



# BIOL 1409 – Introduction to Biology II (non-majors)

## Course Syllabus: Spring 2024

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

**Professor: Chris T. McAllister (Dr. Mac) Univ. North Texas, Ph.D.**

Postdoctoral Fellow in Internal Medicine (VA Med. Cntr, Dallas)

**Office:** UHS Building – Room 163

**Phone:** 903.434.8286 (voicemail)

**Email:** [cmcallister@ntcc.edu](mailto:cmcallister@ntcc.edu) (preferable messaging)

**Class meets:** MW 1:30-2:50pm (room MS 132)

**Lab meets:** MW 3:00-4:20pm (room MS 128)

Office Hours	Monday	Tuesday	Wednesday	Thursday	Friday
	9:00-11:30am	8:00-9:30am	9:00-11:30am	8:00-9:30am	None (off campus-research)

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

**Disclaimer:** The instructor reserves the right to alter this syllabus as necessary with full disclosure to the student. This syllabus and schedule is articulated as an expectation of class topics, learning activities, and expected student learning. However, the instructor reserves the right to make changes in this schedule at any time that, within his professional judgment, would result in enhanced or more effective learning on the part of the students. These modifications will not substantially change the intent or objectives of this course and will be done within the policies and procedures of NTCC. *This may include the test schedule or topics of discussion in either lecture or laboratory. 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.

This course will provide a survey of biological principles with an emphasis on humans, including evolution, ecology, plant and animal diversity, and physiology. Lab activities reinforce these topics.

Note: Additional course fee(s) required.

**Prerequisite(s):** None

**Required Lecture Instructional Materials: Authors: Mader and Windelspecht, 2024, Essentials of Biology, 7e, McGraw-Hill; Publisher: ISBN Number: 978-1-266-09331-9**

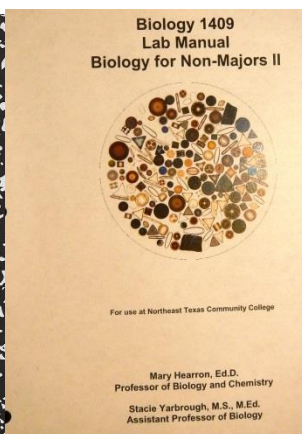
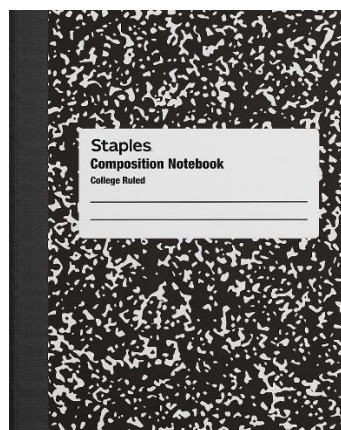
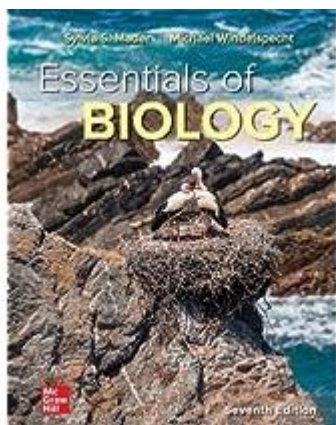
**Required Lab Instructional Materials: Biology 1409 Lab Manual Biology for Nonmajors II: Authors: Hearn and Yarborough: Publisher NTCC: ISBN2803066015159 (Binding Looseleaf)-available in NTCC bookstore.**

**Required Lab Notebook (Journal):** (a bound composition notebook (minimum of 50 sheets with 5 x 5 quads).

**Minimum Technology Requirements:** Internet Access; Microsoft Office or Google Suite

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

**Optional Instructional Materials:** 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. Define modern evolutionary synthesis, natural selection, population genetics, micro and macroevolution, and speciation.
5. Describe phylogenetic relationships and classification schemes.
6. Identify the major phyla of life with an emphasis on plants and animals, including the basis for classification, structural and physiological adaptations, evolutionary history, and ecological significance.
7. Describe basic animal physiology and homeostasis as maintained by organ systems.
8. Compare different sexual and asexual life cycles noting their adaptive advantages.
9. Illustrate the relationship between major geologic change, extinctions, and evolutionary trends.

### **Evaluation/Grading Policy: (Final Letter Grade Dependent on final %)**

#### **Grading Points (1,300 points):**

**100 points – Connect Online Assignments (~4500 pts)**  
**[100 points] – *Optional* Class Report**  
**400 points – Lecture Exams (4)**  
**50+ points – Weekly quizzes (half are bonus)**  
**150 points – Lab Journal**  
**100 points – Insect Collection**  
**200 points – Lab practicals (2)**  
**200 points – Final Exam**

#### **Grade Assignment:**

**A = 90-100% (1,170-1,300pts)**  
**B = 80-89% (1,040-1,057)**  
**C = 70-79% (910- 1,027pts)**  
**D = 60-69% (780-897 pts)**  
**F = 0-59% (0-767 pts)**

#### **% breakdown of grades**

**Lecture (includes Connect) = 20%**

**Exams = 50%**

**Lab = 25% (practicals, lab journal, insect collection)**

**Weekly Quizzes = 5%**

**\*Final Grade will be rounded up if attendance, punctuality, and feedback/discussions were made.**

**Connect Online Assignments:**

Connect Online Assignments: Each chapter has an assigned Smartbook activity and chapter assignment 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. Students will need to earn 4,500 connect points out of the 5,800 possible to earn a 100 for their connect grade. Every 100 points over 4,500 will be worth 1 extra credit point for a maximum of 13 extra credit points or a grade of 113. *Students will work at their own pace prior to the final due date (Friday, May 3<sup>rd</sup>) so don't get behind or wait until the last day to complete them.* **This final due date is firm – no makeups for missed online Connect work will be allowed.**

**Lecture Material:**

Each week, lectures will be posted on Bb from Powerpoint presentations by your professor. Either print these out and bring to class or have them available on your laptop during class. Study them for exams!

**Regular Lecture Tests/Exams (4):**

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 4 unit exams will be accessed in the classroom setting unless they need to be done in the testing center (which prior approval from Dr. Mac). Each exam is 100 questions worth 100 points. **Tests cannot be made up for any reason without prior communication to your instructor on extreme situations.** Any missed exam will be recorded as a zero (0) and can only be made up with the final exam grade counting twice at the end of the semester to replace the zero. The final exam is worth 200pts (see below). Scantrons are required for each exam. Late arrivals must complete exam by the end of class time. Each exam will have 10 bonus questions over figures or pictures or photomicrographs from the lecture material. A review will be provided for each.

**Final Lecture Exam**

A 200 point final exam will be given during the time set forth by the college Final Exam Schedule. The final exam will consist of 100 objective questions (multiple choice, matching, etc.) from chapters chosen by your professor TBA. There will be 10 bonus questions as usual. I will take your grade and multiply it x2. A scantron is required for the final exam. **No makeup on the final exam.**

**Weekly Quizzes:**

Each week you will take a quiz worth 10 pts (with 2 bonus pts on fill-in-the-blank questions) on lecture material covered the prior lecture period. Every other quiz is entirely bonus, that is, every odd numbered quiz will be worth 12 pts total. Every even numbered quiz counts for a grade against 10 possible pts. You must be in your seat once the quiz begins to take it. If you are late for any reason, you cannot take the exam. Just be punctual to class as this is an excellent way to get bonus points on quizzes done well and helps prepare you for major exams. Quizzes cannot be made up. A scantron is needed for each quiz.

**Lab Reports:**

The lab reports from the lab manual are to be completed **during lab**. I do not take up and grade these reports as these are designed to help you prepare for the Lab Practicals. I will be glad to take a look at your answers and provide feedback/discussion.

**Lab Practicals:**

Two lab practicals will be given during the semester. Each is a live exam with stations that students will rotate through and answer mostly multiple-choice questions associated with visuals from lab exercises and handouts from the professor. Visuals may include images, specimens, lab equipment, data tables, graphs, experimental results, etc. A review will be provided for each.

**Lab Journal:**

It is a requirement of this course to keep a Non-majors Biology Laboratory Notebook. The notebook will be graded by Dr. Mac at 2 different (announced) times during the semester. First grading is worth 50 pts and the final grading is worth 100 pts. The notebook should be a **bound** composition notebook (minimum of 50 sheets with 5 x 5 quads), available at most bookstores or Walmart. It is worth a total of 150 pts. More later on this journal.

**Insect Collection:**

You will be REQUIRED to turn in a good insect journal. Specs are posted as well as a handout given to you by Dr. Mac. It is worth 100 pts. We will talk more about it in our first lab. Please take it seriously. The deadline is the last organized lab.

**Optional Class Report:**

You will provide an optional special written report in this class on topics provided by the instructor. First come, first serve. This is entirely optional! More later...

**Cell Phones and Unapproved Electronic Devices:** Absolutely NO video cameras, tape recorders, beepers, MP3 players, I-pods, or other unapproved electronic devices are to be used during class/lab. You may use your lab top. You may also turn your cell phone to a silent buzz (but not during any exam) and excuse yourself from the classroom/lab if you absolutely must answer the call (emergencies only!). Examples would include sick children and/or seniors or other family members who need your immediate help. It is wise to leave your phone in your car on test days!! Students found using their cell phones or other devices during class will **lose 10 pts** from their total class score for each offense. **THIS INCLUDES TEXTING!! Please make it a habit to turn cell phones OFF or on vibrate before class begins each day. Phones are never to be on during any sort of examination. If your phone rings during any exam, you must immediately turn in your exam and receive the grade you earned on all questions whether or not you completed that exam (probably an "F"). No one to blame but yourself!**

**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: McAllister, Chris - BIOL 1409.001TR

**Student Expectations:**

- Attend each class and be punctual
- Adhere to Classroom Etiquette including Zoom Virtual Classroom if needed
- Show respect to classmates and your instructor (agree to disagree)
- Adhere to in class Exam Etiquette
  - Testing Violations will be reported to the Department Chair

**Communications:** NTCC email is the official form of communication used by the college. The professor will try to respond to student emails within 24 hrs of receipt (except on weekends). **You should NOT expect an immediate response from your instructor in reply to your email.** While I will try to respond in a timely fashion, I do not always have my phone on my person, and I do not have notifications set on my phone to alert me the moment an email arrives in my inbox. (On the weekends it may be up to 48 hrs after receipt of email). Feedback and grades on assignments and postings will be posted 48 to 72 hrs after due date/time of assignment.

**Institutional/Course Policy: Withdrawal Date**

The last day to withdraw from the course and receive a W is **Thursday, April 18<sup>th</sup>**. 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 and I will not drop you from the course if you quit attending. It is entirely your responsibility.

**Statement Regarding the Use of Artificial Intelligence (AI) Technology:**

Absent a clear statement from a course instructor, use of or consultation with generative AI shall be treated analogously to assistance from another person (collusion). Generative AI is a subset of AI that utilizes machine learning models to create new, original content, such as images, text, or music, based on patterns and structures learned from existing data (Cornell, Center for Teaching Innovation). Unauthorized use of generative AI tools to complete an assignment or exam is not permitted. Students should acknowledge the use of generative AI and default to disclosing such assistance when in doubt. Individual course instructors may set their own policies regulating the use of generative AI tools in their courses, including allowing or disallowing some or all uses of such tools. Students who are unsure of policies regarding generative AI tools are encouraged to ask their instructors for clarification. **(Adapted from the Stanford University Office of Community Standards--accessed August 31, 2023)**

**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.

### **Eagle ASSIST:**

At Northeast Texas Community College, we understand that students often need support that extends beyond the classroom. "Eagle Assist" is the place to start when looking for that type of assistance. Our support system is here to help you succeed in both your academic and personal growth.

Services provided at <https://www.ntcc.edu/student-services/eagle-assist>

- [Mental Health Counseling](#) (visit [www.thevirtualcaregroup.com/ntcc](http://www.thevirtualcaregroup.com/ntcc) to activate your account)
- [Classroom Accommodations](#)
- [NTCC Care Center Food Pantry](#)
- [NTCC Care Center Hygiene Closet](#)
- [NTCC Care Center Cook Nook](#)
- [Financial Literacy](#)
- [Child Care Assistance](#)
- [Emergency Aid](#)

Send us a message at [eagleassist@ntcc.edu](mailto:eagleassist@ntcc.edu)

\*Dual credit students please email [jstewart@ntcc.edu](mailto:jstewart@ntcc.edu) if interested.

## **BIOL 1409 COURSE SCHEDULE**



All 4 credit college courses require 9 hours of lecture work per week and 3 hours of lab course work per week. You may always work ahead but never get behind.

### Tentative Course Timeline:

(\*note\* instructor reserves the right to make adjustments to this timeline and lectures/labs at any point in the term):

#### BIOL 1409

#### Lectures (M-W) @ 1:30-2:50pm Bb & Text Chapter

#### Lab (M-W) @ 3:00-4:50pm Lab manual and handouts

Week 1: JAN. 15, 17

\*\*\*\*MLK Holiday, Monday, Jan. 15\*\*\*\*

No Lecture

Orientation/Syllabus (Wed., Jan. 17)

CH 17 Viruses, Bacteria, & Protists

Getting Started; Intro; Safety; The Lab Notebook (W, Jan. 17)

Lab Safety Contract Due Jan 22

Week 2: JAN. 22, 24

CH 17, Con't

LAB 1 Taxonomy

Week 3: JAN. 29, 31

CH 18 Plants & Fungi

LAB 2 Diversity of Microbes I  
(Bacteria and Fungi)

Week 4: FEB. 5, 7

Exam 1: Mon., Feb. 5-Chaps TBA

CH 19 Animals I & II

LAB 3 Diversity of Microbes II  
(Protista)

Week 5: Feb. 12, 14

CH 22 Being Organized  
(Homeostasis)

LAB 4 Introduction to Terrestrial Plants

Week 6: Feb. 19, 21

CH 23 Transport Systems (Circulatory System)

LAB 5 Vascular Seed Producing Plants

Week 7: Feb. 26, 28

CH 24 Maintenance Systems  
(Respiratory System)

Lab Practical I-Labs 1-5 (Wed, Feb. 28)

Week 8: Mar. 4, 6

Exam 2: Mon., Mar. 4-Chaps TBA

CH 24 Maintenance Systems  
(Urinary System)

LAB 6 Animals without a True Body Cavity

\*\*\*\*\*SPRING BREAK: MAR. 11-15\*\*\*\*\*

Week 9: Mar. 18, 20

CH 25 Digestion & Nutrition

LAB 7 Animals with a True Body  
Cavity

Week 10: Mar. 25, 27

CH 27 Control Systems (Nervous  
System)

LAB 8 Urinary and Digestive Systems

Week 11: Apr. 1, 3

CH 28 Control Systems (The Senses)  
Exam 3: Mon., Apr. 1-Chaps TBA

LAB 9 Circulatory & Respiratory  
Systems

Week 12: Apr. 8, 10

CH 29 Sexual Reproduction

LAB 10 Reproductive System

Week 13: Apr. 15, 17  
(Drop Date Apr 18<sup>th</sup>)

CH 30 Ecology  
Exam 4: Mon., Apr. 18-Chaps TBA

LAB 11 Ecology

Week 14: Apr. 22, 24

CH 31 Communities/Ecosystems

Special Lab: Vertebrates: Birds &  
Mammals

Week 15: Apr. 29, May 1

CH 32 Human Impacts on Biosphere  
Optional report due (Apr. 29)  
All Connect Ex due (May 3)

Review for Lab Final (Mon, Apr.  
29)  
Final Lab Journal due (May 1)  
Lab Practical II (Wed, May 1)



Week 16: May 6, 8

Final Exam (Chapters TBA)

May 11

NTCC graduation

*NOTE: CHAPS 20-21 & 26 omitted*

**DISCLAIMER NOTE:** The instructor reserves the right to alter this syllabus as necessary with full disclosure & prior notice to the student.

\*Various assignments on specific dates beyond exams will be given throughout the semester and posted online on Bb.

\*\*Major exam dates are tentative and subject to change, if necessary.

\*\*\*Modifications of the above schedule may be made and the material covered on any exam, including dates for major examinations.

**Notes:**