

# Biology 1408.881 4 Credits Summer 2022 (June 6th – July 7<sup>th</sup>)

**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, 6th ed with Connect Inclusive Access

Publisher: McGraw Hill ISBN Number: Available through NTCC Bookstore

Required Instructional Materials: eScience Introductory Biology Version 1 Lab Kit 1286

**Publisher:** eScience **ISBN Number:** 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

- 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**.

### Lab Portfolio:

Lab Kits are required for online lab portion of the course. These are purchased through the NTCC bookstore. Each Lab Unit has a Lab Workbook (docx file) to download and complete while conducting the experiments at home. All supplies needed are provided in the kits other than common household items. Students will work on lab at their own pace prior to due dates. NOTE: Some labs take multiple days to complete. **The weekly Lab Workbooks (docx file) are always due on certain dates at 11:59pm. These dates are firm – no makeups for missed labs will be allowed.** 

### **Proctored Final Exam:**

A comprehensive exam will be accessed through blackboard. It will begiven **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/QUIZZES	20%
B = 80-89%	TESTS	40%
C = 70-79%	LABORATORY	25%
D = 60-69%	FINAL EXAM	<b>15%</b>
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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 29th/2022**. 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 2021 - 2022

# **2022 Summer Semester**

First Class Day (1st 5-week and 10-week sessions)	Monday, June 6
Late Registration Ends (1st 5-weeks)	Monday, June 6
Late Registration Ends (10-weeks)	Wednesday, June 8
Deadline for Summer Graduation Application	
Final Day to Withdraw with a Grade of "W" (1st 5-weeks)	Wednesday, June 29
Independence Day Holiday	
Last Class Day/Final Examinations (1st 5-weeks)	Thursday, July 7
MW Evening Classes (1st 5-weeks)	
TR Evening Classes (1st 5-weeks)	Thursday, July 7
First Class Day (2 <sup>nd</sup> 5 week session)	Monday, July 11
Late Registration Ends (2 <sup>nd</sup> 5-weeks)	Wednesday, July 13
Final Day to Withdraw with a Grade of "W" (10-weeks)	Thursday, July 28
Final Day to Withdraw with a Grade of "W" (2nd 5-weeks)	Thursday, August 4
Last Class Day/Final Examinations (2 <sup>nd</sup> 5-weeks)	Thursday, August 11
MW Evening Classes (2 <sup>nd</sup> 5-weeks)	Wednesday, August 10
TR Evening Classes (2 <sup>nd</sup> 5-weeks)	
Summer Graduation	Friday, August 12

#### **BIOL 1408 ONLINE COURSE SCHEDULE**

#### **MATERIALS FOR EXAM 1:**

Online Lecture Online Lab

Orientation/Syllabus LAB 0 Getting Started

Syllabus Agreement/ Syllabus Lab Safety Contract Due Sep 6th

CH 1 Biology: Science of Life LAB 1 Intro to Science & LAB 2 Lab Safety

CH 1 Connect Lab 1 & 2 Workbooks
CH 2 Chemical Basis of Life LAB 3 Chemical Bonding

CH 2 Connect

CH 3 Organic Molecules of Life

CH 3 Connect

Lab 3 Workbook

LAB 5 Chemistry of Life

Lab 5 Workbook

All Assignments/Labs Due 6/10th/2022

EXAM 1 over CH 1-3 (available online on 6/11th/2022

#### **MATERIALS FOR EXAM 2:**

Online Lecture Online Lab

CH 4 Inside the Cell LAB 4 Microscope & LAB 10 Cell Structure

CH 4 Connect Lab 4 & 10 Workbooks

CH 5 Dynamic Cell - Transport LAB 6 Diffusion & LAB 7 Osmosis

Lab 6 & 7 Workbook LAB 8 Enzymes

CH 5 Dynamic Cell – Enzymes
CH 5 Connect

LAB 8 Enzymes
Lab 8 Workbook

All Assignments/Labs Due on 6/16/2022

EXAM 2 over CH 4-5 (available online on 6/17/2022)

#### **MATERIALS FOR EXAM 3:**

Online Lecture Online Lab

CH 7 Energy for Cells – Respiration LAB 9 Cellular Respiration

CH 7 Connect

CH 6 Energy for Life - Photosynthesis

CH 6 Connect

Lab 9 Workbook

LAB 20 Photosynthesis

Lab 20 Workbook

All Assignments/Labs Due 6/22/2022 EXAM 3 over CH 6-7 (available on 6/23/2022)

#### **MATERIALS FOR EXAM 4:**

Online LectureOnline LabCH 8 Cellular ReproductionLAB 11 MitosisCH 8 ConnectLab 11 WorkbookCH 9 Sexual ReproductionLAB 12 MeiosisCH 9 ConnectLab 12 Workbook

All Assignments/Labs Due on 6/29/2022 EXAM 4 over CH 8-9 (available on 6/30/2022)

#### **MATERIALS FOR EXAM 5:**

Online Lecture Online Lab

CH 10 Patterns of Inheritance
CH 10 Connect
CH 11 DNA Biology
CH 11 DNA Biology
CH 12 Biotechnology; CH 13 Mutations
CH 12 & 13 Connect
CH 12 & 13 Connect
CH 12 & 15 Connect
CH 12 & 15 Connect
CH 12 & 15 Connect
CH 12 & 16 Connect
Lab 15 Workbook
LAB 15 Population Genetics
Lab 15 Workbook

All Assignments/Labs Due on 7/4/2022

EXAM 5 over CH 10-13 (available on 7/5/2022

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