UNIVERSITY OF NORTHERN COLORADO

Extended Campus

College of Natural & Health Sciences
School of Biological Sciences

UNC Dual Enrollment at Eaton High School

BIO 110-680/694: Biology-Atoms to Cells (4 credits; LAC, gtP)
Fall 2020 & Spring 2021

Professor: Mr. Zac Lemon
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CATALOG DESCRIPTION
Biological principles from cells to communities, especially structure and function. Study of genetics, metabolism, development and homeostasis. NOT recommended for non-science majors.

COURSE DESCRIPTION
Welcome to *a study of life*! This course examines biological principles from cells to communities, especially structure and function. You will explore genetics, metabolism, physiology, and homeostasis. This course will help build a foundation of knowledge about how all living organisms from a simple yeast cell to a gigantic blue whale live and survive. Although this course fulfills one of the general education requirements, it is not recommended for non-science majors.

Outcomes:
The student:

1. Will understand the basic principles of the discipline including relationships and application to other areas
2. Will discuss and demonstrate how scientists solve problems in the discipline
3. Will discuss and demonstrate attitudes important to the scientific community such as cause-effect relationships, making conclusions from evidence, use of reductionism to analyze problems, and importance of re-synthesis of facts to understand the total situation
4. Will demonstrate ability in critical thinking
5. Will collect, organize and interpret data
6. Will understand some of the quantitative methods needed to interpret data
7. Will demonstrate skills in observation

TEXT
The textbook for this course is "*Biology*, 3rd edition" by Brooker, Widmaier, Graham and Stiling. If you would like a hard copy of the book, there should be many used versions of the 3rd edition available via Amazon and other retailers.

OTHER REQUIRED MATERIALS

1. Lab Manual: The laboratory manual for this course will be provided for you.

EVALUATION

Exams (4)	45%	
Quizzes	15%	(lowest grade will be dropped)
Laboratory	25%	
Weekly Homework	15%	

GRADE BREAKDOWN

90-100%	A
80-89%	B
70-79%	C
60-69%	D
<60%	F

LABORATORY

This course has a required laboratory portion associated with it. You will be given a separate syllabus for the lab, and will be expected to follow all guidelines listed therein. There is not a separate grade reported for lab, instead the laboratory grade is entered as a portion of the lecture grade. Labs will meet once a week as they coordinate with lecture. Your lab participation makes up 25% of your overall grade and must be taken seriously. Grades will include weekly quizzes, lab exercises, homework, and a lab notebook. In addition, individual research will make up a large part of your lab grade. This includes proposals of research topics, a rough draft, a final draft of proposed research, presentations, and a final lab report.

COURSE SCHEDULE

Unit 1: Introduction and Molecules: 7 Weeks
Chapters 1-3, 22, 23

Exam 1

Unit 2: Energy and Cells: 6 Weeks
Chapters 4-6

Exam 2

Unit 3: Cell Processes: 7 Weeks
Chapters 7-9, 11, 12

Exam 3

Unit 4: Genetics: 6 Weeks
Chapters 13-16, 24, 40

Exam 4

CELL PHONES

You are allowed to use phones for academic purposes and with permission. If your phone rings during class, or you are texting, you will be asked to turn in your phone.

STUDENTS WITH DISABILITIES: Any student requesting disability accommodation for this class must inform the instructor and give appropriate notice. Students are encouraged to contact Disability Support Services at Eaton High School to certify documentation of disability and to ensure appropriate accommodations are implemented in a timely manner.

LECTURE CONDUCT

UNC's policies and recommendations for academic misconduct will be followed. During class, talking on the phone, texting, listening to an iPod, talking with fellow students, and doing other work not related to class is not permitted. If you are doing any of these activities, you will be asked

to leave the lecture hall immediately. On days when we do case studies, you will not be allowed to use computers during the lecture period. Lectures will start and end on time, so come to class a few minutes early to get settled and ready to begin. If you find you are running late, quietly enter the back of the classroom and slip into a row with minimal commotion. Please treat me and your fellow students with consideration and basic courtesy.

ACADEMIC INTEGRITY
As members of a scholarly community dedicated to healthy intellectual development, students and faculty are expected to share the responsibility for maintaining high standards of honesty and integrity in their academic work. All material for this course must be your work and no one else's. Cheating or plagiarism in any form will not be tolerated. This includes, but is not limited to, copying someone else's work, and using banned material while taking exams. The penalty for cheating or plagiarism is a zero for the course.

HONOR CODE
All members of Eaton High School and the University of Northern Colorado community are entrusted with the responsibility to uphold and promote five fundamental values: Honesty, Trust, Respect, Fairness, and Responsibility. These core elements foster an atmosphere, inside and outside of the classroom, which serves as a foundation and guides the UNC community's academic, professional, and personal growth. Endorsement of these core elements by students, faculty, staff, administration, and trustees strengthens the integrity and value of our academic climate.

***Liberal Arts Core & Colorado gtPathways**
This course satisfies 4 credits of Area 6. (Physical & Life Sciences) of the UNC Liberal Arts Core. This course has been approved by the Colorado Commission on Higher Education for inclusion in the Colorado Guaranteed Transfer Program, gtP. gtP courses automatically transfer to any public institution in Colorado and will continue to count toward general education or other graduation requirements for any liberal arts or science associate or bachelor's degree program IF a grade of C- or higher is recorded. Statewide articulation agreements prescribe specific general education and degree requirements in the following professional degree programs: business, early childhood, elementary education, engineering and nursing. Most other courses not approved for the gtP designation will also be accepted in transfer by other institutions but may not fulfill general education or degree requirements. For more information on the GT Pathways program, go to http://highered.colorado.gov/academics/transfers/gtpathways/curriculum.html"

Dropping or Withdrawing from a UNC Dual Credit Course
Note: Drop and withdrawal dates for the courses at your school can be found on your dual enrollment page for your high school.
Please use the Dual Enrollment Drop & Withdrawal Form.

- You can drop your course up until the designated Drop Deadline. The course will be removed from your transcript and you will receive a full tuition refund.
- After the Drop Deadline and up until the Withdrawal Deadline you can withdraw from your course. The course will remain on your transcript with a grade of "W" (this does not impact your GPA), and there is no tuition refund.
- After the withdrawal deadline you are unable to be removed from the course. The course will remain on your transcript with the grade that you have earned, and there is no tuition refund.
- If you stop attending the course but fail to officially withdraw from the course(s), you will be responsible for full tuition and fees and the course grade will remain on your transcript.