

Eastfield College  
Science and PE Division  
BIOLOGY 1408 Syllabus  
Fall 2011  
4 Credit Hours

**Course Title and Number**

Biology for Non-Science Majors I  
BIOL 1408- Section Number

**Class Time**

Lecture days of the week and time

Lab days of the week and time

**Instructor**

Name:

Office:

Office hours or adjuncts by appointment

Office Phone:

DCCCD Email:

**Course Description** – in Eastfield College catalog

Presentation of biological concepts for the non-science major. Emphasis will be on scientists and their contributions to the science field, scientific problem solving, unity of life including cells and genetic information, energy pathways important to life, and current issues in biology. ( 3 Lec., 3 Lab.) (Coordinating Board Academic Approval Number 2601015103)

**Prerequisites**

One of the following must be met: (1) Developmental Reading 0093 AND Developmental Writing 0093; (2) English as a Second Language (ESOL) 0044 AND 0054; or (3) have met Texas Success Initiative (TSI) Reading and Writing standards AND DCCCD Writing score prerequisite requirement.

**Textbooks**

Biology – Life on Earth with Physiology – BIOL 1408 Eastfield College – Custom Edition, 9<sup>th</sup> edition, Audesirk, T., Audesirk, G., and Byers, B., Pearson Prentice Hall, 2011, California, ISBN 9780558687731

Inquiry into Life Laboratory Manual, 13<sup>th</sup> edition, Mader, S., McGraw-Hill, 2011, New York, ISBN 9780077297435.

**Intellectual Competencies**

1. Reading – The ability to analyze and interpret a variety of printed material – books, documents and articles.
2. Writing – The ability to produce clear, correct and coherent prose adapted to purpose, occasion and audience.
3. Listening – analyze and interpret various forms of spoken communication.
4. Critical Thinking – Think and analyze at a critical level.
5. Computer Literacy – Understand our technological society, use computer based technology in communication, solving problems, acquiring information.

### Educational Objectives

1. To understand and apply method and appropriate technology to the study of the natural sciences.
2. To recognize scientific and quantitative methods and the differences between these approaches and the other methods of inquiry and to communicate findings, analyses, and interpretation both orally and in writing.
3. To identify and recognize the differences among competing scientific theories.
4. To demonstrate knowledge of the major issues and problems facing modern science, including issues that touch upon ethics, values, and public policies.
5. To demonstrate knowledge of the interdependence of science and technology and their influence on, and contribution to, modern culture.

### Educational Objective Activities

State each activity that is done in the classroom and which Educational Objective it meets. All educational objectives must be met.

### Learning Outcomes

- 1) Demonstrate the correct way to use the compound light microscope
  - a. Assessment: Instructors will quiz each student individually on the correct way to focus slides with the compound light microscope
- 2) Make correct metric conversions of length, volume, and mass
  - a. Assessment: A program-wide quiz in metric conversions will be administered to the students
- 3) Apply Mendelian genetics by being able to solve different genetic problems
  - a. Assessment: Instructors will provide a worksheet of genetic exercises for the students to complete.

### Grading Procedure: This will vary depending on the number of assignments that the instructor gives

5-6 Major lecture exams\* - 100 points each = 600 points

2 Laboratory exams – 100 points each = 200 points

\*Other assignments added by the instructor

#### **Final Grade (Based on 6 lecture exams)**

716 – 800 pts = 89.5-100% = A

636 – 715 pts = 79.5-89% = B

556 – 635 pts = 69.5-79% = C

476– 555 pts = 59.5-69% = D

0 – 475 pts = 0-59% = F

#### **\*Make-up Exams**

A comprehensive essay lecture exam will be given in case of a missed examination with an excused absence. If a laboratory practical is missed, you will receive a grade of **ZERO** for the exam.

#### **Test Coverage**

Included within the course outline

**Test review material:** Notes and website found on the inside cover of your textbook. Tutoring is available at the Science Corner.

## **WRITING ACROSS THE CURRICULUM**

Writing is a part of all biology courses. You will have writing assignments determined by your instructor.

## **ATTENDANCE POLICY**

Students are expected to regularly attend all classes in which they are enrolled. Students have the responsibility to attend class and to consult with the instructor when an absence occurs. Instructors are responsible for describing attendance policies and procedures to all students enrolled in their class.

### **Religious Holidays/Observances:**

Absences for observance of a religious holy day are excused. Notification of the absence must be given to the instructor in writing at least two weeks prior to the date of the holy day. A student whose absence is excused to observe a religious holy day is allowed to contract with the instructor to take a make-up examination or complete an assignment within a mutually agreed upon time after the absence.

## **DROP / WITHDRAWAL POLICY**

If you are unable to complete this course, it is your responsibility to withdraw formally. The withdrawal request must be received in the Registrar's Office by **November 17, 2011**. Failure to do so will result in your receiving a performance grade, usually an "F." If you drop a class or withdraw from the college before the official drop/withdrawal deadline, you will receive a "W" (Withdraw) in each class dropped.

### **STOP BEFORE YOU DROP (Six-Course Drop Rule)**

For students who enrolled in college level courses for the first time in the fall of 2007, Texas Education Code 51.907 limits the number of courses a student may drop. You may drop no more than 6 courses during your entire undergraduate career unless the drop qualifies as an exception. Your campus counseling/advising center will give you more information on the allowable exceptions. Remember that once you have accumulated 6 non-exempt drops, you cannot drop any other courses with a "W". Therefore, please exercise caution when dropping courses in any Texas public institution of higher

learning, including all seven of the Dallas County Community Colleges. For more information, you may access: <https://www1.dcccd.edu/coursedrops>.

## **FINANCIAL AID STUDENTS**

If you are receiving Financial Aid grants or loans, you must begin attendance in all classes. Do not drop or stop attending any class without consulting the Financial Aid Office. Changes in your enrollment level and failing grades may require that you repay financial aid funds. Students who fail to attend or participate after the drop date are also subject to this policy. Failure to contact the instructor will result in your name being submitted to the Financial Aid Office as a “non-attende.”

## **ADA STUDENT GUIDLINES**

Students with a physical, mental or learning disability who require accommodations should contact the college Disability Services Office in C237. Call 972.860.8348 or email [efcdso@dcccd.edu](mailto:efcdso@dcccd.edu). For more information: <http://www.eastfieldcollege.edu/SSI/DSO/index.html>

## **ACADEMIC HONESTY**

Academic honesty is expected, and integrity is valued in the Dallas County Community Colleges. Scholastic dishonesty is a violation of the Code of Student Conduct. The purpose of the Student Code of Conduct is to provide guidelines for the educational environment of the Dallas County Community College District. Such an environment presupposes both rights and responsibilities. Disciplinary regulations at the college are set forth in writing in order to give students general notice of prohibited conduct. Students should be aware of disciplinary actions for all forms of academic dishonesty, including but not limited to, cheating on a test, plagiarism, and collusion. As a college student, you are considered a responsible adult. Your enrollment indicates acceptance of the DCCCD Code of Student Conduct publishes in the DCCCD Catalog. More information is available on the internet at <https://www1.dcccd.edu.cat0406/ss/code.cfm> .

### **Cheating on a Test shall include:**

- a. Copying from another student’s test paper.
- b. Using test material not authorized by the person administering the test.
- c. All forms of academic dishonesty, including cheating, fabrication, facilitating academic dishonesty, plagiarism, and collusion.
- d. Collaborating with or seeking aid from another student during a test without permission from the test administrator.
- e. Knowingly using, buying, selling, stealing, or soliciting, in whole or in part, the contents of an unadministered test.
- f. The unauthorized transporting or removal, in whole or part, of the contents of the unadministered test.
- g. Substituting for another student, or permitting another student to substitute for one’s self, to take a test.

- h. Bribing another person to obtain an unadministered test or information about an unadministered test.

**Plagiarism:**

Shall be defined as the appropriating, buying, receiving as a gift, or obtaining by any means another's work and the acknowledged submission or incorporation of it in one's own written work (i.e., taking someone else's words or ideas and using them as your own). Plagiarism is academic dishonesty and plagiarized materials/assignments will receive a grade of zero and the student will be subjected to the disciplinary actions under academic dishonesty.

**Collusion:**

Shall be defined as the unauthorized collaboration with another person in preparing written work for fulfillment of course requirements.

**REPEATING THIS COURSE**

Effective for Fall Semester 2005, the Dallas County Community Colleges will charge additional tuition to students registering the third or subsequent time for a course. This class *may/may not* be repeated for the third or subsequent time without paying the additional tuition. Third attempts include courses taken at any of the Dallas County Community Colleges since the Fall-2002 semester. More information is available at: [https://www1.dcccd.edu/cat0506/ss/oep/third\\_attempt.cfm](https://www1.dcccd.edu/cat0506/ss/oep/third_attempt.cfm) .

**STUDENT E-MAIL**

Legal privacy issues prevent your instructor from discussing your work or your grades on commercial e-mail accounts. If you wish to send your papers as attachments to an e-mail (and the instructor permits it), or if you have a question about your grade, you must open a student e-mail account . The account is free. You may set it up by going to [www.dcccd.edu](http://www.dcccd.edu) and click on Student Services, Online Services, and Student NetMail. All students receiving financial aid must open a student NetMail account.

**CLASSROOM POLICIES**

In order to maintain an environment suitable for learning, food and drinks are not permitted in any classroom or laboratory. Cell phones, pagers, IPODS, MP3 Players, and any other electronic devices are to be turned off prior to entering a classroom and/or laboratory unless the student has received permission from the instructor. Students arriving to class late will take a seat quickly and quietly in order to prevent distracting the class in session. Likewise, students that must leave class early will do so quietly to prevent distraction. Failing to observe these requests may result in a student's dismissal from the class.

**EMERGENCY / INCLEMENT WEATHER PROCEDURE**

In case of emergency or inclement weather conditions, Eastfield students should listen to KEOM-FM Radio Station (88.5) as the primary media source. In partnership with the Mesquite

Independent School District, Eastfield College Administration will notify KEOM immediately after a decision is made to cancel classes on any given day of inclement weather or for emergency purposes. Students may also monitor other local radio and television stations. The earliest an announcement may be broadcast on KEOM Radio is 6:00am. Students may also refer to the Eastfield College web page [www.eastfieldcollege.com](http://www.eastfieldcollege.com) for the Inclement Weather announcement under the “Features” area of the front page. The announcement will be posted immediately following the decision to close the college.

### **OBTAINING YOUR GRADES AT THE END OF THE SEMESTER:**

Final Grade Reports are no longer mailed. Convenient access is available online at [www.econnect.dcccd.edu](http://www.econnect.dcccd.edu). Use your identification number when you log onto eConnect, an online system developed by the DCCCD to provide you with timely information regarding your college record. Your grades will also be printed on your **Student Advising Report**, which is available in the Admissions Office.

### **Family Educational Rights and Privacy Act of 1974 (FERPA)**

In compliance with the Family Educational Rights and Privacy Act of 1974 (FERPA), the College may release information classified as “directory information” to the general public without the written consent of the student. Directory information includes: (1) student name, (2) student address, (3) telephone numbers, (4) date and place of birth, (5) weight and height of members of athletic teams, (6) participation in officially recognized activities and sports, (7) dates of attendance, (8) educational institution most recently attended, and (9) other similar information, including major field of student and degrees and awards received. Students may protect their directory information at any time during the academic year. If no request is filed, directory information is released upon written inquiry. No telephone inquiries are acknowledged. No transcript or academic record is released without written consent from the student, except as specified by law.

### **Children on Campus**

The institution strives to protect an environment most conducive to teaching and learning for all enrolled students. Children who are taking part in organized scheduled activities or who are enrolled in specific classes are welcomed. Minor children, however, should not be brought to the institution unless closely supervised by their parent. Minor children should not be brought into classrooms, laboratories or other facilities of the college. This practice is disruptive to the learning process. In the case of an emergency where the student-parent has no alternative but to bring the child to campus, classroom faculty or the administrative heads of other units have full discretion as to whether a child may be allowed to quietly stay in the location. These individuals may require that children be removed by the student-parent from the setting if, in their opinion, the presence of the child is deemed to be disruptive to the learning process. For reasons of security and child welfare the institution will not permit unattended children to be left anywhere on the premises. Parents who have problems with childcare should visit the Counseling and/or Advisement Center to receive referrals to childcare services in the area.

### **DISCLAIMER**

The guidelines set forth in this syllabus may be changed, deleted, or amended at any time by the instructor. The attached course outline is intended as an aid in helping you know your

responsibilities for the semester. It is possible that some changes in the course outline or class policies will be made during the semester. Any changes that are made to the class policies or course outline will be announced in class.

**The guidelines in this syllabus may be changed, deleted or amended at any time by the instructor**  
**Course Outline**

<u>Week</u>	<u>Topic</u>	<u>Chapter</u>
1	An Introduction to Life on Earth	1
	Atoms, Molecules, and Life	2
2	Biological Molecules	3
3	<b>Exam #1: Chapters 1, 2, 3,</b>	
	Cell Structure and Function	4
4	Cell Membrane, Structure and Function	5
5	Energy Flow in the Life of a Cell	6
6	<b>Exam #2: Chapters 4, 5, 6</b>	
	Capturing Solar Energy: Photosynthesis	7
7	Harvesting Energy: Glycolysis and Cellular Respiration	8
8	DNA: The Molecule of Heredity	11
9	<b>Exam #3: Chapters 7, 8, 11</b>	
	The Continuity of Life: Cellular Reproduction	9
10	Patterns of Inheritance	10
11	Gene Expression and Regulation (page 216 – 231 – Skip everything after section 12.5)	12
12	<b>Exam #4: Chapters 9, 10, 12</b>	
	Homeostasis and the Organization of the Animal Body	31
13	<b>Thanksgiving Holiday on Thursday and Friday</b>	
	Animal Reproduction	41
14	Animal Development	42
15	<b>Exam #5: Chapters 31, 41, 42 and Review</b>	
16	<b>Exam #6: Comprehensive Final Exam</b>	

**BIOLOGY 1408**

**Lab Schedule**

**Fall 2011**

<b>Week of:</b>	<b>Assignment:</b>
<b>AUG 29</b>	<b>Lab 2 Safety and Metric System (pages ix and Lab 2 - pages 9 -13)</b>
<b>SEPT 5</b>	<b>No Labs –Labor Day Week</b>
<b>SEPT 12</b>	<b>Lab 2 Microscopy (Lab 2 – pages 14 – 26)</b>
<b>SEPT 19</b>	<b>Lab 3 Chemical Composition of Cells</b>
<b>SEPT 26</b>	<b>Lab 4 Cell Structure and Function</b>
<b>OCT 3</b>	<b>Lab 6 How Enzymes Function</b>
<b>OCT 10</b>	<b>Lab 8 Photosynthesis</b>
<b>OCT 17</b>	<b><u>LAB PRACTICAL #1</u></b>
<b>OCT 24</b>	<b>Lab 5 Mitosis and Meiosis</b>
<b>OCT 31</b>	<b>Lab 22 DNA Biology and Technology</b>
<b>NOV 7</b>	<b>Lab 20 Patterns of Inheritance</b>
<b>NOV 14</b>	<b>Lab 21 Human Genetics</b>
<b>NOV 21</b>	<b>No Labs – Thanksgiving Week</b>
<b>Nov 28</b>	<b>Lab 11 Animal Organization</b>
<b>Dec 5</b>	<b><u>LAB PRACTICAL #2</u></b>