**Eastfield College**  
*STEM Division*  
**BIOL 2406 – Environmental Biology - Online**  
**Spring 2015**  
**Sections 43440, 43441, 93401, 93402**

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

**Instructor:** José Flores  
**Office:** L-317  
**Phone:** 972-860-7087  
**Email:** joseflores@dcccd.edu  
**Office hours:** MF 11:30 – 12:30pm (L-317)  
TR 12:30 – 1:30pm(L-317)  
W 11:30 – 12:30pm (Science Corner)  
Other times by appointment

**Section 43440, 43441, 93401, and 93402 Times and Locations:**

**Lecture:** Online  
**Lab:** Online

**Course Description:** 4 Credit Hours  
The principles of aquatic and terrestrial communities are presented. Emphasis is on the relationship of these principles to the problems facing people in a modern technological society. (3 Lec., 3 Lab.)  
Coordinating Board Academic Approval Number 0303035101

**Textbooks**  

**Core Objectives:**

BIOL 2406 develops the following Core Objectives:

* Critical Thinking - to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information.

* Communication - to include effective development, interpretation and expression of ideas through written, oral and visual communication.

* Empirical and Quantitative Skills - to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions.
* Teamwork -to include the ability to consider different points of view and to work effectively with others to support a shared purpose or goal.

Core Objective Development Statements: BIOL 2406 develops Critical Thinking and Empirical and Quantitative Skills by requiring students to research, analyze and interpret data derived from an experimental setting and drawing a well-informed conclusion of the data through the application of sound biological concepts.

BIOL 2406 develops Teamwork and Communication by requiring students to effectively work in a small group on an assigned problem, exercise or course concept that will then be presented in a written, oral or visual format.

The project that will assess these Core Objectives will be the Human Populations Lab.

**Lecture Learning Outcomes from Texas Coordinating Board:**
1. Explain the structure and impact of biogeochemical cycles.
2. Describe energy transformations across trophic levels.
3. Illustrate abiotic/biotic interactions and symbiotic relationships.
4. Identify various types of natural resources, human impact on these resources, and common resource management practices.
5. Quantify and analyze the impact of lifestyle on the environment.
6. Depict evolutionary trends and adaptations to environmental changes.
7. Describe environmental hazards and risks and the social, economic, and political ramifications.
8. Describe ecological and statistical techniques and approaches used in the study of environmental biology.

**Lab Learning Outcomes from Texas Coordinating Board:**
1. Be able to 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 investigations.
4. Explain the structure and impact of biogeochemical cycles.
5. Describe energy transformations across trophic levels.
Technical Skills and Software:

1) To be successful in this course you must have the following minimum technical skills: be able to use a word processor, use e-mail, and attach files for submission.

2) Navigation of this online course can be problematic with Internet Explorer. I would recommend you to use Mozilla Firefox. If you don't have Firefox, you can download it at the following website:
   

3) In order to access all course documents, it is required to have the following programs. If you don't have these programs, you can download them for free from the following web addresses:

   Adobe Flash 6TM or higher: http://get.adobe.com/flashplayer/
   
   Adobe Reader 6.0.2 or higher: http://get.adobe.com/reader/
   
   Microsoft Reader for Windows-based desktops and laptop PCs.: http://www.microsoft.com/reader/uk/downloads/pc.mspx
   

Grade Procedure:

- 4 lecture exams -100 points each 400 points
- Lab exam 100 points
- 12 Online quizzes 120 points
- 6 lab reports 180 points
- Tree Planting Project 50 points
- Weekly homework 55 points

Total 905 points

Final Grade Scale:

<table>
<thead>
<tr>
<th>Total points</th>
<th>Percent</th>
<th>Grade</th>
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</thead>
<tbody>
<tr>
<td>905 – 805</td>
<td>100 - 89.5%</td>
<td>A</td>
</tr>
<tr>
<td>804 – 720</td>
<td>89.4 - 79.5%</td>
<td>B</td>
</tr>
<tr>
<td>719 – 629</td>
<td>79.4 – 69.5%</td>
<td>C</td>
</tr>
<tr>
<td>628 – 539</td>
<td>69.4 – 59.5%</td>
<td>D</td>
</tr>
<tr>
<td>538 – 0</td>
<td>59.4 – 0%</td>
<td>F</td>
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</tbody>
</table>
EXAMS
There are four exams covering three chapters each. The exams consist of multiple choice and true or false questions. The exams are based on the assigned chapter readings, the power point posted for every chapter, the web animations posted for every chapter, additional sheets and websites posted by the instructor, and when indicated on case studies. A study guide is provided for each chapter to facilitate the studying process.

LABS
There are six labs in the class. Four of the lab reports consist of answering questions on the worksheets provided by the instructor. The Scientific method lab and the Soils lab are formal reports that require the development of an introduction, procedure, results, analysis, conclusion and references. Labs can be completed individually or with one or two partners. If you choose to work with partners, you have to turn in all the labs with those same partners, and the names of every person in the team have to be included in every lab and picture submission.

A camera is required for the labs. You have to take pictures of every step of your experiment, and your face and the face of your partners have to appear in every picture set for every lab. If you are working with partners, a picture of you with your partner doing the lab has to be submitted. Failure to follow any of these guidelines will result in a zero for the lab with no exceptions.

WRITING ACROSS THE CURRICULUM:
Writing is a required part of all biology courses. You will have writing assignments determined by your instructor.

PLAGIARISM
This is the act of taking someone else’s words or ideas and using them as your own. This is academic dishonesty and will not be tolerated. You will receive a grade of zero on the assignment and you will be subjected to the disciplinary actions under academic honesty.

ACADEMIC HONESTY
Scholastic dishonesty is a violation of the Code of Student Conduct. Scholastic dishonesty includes, but is 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, published in the DCCCD Catalog at http://www1.dcccd.edu/cat0506/ss/code.cfm.

Academic dishonesty includes, but is not limited to, cheating on tests, plagiarism and collusion. Cheating includes copying from another student’s test or homework paper, using materials not authorized, collaborating with or seeking aid from another student during a test, knowingly using, buying, selling, stealing, or soliciting the contents of an unadministered test, and substituting for another person to take a test. Plagiarism is the appropriating, buying, receiving as a gift, or obtaining by any means another’s work
and the unacknowledged submission or incorporation of it in one’s own written work. **Collusion** is the unauthorized collaboration with another person in preparing written work for fulfillment of course requirements. Academic dishonesty is a serious offense in college. You can be given a failing grade on an assignment or test, can be failed for the class, or you can even be suspended from college.

**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. Failure to contact the instructor will result in your name being submitted to the Financial Aid Office as a “non-attendee”. All students receiving financial aid must open an Email account through NetMail. See directions in the syllabus for opening an Email account.

**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 **April 22, 2015**. 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. For more information about drop deadlines, refer to the current printed Credit Class Schedule, contact the Admissions/Registrar’s Office at 972-860-7167 (Room C119), or contact the division office.

If you drop a class via eConnect, make sure to print a copy of the confirmation and keep the copy. In the event of a discrepancy it will be the responsibility of the student to provide documentation of having dropped the class.

**STOP BEFORE YOU DROP:** 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](https://www1.dcccd.edu/coursedrops)

**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 6am. Students may also refer to the Eastfield College webpage www.eastfieldcollege.edu 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.

REPEATABILITY ISSUE:
Pending legislative action and DCCCD Board approval, effective for Fall Semester 2005, the Dallas County Community Colleges will charge a higher tuition rate to students registering the third or subsequent time for a course. All third and subsequent attempts of the majority of credit and Continuing Education/Workforce Training courses will result in higher tuition to be charged. Developmental Studies and some other courses will not be charged a higher tuition rate. Third attempts include courses taken at any of the Dallas County Community Colleges since the Fall 2002 semester. For complete information, go to: http://www.dcccd.edu/ThirdCourseAttempt/

EASTFIELD COLLEGE EMAIL POLICY
Faculty and students must have and use a DCCCD account for all correspondence relating to academic coursework. For information on setting up a DCCCD student email account go to: http://www.dcccd.edu/netmail/home.html

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.

ADA GUIDELINES
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. For more information: http://www.eastfieldcollege.edu/SSI/DSO/index.html

OBTAINING YOUR GRADES AT THE END OF THE SEMESTER:
Grade reports are no longer mailed. Convenient access is available online or by telephone. Just use your student identification number when you log in to e-Connect or call DCCCD Touch Tone Services. Website address http://ecconnect.dcccd.edu/. Telephone number: 972-613-1818

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.

CLASSROOM ENVIRONMENT
It is important that the best possible learning environment exist in the classroom. Students should arrive on time and remain for the entire class. Arriving late, leaving early and talking while the instructor is speaking, is disruptive to other students and the instructor. Please turn off cell phones and pagers and refrain from texting in class. All students should conduct themselves in a mature, responsible and courteous manner. Your cooperation in creating and maintaining a pleasant classroom environment will be appreciated by all.

ATTENDANCE
Students who are receiving any form of financial aid should check with the Financial Aid Office prior to withdrawing from classes. Withdrawals may affect your eligibility to receive further aid and could cause you to be in a position of repayment for the current semester. Students who fail to attend or participate after the drop date are also subject to this policy.

Food and Drink Policy
Food, drinks, and tobacco products are prohibited in Eastfield College classrooms.

The guidelines in this syllabus may be changed, deleted or amended at any time by the instructor.
## Class Schedule

<table>
<thead>
<tr>
<th>Week</th>
<th>Class Lesson</th>
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<tbody>
<tr>
<td>February 2 - 8</td>
<td>Chapter 1: Understanding Our Environment</td>
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| February 9 - 15  | Chapter 2: Environmental Systems  
                     *Lab 1: Scientific Method*                                                 |
| February 16 - 22 | Chapter 3: Evolution, Species Interactions, and Biological Communities  
                     *Exam 1: Chapters 1, 2 and 3*                                            |
| February 23 – March 1 | Chapter 4: Human Populations  
                     *Lab 2: Human Populations*                                                |
| March 2 – 8      | Chapter 5: Biomes and Biodiversity                                            |
| March 9 – 15     | Chapter 6: Environmental Conservation  
                     *Lab 3: Natural Area Visit*                                               |
| March 16 - 22    | SPRING BREAK – NO CLASSES!                                                   |
| March 23 - 29    | Chapter 7: Food and Agriculture  
                     *Exam 2: Chapters 4, 5 and 6*                                             |
| March 30 – April 5 | Chapter 8: Environmental Health  
                     *Lab 4: Properties of Soils*                                               |
| April 6 - 12     | Chapter 9 and 10: Air: Climate and Pollution  
                     *Lab 5: Air Quality and Pollution*                                         |
| April 13 - 19    | Chapter 11: Water: Resources and Pollution  
                     *Exam 3: Chapters 7, 8, 9 and 10*                                         |
| April 20 - 26    | Chapter 13: Energy  
                     *Lab 6: Water Quality*                                                     |
| April 27 – May 3 | Chapter 14: Solid and Hazardous Waste  
                     Lab Exam                                                                    |
| May 4 – 10       | **Final Exam – Chapters 11, 13 and 14**                                       |

Note: This schedule is tentative. Any changes will be announced ahead of time. This schedule does not include the assignment dates. Look for assignment dates and instructions on e-campus.