Biology 2424.510 Human Physiology
Course Lecture Syllabus - - Summer II 2019

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Overview: Welcome to Human Physiology! You are about to embark on a fascinating journey that will take you through an amazing exploration of the human body. Today we know more about the body than ever before and it is truly an exciting time to be taking this class. Just think how you’ll be able to impress and educate your friends with your vast knowledge of how the human body works at the end of this course! In this class you will explore topics concerning the normal functions of the human bodies’ cells, tissues, organs, and organ systems (see schedule). This course serves a variety of academic majors and activities are planned to accommodate special interest topics in each discipline. The specific topics of content are traditional fundamentals with treatments that vary, depending on the needs of the participants.

As a successful student of human physiology you should achieve the following Student Learning Outcomes:
⇒ describe and explain the normal function of the cells, tissues, organs, and organ systems of the human body to help prepare you for a career in your chosen field (e.g. to gain content knowledge and comprehension).
⇒ connect what you have learned to your own academic field (e.g. to make physiology relevant to your own academic endeavors).
⇒ apply what you have learned to evaluate various case-studies, analyze controversial topics, and to solve problems relevant to physiology and to your field (e.g. to learn how to ask questions, work with others, and apply information you have learned in different situations).

To Satisfy Mandated University, Departmental, State, and SACS Accreditation purposes this course will also assess:

- Biology Department Learning Goal #2 – Students ability to demonstrate comprehensive, specialized knowledge in the various sub-disciplines of the biological sciences. This will be accomplished by assessing the Student Learning Outcomes above.

- Texas Higher Education Coordinating Board Exemplary Educational Objectives:

  EEO - #1 – Students ability to understand and apply method and appropriate technology to the study of natural sciences. Students are introduced to the process of science in reference to investigative methods of studying physiology of the human body. This includes locating, identifying, and functionally describing the structures of the human body at all levels of organization using the processes and tools of the discipline. Students will be assessed using lab quizzes and exams.

  EEO - #2 – Students ability to recognize scientific and quantitative methods and the differences between these approaches and other methods of inquiry and to communicate findings, analyses, and interpretation both orally and in writing. Students will determine/ and visualize the correlation between quantified physiological parameters at all levels of organization, as indicators of homeostatic processes using various scientific and inquiry based methods in the laboratory. Students will communicate these in writing in assessment activities and on examinations.

  EEO - #4 – Students ability to demonstrate knowledge of the major issues and problems facing modern science, including issues that touch upon ethics, values, and public policies. Students will apply anatomical information to evaluate relevant clinical scenarios/problems to demonstrate knowledge of the major issues facing modern science that touch upon ethics, values, and public policy. These will be assessed using embedded examination questions in lecture.

- The ASU Biology Department uses the following scale to chart your progress on these objectives. While these are primarily for departmental, state, and accreditation purposes and have no bearing on your grade in the course, they will provide you with an indication of your individual progress according to the biology department standards. 4 = Exceeds Dept. Goal; 3 = Meets Dept. Goal; 2 = Approaches Dept. Goal; 1 = Below Dept. Goal While these are primarily for departmental, state, and accreditation purposes and have no bearing on your grades, they will provide you with an indication of your individual progress according to the biology departments standards.
Physiology requires a deeper conceptual understanding of the material rather than the simple memorization of facts you may have encountered in anatomy. To achieve these objectives and help maximize your learning, it is vital that you:

1) attend class,
2) arrive prepared,
3) study the material every day, and
4) practice some form of self-assessment often.

To facilitate your comprehension and study of the material, the course has been designed so that both the textbook, lab manual and online resources (PhysioEx and Interactive Physiology (I.P.)) will be an integral part of your learning experience in human physiology. Successful students are those who use these resources to their fullest potential regularly and complete all assignments which utilize them. Lectures and lab activities you attend are designed to discuss, explain, and apply assignments made for these resources. The maximum benefit of doing them comes from attending labs and lectures upon which these are based.

To get the most from class meetings one must be prepared for them. The required course materials listed on page 3 serve as the basic content outline for the course, so it is your responsibility to read the text and complete the assignments related to lectures and laboratory activities BEFORE you come to class. Not only will these help to prepare you for class, they will help you gain a better understanding of the material being presented. In this way, time spent in class can be devoted to gaining a better understanding of the course content, rather than being introduced to it for the very first time. A major portion of every exam will be based directly upon these assignments and review materials included in each of them.

Reading assignments for lecture and laboratory activities are important and vital. While not common, it is possible that some content on an exam may have been covered by a reading assignment, rather than in class, so well, that it is not necessary to devote precious class time to it. It is also recommended that you bring your textbook and lab manual to class, as a valuable reference an so that you may follow along more easily. Like the course you took in anatomy to get you here… there is a large volume of information to process in this course. The challenge here is somewhat different from your previous experiences with human anatomy, since physiology is a course which delves into the many ways in which the cells, tissues, organs and the organ systems function or actually "work".

- What makes them work the way they do?
- What is normal and what is not?
- How does your body maintain this and what happens if it does not?

This is explored in a systematic “biological manner” using the discoveries made in physiology, through science, through history.

It takes time to truly understand it and to learn physiology. Like human anatomy it is a discipline best examined in small bites which are more easily digested and assimilated, rather than chunks of great size upon which one may choke! Use some time each day to study and learn while the nourishment of your mind this course offers can be consumed in manageable bites.

So, reading the textbook is extremely important. Maybe even ten times more important than in anatomy! Yes, Read that previous sentence again. Lectures in this course are planned by your instructor with the expectation that you are not going to be hearing or thinking about most of the content covered in class for the very first time.

To meet this expectation you must read. The expectation is that you read text assignments and complete electronic software assignments - not for memorization, but for comprehension. You will know what you may need to work on harder or pay more attention to in class if you have studied the material BEFORE the in-class or in- lab work and also have used the assessment activities provided for your use outside of class meetings. That is your first job in this course. After classes and between scheduled lecture and lab sessions, it will also help your understanding of physiology tremendously when you attend lecture and review your notes faithfully. Studies devoted to determining the value of reviewing course material correctly, carefully and completely every day clearly show that this works - but only if you do it faithfully, seriously and consistently. That doesn't mean waiting consistent until a day or two before an exam is coming and seriously attempting to cram consistently for every exam!

The reference material you must have for this course includes items which may be used at your convenience, when it suits you best, also to provide invaluable feedback through a method known as self-assessment. By completing designed self-assessment activities you may preview the kinds of questions you can expect to see on exams. But even more important is the opportunity to learn from these activities what you may need to review again and clarify with your instructor so you have time to do this well in advance of an upcoming exam or quiz. Experience has shown that you will perform MUCH BETTER in this class if you take the time regularly to check - yourself - to assess your understanding of the course material (both lecture AND lab) by using the resources available in your textbook, lab manual and electronic simulations and tutorials online, by working with the SI Leader supporting this course, AND, of course, by asking your lecture and lab instructor(s) questions about anything you may have difficulty with.
Do the worksheets and answer the review or practice questions for every activity – even if you know you don’t have to turn them in. They might still be used to make-up lab or lecture exams or quizzes. Each chapter in the textbook and every lab activity you will perform has questions for review that accompany them. There are also lab items organized as “Lab Bundles” with study checklists posted on the Bio 2424 ASU Human Physiology Blackboard (Bb) coursepage you will see are helpful to use in preparing for and executing lab instructional activities.

This really works. BUT… ONLY IF YOU DO IT!

So then… As a member of the class you are also invited to:

℗ Ask questions, no matter how naive they seem to you. There are probably at least two other folks who have the same question. I will do my best to answer them and to offer you guidance in obtaining a satisfactory solution.

℗ Ask for help and/or clarification. Don’t suffer in silence. I can’t help you learn if I don’t know you’re confused or if instructions are unclear.

℗ Form study groups. Group learning can be powerful and is often beneficial in a course like physiology. Besides that, new friendships can be formed too! SI Leader Developed study session will be offered throughout the semester to facilitate this too.

Required Supplies:
1. **Human Physiology: An Integrated Approach**, 8th Ed. Silverthorn (2019), Pearson Publishing. A digital version is available for those who prefer to use it rather than a printed copy. For more information see the items included in the electronic bundle of items included with Mastering A&P (MAP)

2. No Laboratory Manual to purchase is required this semester. But, you MUST BE ABLE to access the **ASU Blackboard** Course page for the laboratory portion of this course AND check it frequently for all information, lab protocols, assignments, review guides, etc.. Essentially ANYTHING for lab you will need, in the way of printed information, references, or instructions related to lab will be posted on/accessed through this page.

3. Mastering A&P **Software** available online using access codes provided with purchase of the Silverthorn Textbook bundle.(Additional information is provided following the tentative course schedule on the syllabus. This is also available for purchase if you are using a used copy of the textbook. **This is a different product than that used in Bio 2423. A separate access code and registration is required this semester.** http://www.masteringaandp.com textbook publisher's page for Mastering A and P online resources and assessments

→ (MAP) **Interactive Physiology 10.0** (IP10) (software) available online w/ password protected access OR as a CD ROM

→ (MAP) **PhysioEx**: Laboratory Simulations Software – available on CD ROM or via the internet also. Stabler et.al., Pearson Higher Education

**Both items above offer online versions which are accessed through a password provided at the time of purchase of

1) a new (not used) copy of the Silverthorn textbook. If you chose to purchase/use used copies of the text, access must be purchased separately. See your instructor for additional information, if necessary OR visit the ASU Bookstore. THIS ITEM IS HIGHLY RECOMMENDED FOR EVERY STUDENT – But it is not required. See Next Line Below.

2) the Mastering A&P internet access code (includes access to digital copy of the textbook and its associated online resources: a) MAP Assessment / Learning Activities b) PhysioEx (Laboratory Simulations) c) Interactive Physiology Tutorials and Animations (THIS IS A REQUIRED ITEM FOR THIS COURSE. Available for purchase at ASU Bookstore, and also online at MasteringAandP.com) See #3 Above)

4. **TopHat website access for this course.** Passcodes or access used for Human Anatomy (or any other courses) are not valid. You should have received an e-mail from TopHat inviting you to enroll/register in this service, along with instructions for completing the process. This is a required item for this course.

5. You will also need an inexpensive calculator that does basic math functions. Cell phones will NOT BE ALLOWED to be used as calculators on quizzes or exams. It’s best not to count on having a calculator available or borrowing one from someone else in your class.

6. **You will also be required to have internet access and an ASU addressed e-mail account you check regularly.** All communications made via e-mail are done through the ASU e-mail system. Your instructor is not responsible for communicating with you through any other third party e-mail service such as hotmail, gmail, etc. - nor should you expect them to.

ASU provides internet access AND e-mail accounts at no additional cost to you, at any of the computer labs on campus. These will make it possible for you to use resources available online AND to communicate with your instructor and classmates.

* Access to the ASU Blackboard Course pages for this site IS REQUIRED and is provided by ASU along with personal e-mail and internet access

* Additional Learning Resources are available at the following webpage(s) for important references and useful resources: Remember too that ASU Blackboard – may be accessed via ASU Ramport
Final Course Grade Determination and Assessment Measures: How well you succeed in meeting the expectations described above and achieve the learning outcomes and master understanding of human physiology - will be reflected in your course grade. Your grade in this course will be determined by your performance on 1) combination lecture/lab exams, and 2) in-class learning activities and 3) internet based Mastering A and P assessments.

Each point earned on exams and other activities throughout the course will be totaled to determine your final course grade. Therefore it is to your advantage to earn and accumulate every possible point every time an opportunity to do so is given.

Due to the volume of students we have, it is your responsibility to keep up with your grades and cumulative point total. ASU Blackboard will be used to permit monitoring of grades and points earned, using the Gradecenter function. Grades and points earned will be posted to the ASU Blackboard Course page and you will have access to them immediately after they have been posted. In most cases an e-mail will be sent and/or an announcement made through the ASU Blackboard to notify you when this is done.

Total of Combination Lecture/Lab Exams (I, II, III, IV) @ 225 points each = 850 possible points

Total of Various Combined Scores from:
- Weekly MAP Assessments for Assigned Class Material = 150 possible points
- In-Class Activities / Homework Assignments / Participation = 100 possible points

TOTAL OF ALL POSSIBLE COURSE POINTS = 1100 possible total points (w/ all possible points earned)

Letter grades will be assigned according to the following scale:
- 900 and up = A
- 800-899 = B
- 700-799 = C
- 600-699 = D
- < 600 = F

Note that if perfect scores are earned on all assignments it is possible to earn a grade of A++ (i.e. 110 % !)

Due to the more than ample number of points which may be earned throughout the course there will be no additional adjustments, "curves", or other opportunities to modify a final grade in any other manner. Therefore final grades are non-negotiable and are based strictly upon the final total of all possible points earned in the course at its conclusion AND the corresponding letter grade scale shown above. It is also, therefore, advised that students take advantage of every opportunity to earn all available points and to earn the maximum number of points available and to monitor their grade status regularly and carefully throughout the semester – from the beginning to the end.
Combination Lecture/Lab Exam Format / Blueprint: All exam questions will be of the objective format. Components of each exam will consist of two parts. (See below) They will cover material covered or assigned up to that point or since the last major exam.

Part I – Objective Questions: Based on content/objective information contained primarily from your text and online lecture notes, powerpoint slidesets, MAP reviews, checklists provided by your instructor, and on end-of-chapter (EOC) question assignments made from the textbook, and reviews of material presented in the Interactive Physiology (IP) and PhysioEx related content. Note: online quizzes for IP 10. PhysioEx, and Mastering A & P, “Exam-Type” Practice Questions, and Exam Checklist questions, and Lab Report Type questions are a potential source of questions modified to make up quiz and exam questions. The questions for this part of the exam will be multiple choice/scantron and will make up about 70-75% of each exam this semester.

Part II - The second part of the lecture exam will come from information presented in class and outside of class assignments that assess an ability to put to practical use what one has learned, rather than simple straight factual recall. Questions for this part of the exam and will make up 25-30% of each exam, and are all of the objective format type (matching/multiple choice/Scan-tron). See the Bb Coursepage for examples and additional practice opportunities for these. Remember too, that lab session notes, calculations, interpretations and analytical techniques will also be considered as exam questions, also. Being able to perform calculations and to make conclusions about them will be included in these assessments.

Through the ASU Blackboard Coursepage you will be provided with a checklist of possible questions and/or scenarios, as a supplement to those found in the other assigned resources mentioned above. On the exam many of these will be taken verbatim from the exam checklist, textbooks, lab protocols and online quizzes for this course. This part of the exam will also include specific references to potential exam questions based upon End of Chapter Review questions (called EOCs) as noted in the course schedule from the Silverthorn textbook, PhysioEx simulations, and supplemental Interactive Physiology (IP10). It will be to your benefit in earning higher scores to use these as much as you can and checking your work regularly – BEFORE the exam is to occur, during office hours.

Exam Days: On exam days, Scantron form 882-ES (green) answer sheets WILL BE provided. You will need to bring a pencil (with a good eraser) and may use a calculator that you bring with you for the exam. Cell phone calculators are not allowed. Cell phones and any other personal communications devices, tablets, laptops, smartwatches, etc. MUST BE TURNED OFF and not on your person. (See the course schedule for Exam Dates. All exams will begin no later than 8:00 a.m. – No additional time extensions will be given to those who arrive late. Please be on-time. Early is better.

You will be expected to adhere to the following guidelines: Place all your books, backpacks, purses, caps, etc. at the front of the room OR neatly under your seat. If you have something of value that you’re concerned about leaving here, do not bring it on test day. Wear no hats or sunglasses.

Electronic devices such as cell phones, pagers, personal stereos, graphing calculators, laptops, recording devices, etc. are not allowed. You will be asked to leave if they go off or cause a disturbance during an exam and subject to a grade of zero. (see statement below).

NO EXCEPTIONS TO THIS POLICY WILL BE MADE

You will be asked to choose a seat for the exam so that you are not sitting next to anyone that you normally do and whenever possible with an empty seat on each side and in front and behind of you. No talking is allowed once the exam is handed out. You will also not be allowed to leave during the exam. If you leave, you will have to turn in your exam. Visit the restroom BEFORE you begin the quiz or exam. Please see me during office hours well before the first exam, if you anticipate any problems with the procedures outlined above. If you arrive late for an exam you cannot be given additional time to finish. So... please be on time.

Exam & Quiz Preparation / Tentative Reading, and End of Chapter (EOC) Assignments / Using Your Textbook:

It is strongly recommended that you attempt to work ahead of lecture and laboratory meetings and not get behind. Weekly lab assignments requiring completion of activities outside of class will be required to be well prepared to complete lab assignments within the time allotted in each lab session. This course requires, and even more so in summer sessions, a daily study commitment including attention to laboratory information as well as lecture information. It is designed to integrate both parts of the course together, so studying for one helps you understand information in the other and vice versa.

The reading assignments are NOT optional and should be completed, BEFORE the lecture or lab session in which they will be addressed and studied well in advance of the exam. READ THAT LAST SENTENCE AGAIN!

Remember too, that the integrated MAP Assessments will be based heavily upon the material covered in these assignments as well as material being covered in lab and lecture sessions as well. These offer an opportunity to earn up to 150 points and will also help you to earn points on in-class activities, homework and ultimately – on major exams too!
Read for understanding and comprehension of the physiological topics we are exploring, not for specific memorization of facts, but for lasting understanding of physiological processes and an ability to apply them. Specific references to each of the sets of review questions used in formulating exams will be provided as the semester progresses. This is done primarily via the ASU Blackboard course page for this course. It is expected that you will check these pages regularly and frequently throughout the week. Additionally the specific references to the textbook provided included with the course topics sequence may be used to assist you in organizing and planning your studies throughout the semester. The sequence may be modified by the instructor if necessary as the course progresses, so the schedule as it is printed is tentative and subject to change as necessary.

Textbook Concept Check and End of Chapter Review Questions (EOCs) are to be used to supplement the lecture material we cover, and as such, are an excellent way of gaining mastery of the content. A large number of exam questions will come from your lecture notes and EOCs (which covers the same material). End of Chapter review (EOC) answers may be found in the section Called “Appendix A: Answers to Review Questions” and also in the end section of every chapter assigned. Please let me know if you need assistance. (See e-mail, office phone/office hours schedule on page 1 and on the Bb Coursepage). Additionally, homework and assessment activities assigned in Mastering A and P will offer useful, worthwhile and meaningful examples of questions that can be used to determine how well you have learned and understand content covered in textbook readings and assigned labwork and assignments in Interactive Physiology (IP) and PhysioEx. In some instances you could expect to see questions taken verbatim from any of these activities on exams. It’s a great idea to use them carefully, study and review them to make sure that you can answer every one of them (or ones very similar to them) correctly every time!

Exam Checklist Questions which incorporate real-world applications of class material are often selected and used on exams as they are written. These will always be available for use on the Blackboard (Bb) Coursepage. These topics may or may not be specifically addressed in-class, but are considered fair-game for coverage on exams and/or in-class or take-home activity assignments. You are encouraged to review them carefully, attempt to answer them correctly and completely, and consult with me early and often to check your responses and to be well-prepared for these on an exam.

Lecture Make-Up Exams:

- **Lecture make-up exams will NOT be provided, but read on...**

- If you miss exam 1 or 2, or 3 - for any reason - you will be required to take a comprehensive make-up exam or a grade of zero (0) will be entered for the exam missed and those points will be forfeited. The grade earned on the comprehensive exam will serve as the replacement for only one missed exam. Only students who have missed Exam 1 OR 2 OR 3 (only one of these) are permitted to take the Comprehensive Replacement Exam. This is not an opportunity to replace a score on an exam unless it is being taken to replace a missing score on one of the first three exams.

You must notify me within **24 hours** if you miss an exam and need to take the Comprehensive Replacement Exam.

- There will be one, and only one, comprehensive exam given during the final exam period. This exam will cover any/all material presented and assigned from the beginning of the semester, and thus includes any material covered on the first three major exams. Contact may be made 1) in person 2) via e-mail 3) by telephoning my office

- The format will be from 100 to 150 multiple choice questions.

- Generally it is better to make the best effort to take all four major exams, and exercise the make-up exam option only for emergency circumstances or for unavoidable situations.

- All students are required to take Exam 4. Your score on the Comprehensive Replacement Exam **CANNOT** replace the score for Exam 4. The Comprehensive Replacement Exam can only replace one of the first three exams, i.e. the missed exam, otherwise a zero grade will result. If more than one exam is missed then a grade of zero will be entered for each additional missed exam.

- Failure to follow the procedures outlined for “make-up exams” will result in denial of the opportunity to take a make-up exam and result in a score of zero for the exam in question. **Students who miss an exam will not be permitted more than one make-up exam per semester in this manner.**

Exam Grade Review / Regrading Procedures:

An answer key of each exam will be provided during instructor office hours, along with the return of exam answers sheets, which you are encouraged to review. Students are also encouraged to confer with me if there are any questions regarding exams once they have compared their exam to the key. Questions regarding scoring should be reported to me immediately for consideration by following the **Procedures for Regrading** shown below:

1. If the error is strictly an addition and/or division error:
   - attach a note to your exam which reads “math only” and highlight the error
• turn in your exam to me personally

2. If you believe you have found a true grading error:
• be sure you have studied the key before you request that any question(s) be regraded.
• you must highlight the error and clearly state your reason(s) for thinking the question has been graded incorrectly in an attached note.
• “Question X is graded wrong or I deserve more points on question Y” are not reasons. A clearly delineated and thoughtful reason with verification from a published reference, such as your text, lab manual, website, etc. MUST BE given.
• turn in your exam to me personally

3. Understand that I will be very fair but I will regrade the entire exam AND if the resulting grade is lower than the previous, the second grade will replace the first.

4. The deadline for requesting any regrading is 24 hrs. or less following the announced availability/return of your exam; e.g., by the end of the next class meeting day in a summer semester. No Exceptions.

Class Participation Activities:
Periodically, throughout the course, in both lecture and lab, activities will occur such as quizzes, discussions, activities, etc., and outside of class assignments (“homework”) may be assigned and collected for grading. The points earned on these will be added to each student’s final point total in the course. (See page 4 of this syllabus)

For in class activities – students must be present to earn points. For assignments, students are expected to complete them or take a quiz in class as announced or complete a related in class activity and hand them in at the required due date, on time. No make-ups for in-class participation or missing or late assignments will be allowed MAP Assessments are to be completed outside of class and between class meetings as noted on the MAP website as noted by the due dates and times posted. Consult with me promptly if you have any questions about this policy.

Laboratory Sessions and Policies:
The physiology lab exercises that you will participate in this semester have been designed to offer you the opportunity to gain practical experience with the topics being discussed in the lecture portion of the course in a “hands on” way. Your opportunity to learn and understand human physiology will be enhanced by your attention and active participation in the lab experience. You will see in this course how the knowledge of human anatomy you have is applied to an understanding of how the human body functions and how the various organ systems interact with one another to maintain homeostasis, otherwise known as human physiology!

Specific policies and additional laboratory information is provided through the Bio 2424 Blackboard coursepage for all lab sections being taught this semester, and during your first lab meeting of the semester. Your lab instructor will be able to answer any additional questions and provide assistance as needed throughout the semester also.

Assessments of laboratory content comprehension and mastery will be made via MAP assessments and specific exam questions and practical applications activities done during class meetings. It may seem that few if any points are earned by attending lab, but it is very unlikely that you will have a reasonable opportunity to do well on exams and other assessments if you do not attend and actively participate in lab sessions. Attendance records are kept by your lab instructor as required by the university and reported. There are no point deductions made for a missed lab – nor are there points earned simply for attending lab. But, as you will see, lab attendance – just like lecture attendance - will affect your final grade in the course. This will be directly reflected in the scores you will earn in the class – and ultimately - your final grade.

Further details about lab exam type questions will be given as the date of the first exam approaches, but do not hesitate to ask for additional information as you see fit. Lab instructors are happy to help in whatever way we can. All you have to do is ask. You will also be given additional information during the first lab meeting of the semester. Be sure to attend! Instructors will hold regular office hours and announce them so you can get extra help also. The course is also being supported by the ASU Supplemental Instruction Program. Details and opportunities to take advantage of these services will be discussed in class early in the semester.

Lecture Attendance:
The university requires that attendance be taken, since you are expected to be in class every day and are responsible for all information given and assigned. Attendance will be checked by using TopHat. Each student enrolled in the course is expected to have and use this on your smart phone or another enabled device in-class each day the class meets. Additionally, two ways may also be used during each class meeting as determined by each instructor.
1) by way of participation in a class activity which requires attendance to complete and/or
2) via a list of your ASU CID# number that will be circulated during each class (lecture and lab) meeting. You must initial the space beside your name on at least one of the circulating rosters for the day's class. If you arrive late it is your responsibility to sign the attendance sheet at the conclusion of the class. Anyone who does not initial the sheet at each day's meeting will be counted
absent for that day. (An absence is defined as any time you miss a lecture for a non-sanctioned university sponsored event OR are not present to participate with your classmates when attendance is being monitored).

University policy permits students to miss classes in observance of religious holidays which may not be observed campus wide by the university community. Should you have concerns regarding how your observance may affect your ability to participate in some aspect of the course due to absence you are encouraged to discuss those concerns with your instructor prior to the absence in order to minimize its potential effects.

Points are not given in this class for perfect attendance, nor are points subtracted for excessive absences: but attendance will affect your grade in this course. Please keep reading—You penalize yourself on exams when you miss class simply because you are missing learning opportunities. On average, students who miss a single lecture class score 6-8% lower than the class average on exam scores. This decreases about another 6-8% for missing two classes. Missing more than two lecture classes virtually guarantees a very poor exam score. In general it is true that students who exhibit erratic attendance do not perform to their full potential and may be perceived as having a lack of interest in learning and/or completing the course. If a situation exists which is causing you to miss an excessive amount of class I strongly encourage you discuss the situation with me as soon as possible, so I will be able to appraise your situation and offer advice and guidance as necessary. Contrary to popular belief, a student who fails to attend class is not automatically withdrawn from a course and will receive a grade which represents their performance throughout the entire semester whether they were there or not.

Academic Honesty/Plagiarism/Cheating & ASU Student Honor Code:

The Angelo State University Student Handbook contains information regarding guiding and governing of student related issues. ASU recently adopted new policies concerning student conduct. Every student is expected to read and become familiar with, and abide by the rules regarding student conduct where academic issues are concerned. It is the policy of Angelo State University that all students are expected to "engage in all academic pursuits in a manner that is beyond reproach"... and to "maintain complete honesty and integrity in their experiences both in and out of the classroom". Students in this class are expected to submit work in accord with the guidelines of academic honesty provided by the The Angelo State University Student Handbook in addition to any assignment specific guidelines or policies provided by the course instructor. The student(s) found to be submitting a completed assignment, exam, report, paper, etc., that is shown to be in offense to any of the policies given below, as well as student(s) who assisted or who were otherwise involved in the violation such as those who may have allowed their work to be copied, etc. will not receive credit for the activity, assignment etc. Furthermore, any student observed by the instructor to be willfully copying from another student during an exam/ quiz or otherwise engaged in using devices not allowed by the instructor during an examination will not receive credit for the examination/quiz, (i.e. a grade of "0" will be entered). All incidents constituting violation of the ASU Student Honor Code will be reported to the appropriate administrative authority. In each case of suspected academic dishonesty the student will also be subject to further disciplinary action by the university and dismissal from the course. In each case of suspected academic dishonesty the student will also be subject to further disciplinary action by the university and dismissal from the course. — see the ASU Student Honor Code posted at http://www.angelo.edu/forms/pdf/honorcode5.pdf, or as a physical copy in all administrative offices on campus or at the ASU Porter Henderson Library

Withdrawal From the Course: Contrary to what many students believe, you are not automatically withdrawn from a course if you cease to attend lectures or labs. If you wish to discontinue participation in a course you must formally withdraw from the course. Failure to do this can result in a grade of F appearing on your academic transcript. A written or electronic form is required to be submitted and may be obtained after consultation with your lecture instructor. The last day to withdraw from classes for the Summer II 2019 semester is 5 p.m. Friday, July 26th.

Students with Disabilities: Angelo State University is committed to the principle that no qualified person shall, on the basis of disability, be excluded from the participation in or be denied the benefits of the services, programs, or activities of the University, as required by the Americans with Disability Act of 1990. However, Angelo State University does not waive the published degree requirements for students.

All students at Angelo State University must have the capacity and ambition to undertake, with reasonable assistance from the faculty and administration, the academic challenges necessary to fulfill the academic requirements for the degree or certification programs which they are pursuing. If you believe your success in the course is at risk due to a disability, it is your responsibility to arrange a meeting with me by the end of the 1st day of class, so that we may further assess your situation and arrange communication with the Dean of Student Life and your academic advisor and/or department head. Any and all accommodations will require documented, verifiable evidence from an accredited professional specific disability expertise.
Persons with disabilities which may warrant academic accommodations must contact the Student Life Office, Room 112 University Center, in order to request such accommodations prior to any accommodations being implemented. You are encouraged to make this request no later than the end of the second day of the semester, so that appropriate arrangements can be made.

Electronic devices such as cell phones, pagers, laptops, personal stereos, etc. are not allowed to operate (i.e. ring/play/talk) during formal lecture or lab class meetings. They are considered by the Biology Department to be a disruption as well as a distraction to your fellow students and to the instructor. This statement in this document will be considered your first warning.

This policy also includes “text messaging”, during class meetings. Please be considerate of the distraction these cause to you and your classmates during a class session. After an initial reminder warning, **five points will be deducted** from your point total for each time they ring/chime/ etc...or you talk on them during a class lecture or during lab sessions. Expect to be asked to leave class if you insist on violating this policy. Expect also to be given a grade of zero on exams or quizzes if these devices create any kind of disturbance during a session. If you carry them during a quiz or exam you will automatically **receive a ZERO** AND you will be immediately dismissed from class. On quiz or exam days turn them off and leave them in your backpack or better yet, don’t bring them to class.

If the disruptive behavior continues, you will be reported to the Dean of Student Life and your major’s Department Head for disrupting class and disciplinary action. Laptops/ recording devices are fine for use during lectures, so long as they do not distract others, but are not permitted during exams / quizzes, etc. Please discuss the use of these devices with your instructor in class before using them. Your instructor reserves the right to change this policy at any time during this course.

**For “A” students only.** The fact that you’re reading this shows that you have the potential to be an “A” student. In fact, I would like for every student in this class to earn an A. Read that again....Shocking isn’t it? Yes, believe it or not I want you to do well and if you’re reading this, I sincerely believe you have the potential to do well in this class. I will do everything in my power to help you earn the grade you want, but you’ll have to do your part too which means studying for complete understanding and learning beyond just memorizing the facts. A lot of students after an exam say, “but I knew the material,” and are truly bewildered by a grade lower than they anticipated. The problem is that there’s a big difference between understanding something you hear and/or read and knowing it. “Knowing it really means much more than being able to simply recall facts and memorized information. Understanding is what has to come first, but knowing is beyond even that. Knowing requires being able, without reference, to (1) repeat what you hear/read, accurately and completely, AND (2) use what you’ve heard/read to figure out things you’ve never seen before at all! Knowing requires a degree of familiarity and usefulness of the material that cannot occur overnight. Cramming doesn’t work. The faculty who teach this course suggest you spend “quality time” with physiology everyday. Also don’t be deceived by the large amounts of free time in your schedule. They simply do not exist. The general rule of 3 hrs of study a week for each hour of course credit is no joke. Such experiences have led to the classification of a person carrying 12 semester hours as a full-time student.

12 + 3(12) = a 48 hour work week

Or to put it differently 75% of what you accomplish is MOSTLY done on your own. Time in class and in lab is intended to guide, facilitate, and clarify your learning of course content. This may be vastly different from your experience in high school or other courses. Our suggestion:.get a calendar, mark all your exam dates on it, and prepare a weekly schedule of study/play/work time.

So how do you become an “A” student? In short all it takes is hard work, self discipline, and thoughtful and efficient time management. If you feel you need further assistance, please feel free to come by my office. You are welcome to visit as often as you like. Office hours are scheduled directly for this purpose, but additional times may be arranged also. All you must do is ask.
THE TOP THIRTEEN DO'S AND DON'TS FOR THIS COURSE:

- 13. **DO EXPECT** TO HAVE FUN AND BE CHALLENGED AS YOU LEARN HUMAN PHYSIOLOGY.

- 12. **DO EXPECT** YOUR INSTRUCTOR TO BE INTERESTED IN YOUR PROGRESS AND WILLING TO HELP YOU INDIVIDUALLY.

- 11. **D.O.N.T. EXPECT** YOUR INSTRUCTOR TO KNOW WHEN YOU'RE HAVING PROBLEMS AND NEED EXTRA HELP. YOU MUST ASK AND IDENTIFY THE SPECIFIC AREA SO WE WILL HAVE A PLACE TO START FROM IN HELPING YOU.

- 10. **DO READ** THE ASSIGNED READINGS BEFORE YOU COME TO LAB TO BE PREPARED TO GET THE MOST OUT OF YOUR TIME IN CLASS EXAMS, QUIZZES AND OTHER OPPORTUNITIES TO EARN POINTS ARE REFLECTED IN THESE.

- 9. **DO EXPECT** TO TAKE NOTES AND TO PAY ATTENTION TO THE DETAILS PRESENTED BY YOUR INSTRUCTORS. NOT EVERYTHING YOU MIGHT NEED TO STUDY IS IN THE BOOKS OR ON THE WEB RESOURCES – COME TO CLASS!!

- 8. **D.O.N.T. W.A.I.T.** UNTIL A DAY OR SO BEFORE AN EXAM TO GET SERIOUS ABOUT PREPARING FOR THE EXAM.


- 6. **DO SEEK EXTRA HELP IF NEEDED.**

- 5. **DO WORK THROUGH** THE EXAM CHECKLIST AND TEXTBOOK EOC QUESTIONS ASSIGNED AND PRACTICE ANSWERING THE QUESTIONS ON THEM IN WRITING. USE THESE AS SAMPLES OF QUESTIONS THAT YOU COULD EXPECT TO SEE VERBATIM OR VARIATIONS OF ON EXAMS. BRING THEM IN DURING OFFICE HOURS TO DISCUSS OR GET EXTRA HELP WITH THEM.

- 4. **D.O.N.T. EXPECT** TO SEE EVERY QUESTION FROM EOC OR MAP ASSIGNMENTS, LAB REPORTS ETC. ON EXAMS. EXAMS ARE SAMPLES OF THE LARGER, BODY OF MATERIAL PRESENTED IN A GIVEN PERIOD OF TIME IN A COURSE. IT IS IMPOSSIBLE, GIVEN TIME CONSTRAINTS TO ASK EVERY SINGLE THING THAT YOU MAY HAVE STUDIED FOR AN EXAM. NEVERTHELESS IT IS ALWAYS BETTER TO STUDY MORE OF THE MATERIAL, THAN LESS. REMEMBER ALSO, THAT ANY MATERIAL ASSIGNED AND ESPECIALLY THAT WHICH HAS BEEN COVERED IN CLASS WILL FORM THE MAJORITY OF THE MATERIAL TEST QUESTIONS WILL BE DERIVED FROM.

- 3. **DO EXPECT** TO SEE QUESTIONS YOU HAVE NEVER SEEN BEFORE ON EXAMS. PHYSIOLOGY IS NOT ONLY ABOUT LEARNING FACTUAL INFORMATION, BUT IT IS ALSO HEAVILY CONCERNED WITH BEING ABLE TO TRULY UNDERSTAND THIS INFORMATION AND APPLY IT TO PRACTICAL SITUATIONS OR SCENARIOS. STUDENTS THAT ARE MORE ACCUSTOMED TO SUCCESS IN COURSES WHERE “MEMORIZING” FACTS IS EMPHASIZED WILL FIND IT NECESSARY TO ADJUST THEIR STUDY HABITS. LEARNING TO ANTICIPATE QUESTIONS THAT REQUIRE APPLICATION OF THE INFORMATION THEY HAVE BEEN STUDYING WILL MAKE YOU MORE SUCCESSFUL IN THIS COURSE.

- 2. **D.O.N.T. S.U.I.T.E. F.E.R.** (**I.N. S.H.I.E.L.D.** E.O.R.**)) THERE ISN'T A SINGLE FACULTY MEMBER ASSOCIATED WITH THIS COURSE WHO ISN'T WILLING TO HELP YOU IN ANY WAY THEY CAN TO BE SUCCESSFUL. ALL YOU HAVE TO DO IS ASK, LET US HELP YOU TO HELP YOURSELF. YOUR SUCCESS AND SATISFACTION WITH YOUR ACCOMPLISHMENTS IS OUR UNIVERSAL AND PRIMARY GOAL.

AND ... ABOVE ALL ELSE...

- 1. **DO REMEMBER.** ... WISH FOR THE GRADE YOU WANT AND THEN WORK FOR IT. EDUCATION WORKS BEST, WITH HIGHLY MOTIVATED, WILLING AND ENTHUSIASTIC PARTICIPANTS!!
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**Tentative Exam Dates:**
- Lecture/Lab Exam  I – Monday July 15 7:30- 9:45 a.m.
- Lecture/Lab Exam  II – Monday July 22 7:30-9:45 a.m.
- Lecture/Lab Exam III – Monday July 29 7:30-9:45 a.m.
- Lecture/Lab Exam IV and Comprehensive Replacement Exam – Wednesday August 7th 7:30-9:45 a.m.

**Topics appear in the approximate order in which they will be covered.**
In this course you will be using MasteringAandP™, an online tutorial and homework program that we will use to help you “master” the course material and as easy to use means of self-assessment. Remember also, grades in these activities will be used as an “averaged in” component 10% of the final course grade. They may then, negatively affect your grade if you don’t complete them.

What You Need:

✓ A valid ASU email address (Use your ASU e-mail address when prompted)
✓ A student access code (Comes in the Student Access Kit available separately in your school’s bookstore or online. Otherwise, you can purchase access online at www.masteringaandp.com.)
✓ The ZIP code for your school: _____76909_____
✓ A Course ID: _____MAPGRIFFINSUM2019_________ (←This is ours)

1. Register
   • Go to www.masteringaandp.com and click New Students under Register.
   • Click Continue under Step 1.
   • License Agreement and Privacy Policy: Click I Accept to indicate that you have read and agree to the license agreement and privacy policy.
   • Select the appropriate option under “Do you have a Pearson Education account?” and supply the requested information as listed above. Upon completion, the Confirmation & Summary page confirms your registration. This information will also be emailed to you for your records. You can either click Log In Now or return to www.masteringaandp.com later.

2. Log In
   • Go to www.masteringaandp.com.
   • Enter your Login Name and Password and click Log In.

Enroll in Your Instructor’s Course (SEE ABOVE) and/or Access the Self-Study Area

Upon first login, you’ll be prompted to do one or more of the following:

• Join your online course by entering your instructor’s MasteringAandP Course ID (SEE ABOVE).
• Enter your ASU Student ID. Your instructor may request that you enter a special Student ID for this course. If so, be sure to enter this information EXACTLY as instructed.

Congratulations! You have completed registration and have enrolled in your instructor’s MasteringAandP course. To access your course from now on, simply go to www.masteringaandp.com, enter your Login Name and Password, and click Log In. If your instructor has created assignments, you can access them in the Assignments Due Soon area or by clicking View All in this area. Otherwise, click on Study Area to access self-study material. Assignment may be made at the end of this first week – for next week, so try this ASAP and make sure you can do so successfully before then. If you have problems the best thing to do is use the information in the section below to get help from the people managing this webpage. You may also contact me and I’ll help as much as I can.

Support
Access Customer Support at www.masteringaandp.com/support, where you will find:

• System Requirements
• Answers to Frequently Asked Questions
• Additional contact information for Customer Support, including Live Chat
Bio 2424: Human Physiology Lab & Exam Schedule - Summer Session II 2019

Lab Sessions: Check your schedule to verify the one in which you are enrolled.  
All Sections meet Tu, W & Th (Exam Dates are noted below also)
  ■ 10:00 am -1:05 pm (Two concurrent sessions): 52Z Sci III Rm. 109 (Griffin),  
     53Z SciIII Rm.107 (Rilling)
  ■ 1:15-4:20 54Z Sci III Rm. 107 (Rilling)

Topical Sequence & Dates: subject to minor change as necessary

Week 1:  
July 8-12 Tu Introduction, Orientation, Policies and Fundamental Physiological Principles  
W Cell Physiology and Movement Through Cell Membranes  
Th Glucose Tolerance Testing and Metabolic Applications

Week 2:  
July 15-19 EXAM I -- Monday July 15th - 7:30 am$  
Tu * Mechanical vs. Chemical Digestion & Selected Examples of Enzymatic Digestion  
W * Basic Neuroanatomy Review and Fundamentals of Neurophysiology  
Th * Human Reflex Arc Considerations, Functions, and Reaction Time Assessments

Week 3:  
July 22-26 EXAM II -- Monday July 22nd - 7:30 am$  
Tu ** Sensory Physiology I: Cutaneous, Auditory & Tactile  
W ** Sensation Sensory Physiology II: Vision Considerations and Vestibular Labyrinthine Reflexes  
Th ** Muscle Contractility Simulation Exercises and Analysis

Week 4:  
Jul 29-Aug 2 EXAM III -- Monday July 29th- 7:30 am$  
Tu *** Cardiac Physiology Experiments Using The Amphibian Model and Microcirculation  
W *** Blood Analysis & Basic Hematology, Human Cardiovascular Dynamics and  
Electrocardiography  
Th *** Respiratory Function Tests & Volume Determinations, Selected Exercise Physiology  
Applications

Week 5:  
August 6-8 Tu Renal Function Tests and Urinalysis
EXAM IV -- Wednesday August 7th - 7:30 am$  
(and Comprehensive Replacement Make-Up Exam See Syllabus FMI)

* Begins / Includes Exam II Material
** Begins / Includes Exam III Material
*** Begins / Includes Exam IV Material
$ 30 Minute “Optional Early Start”
I. ________________________________________________________________, (print your name) have read the information contained in the Biology 2424.510 Human Physiology course syllabus for the Summer II 2019 Semester at Angelo State University and fully understand the expectations, requirements, and regulations for completing this course successfully. In addition, I pledge to maintain the highest standards of academic honesty, integrity, and discipline while I am enrolled in this course.

Date Bio2423 (or equivalent was completed) ____________________.

LAB section (Instructor, day, time, ) (required): __________

Academic major (required): ________________________________.

Classification (required): ________________________________.

ASU ID# ________________________________________________.

Hometown ________________________________________________________________________.

ASU Email and other addresses you check regularly (required):
____________________________________________________________________________.

Phone # (optional) _____________________________________________. In some rare cases I have found it necessary to contact a student.

I acknowledge that I understand and am responsible for the material contained in the syllabus.

SIGNATURE: _______ . TODAY'S DATE: ___