

UNIVERSITY OF SOUTHERN MISSISSIPPI
Hattiesburg, Mississippi 39406
BIOLOGICAL SCIENCES

BSC 251 ANATOMY & PHYSIOLOGY LABORATORIES

FALL 2007

THE LABORATORY SCHEDULE

WEEK	MONTH DATE	DAY	LABORATORY EXPERIMENT
1	AUG 22	W	ANATOMY: Nervous System including Brain and Spinal Cord (Exercises 27,28,30,33,34) [Booklet page vi] Journal Entry: Spinal Cord Injury
2	29	W	PHYSIOLOGY: Reflex Physiology and Aspects of Vision (Exercises 29 & 37) [Quiz #1]
3	SEPT 5	W	ANATOMY: Anatomy of the Eye and the Ear (Exercises 36,38) [Booklet page vii] Journal Entry: Colorblindness
4	12	W	ANATOMY: LAB PRACTICAL (Exercises: 27,28,30,33,34,36&38) [Anatomy Booklet pages vi-vii]
5	19	W	PHYSIOLOGY: Physiological Aspects of Hearing and Equilibrium (Exercises 39,40) [Quiz #2]
6	26	W	Physiology: Anatomy and Physiology of Taste, Smell, and Touch (Exercises 41, 42, 43) [Quiz #3] {1st part of Journal Due—15 Entries!}
7	OCT 3	W	Anatomy: Anatomy of the Digestive System (Exercise 58) [Booklet page viii] Journal Entries: Critical Thinking: Urinalysis & Moral/Ethical Issue
8	10	W	Physiology: Enzymatic Action in Digestion (Exercise 60) [Quiz #4]
9	17	W	Anatomy: Anatomy of the Urinary System (Exercise 62) [Booklet page ix]
10	24	W	PHYSIOLOGY: Urine Analysis (Exercise 64) [Quiz #5]
11	31	W	ANATOMY: Anatomy of Male and Female Reproductive Systems; Endocrine System: An Overview (Exercises 66, 67 & 44) [Booklet page x]
12	NOV 7	W	ANATOMY: Fertilization and Early Development (Exercise 70) [Booklet pages xi-xii] (2nd) Part of Journal Due – 15 Entries!
13	14	W	ANATOMY: LAB PRACTICAL (Exercises 58,62,66,67,44&70) [Anatomy Booklet pages viii-xii]
14	21	W	NO LAB: THANKSGIVING HOLIDAY

DROP DATE: WEDNESDAY OCTOBER 3, 2007

THE TEXTS

Textbook (required)

Seeley, Rod R., Trent D. Stephens & Philip Tate. 2008.
Anatomy & Physiology. Eighth edition.
McGraw Hill, New York, New York, 1116 pp.

Laboratory Manual (required)

Martini, Frederic H. and Roberta M. Meechan. 2001.
Laboratory Manual - Fundamentals of Anatomy and Physiology II. Fifth edition.
Pearson Custom Publishing, Upper Saddle River, New Jersey 224 pp.

THE LABORATORY

Laboratory sessions are periods of intense activity. It is extremely important that you prepare for each lab, and then take full advantage of all the scheduled time. Study the assigned material **in advance** (See THE ASSIGNMENTS, above), because time for study preparation will not be available during the lab period. Be certain that you refer to the proper exercise each week (See THE ASSIGNMENTS, above). Additional required materials of importance will be handed out through out the semester in the anatomy lab. **YOUR ANATOMY & PHYSIOLOGY LAB MANUAL II should be brought to all of your ANATOMY & PHYSIOLOGY LABS.**

The syllabus, anatomy booklet and photographs of the models used in the lab will be located on the Biological Sciences Department's web site at <http://www.usm.edu/biology/biologylabs> .

The ANATOMY laboratory is WSB 209; PHYSIOLOGY laboratory is WSB 224. Consult the attached course schedules and report to the appropriate laboratory each week. **Bring the lecture text and the lab manual** (see THE TEXTS, above) **to every lab**. No cell phones or pagers are to be on when in the laboratory.

Responsibility for the organization, staffing, and general conduct of the laboratories resides with the Laboratory Coordinator. Her office is WSB 136, although she will often be found in one of the laboratories identified above or you can call (601) 266-4927 or e-mail Patricia.McRee@usm.edu . The Laboratory Coordinator is authorized to administer many aspects of lab operation and should be consulted initially on all matters related to the laboratory.

Any student with a disability for which some accommodation may be appropriate must communicate with the Laboratory Coordinator regarding any limitations related to the condition. The specific situation must be discussed during the first week of class, at which time relevant documentation may be required. Each laboratory section is limited to 24 students, due to constraints imposed by available facilities. Because of this, students must be prepared to attend the laboratory sections for which they registered. Where legitimate conflicts exist, a change in laboratory section may be requested through the Laboratory Coordinator, who will accommodate such requests as space exists. **ALL** students must attend the **first** meeting of the laboratory section for which they registered, at which time requests for change will be considered. Any new laboratory assignments which result will be handled by the second week of class, if possible. Any student requesting a lab change should contact the Lab Coordinator during the second week of class to see if the lab change was approved.

Remember that laboratory work proceeds on a daily basis. Therefore, if some emergency prevents attendance during your assigned laboratory period, special arrangements must be made with the Laboratory Coordinator to attend another laboratory section **on the same day**, if space is available. There will be no switching of labs sections without prior permission of the Lab Coordinator. **NO EXCEPTIONS**. The Teaching Assistant will take roll each lab section, and students will be required to sign out of the lab if special circumstances require departure before the end of a scheduled laboratory period. Labs are two hours long. Students should be on time or you may not have time to complete your physiology lab or anatomy lab practical.

NOTE: If a student is more than 30 minutes late for a lab practical or a physiology lab they will not be allowed to attend that lab. You will need to attend another lab in the same week or on the same day to get credit for the lab. If it is the last lab practical or physiology lab of the week, you will receive a zero unless you get a written excuse from the Vice President for Student Affairs.

If in lecture the day of an anatomy lab practical or a physiology lab and you miss your excuse will not be accepted. You will receive a zero for that lab.

Students will be held responsible for equipment and non-expendable supplies used in the laboratory. Records will be maintained and individuals will be charged for breakage through the business office.

THE EXAMINATIONS

All lab practicals and quizzes must be taken as scheduled. A zero will be recorded for students who are absent from scheduled lab practicals and quizzes, unless a **written excuse** is provided from the Vice President of Student Affairs in Union room 219. This excuse should be given to the Teaching Assistant or or Lab Coordinator as soon as you return to lab. **NO EXCEPTIONS WILL BE PERMITTED.** Special information related to testing in the laboratory is given below. **EXCUSES AFTER THE LABS ARE COMPLETED FOR THE SEMESTER WILL NOT BE ACCEPTED.**

Your knowledge of ANATOMY will be evaluated by administering multi-station lab practicals, conducted using the customary, timed, rotation format. A short quiz will usually be administered at the end of each PHYSIOLOGY lab, although unknown determinations, or other means, may be employed to assess your understanding of this material. The lab practical will include the recall of data and the identification of the anatomical structures studied in the anatomy portion of the lab. The physiology quizzes consist of multiple choice questions concerning the information obtained while doing the required exercise. It can also include concept questions and questions concerning the results and what they should be. Mathematical problems are sometimes included in some exercises. Students are encouraged to discover about the many structures and functions of their bodies. As a student in Anatomy and Physiology, we hope you will learn the human body and its many functions. Lab acts as a reinforcement for lecture in that in lab you will actually see much of what you heard about in lecture.

Since labs require special preparation, **make-up arrangements** for any practical or quiz which you miss **cannot be provided** in the same semester, **after the last lab of that day** (see THE LABORATORY, above). If some emergency prevents you from taking a lab practical or quiz at the scheduled time, you must make **immediate** contact with the Laboratory Coordinator, who will proceed as follows:

1. You will be permitted to make up the practical or quiz by attending a specified lab section which meets on the same day.
2. If a make-up on the same day is not possible, the following provisions will be made, but **only** upon presentation of a written excuse, as specified above, **as soon as you return to lab:**
 - (a) If the excused absence involved a lab practical, you will be assigned an "I" (Incomplete) at the end of the semester. You will then be permitted to make up **that practical only** at its scheduled time during the next semester. You will be responsible for making the necessary arrangements with the Laboratory Coordinator. Your final grade will be computed by combining your score on the make-up exam with your other lab scores from the semester in which the "I" was assigned, and using the grade scale developed for that semester.
 - (b) If the excused absence involved a lab quiz, that quiz will be disregarded and your final grade will be computed using the lab scores which remain for that semester. If excused absences for more than one lab quizzes exist, you will be assigned an "I" at the end of the semester, and permitted to make up **those quizzes only** during their scheduled times during the next semester. The other provisions given in 2 (a) above will then apply.

THE GRADES

Final grades are determined each semester using a scale based on the top score achieved in the course during the semester.

In the laboratory course: Three percentages are calculated for each student at the end of the semester, first using the ANATOMY scores the second using the PHYSIOLOGY scores (as above) and the third using the Journal. ANATOMY counts 60%, PHYSIOLOGY counts 30% and the Journal 10%. The percentages are then combined to give a final percent.

(Journal information is included at the end of this syllabus.)

The following scale is **normally employed** to assign final grades in the laboratory:

Final percentage \geq 90% of the top final percentage.....	A
Final percentage \geq 80% but < 90% of the top final percentage.....	B
Final percentage \geq 65% but < 80% of the top final percentage.....	C
Final percentage \geq 55% but < 65% of the top final percentage.....	D
Final percentage \leq 55% of the top final percentage.....	F

The final grade scale reflects extensive deliberation and analysis, and the grades thus assigned represent decisions which are **final**. As a result of this policy, please understand that requests to modify the grade scale **will not** be approved.

Incompletes will be assigned in lab as indicated; otherwise, an "I" will be assigned only when some factor beyond anyone's control prevents completion of the coursework, or when materials loaned to a student are not returned.

The College of Science and Technology strictly enforces university policy with regard to the dropping of classes. Thus any request to drop a class after the applicable drop date must be accompanied by written evidence of the extenuating circumstances on which the request is based.

ADA SYLLABUS STATEMENT

"If a student has a disability that qualifies under the Americans with Disabilities Act (ADA) and requires accommodations, he/she should contact the Office for Disability Accommodations (ODA) for information on appropriate policies and procedures. Disabilities covered by ADA may include learning, psychiatric, physical impairments, or chronic health disorders. Students should contact ODA if they are not certain whether a medical condition/disability qualifies." **Address:** The University of Southern Mississippi, Office for Disability Accommodations, 118 College Drive Box 8586; Telephone: (601) 266-5024; TTY: 1-800-582-2233; Fax: (601) 266-6035 or email Suzy Hebert at Suzanne.Hebert@usm.edu.

The following statements on Honesty, page 31 and Plagiarism, page 32 come from the USM Student Handbook.

"When cheating is discovered, the faculty member may give the student an F on the work involved or the course. If further disciplinary action is deemed appropriate, the student should be reported to the dean of students.

In addition to being a violation of academic honesty, cheating violates the code of student conduct and may be grounds for probation, suspension, expulsion, or all three. Students on disciplinary suspension may not enroll in any courses offered by The University of Southern Mississippi."

Plagiarism is the use of anyone's work without acknowledgement of whose work it is. See page 32 in the Student Handbook for additional information and the ways to avoid it.

HUMAN ANATOMY AND PHYSIOLOGY FALL & SPRING JOURNAL'S CRITERIA

Each student enrolled in the BSC 250 or BSC 251 lab course is required to maintain a journal during the semester. If a student is enrolled in both BSC 250 and BSC 251 labs during the same semester, a different journal is required for each lab. The journal will count as 10% of your overall lab grade. The journal will be divided into 2 parts with 15 entries per part. Each part will be graded separately and then totaled at the end.

At the end of the semester all 30 entries must be turned in.

The following is a list of criteria expected in journal entries:

Each journal entry must discuss a topic that will be covered in the lab or lecture during that semester. In other words, BSC 250 students will write about topics covered in BSC 250 and BSC 251 students will write about topics covered in BSC 251.

Each journal entry must be at least one complete paragraph, with a thorough description about the topic. The student should relate information learned in lecture or lab to the topic. In other words, stating you had a headache is not sufficient. If you describe what factors are related to the headache, this is acceptable.

Topics must be about events that occur outside of lecture or lab unless otherwise stated (see below). Students can not use definitions or concept questions from the text book for journal entries. A student can only write about the same subject twice; however, each entry on that subject must discuss different aspects of that subject. This may include programs you have seen, news articles you have read or discussions you may have had with family or friends.

Periodically, special topics for journal writing will be assigned during the semester. The Teaching Assistant will explain the topic and what type of journal entry is expected for each. There will be a total of four specific journal entries during the semester.

As stated, the journals will be graded twice during the semester (with 15 total entries each time). No make-ups are allowed. The journal's due date will be noted on your syllabus. The first 15 entries will be graded and returned to you at the next lab session. The last 15 entries will be due the next to last lab. These 15 entries must be accompanied by the first 15 entries or you will lose 5 points. The graded journal will be returned to you at the last lab session of the semester.

Remember the journal must be submitted by the due date stated on the syllabus or it will not be accepted.

During the semester, four specific entries will be assigned. One designated journal entry is a discussion of how moral values affect decisions pertaining to development and or implementation of health care issues. This may involve many topics including stem cell research, pharmaceuticals, cloning, or sex education programs.

Your Teaching Assistant will inform you if your journal is to be typed or if hand written is ok. If they require a typed journal and you do not type it you will lose two points.

Remember the entire journal must be turned in at the end of the semester or you lose 5 points!

SAMPLE OF ACCEPTABLE JOURNAL ENTRIES

EXAMPLE 1

I am always doing something that relates to A&P. I am about the clumsiest person. The other morning, I was ironing my shirt for class because I didn't want to look like a total slob. I was ironing and my finger touched the iron as I tried to iron the collar of the shirt. My first response was to jerk back my hand. I had a spinal reflex. Spinal reflexes protect us each day from the harmful environment we live in. It is a way of protecting our bodies.

(Reflexes discussed in BSC 251)

EXAMPLE 2

Today I read an article about a little girl whose face was deformed by a bacteria that pretty much ate away her skin. She said it started off when she was a baby and looked more like a birthmark. But it continued to grow and spread now over half of her face has been affected because the doctors tried to remove portions of her skin to prevent the spread of the bacteria. I thought it was so sad and wonder functions if any does her skin in the affected portion of her face still perform. Our skin is a form of protection but is missing from half of her face! The bacteria destroyed to some of the deeper tissues and through to get rid of the bacteria and reconstruct her face, she has lost a great deal of the function of facial muscles too.

(Skin discussed in BSC 250)

EXAMPLE 3

Sometimes I think it's funny to spook my friends out by waiting till its real quite and then popping the bones in my wrist and neck real loud. I worried that this means I will have bad arthritis when I am older but my sister who is in med school told me that the popping noise is due to air pockets in the joints and is not related to arthritis later in life. I'll just take her word for it.

(Joint discussed in BSC 250)