Biology 2424 Human Physiology Course Lecture Syllabus
Spring 2018

Instructor:
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Office Hours: As posted on office door and discussed on first day of class

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. In this class you will explore topics concerning the normal functions of the human bodies’ cells, tissues, organs, and organ systems. This course serves a variety of academic majors and activities are planned to accommodate special interest topics in each discipline.

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).

A successful student in Human Physiology should be able to achieve the following course and state core related learning outcomes:
- locate, identify, and functionally describe the structures of the human body at all levels of organization (i.e. recall content) = CT1, EQS1, EQS2 – Assessment = In class activities, lecture exams, embedded test questions, lab practical exams, and lab activities/reports
- develop understanding of the functional relationships of anatomical structures to one another (at all levels of organization) in health and communicate the acquired knowledge in written form. (i.e. comprehend the material). CS1 – Assessment = In class activities, lecture exams, embedded test questions, lab practical exams, and lab activities/reports
- perform laboratory investigations in which numerical, physical and chemical physiological data pertaining to tissue function are collected, classified, and analyzed in order to reach an informed, conclusive interpretation about relevant clinical scenarios and “real-world” applications. EQS1 – Assessment = In class activities, lecture exams, embedded test questions, lab practical exams, and lab activities/reports work effectively with others to support and accomplish a shared goal = CS1, TW2 – Assessment = In class activities, lecture exams, embedded test questions, lab practical exams, and lab activities/reports
- connect what she/he is learning to her/his own field (i.e. to make physiology relevant to your own academic endeavors). Assessment = In class activities, lecture exams, embedded test questions, lab practical exams, and lab activities/reports

For State, and Accreditation purposes this course will assess your ability to:
- CT1: Gather, analyze, evaluate, and synthesize information relevant to a question or issue
- CS1: Develop, interpret, and express ideas through effective written communication.
- EQS1: Manipulate and analyze numerical data and arrive at an informed conclusion.
- EQS2: Manipulate and analyze observable facts and arrive at an informed conclusion.
- TW2: Work effectively with others to support and accomplish a shared goal.
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 (read text prior to class!)
3. study the material every day (really… every day, 1 hour minimum each day)
4. practice self-assessment

To facilitate comprehension of the material, the course has been designed such that the textbook, lab manual and online resources (PhysioEx and Interactive Physiology (I.P.)) are integrated into your learning experience. Successful students are those who use these resources to their fullest potential regularly. To get the most from class meetings one must be prepared for them. 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 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. 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.

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.
- 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!

**Required Supplies:**

2. No Laboratory Manual to purchase is required this semester. But, you must be able to access the [ASU Blackboard](http://) 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. **Interactive Physiology 10.0** (software) available online w/ password protected access or as a CD
4. **PhysioEx**: Laboratory Simulations Software – available on CD or via the internet also. Stabler et. A.I., Pearson Education
5. **Mastering A&P Software** available online using access codes provided with purchase of the Silverthorn Textbook bundle
6. All students in my lecture section will be using a software/application product called **Top Hat**. This service may cost a small fee, depending on whether or not you have purchased it for other courses. If you purchased this application for another course this semester, there is no additional cost. If you purchased the 5 year service from another course at ASU in the past, there will be no additional cost. Tophat requires everyone to have an **electronic device** (Smartphone, tablet, laptop, etc.) with them every day in class.
7. 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 one available or borrowing one from someone else in your class.
8. **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 and blackboard. Your instructor is not responsible for communicating with you through any other third party e-mail service such as hotmail, gmail, etc.

**Items 3, 4 & 5 above are accessed through a password provided at the time of purchase of a new (not used) copy of the Silverthorn textbook. If you chose to purchase used copies of the text, access must be purchased separately. See your instructor for additional information, if necessary.

**The Pearson Mastering A & P webpage contains important references and useful resources:**
http://www.pearsonmylabandmastering.com/northamerica/masteringaandp/  (textbook publisher’s page for Mastering A and P online resources).
Grade Determination – Exams & Other Activities:

Lecture = 65% of your Final Grade broken down as follows:

<table>
<thead>
<tr>
<th>Lecture Item</th>
<th>Percentage</th>
<th>Points</th>
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</thead>
<tbody>
<tr>
<td>Lecture Exam 1</td>
<td>12.5%</td>
<td>(or 125 points)</td>
</tr>
<tr>
<td>Lecture Exam 2</td>
<td>12.5%</td>
<td>(or 125 points)</td>
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<tr>
<td>Lecture Exam 3</td>
<td>12.5%</td>
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<tr>
<td>Lecture Exam 4</td>
<td>12.5%</td>
<td>(or 125 points)</td>
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<tr>
<td>Average of All Other Class Activities</td>
<td>15.0%</td>
<td>(or 150 points)</td>
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<tr>
<td>LECTURE TOTAL</td>
<td>= 65%</td>
<td>(or 650 points)</td>
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Laboratory = 45% or 450 points

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<thead>
<tr>
<th>Laboratory Item</th>
<th>Percentage</th>
<th>Points</th>
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<tbody>
<tr>
<td>Lab Exam 1</td>
<td>15%</td>
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<tr>
<td>Lab Exam 2</td>
<td>15%</td>
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<tr>
<td>Lab Exam 3</td>
<td>15%</td>
<td>(or 150 points)</td>
</tr>
<tr>
<td>LAB TOTAL</td>
<td>= 45%</td>
<td>(or 450 points)</td>
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Therefore a total of 110% or 1100 points are available in this course.

Letter grades will be assigned according to the following scale:

- 90% (900 points and up) = A
- 80.0-89.9% (800-899 points) = B
- 70.0-79.9% (700-799 points) = C
- 60.0-69.9% (600-699 points) = D
- Less than 60% (599 points or fewer) = F

All grades are posted on Blackboard and you will have access to them immediately after they have been posted. 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 point total.

Lecture Exam Format: All exams will consist of multiple choice questions. Approximately 75% of questions will be factual recall, and the remaining 25% will include higher order, critical thinking questions. Questions come from the text, lecture notes, powerpoint presentations, critical thinking questions posted on blackboard, and the EOC questions following each chapter.

Lecture Exam Days: Scantron forms will be required. You will need to bring a scantron and a pencil (with a good eraser). Cellphone calculators are not allowed. Electronic devices such as cell phones, pagers, personal stereos, graphing calculators, palm pilots, laptops, recording devices, etc. are not allowed during exams. If found on your person during an exam, you will be subject to a grade of “0” and disciplinary action.

Lecture Make-Up Exam:

- If you are planning an absence on a lecture exam day for any reason, you must make arrangements to take the exam in advance of the planned absence.
- If you miss a lecture exam for any legitimate, unplanned 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. The grade earned on the comprehensive exam will serve as the replacement for the missed 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. The format will be 75-100 multiple choice questions.
- All students are required to take lecture exam 4. The comprehensive final cannot replace the fourth exam.

Exam Grade Review: An answer key of each exam will be provided during instructor office hours. Students are encouraged to confer with me if there are any questions regarding exams once they have compared their exam to the key.

Class Participation Activities:

Periodically, throughout the course we will have in class activities (such as quizzes), and outside of class assignments (“homework”). For in class activities – students must be present to earn points. No make-ups for in-class participation, missing or late assignments will be allowed.

Laboratory:

Specifics regarding the laboratory portion of Human Physiology are found in the lab syllabus. You must complete the lab safety training courses “Biosafety” AND “Chemical Safety” and pass the online exam, before you will be allowed in lab.
**Attendance:**

The university requires that attendance be taken. Attendance will be checked during each class meeting via TopHat. You are expected to be in class every day and are responsible for all information. Additionally, there are multiple class participation activities that contribute to your grade.

**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 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 form is required to do so and may be obtained after consultation with your instructor. The last day to drop this course and receive a "W" is **Monday, April 2nd**. Anyone remaining in the course after this date will receive a grade.

**Religious Holy Days:**

A student who intends to observe a religious holy day during the semester should make that intention known in writing to the instructor during the first week of the semester and one week prior to the absence. If this submission is completed, a student who is absent from classes for the observance of a religious holy day shall be allowed to take make up missed exams or assignments scheduled for that day in accordance with syllabus policy.

**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 week 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 of your specific disability. Persons with disabilities which may warrant academic accommodations must contact the Student Life Office, Room 112 University Center, (325)942-2191 in order to request such accommodations prior to any accommodations being implemented. You are encouraged to make this request early in the semester so that appropriate arrangements can be made. You must give me a copy of the paperwork from the student life office specifying the needed accommodations at least one week prior to the first exam/ etc. in which accommodations are expected.
Biol 2424  Human Physiology – Spring 2018  
Anticipated Sequence of Lecture Topics and Reading Assignments

<table>
<thead>
<tr>
<th>Topic(s)</th>
<th>Textbook Reference:</th>
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<tbody>
<tr>
<td>Course Policies, Tips and Intro to Science &amp; Physiology</td>
<td>Ch.1</td>
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<tr>
<td>Tissues/Organ Systems, Characteristics of Life and Homeostasis</td>
<td>Ch.3, 6</td>
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<td>Cell Physiology:</td>
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<td>Organization and Biochemistry</td>
<td>Ch.2,3</td>
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<tr>
<td>Cell Structure and Function</td>
<td>Ch.3</td>
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<td>Membrane Transport Processes</td>
<td>Ch.5</td>
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<td>Cell Metabolism &amp; Metabolic Principles</td>
<td>Ch.4</td>
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<td>Ch.22</td>
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<td>Digestive Physiology</td>
<td>Ch.21</td>
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<tr>
<td>Cellular Communication and Signal Integration/Endocrine Intro</td>
<td>Ch. 6, 7</td>
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<tr>
<td>Nervous System Physiology:</td>
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<tr>
<td>Nervous Tissue &amp; Organization Overview</td>
<td>Ch.8</td>
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<tr>
<td>Membrane Potentials and Impulse Communication and</td>
<td>Ch.5, 8</td>
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<tr>
<td>Nerve Impulse Conduction</td>
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<tr>
<td>Central Nervous System (Functional Regions)</td>
<td>Ch.9</td>
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<tr>
<td>Sensory Physiology: General and Special</td>
<td>Ch.10</td>
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<tr>
<td>Peripheral Nervous System (Somatic, Enteric, Autonomic)</td>
<td>Ch.11</td>
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<tr>
<td>Muscle Physiology and Control of Body Movement</td>
<td>Ch.12, 13</td>
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<td>Cardiovascular Physiology:</td>
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<tr>
<td>Cardiac Physiology</td>
<td>Ch.14</td>
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<td>Blood Flow and Pressure</td>
<td>Ch.15</td>
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<td>Blood</td>
<td>Ch.16</td>
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<td>Respiratory Physiology</td>
<td>Ch.17</td>
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<td>Gas Exchange &amp; Transport</td>
<td>Ch.18</td>
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<td>Kidney Physiology</td>
<td>Ch.19</td>
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<tr>
<td>Fluid &amp; Electrolyte Balance</td>
<td>Ch.20</td>
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<tr>
<td>Reproductive Physiology</td>
<td>Ch.26</td>
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<tr>
<td>Endocrine and Immune Systems Overview</td>
<td>Ch.7, 23</td>
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<td>Ch.24, 22</td>
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Tentative Lecture Exam Dates:

- Lecture Exam I – Feb 8 (Thurs)
- Lecture Exam II – Mar 8 (Thurs)
- Lecture Exam III – April 12 (Thurs)
- Lecture Exam IV – 8 May (Tuesday) – 8 AM- 10 AM & Comprehensive Final

LAST DAY TO DROP/WITHDRAW: April 2nd (Monday)
****We will discuss TOPHAT in class*** For Spring 2018 the Join Code is 360939

****Get Started with Pearson’s MasteringA&P****

First, make sure you have these 3 things...
1. Email: Please use your ASU email address. This will be how I & MAP communicate with you.
2. Course ID- For Spring 2018 Course ID is MAPFOHN98108
3. Access Code or Credit card: the required access code comes with your book (if book is purchased new) or may be purchased by itself (with access to Physio-Ex and Interactive Physiology) from the bookstore. You can also buy instant access with a credit card or PayPal during MAP registration below.

Next, get registered!
1. Go to [www.masteringaandp.com](http://www.masteringaandp.com)
2. Under the large Register section on the right side of the page, and click the Student button.
3. Read the onscreen instructions and click OK! Register now.
4. Next, check off whether or not you have an Access Code. If you don’t, select your textbook.
5. After this, either Create a new Pearson username/password, or, if you’ve already registered for another Pearson product (i.e. MyMathLab), enter that username/password. If you have an Access Code, enter it on the bottom of the page.
6. On the next page, fill out the appropriate information fields then click Next. If you entered an Access Code, you will be brought to a page from which you can access your product. If not, enter your payment information so that you can Purchase Access, after which you’ll be granted access.
7. You are now registered! Now, it’s time to sign. Go to [www.masteringaandp.com](http://www.masteringaandp.com) and click the Sign In button in the top right. Enter your username and password.

For help setting up Mastering A and P:
Visit [www.masteringaandp.com/get-registered](http://www.masteringaandp.com/get-registered) or visit the 24/7 Technical Support site at [www.247pearsoned.custhelp.com](http://www.247pearsoned.custhelp.com).