



Biology 1408.881 4 Credits
Summer 2024 (June 3rd – July 9th)
Introduction to Biology I

"Northeast Texas Community College exists to provide personal, dynamic learning experiences empowering students to succeed."

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Office Hours: There will be no specific time for Office hours since I am available to answer your question at any time.

This syllabus serves as the documentation for all course policies and requirements, assignments, and instructor/student responsibilities.

The information contained in this syllabus is subject to change without notice. Students are expected to be aware of any additional course policies presented by the instructor during the course.

Course Description:

4 credit hours: Lecture/Lab: Three hours of lecture and three hours of lab each week.

Provides a survey of biological principles with an emphasis on humans, including chemistry of life, cells, structure, function, and reproduction. Lab activities support these topics. Note: Additional course fee(s) required.

Prerequisite(s): None

Student Learning Outcomes:

1. Apply scientific reasoning to investigate questions and utilize scientific tools such as microscopes and laboratory equipment to collect and analyze data.
2. Use critical thinking and scientific problem-solving to make informed decisions in the laboratory.
3. Communicate effectively the results of scientific investigations.
4. Distinguish between prokaryotic, eukaryotic, plant and animal cells, and identify major cell structures.
5. Identify stages of the cell cycle, mitosis (plant and animal), and meiosis.
6. Interpret results from cell physiology experiments involving movement across membranes, enzymes, photosynthesis, and cellular respiration.
7. Apply genetic principles to predict the outcome of genetic crosses and statistically analyze results.
8. Identify the importance of karyotypes, pedigrees, and biotechnology.
9. Identify parts of a DNA molecule, and describe replication, transcription, and translation.
10. Analyze evidence for evolution and natural selection

Inclusive Access: We have negotiated with the Publisher to obtain a discounted price for your lecture course materials. Your eBook and Connect Access Code are included with your tuition and will be available through Blackboard on the first-class day (use the link found on the Bb course homepage). The materials are required for your class and essential in your success. If you also determine that you would like a print copy of your text in addition to your inclusive access loose-leaf copies will be available in the College Store at a discounted price. You may opt out of purchasing your materials from the College Store through the Census Date for the course. If you choose to opt out you will be responsible for purchasing your Connect Access Code from another vendor. You will receive a refund for the Inclusive Access if you opt out.

Required Instructional Materials: Mader: Essentials of Biology, 7th ed with Connect Inclusive Access

Publisher: McGraw Hill **ISBN Number:** Available through NTCC Bookstore

Required Instructional Materials: Science Interactive Lab Kit: Available through NTCC Bookstore

Optional Instructional Materials: none

Minimum Technology Requirements:

- Internet capable desktop, laptop, or chromebook (Tablets/ipads/Phones not recommended)
- Microsoft Office for Lab Workbook in Microsoft Word
- Video conferencing capability with webcam and microphone using Zoom
- Access to printer if hard copies of assignments are desired

Required Computer Literacy Skills: Blackboard; Microsoft Office; Zoom, TEAMS

- Web browsing skills for working with the online homework system
- Ability to use Blackboard for access to course information and assignments
- Functional use of Microsoft Office and ability to insert images into word docs
- Ability to use camera and microphone for video and sound in zoom
- Competent and professional emailing skills: Emails should have the following format in subject line:
Last Name, First Name -Course ID: Example: Smith, Jon - BIOL 1408.881

Connect Online Assignments:

Each chapter has an assigned Smartbook activity, chapter assignment, and chapter quiz to check your understanding of chapter topics and reading assignments. These are completed online in Connect which is accessed through blackboard. You will need to login to blackboard on the 1st day of the semester. Students will work at their own pace prior to due dates. Activities and Assignments are not timed. The chapter quizzes each consist of 20 questions with a 25 minute timer. Each assignment has a posted due date for completion.

Connect chapter assignments are always due at 11:59pm. These dates are firm – no makeups for missed online work will be allowed.

Lecture Tests/Exams:

The lecture exams may include both objective questions (multiple choice, matching, etc.) over text materials, and readings as well as descriptive questions requiring detailed explanations over broad themes. Success on the exams is a function of anxiety regulation, test prep, study strategies, and studying for retention. Retention requires repetitions, which requires time! The 5 unit exams will be accessed through Blackboard. They will be completed **online via Connect monitored by Proctorio**. Each exam is 100 questions worth 100 points with a 90 minute timer. Exams will not be made up for any reason as multiple days exist for students to complete the exams. **Exams due dates are firm – no makeups for missed exams will be allowed.**

Science Interactive Labs:

Science Interactive Lab Kits are hands-on labs designed to augment learning by enabling students to engage with authentic lab experiences from anywhere. Virtual labs are interactive science simulations that students complete online from their personal devices. Each lab places students in real-world scenarios, where they must apply their knowledge to solve practical problems

The labs in this course are crucial learning activities designed to help you master many of the course outcomes. To receive credit, all short-answer questions must be answered in complete sentences using your own words to describe the work you have completed. Labs are graded based on documented evidence of completing the lab exercise. Labs may require photos to be uploaded, data tables to be completed, and successful answers to the presented questions. When photos are required as part of a lab submission, work submitted without the necessary photos will receive an automatic zero. Completing data tables is equally important. The icon for photo submission and data table completion is labeled “Data” and is located in the lower right corner of your lab experimentation page.

Lab reports that show evidence of being copied from any website or are identical to other submitted reports will receive a grade of zero. Lab reports are generally graded within a week of submission, and feedback on your techniques or results will be provided.

Lab kits are required for the online lab portion of the course and can be purchased through the NTCC bookstore. The Science Interactive Lab Kit contains almost all the materials you will need. However, there are a few items you will need to supply yourself, such as access to a microwave oven or hot water bath, isopropyl (rubbing alcohol), local tap water, household bleach, etc. Please review all the materials in your lab kit and check them against the provided content list to ensure you have everything. If any components are missing, contact Science Interactive, and they will replace the missing items.

Proctored Final Exam:

A comprehensive exam will be accessed through blackboard. It will be given **online via connect monitored by Proctorio**. Each exam is 200 questions worth 200 points with a 150 minute timer.

Evaluation/Grading Policy:

Final grades will be calculated as follows:

A = 90-100%	CONNECT HOMEWORK	15%
	Quizzes:	10%
B = 80-89%	TESTS	40%
C = 70-79%	Science Interactive Labs	20%
D = 60-69%	FINAL EXAM	15%
F = 0-59%		

Student Expectations:

- Adhere to Classroom Etiquette including Zoom Virtual Classroom (see addendum in Blackboard)
- Adhere to Proctored Exam Etiquette (see addendum in Blackboard)
- Proctored exams are monitored by McGraw Hill through Connect with Proctorio
- Students will be recorded in the following ways during proctored exams:
 - Video, Audio, Screen, and Environment
- Testing Violations from all recordings will be reported by Proctorio

Communications: Turnaround time for email responses is 24 hours during workweek. NTCC email is the official form of communication used by the college.

Institutional/Course Policy: Withdraw Date

The last day to withdraw from the course in **June 28th/2024**. Discontinuing with the course without officially dropping the course by this date will result in a grade earned, in most instances an “F”. A stoppage in attendance does not equate to dropping the course.

Alternate Operations During Campus Closure and/or Alternate Course Delivery Requirements:

In the event of an emergency or announced campus closure due to a natural disaster or pandemic, it may be necessary for Northeast Texas Community College to move to altered operations. During this time, Northeast Texas Community College may opt to continue delivery of instruction through methods that include, but are not limited to, online through the Blackboard Learning Management System, online conferencing, email messaging, and/or an alternate schedule. It is the responsibility of the student to monitor NTCC’s website (<http://www.ntcc.edu/>) for instructions about continuing courses remotely, Blackboard for each class for course-specific communication, and NTCC email for important general information. Additionally, there may be instances where a course may not be able to be continued in the same delivery format as it originates (face-to-face, fully online, live remote, or hybrid). Should this be the case, every effort will be made to continue instruction in an alternative delivery format. Students will be informed of any changes of this nature through email messaging and/or the Blackboard course site.

NTCC Academic Honesty/Ethics Statement:

NTCC upholds the highest standards of academic integrity. The college expects all students to engage in their academic pursuits in an honest manner that is beyond reproach using their intellect and resources designated as allowable by the course instructor. Students are responsible for addressing questions about allowable resources with the course instructor. Academic dishonesty such as cheating, plagiarism, and collusion is unacceptable and may result in disciplinary action. This course will follow the NTCC Academic Honesty and Academic Ethics policies stated in the Student Handbook. Refer to the student handbook for more information on these subjects.

ADA Statement:

It is the policy of NTCC to provide reasonable accommodations for qualified individuals who are students with disabilities. This College will adhere to all applicable federal, state, and local laws, regulations, and guidelines with respect to providing reasonable accommodations as required to afford equal educational opportunity. It is the student’s responsibility to request accommodations. An appointment can be made with the Academic Advisor/Coordinator of Special Populations located in Student Services and can be reached at 903-434-8264. For more information and to obtain a copy of the Request for Accommodations, please refer to the special populations page on the NTCC website.

Family Educational Rights and Privacy Act (FERPA):

The Family Educational Rights and Privacy Act (FERPA) is a federal law that protects the privacy of student education records. The law applies to all schools that receive funds under an applicable program of the U.S. Department of Education. FERPA gives parents certain rights with respect to their children’s educational records. These rights transfer to the student when he or she attends a school beyond the high school level. Students to whom the rights have transferred are considered “eligible students.” In essence, a parent has no legal right to obtain information concerning the child’s college records without the written consent of the student. In compliance with FERPA, information classified as “directory information” may be released to the general public without the written consent of the student unless the

student makes a request in writing. Directory information is defined as: the student’s name, permanent address and/or local address, telephone listing, dates of attendance, most recent previous education institution attended, other information including major, field of study, degrees, awards received, and participation in officially recognized activities/sports

Academic Calendar

2024 Summer Semester

First Class Day (1 st 5-week and 10-week sessions)	Monday, June 3
Late Registration Ends (1 st 5-week session)	Monday, June 3
Late Registration Ends (10-week session).....	Wednesday, June 5
Summer Census (1 st 5-week session)	Thursday, June 6
Summer Census (10-week session).....	Tuesday, June 11
Juneteenth Holiday	Wednesday, June 19
Deadline for Summer Graduation Application	Thursday, June 27
Final Day to Withdraw with a Grade of “W” (1 st 5-week session)	Friday, June 28
Independence Day Holiday	Thursday, July 4
Last Class Day/Final Examinations (1 st 5-week session)	Tuesday, July 9
MW Evening Classes (1 st 5-week session)	Monday, July 8
TR Evening Classes (1 st 5-week session)	Tuesday, July 9
First Class Day (2 nd 5-week session)	Monday, July 15
Late Registration Ends (2 nd 5-week session)	Monday, July 15
Summer Census (2 nd 5-week session).....	Thursday, July 18
Final Day to Withdraw with a Grade of “W” (10-week session)	Thursday, August 1
Final Day to Withdraw with a Grade of “W” (2 nd 5-week session).....	Tuesday, August 6
Last Class Day/Final Examinations (2 nd 5-week session).....	Thursday, August 15
MW Evening Classes (2 nd 5-week session).....	Wednesday, August 14
TR Evening Classes (2 nd 5-week session)	Thursday, August 15
Summer Graduation	Friday, August 16

BIOL 1408 ONLINE COURSE SCHEDULE

MATERIALS FOR EXAM 1:

Online Lecture	Online Labs
Orientation/Syllabus	Lab 1 Science Interactive Labs - Orientation
Syllabus Agreement/ Syllabus	
CH 1 Biology: Science of Life	LAB 2 Chemistry Fundamentals
Connect Assignments over Ch 1	
CH 2 Chemical Basis of Life	LAB 3: Biological Macromolecules
Connect Assignments over Ch 2	
CH 3 Organic Molecules of Life	
Connect Assignments over Ch 3	

All connect & Labs Assignments are Due on 6/8th/2024

EXAM 1 over CH 1-3 (available online on 6/9th/2024

MATERIALS FOR EXAM 2:

Online Lecture	Online Lab
CH 4 Inside the Cell	LAB 4 Introduction to Microscopy
Connect Assignments over Ch 4	Lab 5: Cell Types - Structure and Function
CH 5 Dynamic Cell - Transport	LAB 6 Cell Membrane Transport
	Lab 7 Enzymes
CH 5 Dynamic Cell – Enzymes	
Connect Assignments over Ch 5	

All connect & Labs Assignments are Due on on 6/15/2024

EXAM 2 over CH 4-5 (available online on 6/16/2024)

MATERIALS FOR EXAM 3:

Online Lecture	Online Lab
CH 7 Energy for Cells – Respiration	LAB 8 Cellular Respiration and Metabolism
Connect Assignments over Ch 7	
CH 6 Energy for Life - Photosynthesis	LAB 9 Photosynthesis
Connect Assignments over Ch 6	

All connect & Labs Assignments are Due on 6/ 22/2024

EXAM 3 over CH 6-7 (available on 6/23/2024)

MATERIALS FOR EXAM 4:

Online Lecture	Online Lab
CH 8 Cellular Reproduction	LAB 10 Mitosis and Meiosis
Connect Assignments over Ch 8	
CH 9 Sexual Reproduction	
Connect Assignments over Ch 9	

All connect & Labs Assignments are Due on 6/29/2024

EXAM 4 over CH 8-9 (available on 6/30/2024)

MATERIALS FOR EXAM 5:

Online Lecture	Online Lab
CH 10 Patterns of Inheritance	LAB 11 Mendelian Genetics
Connect Assignments over Ch 10	
CH 11 DNA Biology	LAB 12 DNA and RNA and Protein synthesis
Connect Assignments over Ch 11	
CH 12 Biotechnology; CH 13 Mutations	LAB 13 Population Genetics: Natural Selection and Hardy-Weinberg
Equilibrium	
Connect Assignments over Ch s 12 & 13	

All connect & Labs Assignments are Due on 7/6/2024

EXAM 5 over CH 10-13 (available on 7/7/2024)

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FINAL EXAM over CH 1-13 (available on 7/8th & 9th/2024)