BIOL 2305 HUMAN PHYSIOLOGY LECTURE (3-3-0). Lecture component of Human Physiology. A detailed study of the physiological processes of the human body. Corequisite enrollment in laboratory course (BIOL 2102) also required. **Skills:** O **Prerequisites:** High school chemistry with proof of competency through ACC departmental exam and BIOL 2304 and BIOL 2101 with minimum grade of C (or equivalent with lab).

BIOL 2102 HUMAN PHYSIOLOGY LAB (1-0-3). Laboratory component of Human Physiology. Emphasis on lab-based investigations of physiological processes. Corequisite enrollment in lecture course (BIOL 2305) also required. Fee: $24 Insurance: $3.10 **Skills:** O **Prerequisites:** High school chemistry with proof of competency through ACC departmental exam and BIOL 2304 and BIOL 2101 with a minimum grade of C (or equivalent with lab).

You will be dropped from the class if you do not have the course prerequisite (Human Anatomy lecture and lab, NOT A&P) with a minimum grade of C. Proof of completion is required by Wed. June 2. Acceptable proofs include photocopies of transcripts, grade reports, and printouts from student online services as long as your name or student ID# is part of the document. Submit the copies with the form provided. These copies will not be returned to you.

You will be dropped from the class if you do not have the required skill prerequisites. You must prove proficiency in reading, writing and math with one of these: 1) a passing score on ACC’s assessment test; 2) a passing TASP or COMPASS test score; or 3) exemption from assessment through transcripted hours from another college or appropriate ACT, SAT, or TAAS scores.

**Instructional methodology:** Lecture and lab.

<table>
<thead>
<tr>
<th>INSTRUCTOR</th>
<th>Sarah Strong</th>
</tr>
</thead>
<tbody>
<tr>
<td>OFFICE</td>
<td>2297 RVSA</td>
</tr>
<tr>
<td>ACC PHONE</td>
<td>223-6260 + voice mail (Monday through Wednesday)</td>
</tr>
<tr>
<td>FAX</td>
<td>223-6769 – use cover sheet with my name on it</td>
</tr>
<tr>
<td>email</td>
<td><a href="mailto:sstrong@austincc.edu">sstrong@austincc.edu</a> (put “physiology” in the subject line)</td>
</tr>
<tr>
<td>course web site</td>
<td><a href="http://www.austincc.edu/sstrong/phys">www.austincc.edu/sstrong/phys</a></td>
</tr>
<tr>
<td>Blackboard</td>
<td>announcements, course materials, email to students</td>
</tr>
<tr>
<td>HOURS</td>
<td>M,W 12:00 to 1:00 pm or email for an appointment</td>
</tr>
</tbody>
</table>

You must use your ACCmail account. If you are not already using it, read the information about how to activate it at http://www.austincc.edu/google. All email you receive from me will go to your ACCmail address. If you want to forward it to a different account you can find information about how to do that at the address above. If you fail to use your ACCmail account I will not make any allowances for whatever problem ensues.
REQUIRED TEXTS AND MATERIALS:

1) *Human Physiology: from cells to systems* 7/e by Lauralee Sherwood. 2010. Bring your textbook to every class.

2) *PhysioEx for Human Physiology: Laboratory Simulations in Physiology* CD and manual by Stabler, Smith, Peterson and Lokuta.

3) safety eyewear that meets Z87.1 and ACC standards
4) closed-toed shoes for labs
5) #2 pencil with eraser for exams

Recommended:
ADAM Interactive Physiology (10-system version) CD-ROM tutorials (available online through bookstores and software vendors; also in some ACC computer labs)

GENERAL INFORMATION:

ACC policy concerning copyrighted materials: All class materials provided on the instructor's web page, electronic reserves, on diskette, on CD, and in printed form (labs, objectives, assignments, etc.) are copyrighted and may not be reproduced without the written consent of the copyright holder (this may be the instructor, ACC, or a publisher). Reproduction consists of photocopying, scanning and copying files, or posting on a server or web site. Students currently registered for this section have permission to print one copy of course materials for their own personal use. No permission is given for posting any course materials on web sites.

Course rationale: *This course is designed for students entering professional programs such as nursing. It provides a foundation for the clinical topics covered in those programs by requiring mastery of factual material, laboratory techniques, and problem-solving skills.*

Course goal: Most of you probably have as your goal a specific grade and 4 credit hours. ACC and I, however, share the goal of ensuring that students who pass the course and receive 4 credit hours:
- learn and retain the subject material at the knowledge, comprehension, application and analysis levels,
- improve their critical thinking skills,
- improve their ability to work independently and follow directions, and
- are prepared for subsequent courses and professional work.

My job is to help you meet both goals by assisting your in your learning effort, and to ensure the institution’s goal by evaluating your progress. This generally involves:
- delivery of information, in which I help you obtain information through lectures, handouts, assigned directed reading (looking for answers to objectives), and problem-based learning,
reinforcement, in which information is presented in several different ways (labs, homework, answering objectives) so that it’s more easily understood and remembered,

assessment, in which I use different methods of finding out what you know and how well you understand concepts (lab reports, homework, quizzes, exams), and

feedback, in which I let you know how, or if, your work was incomplete and how to improve for the next assessment.

Course Objectives: The lecture outlines, lectures, assignments and labs specify the material you must learn to succeed in this course. You are responsible for and will be tested on all of the material specified by the lecture and lab documents regardless of whether or not it is covered during class time. The purpose of lecture and lab classes is to clarify difficult points and promote the learning of skills, not to cover everything in the objectives.

Departmental course objectives: The ACC Biology Department has specified the content of this course, both in terms of the amount of material covered and the specific things that are covered in both lecture and lab. The generic departmental objectives are located at http://www.austincc.edu/biology/ccobjectives (you don’t have to print these).

Attendance: Your course performance depends on your attendance. You are expected to arrive on time and to stay in class until it is dismissed. Attendance is taken during each lecture and each lab. You are responsible for all materials, activities, assignments, or announcements covered in class, regardless of your reason for being absent. If you do miss a class, get lecture notes from someone in the class and get handouts and assignments from me. If you are routinely late or leave class early you will be dropped--see Instructor-initiated withdrawal below.

Class Participation Expectations: I expect you to be prepared for each lecture and lab class and to participate in all class activities. Class time will not be used to review material from prerequisite courses. If you need help with review material you should see me during office hours or get help from a tutor. You should expect to spend at least 2 hours outside of class for every hour spent in class just to pass the course (minimum 16 hours a week in addition to time spent in class). Many students need more time than this to pass or to get a higher grade.

Disabilities: If you have a disability you must bring a copy of your letter of accommodation before we can make special arrangements for lecture, lab or testing. If you have a medical condition that would require you to leave the room during an exam, you are responsible for making alternative arrangements with me at least one week in advance of the scheduled exam.

Dropping/Withdrawning: The last day to drop/withdraw for this semester without a grade of W is June 10. The last day to withdraw with a grade of W is August 2.
Students are responsible for understanding the impact withdrawing from a course may have on their financial aid, veterans’ benefits, international student status, and academic standing. See the course schedule for information on add/drops procedures, deadlines, and tuition refunds.

- **Effective spring 2006,** any student taking a class for the third time or more may be charged an additional $60 per credit hour unless exempted
- **Effective fall 2007,** students attending Texas public colleges can withdraw from no more than six courses during their undergraduate career. The withdrawal limit applies to first-time college students and follows them until they graduate. Current and returning students are not affected.

**Student-initiated drop/withdrawal:** You are responsible for dropping/withdrawing yourself from the course if you don’t intend to or cannot complete the course requirements. If you do not complete the course requirements and forget to drop/withdraw you will have a grade of “F” on your transcript. Keep your copy of the form, because if the original is lost, you will have a grade of “F” instead of “W” on your transcript. I can’t do anything to help you if you lose your copy of the drop form.

I will be glad to help you figure out your current course average and what you need to pass, but you should contact me a week before the deadline if you have any questions about dropping.

**Instructor-initiated drop/withdrawal and reinstatement policy:**

- I will drop/withdraw any student who does not adequately demonstrate completion of the course prerequisites by the first day of class.
- I will drop/withdraw any student who does not complete required safety training or who consistently fails to follow safety procedures.
- I may, time permitting, drop/withdraw any student who fails to attend class on two successive days, who misses more than 4 total days, or who arrives late or leaves class early more than 4 times during the semester.
- I may, time permitting, drop/withdraw any student who misses an exam, who fails to take a makeup exam within the stated period of one week following the exam, or who misses a scheduled exam or grade-related conference.
- If you are dropped/withdrawn for any of these reasons you will not be reinstated.

**LECTURE POLICIES AND PROCEDURES**

**General Instructions**

1) Before class (in order):
   a. print the lecture outline from Blackboard
   b. complete designated sections of the outline using your textbook
   c. listen to the online lecture on Bb to fill in remaining information
   d. if a pre-test for the chapter is available in Bb, complete it (if you score less than 8 on the pretest you should go through the online lecture again-pretests are not part of your course grade)

2) During class:
   a. during class more information will be added to the lecture outline
   b. complete the in-class activities--they are due at the end of class, they are graded, and they cannot be made up
3) After class:
   a. if a post-test for the chapter is available in Bb, complete it (this is part of your 
course grade; it is timed; you can only take it once; there are no makeups; it must 
be completed within 24 hours of the end of class; lowest score will be dropped)
   b. use active learning to retain the information

Homework Assignments – Specific instructions and deadlines will be included with each 
assignment. Assignments may require PhysioEx and the textbook and class notes as 
references. Homework assignments are to be completed individually. If you submit an 
assignment that was clearly copied from another student, both you and the other student 
will receive zero points the first time and will be officially charged with academic dishonesty 
(see student handbook) if it happens again. If you have problems with assignments, check 
with me during office hours or make an appointment to see me before the assignment is 
due. Homework assignments can be turned in on the due date in class at the RVS mail 
room, or by faxing with a cover sheet to 512-223-6769. Do not email assignments, they 
crash my mail program. Assignments submitted after the due date will be reviewed for 
feedback but will not usually receive any credit. Computer problems and absences are not 
acceptable reasons for not turning in assignments on time.

Exams:
• Cell phones and pagers must be turned off during exams. You may not answer 
  phones during exams. If you have a work pager that you cannot turn off you will 
  leave it with me during the exam.
• You may not leave the room during an exam.

Unit Exam Format: There will be 4 unit exams, see course outline for dates. Unit exams 
are about 50% to 67% objective (multiple choice, true-false, matching, fill in the blank) and 
33% to 50% essay and short answer. The chapters covered by each exam are indicated 
on the course outline. No re-testing. All exams are given in class as scheduled unless the 
class and the instructor think that there is a valid reason for changing the date. Before you 
leave the room you must turn in the exam booklet and Scantron or you will receive a grade 
of 0 for the exam. If you are late, you cannot take the exam if anyone else from the class 
has already completed the exam or left the room. Graded essays will be returned, the 
objective questions are not returned but are available for review during office hours.

Makeup Exams: You can take ONE makeup exam if you miss a regularly scheduled 
exam. If you miss more than one exam I will drop you from the class. Makeup exams may 
be mainly essay or fill in the blank. You must take a makeup exam within one week of the 
date on which the missed exam was scheduled. Contact me as soon as possible to make 
arrangements.

Required Comprehensive Final: The final will consist of 75 to 100 multiple choice 
questions and will be given in class on the last class day. If your score on the final is 
higher than your score on Exam 1, 2 or 3, I will substitute the higher score. The final will 
not substitute for Exam 4.
LAB POLICIES AND PROCEDURES

Human physiology lab is a self-directed learning activity. All equipment and materials you need to complete the exercises will be supplied. You will prepare before coming to class and will work cooperatively to complete the exercises in the time allowed. You will need to have your lab printout, completed prelab, textbook and safety equipment for each class. During lab you will collect, analyze and interpret data. I act as a resource person and troubleshooter. There are no lab makeups for this course.

General Lab Objectives:
1. observe and apply physiological principles
2. learn how to use laboratory equipment
3. learn how to analyze data gathered during lab exercises
4. learn how to read and make graphs

General Instructions for Lab
1) Before class (in order):
   a. print the lab from Blackboard and read it
   b. complete the prelab included in the lab (many require PhysioEx) (you will lose points if you turn in prelabs after the lab begins)
   c. answer questions in the lab report that don’t depend on data gathered during lab
2) During class:
   a. turn in prelab at beginning of lab
   b. work with your lab group to complete the lab activity
   c. complete and submit the lab report
3) After class
   a. the graded lab report will be returned on the next class day
   b. there will be a quiz over each lab the following week (see class schedule)

If you must miss a lab class, fax me the prelab and any parts of the lab you can complete outside of class to get partial credit. Lab reports are expected to be collaborative efforts because in most labs you will be working with your lab group to collect and analyze data. The lowest lab report grade will be dropped.

Lab quizzes cover material from the previous lab or labs (see schedule) and will be given at the beginning of the lab period. The lowest quiz score will be dropped. No makeups. Also, if you miss a lab you still have to take the quiz when the rest of the class takes it.

Cleanup: Each group must clean up its equipment and desk before leaving. If a group does not clean up I will deduct points from the lab grade of each group member. Unless otherwise instructed:
   1) wash all glass and plastic with brush and soapy water, remove marks, rinse and place in drainer above sink
   2) turn off and then unplug all electrical equipment
   3) put animal parts in disposal bag
4) put contaminated materials in biohazard bag  
5) clean any apparatus that has had solutions on or in it  
6) wipe down the table with soap or disinfectant as directed  
7) follow specific instructions on the chalk board and in the lab instructions

**Lab Grade:** Based on lab report, participation and cleanup.

**Safety: Biology Lab Rules and Information handout, Safety Contract**

Do not enter the lab room until the instructor is present. You will wear nitrile gloves, safety eyewear and closed toed shoes when participating in labs that use chemicals, animals, sharps or body fluids. Gloves will be provided by ACC. If you show up on lab days without appropriate safety eyewear and shoes you will not be able to participate in lab or remain in the room during class and you will lose those lab points. If you miss in-class safety training and do not make it up before the end of the second week of classes you will be dropped and not reinstated. You will not be permitted to participate in labs until you complete safety training and will receive a grade of zero for labs you miss for this reason. I will initiate full disciplinary procedures to have you removed from the college if you endanger the health or safety of any ACC student, staff or faculty.

**ACC Biology Department Animal Use Policy:**

Most ACC biology classes, particularly those with laboratory components, use actual organisms during instruction in addition to images and models. ACC students generally are preparing for real-world careers requiring workers with hands-on experience. These careers include health care, veterinary work, horticultural and agricultural work. Other students plan to transfer to four-year colleges and will be participating in biological research where hands-on experience is equally important.

Organisms used at ACC are fundamental in biology instruction and they are utilized to teach specific skills and knowledge. Their condition and usage varies from course to course. Students will be expected to actively participate in these activities. Students with particular concerns in this matter should consult with their instructor and/or departmental officials before enrolling in a laboratory course so that they can know what will be required of them.

Some organisms are observed alive while others are dead and preserved in various ways. Student manipulation of organisms ranges from culturing living organisms to dissecting preserved ones. Some examples include, but are not limited to: bacterial culturing for microbiology courses; cat, pig or rat dissection for anatomy courses; skeleton and pelt examination for field biology; and use of frogs in physiology experiments.

*Approved by Biology Department, February 6, 2004*

**Insurance:** You are covered by a student accident insurance policy if you have an accident during lab that was caused by the lab activity. Your instructor will provide you with the necessary forms if you are injured. $25.00 copay

**Clothing:** Many labs involve the use of chemicals that may stain or damage your clothing if they are not handled correctly. Aprons are available in the lab but they don’t cover all of your clothing. Please wear old clothes to lab.
GRADES AND GRADING

Most grades are not posted in Bb. Only tests that you take in Bb will appear in “My Grades”. You will receive a printed grade report after each major exam. You should keep all returned, graded papers until you receive a course grade at the end of the semester.

Timely return of papers: I will return graded papers within one week of submission.

Grading criteria:
- completeness of facts or components, appropriate level of detail
- correct inference from data
- correct spelling and legible writing
- correct sequence of events or components
- correctly explained relationships among facts or components
- answer is clearly organized and in a logical order

Grading marks:

<table>
<thead>
<tr>
<th>mark</th>
<th>description</th>
</tr>
</thead>
<tbody>
<tr>
<td>⭐⭐⭐⭐⭐</td>
<td>excellent/outstanding</td>
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<tr>
<td>✔</td>
<td>correct</td>
</tr>
<tr>
<td>OK</td>
<td>not completely correct but close</td>
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<tr>
<td>~</td>
<td>almost wrong</td>
</tr>
<tr>
<td>X</td>
<td>wrong</td>
</tr>
<tr>
<td>&gt;&gt;&gt;</td>
<td>answer is incomplete or should be more specific</td>
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<tr>
<td>n/a</td>
<td>this material is not relevant to the question</td>
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<tr>
<td>sp</td>
<td>spelled incorrectly</td>
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<tr>
<td>½</td>
<td>the question was worth 2 points and you got 1 point</td>
</tr>
<tr>
<td>0.75</td>
<td>the question was worth 1 point and you got ¾ point</td>
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</table>

Grades: Your final grade (which will be the same for both lecture and lab) depends on how many points you accumulate, with the additional requirement that you must pass the lab portion of the course with a 70% in order to pass the course with a C:

<table>
<thead>
<tr>
<th>source of points</th>
<th>est.number</th>
<th>points</th>
<th>estimated total</th>
<th>approx. % of grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>unit exams</td>
<td>4</td>
<td>100</td>
<td>400</td>
<td>36</td>
</tr>
<tr>
<td>comprehensive final</td>
<td>1</td>
<td>100</td>
<td>100</td>
<td>9</td>
</tr>
<tr>
<td>safety exams</td>
<td>2</td>
<td>50</td>
<td>100</td>
<td>9</td>
</tr>
<tr>
<td>homework assignments</td>
<td>approx. 3</td>
<td>10</td>
<td>30</td>
<td>3</td>
</tr>
<tr>
<td>in-class activities *</td>
<td>up to 18#</td>
<td>5</td>
<td>85</td>
<td>8</td>
</tr>
<tr>
<td>lecture post tests #</td>
<td>14#</td>
<td>5</td>
<td>65</td>
<td>6</td>
</tr>
<tr>
<td>lab reports # **</td>
<td>15#</td>
<td>10</td>
<td>140</td>
<td>13</td>
</tr>
<tr>
<td>lab quizzes #</td>
<td>13#</td>
<td>15</td>
<td>180</td>
<td>16</td>
</tr>
<tr>
<td><strong>approximate total</strong></td>
<td></td>
<td></td>
<td>1100</td>
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</tbody>
</table>

If there are fewer or more lab reports, quizzes, post-tests or activities, the total number of points will be adjusted before computing your course average.

* you must be present to get credit for in-class activities; no makeups
** less points deducted (up to 5 points per lab) for failing to clean up properly

# lowest score in each category will be dropped - allows you to miss ONE lecture and lab without grade penalty

final grade scale:  90-100% = A; 80-89% = B; 70-79% = C; 60-69% = D; < 60% = F

In the case of borderline final course grades (ie-69%, 79%), I will make a decision about whether or not to assign the next higher grade based on your exam averages alone.

NO CURVE, NO EXTRA CREDIT

A grade of incomplete (I) will be assigned only if 1) you have a valid reason that is documented and can be verified, 2) you request a grade of I in writing and submit documentation supporting the request no later than the last day of class, 3) you have completed at least half of the course work, and 4) you have at least a C (70%) average on completed work.

**Final Course Grade:** Your final course average and letter grade will be posted in Bb as soon as possible after classes are over. This can take up to a week after you take your last exam. You can also see your grades in Online Services after the deadline for faculty posting has passed (usually by the Thursday after classes are over). If you aren’t in a hurry to find out, you can wait until your grades are mailed to you.

**Conferences** – You must meet with the instructor after each exam as long as your class average is below passing (70%).

**HOW TO SUCCEED IN THIS COURSE**

1) make and use a study schedule (link in Bb)
2) attend every class, be on time, don’t leave early
3) learn as you go
   • if you are prepared and focused when you come to class you can learn a lot of the material DURING CLASS
   • as you see, hear and write or draw information, focus on the information instead of thinking that you will learn it later
4) always use active learning (link in Bb)
5) short study periods every day are many times more effective than one long study session just before the exam
6) you can’t wait until the day before the exam to ask for help
7) use the tutors (they cannot study for you but they can explain things that you don’t understand—then you can learn those things)
8) use the Learning Styles assessment to help you learn your strengths and weakness

**BLOOM’S TAXONOMY**

1.00 KNOWLEDGE (remembering previously learned material)
   knowledge of specific facts and definitions, classifications, criteria

2.00 COMPREHENSION (grasping the meaning of material)
   converting material from one form to another; explaining or summarizing material, extending the meaning beyond the data
3.00 APPLICATION (using information in concrete situations)

4.00 ANALYSIS (breaking down material into its parts)
   identifying the parts, the relationship between the parts, the way the parts are organized

5.00 SYNTHESIS (putting parts together into a whole)

6.00 EVALUATION (judging the value of a thing using definite criteria)

Other Policies:

Statement on Scholastic Dishonesty - "Acts prohibited by the college for which discipline may be administered include scholastic dishonesty, including but not limited to, cheating on an exam or quiz, plagiarizing, and unauthorized collaboration with another in preparing outside work. Academic work submitted by students shall be the result of their thought, research or self-expression. Academic work is defined as, but not limited to, tests, quizzes, whether taken electronically or on paper; projects, either individual or group; classroom presentations; and homework."

Student Discipline: Classroom behavior should support and enhance learning. Behavior that disrupts the learning process will be dealt with appropriately, which may include having the student leave class for the rest of that day. In serious cases, disruptive behavior may lead to a student being withdrawn from the class. ACC’s policy on student discipline can be found in the Student Handbook at http://www.austincc.edu/handbook/ (pages 30-35).

Statement on Students with Disabilities - "Each ACC campus offers support services for students with documented physical or psychological disabilities. Students with disabilities must request reasonable accommodations through the Office of Students with Disabilities on the campus where they expect to take the majority of their classes. Students are encouraged to do this three weeks before the start of the semester."

Statement on Academic Freedom - "Institutions of higher education are conducted for the common good. The common good depends upon a search for truth and upon free expression. In this course the professor and students shall strive to protect free inquiry and the open exchange of facts, ideas, and opinions. Students are free to take exception to views [but not facts] offered in this course and to reserve judgment about debatable issues [but not facts]. Grades will not be affected by personal views. With this freedom comes the responsibility of civility and a respect for a diversity of ideas and opinions. This means that students must take turns speaking, listen to others speak without interruption, and refrain from name-calling or other personal attacks."

Statement on Safety - "Health and safety are paramount values in science classrooms, laboratories and field activities. Students are expected to learn, understand and comply with environmental, health and safety (EHS) procedures and protocols, and must agree to abide by the ACC science safety policy. Students are expected to conduct themselves with appropriate professional behavior and with respect and courtesy to all. Anyone who thoughtlessly or intentionally jeopardizes the health of another individual will be immediately dismissed from the day's activity, may be withdrawn from the class, and/or barred from attending all activities. Specific safety information for each activity will be discussed at the beginning of the activity. For those activities that require specific safety training, a student who is late and misses the safety training will not be able to participate in the activity. The comprehensive science safety policy can be found at: http://www.austincc.edu/sci-safe/.

Testing Center: http://www2.austincc.edu/testctr/


Instructional services for students: The web address is: http://www3.austincc.edu/evpcss/memos/reference.htm, then click on "Campus Based Student Support Overview".
<table>
<thead>
<tr>
<th>date</th>
<th>lecture*</th>
<th>lab *</th>
<th>before the next class #</th>
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</thead>
<tbody>
<tr>
<td>6/2</td>
<td>Course Procedures (Syllabus)</td>
<td>Lab 1 - LabScribe, Graphing, Dimensional Analysis (no prelab)</td>
<td>Online diagnostic test (Bb) Ch.1 Lecture Ch.1 Pre-test Ch.3 Lecture Lab 2 Prelab</td>
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<td>Time Management</td>
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<tr>
<td>6/7</td>
<td>Ch. 1 – Homeostasis</td>
<td>Safety Orientation §</td>
<td>Ch.1 Post-test Ch.3 Pre-test Lab 3 Prelab</td>
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<tr>
<td></td>
<td>Ch. 3 – Membrane Functions</td>
<td>Lab 2 - Passive Transport% PPE</td>
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<tr>
<td>6/9</td>
<td>Ch. 3 – Membrane Functions, cont.</td>
<td>Lab Quiz 1</td>
<td>Ch.3 Post-test Ch.4 Lecture Ch.4 Pre-test</td>
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<td>Safety Exam 1</td>
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<td>Lab 3 - Active Transport % PPE</td>
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<tr>
<td>6/14</td>
<td>Ch. 4 – Neural &amp; Hormonal</td>
<td>Lab Quiz 2</td>
<td>Ch.4 Post-test Ch.5 Lecture Ch.5 Pre-test Lab 5 Prelab</td>
</tr>
<tr>
<td></td>
<td>Mechanisms @</td>
<td>Lab 4 – Neurophysiology (no prelab, no quiz) %</td>
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<tr>
<td>6/16</td>
<td>Ch. 5 – CNS</td>
<td>Lab Quiz 3</td>
<td>Ch.5 Post-test Ch.6 Lecture Ch.6 Pre-test Lab 6 Prelab</td>
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<tr>
<td></td>
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<td>Lab 5 – Reflexes</td>
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<tr>
<td>6/21</td>
<td>Ch. 6 – PNS Sensory Physiology</td>
<td>Lab 6 – Sensory Physiology</td>
<td>Ch.6 Post-test Ch.7 Lecture</td>
</tr>
<tr>
<td>6/23</td>
<td>Exam 1 (Ch. 1,3,4,5,6)</td>
<td>Ch. 7 – PNS Motor</td>
<td>Ch.8 Lecture Ch.8 Pre-test Lab 7 Prelab</td>
</tr>
</tbody>
</table>
**Course Schedule for BIOL 2305/2102 Summer 2010**

- subject to change as necessary
- you may not participate in lab until you have completed the safety orientation
- you must pass with a minimum of 90% to participate in the lab

<table>
<thead>
<tr>
<th>Date</th>
<th>Chapter/Topic</th>
<th>Lecture/Quiz/Pre-test</th>
<th>Date</th>
<th>Chapter/Topic</th>
<th>Lecture/Quiz/Pre-test</th>
</tr>
</thead>
<tbody>
<tr>
<td>6/28</td>
<td>Ch. 8 – Muscle Physiology @</td>
<td>Lab Quiz 5, Lab 7 – Skeletal Muscle Physiology% PPE</td>
<td>7/21</td>
<td>Ch. 15 – Fluid and pH Balance @</td>
<td>Lab Quiz 11, Lab 13 – Fluid and pH Balance% PPE</td>
</tr>
<tr>
<td>6/30</td>
<td>Ch. 9 – Cardiac Physiology @</td>
<td>Lab Quiz 7, Lab 8 – Cardiac Cycle% PPE Hematology Safety Training</td>
<td>7/7</td>
<td>Ch. 11 – Blood</td>
<td>Lab 10 – Hematology% PPE</td>
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<tr>
<td>7/5</td>
<td>Ch. 10 – Vascular Physiology @</td>
<td>Lab Quiz 8, Lab 9 – EKG and Blood Pressure% Hematology Safety Test ~</td>
<td>7/12</td>
<td>Exam 2 (Ch. 7,8,9,10,11)</td>
<td>Ch. 12 – Immune System</td>
</tr>
<tr>
<td>7/14</td>
<td>Ch. 13 – Respiratory Physiology @</td>
<td>Lab Quiz 9, Lab 11 – Respiratory Volumes%</td>
<td>7/19</td>
<td>Ch. 14 – Renal Physiology @</td>
<td>Lab Quiz 10, Lab 12 – Urinalysis and Renal Problems% PPE</td>
</tr>
<tr>
<td>7/19</td>
<td>Ch. 14 – Renal Physiology @</td>
<td>Lab Quiz 10, Lab 12 – Urinalysis and Renal Problems% PPE</td>
<td>7/21</td>
<td>Ch. 15 – Fluid and pH Balance @</td>
<td>Lab Quiz 11, Lab 13 – Fluid and pH Balance% PPE</td>
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@ - ADAM Interactive Physiology module may help you with this material
% PhysioEx
# see specific deadlines in Blackboard
# Course Schedule for BIOL 2305/2102 Summer 2010

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% PhysioEx

# see specific deadlines in Blackboard

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<tr>
<th>Date</th>
<th>Event 1</th>
<th>Event 2</th>
<th>Event 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>7/26</td>
<td>Exam 3 (Ch.12,13,14,15)</td>
<td>Ch. 16 – Digestive Physiology @</td>
<td>Ch.18 Lecture Ch.18 Pre-test Lab 14 Prelab</td>
</tr>
<tr>
<td>7/28</td>
<td>Ch. 18 – Endocrine Physiology @</td>
<td>Lab Quiz 12 Lab 14 – Digestive Enzymes% PPE</td>
<td>Ch.18 Post-test Ch.19 Lecture Ch.19 Pre-test Lab 15 Prelab</td>
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<tr>
<td>8/2</td>
<td>Ch. 19 – Endocrine Physiology @</td>
<td>Lab Quiz 13 Lab 15 – Glucose Control @ % PPE (no quiz)</td>
<td>Ch.19 Post-test Ch.20 Lecture Ch.20 Pre-test</td>
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<td>8/4</td>
<td>Ch. 20 – Reproductive Physiology</td>
<td></td>
<td>Ch.20 Post-test</td>
</tr>
<tr>
<td>8/9</td>
<td>Exam 4 (Ch. 16,18,19,20)</td>
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<tr>
<td>8/11</td>
<td>Final Exam (comprehensive, no optional)</td>
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