FUNCTIONAL ANATOMY

LECTURE SECTION
BIOL-3425.001
Tues. and Thurs., 2:00-3:15 PM
Engineering Building (EN)-106

LABORATORY SECTIONS
BIOL-3425.101 Mon., 8:00-10:50 AM
BIOL-3425.102 Mon., 11:00 AM -1:50 PM
BIOL-3425.103 Mon., 2:30 – 5:20 PM
BIOL-3425.104 Mon., 6:00 -8:50 PM
Center for Instruction (CI)-206

INSTRUCTOR:
DR. DAVID MOURY (Ph.D.)
Office: Center for Instruction (CI)-370
Office Phone: (361) 825-2241
E-mail: david.moury@tamucc.edu
Office Hours: Tuesday and Thursday 3:30-5:00 PM; Wednesday and Friday 10:00-11:00 AM

TEACHING ASSISTANTS:
TO BE ANNOUNCED

Students may make appointments to see us at times other than those listed above. If we are unavailable or need to relocate during office hours, we will post a note on the appropriate office or laboratory door.

REQUIRED TEXT:

REQUIRED LABORATORY MANUAL:

REQUIRED LABORATORY GUIDE:

REQUIRED ITEMS:
A laboratory coat is required for laboratory.

SUGGESTED ITEMS:
http://en.wikibooks.org/wiki/Anatomy_and_Physiology_of_Animals
http://en.wikibooks.org/wiki/General_Anatomy
http://en.wikibooks.org/wiki/Biomechanics

PREREQUISITES:
General Biology I and II (BIOL 1406 and 1407).

COREQUISITES:
Each student must complete laboratory safety instruction to remain in the laboratory, and must attend the laboratory section for which he or she registered.

COURSE OVERVIEW:
Functional Anatomy (BIOL 3425) is an upper-division, lecture-laboratory course that introduces students to the gross anatomy (i.e., anatomy of organs and organ systems) of the chordates. This course relates the form and function of “structures” (usually organs and organ systems) in various chordates. The comparative
approach (with some knowledge of basic embryology, ecology, physics, and physiology), helps to elucidate many aspects of evolution, but also tends to leave the student with the impression that an organism is a collection of parts rather than an integrated whole. Students should bear in mind that natural selection acts on whole organisms, not on individual structures. Obviously, “structures” never exist in isolation, so the focus of this course helps students integrate structures into a functional whole. Functional anatomy can serve students pursuing a wide variety of careers (e.g., pre-medicine, pre-dentistry, pre-optometry, pre-veterinary medicine, biology education, organismal biology, graduate studies in biology). Because of this, it covers a broader array of material than courses that train students for particular careers. Students—in consultation with their academic advisors—must determine whether this course is appropriate for their academic and/or career plans.

The instructors of this course will provide the students with: (1) information in the form of lectures, films, handouts, assigned readings, and supplemental readings; (2) specimens for hands-on examination; and (3) advice, supervision, and guidance. In lecture, students will spend most of the course learning about functional anatomy in the context of evolution. In laboratory, students concentrate on descriptive anatomy. The topics covered in lecture may not always coincide with the topics covered in laboratory.

**STUDENT LEARNING OUTCOMES:** The goal of this course is to provide the students with an opportunity to learn about the evolution, form, and function of chordates. Rather than just learning to identify “parts,” students should be able to coherently illustrate, explain, discuss, critique, etc. basic concepts in evolutionary and functional morphology. Within each organ system, students will examine tissues and organs, their interactions, and the unique properties that emerge when simpler entities are organized into more complex levels. Students should attend and participate in lectures and laboratories, read the assigned material, and mentally organize information from their instructors, their readings and their laboratory work. For all components that are examined within each topic in the schedule, the student will be expected to…

- Understand and correctly use scientific terminology.
- Recognize and identify structures and their components.
- Understand and explain how structures and their components interact to perform one or more functions.
- Discuss the control mechanisms that regulate a particular structure/function, and what—in turn—that particular structure/function regulates.
- Critique basic concepts in evolutionary and functional morphology
- Explain the structural and/or functional bases of selected clinical conditions, dysfunctions, and disease states that help to elucidate the normal structure and function of the body by perturbing it.

**THE LABORATORY:** In laboratory, students sometimes work individually and sometimes with one or more partners. Laboratories stress recognition, identification and comparison of organs and organ systems in representative chordates through…

- viewing and examining preserved specimens of intact protochordates (non-vertebrate marine organisms), and chordates
- viewing wet and dry preparations of individual organ systems obtained from real animals
• viewing plastic models, drawings, and other artificial displays of animals and individual organ systems
• manipulating dried skeletons and skeletons mounted in plastic
• practicing dissection skills on lampreys, sharks, and cats
• viewing demonstrations of feeding and locomotion by live, unrestrained animals as is appropriate.

REQUIREMENTS FOR LABORATORY: Students must complete a laboratory safety instruction during laboratory. Students who miss the first laboratory (excused absences only) will be allowed to take the instruction during TA office hours or on-line (see the TA for information). Students who do not complete this instruction will not be allowed to remain in the laboratory, and will irrecoverably lose all points associated with the laboratory until they complete the safety instruction. Students should buy (and wear) a laboratory coat. Students must also wear long pants (i.e., leg coverings must reach the ankle; no shorts, cut-offs, or short skirts) and closed-top, closed-heel shoes (e.g., no sandals). Gloves, eye protection, and dissecting supplies will be provided when needed. Students must always wear appropriate attire and bring laboratory coats with them to laboratory. A student without a laboratory coat and appropriate attire will not be allowed to enter the laboratory. (Time lost while a student goes home to get a laboratory coat or appropriate attire is always unexcused, and any points lost during that time cannot be recovered.) Students should bring the Laboratory Guide and any handouts that were distributed with it, the textbook, and the laboratory manual to each laboratory period. No food, drink, or cosmetics are allowed in the laboratory.

SUGGESTED ITEMS: Students may wish to buy a binder (in which to keep your notes and assignments), and a set of colored pencils and/or pens. (Many students find it helpful to add color to their laboratory drawings and lecture notes.)

ACADEMIC ADVISING: As soon as students are ready to declare a major, they should meet with an Academic Advisor. The Academic Advisor will guide the student through the requirements of the major, including developing and maintaining the student’s degree plan and directing the student to an appropriate Faculty Mentor. Academic Advisors for the College of Science & Engineering are located in the Center for Instruction (CI), Suite 350, (361) 825-6094.

TUTORING AND OTHER SERVICES: To be successful in this course, and most others, you must cultivate good note-taking skills, organization skills, study habits, and test-taking strategies from the very beginning. Your instructors are always available for help, but don’t wait until it is too late! The Center for Academic Student Achievement (CASA) (825-5933), and STEM Outreach Access and Retention (SOAR) (825-2618) provide free tutoring, test-taking strategies, and extra help. Take advantage of these services! Should you have test anxiety, stress problems, or need help with study skills, the University Counseling Center (University Center, 825-2703) also provides a free service.

DISABILITY AND VETERANS’ SERVICES: Texas A&M University-Corpus Christi is committed to providing persons with disabilities an equal opportunity to access campus facilities, resources and programs. The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for
persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. Support and accommodations are also available for returning veterans who experience cognitive and/or physical access issues in the classroom or on campus. Our Office of Disability Services arranges such support and academic accommodations. If you believe that you require accommodation for a disability, have cognitive and/or physical access issues, or for more information, call (361) 825-5816 or visit Driftwood 101. It is important to contact the Office of Disability Services in a timely fashion to allow them to review requests and prepare accommodations and accommodation letters. Upon receipt of accommodation letters, students should take them to appropriate instructors as soon as possible. (Instructors are not required to make accommodations prior to receipt of an official accommodation letter.)

**Tentative Lecture Schedule:**

<table>
<thead>
<tr>
<th>DAY</th>
<th>DATE</th>
<th>TOPIC</th>
<th>CHAPTERS*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thurs.,</td>
<td>23 Jan.</td>
<td>Introduction</td>
<td>1-5</td>
</tr>
<tr>
<td>Tues.,</td>
<td>28 Jan.</td>
<td>Integumentary System</td>
<td>6</td>
</tr>
<tr>
<td>Thurs.,</td>
<td>30 Jan.</td>
<td>Integumentary System, continued</td>
<td></td>
</tr>
<tr>
<td>Tues.,</td>
<td>4 Feb.</td>
<td>Skeletal System</td>
<td>7-9</td>
</tr>
<tr>
<td>Thurs.,</td>
<td>6 Feb.</td>
<td>Skeletal System, continued</td>
<td></td>
</tr>
<tr>
<td>Tues.,</td>
<td>11 Feb.</td>
<td>Skeletal System, continued</td>
<td></td>
</tr>
<tr>
<td>Thurs.,</td>
<td>13 Feb.</td>
<td>Skeletal System, continued</td>
<td></td>
</tr>
<tr>
<td>Tues.,</td>
<td>18 Feb.</td>
<td>Muscular System and Movement</td>
<td>10</td>
</tr>
<tr>
<td>Thurs.,</td>
<td>20 Feb.</td>
<td>Muscular System, continued</td>
<td></td>
</tr>
</tbody>
</table>

End of Material for Lecture Examination I

| Thurs.,  | 27 Feb.   | LECTURE EXAMINATION I                | 11        |
| Tues.,   | 4 March   | Respiratory System                   |           |
| Thurs.,  | 6 March   | Respiratory System, continued        |           |
| 10-14 March | Spring Break—No Classes                 |
| Tues.,   | 18 March  | Digestive System                     | 13        |
| Thurs.,  | 20 March  | Digestive System, continued          |           |
| Tues.,   | 25 March  | Circulatory System                   | 12        |
| Thurs.,  | 27 March  | Circulatory System, continued        |           |
| Tues.,   | 1 April   | Circulatory System, continued        |           |

End of Material for Lecture Examination II

| Thurs.,  | 3 April   | Urogenital System                    | 14        |
| Tues.,   | 8 April   | LECTURE EXAMINATION II               |           |
| Thurs.,  | 10 April  | Urogenital System, continued         |           |
| Tues.,   | 15 April  | Endocrine System                     | 15        |
| Thurs.,  | 17 April  | Endocrine System, continued          |           |
| Tues.,   | 22 April  | Nervous System                       | 16        |
| Thurs.,  | 24 April  | Nervous System, continued            |           |
| Tues.,   | 29 April  | Sensory Organs                       | 17        |
| Thurs.,  | 1 May     | Sensory Organs, continued            |           |

End of Material for Lecture Examination III

| Tues.,   | 6 May     | LECTURE EXAMINATION III              |           |

End of Material for Final Examination

| Tues.,   | 13 May    | FINAL EXAMINATION (1:45-4:15 PM)     |           |

*Chapters in Kardong (2012); reading these chapters is a standing class assignment.
**Tentative Laboratory Schedule:**

<table>
<thead>
<tr>
<th>DAYS</th>
<th>DATES</th>
<th>TOPIC</th>
<th>CHAP. *</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mon.</td>
<td>27 Jan.</td>
<td>Laboratory 1: Microscopes and Integument</td>
<td>3</td>
</tr>
<tr>
<td>Mon.</td>
<td>3 Feb.</td>
<td>Laboratory 2: Vertebrate Origins</td>
<td>1-2</td>
</tr>
<tr>
<td>Mon.</td>
<td>10 Feb.</td>
<td>Laboratory 3: Skeletal System I</td>
<td>4-5</td>
</tr>
<tr>
<td>Mon.</td>
<td>17 Feb.</td>
<td>Laboratory 4: Skeletal System II (MQ1)</td>
<td>6</td>
</tr>
<tr>
<td>Mon.</td>
<td>24 Feb.</td>
<td>Laboratory 5: Muscular System I</td>
<td>7</td>
</tr>
<tr>
<td>Mon.</td>
<td>3 March</td>
<td>Laboratory 6: Muscular System II (Lab Quiz 1)</td>
<td>7</td>
</tr>
</tbody>
</table>

End of Material for Laboratory Practical Examination I

<table>
<thead>
<tr>
<th>Mon.</th>
<th>10 March</th>
<th>Spring Break—No Classes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mon.</td>
<td>17 March</td>
<td>LABORATORY PRACTICAL EXAMINATION I</td>
</tr>
<tr>
<td>Mon.</td>
<td>24 March</td>
<td>Laboratory 7: Viscera</td>
</tr>
<tr>
<td>Mon.</td>
<td>31 March</td>
<td>Laboratory 8: Circulatory System I</td>
</tr>
<tr>
<td>Mon.</td>
<td>7 April</td>
<td>Laboratory 9: Circulatory System II</td>
</tr>
<tr>
<td>Mon.</td>
<td>14 April</td>
<td>Laboratory 10: Urogenital System (MQ2)</td>
</tr>
<tr>
<td>Mon.</td>
<td>21 April</td>
<td>Laboratory 11: Nervous System (MQ3)</td>
</tr>
<tr>
<td>Mon.</td>
<td>28 April</td>
<td>Laboratory 12: Sensory Receptors (Lab Quiz 1)</td>
</tr>
</tbody>
</table>

End of Material for Laboratory Practical Examination II

| Mon. | 5 May    | LABORATORY PRACTICAL EXAMINATION II         |

*Chapters in Homberger and Walker (2004); reading these is a standing class assignment.

**Religious Holy Days:** Any student who will miss class and/or test days because of recognized religious holy days should notify me as soon as possible so we can make alternative arrangements. Prior notification is required for such absences to be excused.

**Major Course Requirements / Grading:** Your final letter grade will be based on the percentage you earn out of a possible 1000 points, which are distributed as follows:

**Lecture (750 points):**
- Examinations and/or Final 600 points
- Memorization Quizzes (3) 150 points

**Laboratory (250 points):**
- Practical Examinations (2) 200 points
- Laboratory Quizzes (2) 50 points

Statistical manipulations (e.g., curving) may be performed once—at the end of the semester—*not* for each examination. The final grading scale will also be determined at the end of the semester, but the cut-off for each grade will be *no higher* than the following:

**A ≥ 90% > B ≥ 80% > C ≥ 70% > D ≥ 60% > F**

**Lecture Examinations:** In this course, I will give four lecture examinations (totaling 600 possible points—which is 60% of the final course grade). I will take questions for these tests primarily from material covered in the lectures, from handouts, from readings in Kardong (2012).

Lecture examinations may consist of essay, short-answer, compare-contrast, fill-in-the-blank, multiple-choice, matching, making and/or labeling drawings, and/or various types of “flex” questions (i.e., anything is fair game). The first three examinations are worth 200 points each and are sequential (i.e., each examination covers material from one specific section of the course). The final (lecture)
examination is worth up to 600 points and is comprehensive (i.e., covers material from the entire course). You will receive the number of points that you score on the…

1) the final examination alone (Possible points = 600)…

or 2) the sum of the three lecture examinations (Possible points = 600)…

or 3) the sum of the lecture examinations using the (pro-rated) final to replace the lowest lecture examination (Possible points = 600)…

… whichever is highest.

Memorization Quizzes (MQ): Three quizzes (totaling 150 possible points—which is 15% of the final course grade) will be given in the laboratory periods (see schedule for dates). These Memorization Quizzes are worth fifty (50) points each, and will cover the following topics:

• MQ1: muscle origins, insertions, and actions taken from the tables of mammalian (cat) muscles (pp. 42-44) in Laboratory 6 of the Laboratory Guide for this course.
• MQ2: endocrine system—names, numbers, fiber types and region innervated taken from the table in Appendix 5 (pp. 103-104) of the Laboratory Guide for this course.
• MQ3: cranial nerves—names, numbers, fiber types and region innervated taken from the table in Laboratory 11 (p. 71) of the Laboratory Guide for this course.

Laboratory Points: The laboratory is worth 250 possible points (which is 25% of the final course grade). Questions for laboratory practicals and quizzes come primarily from handouts in laboratory, from readings in Homberger and Walker (2004), and from readings in Kardong (2012).

Two laboratory practical examinations (100 points each) will be given during the laboratory periods. These will follow the laboratory practical format in which students move from station to station (one minute per station), giving short answers to questions (e.g., “Identify the structure,” “Give the function of the structure,” “From which layer of the skin is this structure derived?,” etc.). Answers to all questions in the laboratory are written; there are no multiple choice questions in laboratory. Laboratory practical examinations are sequential (i.e., Laboratory Practical II is not comprehensive).

The other 50 laboratory points come from two laboratory quizzes (25 points each, see laboratory schedule for dates). Questions for these laboratory quizzes will be taken from laboratory exhibits and demonstrations, and from assigned readings in the Laboratory Guide, textbook, and laboratory manual. Students are expected to read the laboratory before attending the laboratory. Do not attempt to “cram” the week before a quiz or laboratory practical examination.

Bonus Points: Individual extra credit is not possible, but extra points are built into all examinations (as extra questions). At least 20 bonus points are available in laboratory. In laboratory, a dissection bonus will be given to each member of a dissection group for 1) removal of the inner ear of the shark, intact (10 points); and/or 2) removal of the brain of a mammal with both eyes attached (10 points). Additional opportunities for the entire class to earn extra bonus points may be announced during
the semester (e.g., attendance at a special lecture, written reports, library searches, web searches, etc.). Such opportunities may be announced only once, so be in class/laboratory, be on time, and stay for the entire period. Bonus points cannot be made up—period.

**DROPPING THE COURSE (OR NOT):** Always consult your instructor before dropping a class! If you drop the class before the final “drop date,” Friday 11 April 2014, you will receive a grade of “W” for that class. (Withdrawing from the University means receiving a grade of “W” for all classes for the semester. The final withdrawal date is Monday 5 May 2014.) There are consequences for dropping a class, so read the drop policy in the University Catalog (better still, see your academic advisor and someone in the financial aid office) before you drop any class. **IMPORTANT:** Simply stopping attendance and participation in a class **WILL NOT** automatically result in a student being dropped from the class; the student must initiate the “drop” process by going to the Student Services Center and filling out a course drop form. In the middle of the semester, you are likely to receive mid-term grade reports (either on S.A.I.L. or through some other means). If you have a lower mid-term grade than you wish, it should concern you, but not frighten you. (Remember that there are more opportunities to earn points and boost your grades in the last half of most courses than in the first half.) Talk to your instructors (not just to other students) to explore your options. Also note that the mid-term grades posted on S.A.I.L. are not official, not a guarantee and are never updated; once they are posted they cannot be changed even if your grade in the class does change.

**GRADE APPEALS:** A student who believes that he or she has not been held to appropriate academic standards as outlined in the class syllabus, equitable evaluation procedures, or appropriate grading, may appeal the final grade given in the course. The burden of proof is on the student to demonstrate the appropriateness of the appeal. A student with a complaint about a grade is encouraged to first discuss the matter with the instructor. For complete details on the process, including the responsibilities of the parties involved in the process and the number of days allowed for completing the steps in the process, consult Texas A&M University-Corpus Christi University Procedure 13.02.99.C2.01 Student Grade Appeal Procedures (http://www.tamucc.edu/provost/university_rules/index.html), and the College of Science and Engineering Grade Appeals webpage (http://sci.tamucc.edu/students/GradeAppeal.html). For assistance and/or guidance in the grade appeal process, students may contact the chair or director of the appropriate department or school or the College of Science and Engineering Dean’s Office.

**ATTENDANCE POLICIES:** My attendance policy is the same as that stated in the University Catalog. Attendance is the student’s responsibility, and students are expected to attend, be on time for and remain the entire period in every class. Attendance is not used to determine grades. In lecture, even when I take roll, I **do not** give—per se—a bonus for attendance, nor a penalty for absence (except for missing an examination, bonus points, or an assignment). (Note that I may choose to have “pop” quizzes, and/or “attendance” quizzes as part of the bonus points.) Coming to lecture on a regular basis should result in a higher grade, and if you come to class often, it will help you do well in this course.
Absences: You are responsible for the material covered and assignments made in every lecture regardless of whether you attend it. “I came in late and didn’t hear about the assignment,” is never an acceptable excuse. It is always your responsibility to determine what happened in class during your absence. If you are absent, tardy, or leave early, I will provide you with copies of assignments (including “bonus point” assignments) and handouts if—and only if—you ask for them. (In other words, I will not, “track down” absentees to make sure that they know about assignments.) You must obtain class notes from other students. Because developing note-taking skills is a necessary skill, I do not “share” or “post” my notes or PowerPoints.

Points missed because of an unexcused absence (including tardiness and leaving early) cannot be recovered. An excused absence allows us to make alternative arrangements for completing assignments. The documentation required for an absence to be excused must be...

- from an appropriate source (e.g., doctor, dentist, funeral director) who states the nature of the event that caused (or will cause) your absence.
- in writing, on official stationery, and signed. (I do not return excuses to you.) Telephone calls, FAXes, and e-mails are not acceptable.
- presented prior to the absence for a scheduled event (e.g., university-sponsored activity, recognized religious holiday, military service).
- presented no more than one week after the date of an unexpected absence.

There Are NO Individual Make-up Examinations: The grading formulas above give you three chances to earn points from lecture examinations: method 1 or 3 if you miss one lecture examination; method 1 if you miss more than one lecture examination; method 2 if you miss the final examination.

Miscellaneous Policies Regarding Attendance:
Unacceptable Excuses: Once enrolled in a class, it is the student’s responsibility to arrange his or her schedule (work and personal) so that no regularly scheduled class or examination time is missed. Only unavoidable absences are excused, so routine personal events (e.g., vacations, weddings, birthday celebrations, reunions, non-emergency medical or dental visits, parent-teacher conferences, household or auto repairs) should be scheduled to avoid conflicts with classes. Oversleeping is never an acceptable excuse. Employment conflicts and school or work interviews should be arranged to avoid conflicts with your classes and are not acceptable excuses for absences, tardiness, or leaving class early. Texas waives jury duty for students, so jury duty is not an acceptable excuse.

“Pre-Tests”: For some scheduled events (athletics, military duty, etc.), you may arrange to take a lecture examination before (but not after) its scheduled date. (You should take a test as close to its originally scheduled time as possible, but you may not take a test more than one week before its originally scheduled time. You must obtain your instructor’s approval at least one week before you wish to take the pre-test.) If you arrange to take any test at an alternate time and do not show for that appointment, then you forfeit the opportunity to take the test except at its originally scheduled time. Students who do not arrange to take examinations in advance will not be eligible for this special consideration. A written excuse from the university
department involved or from the Office of Student Engagement and Success is required.

The instructor—in consultation with Dr. Don Albrecht, Vice President for Student Engagement and Success—will determine if circumstances warrant giving an individual a make-up test after the original test. A make-up test given after the original test will be all written (i.e., no multiple choice or matching), and it will be administered on the “Reading Day” for the semester.

**Late Assignments:** You may always turn in assignments early. Except for excused absences, late assignments will not be accepted. If you know in advance that you will have an excused absence when an assignment is due, you must turn in that assignment before its due date. You should turn in assignments that were missed because of an unexpected, excused absence as soon as possible.

Any situations for which you cannot provide an acceptable excuse as outlined above (e.g., “I have an excuse, but it is too personal to discuss with you”) will be referred to Dr. Don Albrecht, Vice President for Student Engagement and Success.

**EXPECTATIONS:** You are adult university students. I will treat you as such, and I will expect you to act as such.

**You will act with courtesy and common sense.** I will not tolerate disruptive, disrespectful, or abusive behavior/language (including comments made on class assignments) directed toward anyone in this class (i.e., student or instructor). Violations range from talking during class to outright insubordination, and will result in penalties that range from the student being asked to stop to the student being “escorted” from the class—permanently. Cellular phones, pagers, and other “beepers” must be silenced *BEFORE* you enter the classroom. Children are *not* allowed in the rooms during lecture periods, or when the child’s guardian is working or studying “after hours.” Use of tobacco products (of any kind) is forbidden in lecture.

**You will act like a responsible adult.** You are responsible for your own education. You should not expect an instructor to take you by the hand, show you everything you need to know, and then have you regurgitate this information on an examination. This is *not* an effective way for self-motivated adults to learn. Students are responsible for all class and lecture notes; required assignments in the textbook and any additional handouts or assignments given by an instructor. This includes (but is not limited to)...

- Knowing and meeting university-imposed deadlines (e.g., withdrawal dates of various types). This information is found in the online University Catalog, Course Schedule or elsewhere on the University website.
- Knowing and meeting assignment dates and times—including any changes that may occur during the semester.
- Checking your answers against a key as soon as possible. By all means check for any clerical errors, but a test score is *not* the end of the learning process. Always review your tests to determine *why* you missed questions. Making—and correcting—mistakes is an effective, natural way to learn material. Educators have a fancy term, *reflective learning*, for this simple process.
• Keeping track of your progress (i.e., your grades, points you earn, and averages).
• Asking for help. Instructors are available for consultation and extra help, but it is the student’s responsibility to request help.

**Learning is more than just reading, taking notes, and memorizing.** Reading and taking notes puts information in short-term memory where it is forgotten quickly unless you do something with it. Memorizing, though important, is but the first step in the learning process. As university students, you should be able to link, combine, and synthesize the bits of data that you memorize into useful concepts.

**Scholastic dishonesty will not be tolerated.** It will be prosecuted to the full extent of university regulations. All students are expected to be familiar with the Academic Honesty Statement found in the University Catalog. In addition, the following procedures will be enforced:
• You must be prepared to present a photo ID at all examinations.
• Different test forms may be prepared for a single examination. To ensure that the appropriate key will be used to grade your answer sheet, always follow instructions on the test or answer sheet, or given orally by the instructor.
• If you leave an examination room—for any reason—you must hand in your answer sheet and you will not be allowed to resume the examination. Attend to personal matters (e.g., rest room visits) before the examination.
• Be on time! **Anyone arriving after the first test-taker has completed an examination and left the room will not be allowed to take that examination.**
• Cheating and plagiarism are unacceptable behaviors.
  1. Students are not to give or receive help during testing
  2. Students are not to submit any work that is not their own product

**IMPORTANT MISCELLANEOUS NOTES:**
• Follow instructions! The most common mistakes that cost students points result from failure to follow instructions.
• Bring two #2 pencils to each lecture examination (including the final examination); I neither provide nor sell pencils. (I will provide Scantron sheets for you.)
• Bring paper and a writing implement to each class period. Handwritten assignments will be accepted **only** if they are written in **pencil, blue ink, or black ink.** (You will get a permanent “zero” on the assignment if you write with anything else.)
• Grammar counts—period! Poor grammar will cost you points—especially on assignments and presentations.
• Spelling counts! To even be considered for partial credit, your answer must phonetically sound like the word that you are trying to spell. Examples of answers that are incorrect:
  • Grossly misspelled words (e.g., “crevurfian pleat” for “cribriform plate”).
  • Ambiguous answers (e.g., “tibula”—could be “tibia,” could be “fibula”).
  • Illegible answers (e.g., “ep-squiggle-squiggle-squiggle” for “epididymis”).
• After an assignment is returned, you have one (1) week to notify me of clerical, mathematical, and/or other errors. I will rectify any such errors, but I will not change a legitimate grade just because you “need” it.
• I will not change a legitimate course grade just because you “need” it either (for financial aid, to get into professional school, etc.). The grading section of this syllabus describes how I assign grades. Please be sure you earn enough points to get the grade you want. There will always be someone who just missed a D, or a C, or a B, or an A. Although I reserve the right to curve, doing so is usually not necessary. (Curves are based on statistical analysis of the entire class’s performance, not on the needs of individual students.) I have to draw lines between grades, and no matter where I draw them, someone is on the wrong side. Don’t let that someone be you. You have plenty of help in my class. Take advantage of the resources I offer. The reasons for receiving a grade of “I” (incomplete) are clearly defined in the University Catalog; this “grade” cannot be used simply to prevent a student from receiving an unwanted grade in a class.

• I only discuss grades in person (i.e., I do not discuss grades or matters relating to grades over the telephone or by e-mail). If you wish to know your final grade before the official grade report is mailed to you, please see me in person or provide me with a self-addressed, stamped envelope.

**COMPUTER ACCESS:** Use of a computer is important to this course (and many others). Students will need a computer to access e-mail, listservs, the worldwide web, the Bell Library catalogs and databases, and to prepare written assignments and slide/poster presentations. Computers are available for student use in Computer Laboratories around campus. Computer Laboratories are staffed with helpful personnel, and have generous operating hours. The University sets up a computer account for each student, and it is available from the first day of classes. Call the Student Computer Helpline at (361) 825-5618 for more information.

**AN IMPORTANT LISTSERV:** The “Opportunities” listserv is sponsored and operated by the College of Science and Engineering, but anyone on campus may subscribe. Periodically, useful information (e.g., scholarship or job opportunities) is posted here. To subscribe, go to [http://www.sci.tamucc.edu/mailman/listinfo/opportunities-list](http://www.sci.tamucc.edu/mailman/listinfo/opportunities-list) and follow the directions. If you follow the subscription instructions, but fail to receive a confirmation e-mail, please try again. You must receive, and reply to, the confirmation e-mail to complete the subscription process. If you decide that the listserv has nothing to offer you, the website contains instructions for removing your name (“unsubscribing”).

**GENERAL DISCLAIMER:** We reserve the right to modify the information, schedules, assignments, deadlines, and policies in this syllabus if and when necessary. Whenever possible, we will announce such changes in a timely manner during regularly scheduled lecture or laboratory periods. We will not attempt to contact students who were absent when an announcement was made. Nevertheless, all students are responsible for abiding by all announced changes, and it is a student’s responsibility to obtain this information. In rare cases, some modifications may be implemented without prior warning.