BIOL 1408 – Introduction to Biology I (Online)



Course Syllabus: Fall 2020

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

Professor James Ward

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Office	Monday	Tuesday	Wednesday	Thursday	Friday	Online
Hours	By Appt	11:00-12:30	8:30-11:00	11:00-12:30 1:30-4:30	11:00-12:30	All Office Hours Online

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

Information relative to the delivery of the content contained in this syllabus is subject to change. Should that happen, the student will be notified.

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, scientific problem-solving, and teamwork to make informed decisions in the laboratory.
- 3. Communicate effectively the results of scientific investigations.
- 4. Describe the characteristics of life.
- 5. Explain the methods of inquiry used by scientist.
- 6. Identify the basic properties of substances needed for life.
- 7. Compare and contrast viruses, prokaryotic cells, and eukaryotic cells.
- 8. Describe the structure of cell membranes and the movement of molecules across a membrane.
- 9. Identify the substrates, products, and important chemical pathways in metabolism.
- 10. Identify the principles of inheritance and solve classical genetic problems.
- 11. Identify the chemical structures, synthesis, and regulation of nucleic acids and proteins.
- 12. Describe the unity and diversity of life and the evidence for evolution through natural selection.

Evaluation/Grading Policy:

Grading Points (1000 points):	Grade Assignment:		
100 points – Connect Online Assignments (3500 pts)	A = 90-100% (900-1000 pts)		
500 points – Lecture Exams (5)	B = 80-89% (800-899 pts)		
200 points – Lab Portfolio	C = 70-79% (700-799 pts)		
200 points – Proctored Final Exam	D = 60-69% (600-699 pts)		
	F = 0.59% (0.599 pts)		

Lecture Assignments:

Chapter outlines, videos, and discussions will be assigned to check your understanding of chapter topics and reading assignments. These are completed online in blackboard. Each assignment has a posted due date for completion. Due dates are firm – no makeups for missed homework.

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. Students will need to earn 3,500 connect points out of the 4,400 possible to earn a 100 for their connect grade. Every 100 points over 3,500 will be worth 1 extra credit point for a maximum of 9 extra credit points or a grade of 109. <u>Connect chapter assignments are always due on Saturdays at 11:59pm. These dates are firm – no makeups for missed online work will be allowed</u>.

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 completed <u>online via Connect monitored by Proctorio</u>. Exams will not be made up for any reason as multiple days exist for students to complete the exams. Each exam is 100 questions worth 100 points with a 90 minute timer. <u>Unit Exams 1-4 will open on the Thursday after completing topics and close the following Tuesday at 11:59pm. The Tuesday due dates are firm – no makeups for missed exams will be allowed</u>. <u>NOTE: Exam 5 has an extended open period due to Thanksgiving break.</u>

Lab Portfolio:

Lab Kits are required for online lab portion of the course. These are purchased through the NTCC bookstore or via a voucher to eScience. Each Lab Unit has a worksheet to 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. <u>The weekly lab reports are always due on Fridays at 11:59pm</u>. These dates are firm – no makeups for missed labs will be allowed.

Proctored Exams:

A comprehensive exam will be accessed through blackboard. It will begiven <u>online via connect</u> <u>monitored by Proctorio</u>. For students out of the area, you must email your instructor at the beginning of the semester with a requested alternate proctored location near your location. Once approved, your exams can be completed at the designated alternate location. A scantron is required for proctored exams on campus. Each exam is 200 questions worth 200 points with a 150 minute timer. <u>The Final Exam will</u> <u>open on Friday December 4th and close on Wednesday, December 9th at 1:59pm. The Wednesday</u> <u>due date is firm – no makeups for missed exams will be allowed</u>. Required Instructional Materials: Mader: Essentials of Biology, 6th ed with Connect Inclusive AccessPublisher:McGraw HillISBN Number: Available through NTCC Bookstore

Required Instructional Materials: eScience Introductory Biology Version 1 Lab Kit 1286Publisher:eScienceISBN 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 or Google Suite
- Video conferencing capability with webcam using Zoom app through computer.
- Access to printer if hard copies of assignments are desired

Required Computer Literacy Skills: Blackboard; Microsoft Office or Google Suite

- 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 or Google Suite and Zoom app
- Competent and professional emailing skills
 - Emails should have the following format in subject line: Last Name, First Name -Course ID
 - Example: Ward, James BIOL 1406.001

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 **Tuesday**, **November 17th**. 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 (<u>http://www.ntcc.edu/</u>) 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.

Tentative Course Timeline:

(*note* instructor reserves the right to make adjustments to this timeline at any point in the term):

BIOL 1408 Onlin		<u>e Lecture</u>	<u>Online Lab</u>	Online Connect		
Week 1: Aug 24-27	Orienta CH 1	ation/Syllabus Biology: Science of Life				
Week 2: Aug 31-Sep 3	CH 1 CH 2	Biology: Science of Life Chemical Basis of Life		CH 1 Due Sat Sep 5		
Week 3: Sep 7-10	CH 2	LABOR DAY Chemical Basis of Life	Lab 1 Due Fri Sep 11 Lab 2 Due Fri Sep 11	CH 2 Due Sat Sep 12		
Week 4: Sep 14-17	CH 3	Organic Molecules of Life	Lab 3 Due Fri Sep 18 Lab 5 Due Fri Sep 18	CH 3 Due Sat Sep 19		
		EXAM 1 over CH 1-3 (available	online Thur, Sep 17 – Tu	ue, Sept 22)		
Week 5: Sep 21-24	CH 4	Inside the Cell	Lab 4 Due Fri Sep 25 Lab 10 Due Fri Sep 25	CH 4 Due Sat Sep 26		
Week 6: Sep 28-Oct 1	CH 5	Dynamic Cell - Transport	Lab 6/7 Due Fri Oct 2			
Week 7: Oct 5-8	CH 5	Dynamic Cell – Enzymes	Lab 8 Due Fri Oct 9	CH 5 Due Sat Oct 10		
		EXAM 2 over CH 4-5 (available	online Thur, Oct 8 – Tue	e, Oct 13)		
Week 8: Oct 12-15	CH 7	Energy for Cells – Respiration	Lab 9 Due Fri Oct 16	CH 7 Due Sat Oct 17		
Week 9: Oct 19-22	CH 6	Energy for Life - Photosynthesis	E Lab 20 Due Fri Oct 23	CH 6 Due Sat Oct 24		
		EXAM 3 over CH 6-7 (available	XAM 3 over CH 6-7 (available online Thur, Oct 22 – Tue, Oct 27)			
Week 10: Oct 26-29	CH 8	Cellular Reproduction	Lab 11 Due Fri Oct 30	CH 8 Due Sat Oct 31		
Week 11: Nov 2-5	CH 9	Sexual Reproduction	Lab 12 Due Fri Nov 6	CH 9 Due Sat Nov 7		
		EXAM 4 over CH 8-9 (available	online Thur, Nov 5 – Tu	e, Nov 10)		
Week 12: Nov 9-12	CH 10	Patterns of Inheritance	Lab 14/15 Due Nov 13	CH 10 Due Sat Nov 14		
Week 13: Nov 16-19	CH 11	DNA/RNA	Lab 13 Due Fri Nov 20	CH 11 Due Sat Nov 21		
Week 14: Nov 23-26	CH 12/	13 Biotechnology/Genetic Couns THANKSGIVING BREAK	seling	CH12/13 Due Sat Nov 28*		
Week 15: Nov 30-Dec 3		EXAM 5 over CH 10-13 (available online Thur, Nov 19 – Thur, Dec 3)				
Week 16: Dec 7-9		FINAL EXAM over CH 1-13 (available Fri, Dec 4 – Wed, Dec 9)				

NOTE: CH 6 & 7 are flipped and LABS are not in sequence!