructed to use them at those times. If you are

on your phone/unauthorized computer/smart watch/headphones or any other unauthorized device while not instructed by myself then I will ask you to leave my class for that day. You should not be texting or on social media while in my class/lecture/lab. You cannot be wearing any smart technology during ANY exam. You will be asked to remove it. If you choose to not remove it then you will be asked to leave and you will not be able to complete the exam wh

Dakota College at Bottineau is increasingly dependent upon email as an official form of communication. A student's campus-assigned email address will be the only one recognized by the Campus for official mailings. The liability for missing or not acting upon important information conveyed via campus email rests with the student.

### Academic Integrity:

According to the DCB Student Handbook, students are responsible for submitting their own work. Students who cooperate on oral or written examinations or work without authorization share the responsibility for violation of academic principles, and the students are subject to disciplinary action even when one of the students is not enrolled in the course where the violation occurred. The Code detailed in the Academic Honesty/Dishonesty section of the Student Handbook will serve as the guideline for cases where cheating, plagiarism or other academic improprieties have occurred.

### Disabilities or Special Needs:

Students with disabilities or special needs (academic or otherwise) are encouraged to contact the instructor and Disability Support Services.

### Title IX:

Dakota College at Bottineau (DCB) faculty are committed to helping create a safe learning environment for all students and for the College as a whole. Please be aware that all DCB employees (other than those designated as confidential resources such as advocates, counselors, clergy and healthcare providers) are required to report information about such discrimination and harassment to the College Title IX Coordinator. This means that if a student tells a faculty member about a situation of sexual harassment or sexual violence, or other related misconduct, the faculty member must share that information with the College's Title IX Coordinator. Students wishing to speak to a confidential employee who does not have this reporting responsibility can find a list of resources on the DCB Title IX webpage.