



**Syllabus:** Concepts of Biology I for Non-science majors

**Course Number:** BIOL 1408.H1 (*Hybrid Course*)

**Semester & Year:** Spring 2014

**Instructor Information**

Name: Mark Storey

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Office Hours:

**Textbook Information**

Inquiry Into Life, 13<sup>th</sup> Edition by Dr. Sylvia Mader, ISBN 978-0-07-340344-1

**Student Learning Outcomes for the Course**

At the conclusion of the lecture portion of this course students should be able to:

1. Distinguish between prokaryotic, eukaryotic, plant and animal cells, and identify major cell structures.
2. Identify stages of the cell cycle, mitosis (plant and animal), and meiosis.
3. Interpret results from cell physiology experiments involving movement across membranes, enzymes, photosynthesis, and cellular respiration.
4. Apply genetic principles to predict the outcome of genetic crosses and statistically analyze results.
5. Interpret the results of karyotypes, pedigrees, and biotechnology experiments.
6. Identify parts of a DNA molecule, and describe replication, transcription, and translation.
7. Analyze evidence for evolution and natural selection.

**Student Requirements for Completion of the Course**

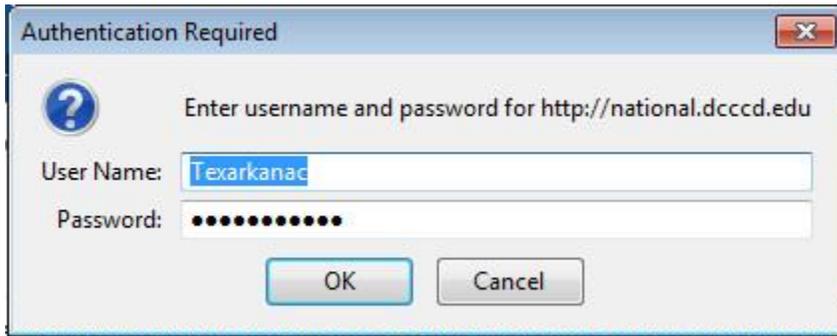
This is a *hybrid course* with the lecture component delivered online through the TC Online LMS (Moodle elearn system) and a traditional laboratory that meets on campus three hours per week. You must maintain enrollment and successfully complete the laboratory in order to receive a passing grade for this course.

The lecture method will be used. However, the student will be required to participate in online “thread” discussions, and complete a multiple choice progress check and a lesson quiz each week during the semester. In addition, four (4) lecture unit exams are taken online and the student is permitted to use the textbook and any notes needed. Each unit exam is made available for students to take Monday through Friday (5 days). All course content is delivered through a cooperative arrangement between the Dallas Community College District and Texarkana College via the LMS TC website:

<https://elearn.texarkanacollege.edu/>

## Technical Requirements & Solutions for this course

IMPORTANT: Course content for Lesson access at Dallas County Community College District may occasionally display a popup alert window like this:



Enter the following information:

**For the User Name: Texarkanac**

**For the Password: texarkana12**

By entering this information you should be allowed to access the content on the course computer server in Dallas. If you have trouble, please e-mail me. [Mark.Storey@texarkanacollege.edu](mailto:Mark.Storey@texarkanacollege.edu)

*A basic level of technical competence and equipment are necessary for participating in this online class. You should already be able to perform the following tasks:*

- **Attach document files to e-mail.**
- **Complete assignments using word processing software.**
- **Locate, save, and retrieve files on the computer.**
- **Send/receive email.**
- **Submit comments to a discussion board.**
- **Use a web browser like Internet Explorer or Firefox and search engines like Google.**

*You should have regular, reliable access to the following software and Internet resources (access to only a mobile device is NOT enough to succeed in this class):*

Hardware/Software Required	if using a PC	if using a Mac
Operating System	Windows XP, Vista, 7	OS 10.5 or later
RAM	at least 512 MB	at least 512 MB
Free disk space	at least 2 GB	at least 2 GB
	•	•

<b>Audio and Visual Capabilities</b>	<ul style="list-style-type: none"> <li>• Screen display set to 1024x768 or higher</li> <li>• sound card and speakers</li> </ul>	<ul style="list-style-type: none"> <li>• Screen display set to 1024x768 or higher</li> <li>• sound card and speakers</li> </ul>
<b>Internet connection</b>	<ul style="list-style-type: none"> <li>• Ethernet (Local area network)</li> <li>• Wireless network card</li> <li>• T1, DSL, cable, or satellite</li> <li>• <i>a 56K modem is not recommended</i></li> </ul>	<ul style="list-style-type: none"> <li>• Ethernet (Local area network)</li> <li>• Wireless network card</li> <li>• T1, DSL, cable, or satellite</li> <li>• <i>a 56K modem is not recommended</i></li> </ul>
<b>Web Browser</b>	<p><i>at least one of these:</i></p> <ul style="list-style-type: none"> <li>• Mozilla Firefox v3.6 or higher</li> <li>• Internet Explorer v8 or higher</li> </ul>	<p><i>at least one of these:</i></p> <ul style="list-style-type: none"> <li>• Mozilla Firefox v3.6 or higher</li> <li>• Safari v4.0 or higher</li> </ul>
<b>Plug-ins and Media Players</b>	<ul style="list-style-type: none"> <li>• Java JRE v6 or higher</li> <li>• Adobe Flash Player v10 or higher</li> <li>• Adobe Shockwave Player v10 or higher</li> </ul>	<ul style="list-style-type: none"> <li>• Java JRE v6 or higher</li> <li>• Adobe Flash Player v10 or higher</li> <li>• Adobe Shockwave Player v10 or higher</li> </ul>
<b>PDF Viewer</b>	<ul style="list-style-type: none"> <li>• Adobe Reader v9 or higher</li> </ul>	<ul style="list-style-type: none"> <li>• Adobe Reader v9 or higher</li> </ul> <p><b><i>**Do NOT use Preview (software pre-loaded onto Mac OS) for lab reports or other fillable PDFs.**</i></b></p>
<b>Word Processing and ability to view Powerpoint shows</b>	<ul style="list-style-type: none"> <li>• Microsoft Word /Office</li> <li>• Powerpoint Viewer</li> <li>• OpenOffice.org</li> </ul>	<ul style="list-style-type: none"> <li>• Microsoft Word /Office</li> <li>• OpenOffice.org</li> </ul>
<b>Miscellaneous</b>	<ul style="list-style-type: none"> <li>• Email address</li> <li>• Printing capability (infrequent)</li> <li>• Turn pop-up blocker OFF!</li> </ul>	<ul style="list-style-type: none"> <li>• Email address</li> <li>• Printing capability (infrequent)</li> <li>• Turn pop-up blocker OFF!</li> </ul>

## Lecture Course Schedule: Topics/ Exams - Biology 1408.H1 Spring 2014

Wk	Lesson Topic	Textbook Reading Assignment <i>Inquiry Into Life Mader (13e)</i>	Pages
1	Lesson 1: Introduction to Biology	Chapter 1: The Study of Life	p 1 – 17
2	Lesson 2: The Chemistry of Life	Chapter 2: The Molecules of Cells , 1 <sup>st</sup> half	p 21 – 29
3	Lesson 3: Biomolecules	Chapter 2: The Molecules of Cells, 2 <sup>nd</sup> half	p 30 – 44
4	Lesson 4: Cells <i>and</i> <b>EXAM 1 (Lessons 1-4)</b>	Chapter 3: Cell Structure and Function <b>Exam covers chapters 1, 2, and 3</b>	p 45 – 66
5	Lesson 5: Basics of Energy Exchange	Chapter 6: Metabolism: Energy and Enzymes	p 99 – 112
6	Lesson 6: Cell Membranes and Material Movement	Chapter 4: Membrane Structure and Function	p 67 – 80
7	Lesson 7: Photosynthesis	Chapter 8: Photosynthesis	p 127 – 142
	<b>SPRING BREAK</b>	<b>March 10 – March 14, 2014 (TC Closed)</b>	
8	Lesson 8: Respiration <i>and</i> <b>EXAM 2 (Lessons 5-8)</b>	Chapter 7: Cellular Respiration <b>Exam covers chapters 6, 4, 8, and 7</b>	p 113 – 126
9	Lesson 9: Cell Division <i>and</i> Lesson 10: DNA Replication	Chapter 5: Cell Division (Cell Cycle & Mitosis) 1 <sup>st</sup> half Chapter 25:DNA Structure and Control of Gene Expression, <i>1st half</i> Chapter 26: Biotechnology and Genomics	p 81 – 88 p 501-505 p 525 - 540
10	Lesson 11: Gene Expression	Chapter 25: DNA Structure and Control of Gene Expression, 2 <sup>nd</sup> half	p 506 - 514
11	<b>EXAM 3 (Lessons 9-11)</b>	<b>Exam covers chapters 5, 25, and 26</b>	
12	Lesson 12: Sexual Reproduction	Chapter 5: Cell Division 2 <sup>nd</sup> half Meiosis and Sexual Reproduction Chapter 10: Flowering Plants: Reproduction, <i>1st half</i> Chapter 21: Reproductive System, <i>1st half</i>	p 89 - 98 p 171 – 175 p 415 – 422
13	Lesson 13: Patterns of Inheritance <i>and</i> Lesson 14: Human Genetics	Chapter 23: Patterns of Inheritance Chapter 24: Chromosomal Basis of Inheritance Chapter 5: Cell Division: Meiosis, 2 <sup>nd</sup> half of chapter	p 469 - 486 p 487 – 500 p 89 – 98
14	Lesson 15: Plant and Animal Reproduction and Development	Chapter 29: Seed Plants (Flowering Plants): Reproduction Chapter 21: Reproductive System, <i>2nd half</i> Chapter 22: Development and Aging	p 612 – 615 p 426 – 442 p 443 - 468
15	<b>EXAM 4 (Lessons 12-15)</b>	<b>Exam covers portions of chapters , 5, 10, 21, 22, 23, 24 and 29</b>	
16	<b>May12-14, 2014 FINAL EXAM (comprehensive) TC – TESTING CENTER</b>	<b>Final exam covers all chapters covered during the course (must be taken in TC testing Center) No study aids are permitted during this exam session.</b>	

## **Student Assessment**

Four (4) lecture exams will be given over four units and a comprehensive final exam, for a total of five exams valued at 55% of the course grade. The examination format will include multiple choice and True/False items. Exams will be administered according to the Lecture Topics and Exams schedule in the preceding section.

**The course grade will be calculated from the following:**

<b>Lecture Exams (4)</b>	<b>40%</b>
<b>Graded Lesson Quizzes</b>	<b>10%</b>
<b>Graded Discussion Weekly Posts Lesson Progress Checks (80% or above)</b>	<b>10%</b>
<b>Lab Grade (on campus lab) BIOL 1108</b>	<b>25%</b>
<b>FINAL Exam - Comprehensive (Taken at TC Testing Center)</b>	<b>15%</b>
<b>Total</b>	<b>100%</b>

Unit tests will be available for five (5) days Mon through Friday, on-line on the weeks indicated in the course schedule above. The tests are randomly generated from the test bank developed for this textbook. Each of the tests is different--no students will receive the same exam. Each test will consist of approximately 50 multiple choice questions. You will be allowed 60 minutes to complete each test, and you are allowed to use your book and notes. The tests will be made available **only** for the five (5) days: (Mon 12:05 am –Friday 11:55pm) period posted on the course TC Online *elearn* Moodle web site. For two (2) days: (Sat 12:05 am –Sun 11:55pm) following each test, detailed feedback will be available including grade, which questions were missed, and what the correct answers were. When taking a test, be careful not to close the testing window, attempt to open other windows, or try to print the exam. These actions will cause the test to close. Taking photographs of exam pages is prohibited and constitutes academic dishonesty.

The final exam is comprehensive and consists of 100 multiple choice questions. **This test must be taken at the TC testing center during testing center hours of operation during final exam week.** The TC testing center is located in the Business Building on the corner of Robison Road and Tucker Street. You will need to bring a student I.D., a picture I.D. See the testing center link on the upper left of our home page for more information and hours that the center is open for students to take exams.

## Grading Scale

Semester Grade	Course Average
A	90-100
B	80-89
C	70-79
D	60-69
F	59-below

## ABSENTEE POLICY (TC Official Policy)

**Texarkana College's absentee policy allows instructors to withdraw a student from a course due to excessive absences.** *If a student leaves and returns during class or leaves the class before the class is over, he/she may be considered absent. Three tardies constitute one absence. Check the syllabus for each class to see how much time you are allowed to be late before the tardy is counted as an absence.*

*In some vocational areas, such as nursing and cosmetology, certification requirements necessitate an absentee policy that is more stringent than the institutional policy. In these instances, the matter of certification takes precedence over local policies, since certification policies are established by the State of Texas.*

**Faculty members are not obligated to provide opportunities for students to make-up missed assignments and tests as a result of a student's absence from class.** *The institution is not required to take attendance with the exception of certain workforce/vocational areas, such as nursing and cosmetology, where certification requirements require taking attendance. However, experience demonstrates that regular attendance enhances academic success. As such, students are expected to attend each meeting of their registered courses.*

**Do no stop attending a class without formally withdrawing from the course by the institution's published Last Day to Drop. If a student does not attend class and does not withdraw from the class, the student will receive a grade of F in the class.** *The published Last Day to Drop applies to students; an instructor may withdraw a student for excessive absences at any time during the semester.*

**Withdrawal from a course(s) may affect a student's current or future financial aid eligibility. Students should consult the Financial Aid Office to learn both short and long term consequences of a withdrawal.**

## EXCUSED ABSENCES

*A student's absence due to school trips and/or school business will not be counted against a student's allowable number of absences. Military duty and absences for Holy Days (FBD LEGAL) are covered in a separate section of the catalog and the student handbook. These are the only types of absences that are considered excused by Texarkana College. **Responsibility for work missed for any absence is placed on the student.** Instructors are required to allow students to make up work missed if the absence is due to military duty or religious holy days when students follow the correct notification procedures. **Instructors are not required to allow students to make up work for absences due to other reasons. Make-up policies are listed in each individual instructor's syllabus.***

## **ONLINE/HYBRID COURSE ABSENCES**

**Absence in an online course is defined as the lack of an active post or submission within the course including discussion board posts, written assignments and tests. This standard will be used to determine all lecture absentee issues, including but not limited to, 12<sup>th</sup> Day Census Reports, last date of attendance, and involuntary withdrawal from a course due to absences. All**

online students must complete an Enrollment Verification activity within the first week of class (activity depends upon the professor) or the professor may drop the student for not having attended. Students must complete at least one activity in their online class per week. Each week in which a student does not complete an activity will be counted as an absence. If a student is taking a **hybrid course**, and it does not meet during the first week of class, **the student must also complete an Enrollment Verification activity within the first week of class or the student may be dropped for not having attended.**

#### MAXIMUM ALLOWABLE ABSENCES

After official registration, the following number of unexcused absences will be the maximum allowable before a student may be dropped from the class:

**The maximum number of absences in this online class is two (2) per semester (the equivalent of two (2) weeks of instruction).** The only excused absences are for officially recognized TC student club activities or for Texarkana College official business. **Please Note: Illness and doctor appointments do not qualify as an excused absence.**

**WARNING: If you exceed the maximum number of absences for this course you will be dropped (W) from the course.**

**Check with your Laboratory instructor for attendance policies for the lab. IF YOU ARE DROPPED FROM THE LAB YOU ARE AUTOMATICALLY DROPPED FROM THIS COURSE!**

If circumstances develop (e.g. extended illness, moving from the city, etc.) which necessitates your withdrawal from this or any other course be sure to let me know AND officially withdraw in the Director of Admissions office located in the C. M. Nelson Administration building. The date each semester is posted on the inside page of the current Texarkana College Catalog / Website under "Academic Calendar". A grade of W is recorded on your permanent transcript *if you withdraw before the official deadline.*

#### **Make-up Policy**

Daily work (lesson units) and required posts in the discussion areas **cannot be made up.**

As a general policy, **I DO NOT GIVE MAKE UP EXAMS.** Tests are available for a four day period (Mon-Thurs) for the convenience of the students. Exams answers are available for three days after each test closes (Friday – Sunday) by clicking on the exam link.

#### **Online Conduct**

Discussion Board responses, emails, and all other correspondence among faculty and students enrolled in this class are expected to conform to the level of conduct that would be expected in a regular classroom. Students should feel free to express disagreement with the instructor and other students but it must be done in a manner which is not abusive, threatening, or harassing in any form. Communication among students is encouraged but must end if one of the parties requests that it be terminated. Students will not send unsolicited email espousing a cause, religion, or activity to other class participants and will not add other class participants to any list-servers or other entity which distributes unwanted email or material.

Violation of these guidelines may result in disciplinary action against the offending student. This action can include termination of the student's participation in the class and a grade of "F".

## Netiquette

Here are the core rules for communicating with me and with each other for the duration of this course: **Remember there's a person behind every message.** It is very easy to forget, as all we see is a computer screen. We don't see facial expressions, gestures, or hear intonation of voice. All we have are words, and if words are not well-chosen, they are easy to misinterpret. Words that ARE well-chosen are often easy to misinterpret too. Remember that, just as you have feelings, each human being out there in cyberspace has feelings as well. Give people the benefit of the doubt if you are the one reading their writing, and if you are the one writing, remember the feelings of others and take the time to construct your sentences as clearly as possible.

**Sarcasm does not translate well in cyberspace.** Cyberspace is more literal than a face-to-face conversation. For example, a phrase like "Yeah, I really believe that is true," can have the exact opposite meaning if you hear the person's delivery, see their body language, and observe their facial expressions in face to face conversation, but as just words on a page, it comes across literally, not figuratively. Again, make sure you say what you mean, and provide as few possibilities for misinterpretation as possible.

**"DO NOT TYPE IN CAPS ALL THE TIME."** This is the online equivalent of screaming or yelling at someone. Please don't do this, it is not appreciated. ☺

**Do not type in all lower case or use text message-like abbreviations, such as btw (by the way), or b/cuz, or lol (laughing out loud).** This is a college class and college-level writing (grammar, punctuation, vocabulary, etc.) is expected.

**Avoid "flaming."** Flaming is when someone expresses a bold point of view, sometimes overly bold or hyper-critical, and others follow up with equally overly-critical commentary and/or personal attacks. It is not that we cannot disagree - it would be a boring world if everyone had the same opinion about everything. It is also in pointed discussions that I've been able to refine my already-held opinions or even change them completely. That's the purpose of college: to make you think, to get you to see different points of view, to make you question your beliefs or to cement them more firmly than before with facts, etc. Discussion is good, disagreement is fine, even welcome, but remember rule #1 above: there are humans with feelings involved.

**Keep your comments and postings relevant.** Camaraderie is good, but please do not include conversation unrelated to the subject line or course material in discussion board communiqués.

**Identify yourself fully.** In the subject box of every email, please type your full name, course and section number (e.g. Sue Jones. BIOL 1408.H1). Please include full identification of who you are when you generate or reply to an email to your instructor. This should include your full name (first and last) as well as the course you are enrolled in. It is my policy that in order to preserve student confidentiality any email that I receive without proper identification will not be responded to.

**Write with civility and respect.** When asking questions, or making comments, do so in a respectful manner. If you are frustrated or irritated when you write the email, wait a minute to reread it asking yourself if the tone is appropriate for a student-teacher interchange before clicking Send. If you're really upset, write the email in Word and copy and paste it in later when you are calm enough to give it a reading with audience in mind. Practice patience. Emails will be answered within 24 hours of receipt Monday-Friday and often sooner. Usually I read email on the weekends, but some weekends, I will not be available.

**Copy yourself.** Send a copy of each email you write to yourself so you can be sure the email went through, and so you can resend it if there is any problem.

**Brevity.** Keep emails brief and to the point.

**Do not forward unsolicited material.** Do not forward material that you send to your friends to your classmates or professor. (Note: If you send emails to everyone in your address book, they will automatically go to your professor and any student in the class who has emailed you.)

(Excerpted from: <http://www.albion.com/netiquette/corerules.html>)

## **Academic Integrity Statement**

Scholastic dishonesty, involving but not limited to cheating on a test, plagiarism, collusion, or falsification of records will make the student liable for disciplinary action after being investigated by the Dean of Students. Proven violations of this nature will result in the student being dropped from the class with an "F".

This policy applies campus wide, including TC Testing Center, as well as off-campus classroom or lab sites, including dual credit campuses. This information can be found in the Student Handbook at <https://texarkanacollege.edu>.

## **Disability Act Statement:**

Texarkana College complies with all provisions of the Americans with Disabilities Act and makes reasonable accommodations upon request. Please contact Larry Andrews at 903.823.3283, or go by the Recruitment, Advisement, and Retention Department located in the Administration building for personal assistance.

If you have an accommodation letter from their office indicating that you have a disability which requires academic accommodations, please present it to me so we can discuss the accommodations that you might need for this class. *It is best to request these changes at the beginning if not before the start of class* so there is ample time to make the accommodations..

## **Financial Aid:**

**Attention!** Dropping this class may affect your funding in a negative way! You could owe money to the college and/or federal government. Please check with the Financial Aid office before making a decision.

<p><b>I reserve the right to modify the syllabus at any time during the semester. This online version (<i>TC Online CMS/elearning</i>) is the official syllabus and supersedes all versions of this document in print.</b></p>
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By signing this statement, I agree that I have read and understand what is expected of me to perform satisfactorily in this course of study.

*I also understand that any photographic and or audio recordings that are made of students including myself) during this class by TC employees are the property of Texarkana College and can be used to promote the educational mission of Texarkana College.*

\_\_\_\_\_  
Student Name (**PRINT** First & LAST NAME)

\_\_\_\_\_  
Legal Signature

**BIOL 1408.H1**  
TC Course Number / Section Number

\_\_\_\_\_  
Date