**BIO 114, CONTEMPORARY BIOLOGY LAB**  
Summer I 2008

<table>
<thead>
<tr>
<th>LAB DATES</th>
<th>LAB EXERCISES TO BE READ BEFORE LAB:</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 &amp; 5 June</td>
<td>1. Introduction to Biology</td>
</tr>
<tr>
<td></td>
<td>2. Using the Microscope to Investigate the Diversity of Life</td>
</tr>
<tr>
<td>9 &amp; 10 June</td>
<td>Complete Chapter 2.</td>
</tr>
<tr>
<td></td>
<td>3. Investigating the Diversity of Life: Plant &amp; Animal Cells</td>
</tr>
<tr>
<td>11 &amp; 12 June</td>
<td>4. Mitosis: Cells Arise from Pre-existing Cells</td>
</tr>
<tr>
<td></td>
<td>5. Stem Cells and Development</td>
</tr>
<tr>
<td>16 &amp; 17 June</td>
<td>6. Genetic Engineering</td>
</tr>
<tr>
<td></td>
<td>7. Introduction to Meiosis and Genetics</td>
</tr>
<tr>
<td>18 &amp; 19 June</td>
<td>8. Evolutionary Processes</td>
</tr>
<tr>
<td></td>
<td>9. Population Genetics and Evolution</td>
</tr>
<tr>
<td>23 &amp; 24 June</td>
<td>10. Introduction to Ecology</td>
</tr>
<tr>
<td></td>
<td>11. Human Reproduction</td>
</tr>
<tr>
<td>25 &amp; 26 June</td>
<td>12. Bearkats' Journal</td>
</tr>
<tr>
<td></td>
<td>Review for final exam</td>
</tr>
<tr>
<td>30 June &amp; 1 July</td>
<td>Final Exam given during your regular lab time. Chapters 1-12</td>
</tr>
</tbody>
</table>

**Laboratory Coordinator:**  
Mrs. Rose  
LDB 302  
(936) 294-1542  
Bio_lah@shsu.edu

**Laboratory Instructor:**  
Mr. Cureton  
LDB 308  
(936)294-4252  
Jcc009@shsu.edu
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 is 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/datasheet/class assignments 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. Two absences during the semester will not affect a student’s weekly average. See “Drop Grade” in the Grading Policies.
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.

Personal Absences  All other absences (appointments, emergencies, etc.) will be considered personal absences and any labs missed can be made-up at the discretion of the Laboratory Coordinator. Permission to attend a different lab section for a make-up lab must be obtained from the Lab Coordinator in LDB 302.

Lengthy Absences  Any student who is absent from the university for longer than two weeks due to illness or personal or family tragedy needs to contact the Dean of Students. The Biology Laboratory Coordinator (LDB 302, 294-1542) should also be contacted to make arrangements 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/homework score)

- 30% = Final Exam

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

**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 two lowest weekly scores 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 these judiciously, you only get two.**
Mid-Term & Final Exam  These will review the material covered in lab. Questions will be
worded in a fashion very similar to those seen on the weekly quizzes. There will be
approximately 60 – 150 questions. You must take these exams with your regularly
scheduled lab section. If you cannot make that time you must take it during the scheduled
make-up exam time seen on the first page of your syllabus.

- 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.

Grades will be assigned according to the following scale:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>90-100%</td>
</tr>
<tr>
<td>B</td>
<td>80-89%</td>
</tr>
<tr>
<td>C</td>
<td>70-79%</td>
</tr>
<tr>
<td>D</td>
<td>60-69%</td>
</tr>
<tr>
<td>F</td>
<td>0-59%</td>
</tr>
</tbody>
</table>

There will be NO EXTRA CREDIT assignments!

There will be NO BONUS QUESTIONS!

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 day during the 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! Don not leave lab early!

• All personal electronic devices and video recording devices must be turned off before entering the lab room. The use of cell phones, iPods, PDAs, MP3s, etc. is absolutely prohibited during lab. The use of such 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.

• Video-taping and photography of “any kind” is prohibited during lab and review times!

• 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: Biology 114 Laboratory Manual for Contemporary Biology 2007-2008 by the Department of Biological Science, Sam Houston State University. Hayden McNeil Publishers. Laboratory Manuals must be purchased NEW each semester.