BIO 117, ENVIRONMENTAL SCIENCE LAB * SUMMER I - 2008 *

LAB DATES:	LAB EXERCISE(S) TO	BE READ BEFORE CLASS:
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4 & 5 June 1. Use of the Metric System

2. Dynamics of an Ecosystem 3

3. Populations and Growth Dynamics

9 & 10 June 4. Interactions of Species

11 & 12 June 5. Primary Productivity

7. Soils: Physical and Chemical Characteristics

16 & 17 June 8. Water 🗘

18 & 19 June 6. Ecological Field Sampling 3

23 & 24 June 9. Air Quality and Acid Deposition

25 & 26 June 11. Wastewater Treatment ©

Final Exam Review

30 June & 1 July Final Exam Given during your regular lab time.

Cumulative! All fill-in-the-blank!

• Weather permitting, the class will be going outdoors for all or most of these lab periods. Please dress appropriately; wear closed, comfortable walking shoes and durable clothes! All field-trips are subject to schedule changes in the case of inclement weather.

Laboratory Coordinator Mrs. Rose

LDB 302

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Responsibilities of The Lab Student

- **Preparation** *BEFORE your lab period*, read the laboratory exercise thoroughly. Underline items of procedure and terms which are not clear to you. Careful reading of the assignment prior to the laboratory is like studying a road map before making a trip; it helps to know where one is going.
- **Use and Care of Equipment** Understand the directions for proper use of equipment prior to turning knobs or flipping switches. The life and usefulness of even the simplest item of equipment is lengthened by observing proper care and respect.
- Work Area Keep your work area neat and clean. Paper, specimens, and used chemicals are to be disposed of in the receptacles indicated by your instructor. Do not leave your lab table cluttered. Do not dump trash items in the sinks or broken glass containers! Before leaving the laboratory be certain that your lab table is clean, all equipment and lab materials are returned to the designated storage areas, and your lab stool pushed back in place at the table.
- **Laboratory Safety** Use care and respect in handling all chemicals. Clothing can be damaged by spills, and injury to the skin can occur. When a caustic chemical comes in contact with the skin or in the eyes, immediately flood the affected area with copious amounts of water. The eye wash station is located at one of the sinks in the laboratory. Flushing the affected area for at least 15 minutes is recommended. Clothing that is contaminated should be removed and washed before being worn again. The handling and heating of chemicals should be done with care. Use protective goggles to prevent eye injury. First aid kits are in each lab room as are fire extinguishers.

Attendance Policies

Every student is expected to attend each lab session, arrive on time and remain in class for the prescribed lab period. Attendance is recorded by the weekly quiz/data sheet grade. An absence = "0" on the weekly grade.

- 1. Quizzes are given at the beginning of each lab period. Students who arrive late will not be allowed to take the quiz!
- 2. *Under no circumstances will a student be allowed to leave class before the lab exercise has been completed.* Any student who leaves class before completing the lab exercise will be considered absent and a "0" will be recorded.

3. Each absence will be recorded as a "0" score on the weekly grade.

School Related Absences Students involved in school related events and activities will be allowed to reschedule their lab class when conflicts arise. *Prior to the absence*, the student must bring a written confirmation of participation in the activity from the faculty sponsor to the Laboratory Coordinator in LDB 302. Arrangements will be made for the student to make up the absence. *Absolutely DO NOT WAIT until after the absence to confer with the Lab Coordinator!*

Personal Absences All other absences (appointments, emergencies, etc.) will be considered personal absences and any quizzes missed cannot be made up. If a student wishes to attend a different lab section to keep up with the material, they may do so. Permission to attend a different section must be obtained from the Lab Coordinator. In the case of illness requiring a physician's treatment or a death in the family, appropriate documentation (i.e. a note from the doctor or funeral home bulletin) must be presented to the Lab Coordinator for rescheduling of a lab period and quiz.

Lengthy Absences Any student who is absent from the university for longer than one lab period due to illness may make arrangements with the Lab Coordinator to make up the material and quizzes missed. You must present a letter from your Doctor to the Lab Coordinator!

Grading Policies

Lab grades will be determined as follows:

70% - Average of weekly grades (quiz/lab exercise score)

30% - Final Exam

Weekly Quiz/Lab Exercise Score This grade is recorded each week and will be a combination of a multiple choice quiz over the previous lab period, a few fill-in-the-blank practical questions, and an in-class lab exercise assignment that will be completed during the lab exercise.

You will need a scantron #815-E and a No. 2 pencil for the multiple choice portion of the quizzes.

Drop Grade Each student's ONE lowest weekly score will be dropped before the weekly average is calculated. This is done to allow for those times when you may not be able to make it to lab for one reason or another such as: illness lasting longer than the lab week, flat tire, car trouble, you forgot you had lab, etc. **Use this judiciously, you only get ONE.**

Final Exam Will review the material covered in lab. Questions will be worded in a fashion very similar to those seen on the weekly quizzes.

Grades will be assigned according to the following scale:

- A 90-100%
- B 80-89 %
- C 70-79 %
- D 60-69 %
- F 0-59 %

There will be NO extra credit assignments!

There will be NO curve of any kind on any grades!

All students are required to participate in lab exercises! NO EXCEPTIONS!

- Students with a disability which affects their academic performance are expected to arrange for a conference with the instructor in order that appropriate strategies can be considered to ensure participation and achievement opportunities are not impaired.
- Any student that will miss lab due to Religious Holy Day(s) must notify the lab coordinator in writing by the twelfth semester class day during a regular semester and the fifth semester class during a summer session, so that appropriate arrangements can be made!
- **All students are expected to take personal responsibility for themselves and the constructive use of their lab time for study and learning. Be prepared for class before you even leave home! Do not leave lab early!
- All personal electronic devices such as cell phones, iPods, MP3s, PDAs, etc. must be turned off before entering the lab room. Cell phone use is absolutely prohibited during lab. The use of these devices during a quiz or exam will result in a zero for that test and possibly the lab course.
- Students are expected to be courteous to each other as well as to the lab instructor. Please listen quietly while the lab instructor is speaking to the class. Please do not talk to anyone during the quizzes and exams. Please do not use foul language in the lab room. Students causing a disturbance during class may be asked to leave.

- Due to safety requirements, food and drink are prohibited in the lab room.
- Due to safety requirements, all students must wear enclosed shoes to lab. Please do not wear sandals or any other type of open shoe in the lab room. You will be sent home to change your shoes.
- Any student taking a "make-up" mid-term or final exam must present appropriate documentation for their absence from their regularly scheduled exam. Example: doctor's note, obituary, court summons, proof of incarceration during exam time, etc.

 These students must also present a photo ID when attending the "make-up" exam. If a student misses their regular exam and the make-up exam time stated on the syllabus, they will either not be allowed to make-up the exam, or they will be required to complete an essay exam pending presentation of appropriate documentation.

Colored pencils are very helpful when drawing specimens and labeling diagrams. You are strongly encouraged to bring some for your own personal use.

REQUIRED BOOKS: *Introductory Environmental Science - BIO 117 Lab Manual* by the Department of Biological Sciences, Sam Houston State University. *Laboratory Manuals must be purchased NEW each semester.*