

**Dear Physiology Students,**

I would like to welcome you to Human Physiology. Understanding physiology is essential to being an effective health care professional and this course is designed to provide you the opportunity to greatly increase your knowledge about how the body functions and how various disorders/diseases can interrupt that function.

**Time Requirement for the class: How much you learn will depend on the amount of time and effort that you are willing to dedicate to your education. Your success in this course is all up to you.** Taking a 5 unit physiology course will require a great deal of **dedication** and **self-discipline** to be successful. The rigor of the class demands that you put in at least 8 hours of quality study time per week. More time will be required if you have not had a prior class in human anatomy or human biology. While anatomy and human biology are not prerequisites for the class taking one of them before physiology would be helpful and enhance your understanding of physiology.

There are a number of students on the waitlist and if, after going through the requirements of the course, you feel that you will not have the time to dedicate to this class then please drop before the first day of the semester or simply do not show on the first day; **I automatically drop any student who does not attend the first class meeting.** You can then reschedule for another semester when you have more time to devote to the subject.

**What to do before class starts:** To increase your opportunity for learning physiology and continue your development in becoming a well educated, intelligent, leader in the health care profession I have included the following assignments. These assignments are due at the beginning of class. Learning this information will serve as a good basis for understanding future concepts and **will be included on the first exam.** At the start of class **you will turn in the Clinical Applications and Diagrams for chapter 1 and be prepared to take a quiz. Quiz questions can come from chapter 1 lecture notes, the key medical terms, clinical applications and diagrams, and from the inspirational videos.**

**Assignment 1.** Complete the following before the first class meeting:

- 1) **Read the class syllabus.** The syllabus can be accessed in the “**Physiology Syllabus and Schedules for Lab/Lectures**” section of my website. My website can be accessed at: <http://www.drcroes.com>

**Watch the following videos:** Videos can be accessed on the “**Inspirational Videos**” page of my website.

- 1) **Be Phenomenal**
- 2) **Courage of Famous Failures**
- 3) **Mindset and Success, Growth vs. Fixed Mindset.**

- 2) **Read the introduction (chapter 1)** of your physiology text book. Since most of you will purchase the text book (**older editions are fine**) at the beginning of the semester I have posted the introductory chapter on my website located in the “**Physiology Lecture Note Outlines**” section. The information found in chapter 1 is a good overall introduction but **the majority of information that you will be tested on will be based on the lecture information including the lecture note outlines, clinical applications, study guides, and key medical terms. These areas should be the main focus of your study.** Use the text book as a resource for additional explanations to increase your understanding of important concepts.

- 3) **Text Book Information:** The textbook requirements for the class can be found in the syllabus. Older editions are fine and **many students do well in the course without the textbook** as I provide most of the information in the lecture notes. While there are two options for the textbook, the **electronic text book with Mastering A&P** seems to be a good value. The cost is reasonable and it comes with additional study aids. However, I supply a number of study aids so if you would like to save some money then **you do not need to add the Mastering A&P** to the electronic text book. I certainly understand the financial difficulties of being a student so **it is also fine with me if you would like to use an older less expensive edition without Mastering A&P**. You can also use the textbook I used in previous courses titled **Human Physiology, by Stuart Fox**. As I stated earlier, **the majority of information that you will be tested on will be based on the lecture information including the lecture note outlines, clinical applications and diagrams, study guides, and key medical terms.** The text book is to be used as a resource.
- 4) **The lab manual is required and will be used for our first lab.** Those registered for the class should bring their lab manual to their first lab session. **Students on the wait list should not purchase the manual until you know that I will be able to add you to the class.** We have the manual printed by our bookstore to keep the cost low – less than \$20. Usually the manual is not available until one week before the semester starts.
- 5) **Learn the information contained in the lecture outline for chapter 1.** The lecture outline is located in the “**Physiology Lecture Note Outlines**” section of my website. Once the semester starts they will only be available in Canvas. The web page is password protected: **The password was sent to you in the introductory email.**

If you did not receive the email then you should logon to your MyShasta account and verify that your email address is correct. I send all class emails through MyShasta and only you can go in and change your email address.

**Lecture videos for Chapter 1. Watching the videos on the lecture material is optional.** On the lecture note outline page of my website you will find videos that contain similar information as in the lecture note outline with the addition of more images and examples. **The videos are divided into sections that match each objective/topic covered** so that you can watch them all or just those areas that you would like additional help in understanding. The slides shown in the videos have the same text as the lecture note outlines so that you can follow along and add additional notes where needed. **Watching the videos on the lecture material is optional.** If you find that you are understanding the material based on the lecture note outlines and textbook then **you do not need to watch the videos**. I have incorporated these to enhance the learning experience for the more visual/auditory learners and provide additional images and examples for the more challenging concepts.

- 6) **Be able to answer/explain each of the student objectives listed at the beginning of the chapter 1 lecture note outline. This is very important! If you truly know a concept then you should be able to explain it to someone else. The answers to the objectives follow in order within the outline and you should work to know the objectives in the same detail as in the outline.** This can be an overwhelming amount of information and you will likely feel anxious about what you will need to learn. **The best way to reduce anxiety is to study.** **Take it one objective at a time and learn that objective/concept before going to the next.** When finished with the notes for that chapter go back and practice explaining each objective.

**Don't just read through the information - study with intensity** always asking yourself, “**what did I just read/learn and can I explain it to someone else?**” Put time limits for learning each objective. For example – I will learn objective one in 10 minutes and then push yourself to meet that target. **Write key words down**, explain while speaking out loud, while standing up, sitting down, walking about, running, and then explain it to someone else –

**imagine that the person you are explaining the concept to is a future patient.** Most of all, **Practice, Practice, Practice** and in time your anxiety will decrease with each objective, key medical term, clinical application question, and study guide question that you learn.

- 7) You should go through and become familiar with my website – especially the “**Student Resource**” section as you will find a number resources that will help in your understanding of human anatomy and physiology.
- 8) **Learn the key medical terms contained in the Medical Diagnostic Tests.** The Medical Diagnostic Tests information is located in the “**Key Medical Terms and Case Studies for Physiology**” section of my website.
- 9) **Complete the Clinical Applications and Diagrams for Chapter 1.** Do this after you have read chapter 1, learned the information from the chapter 1 lecture note outline, and learned the **key medical terms of Medical Diagnostic Tests.** Some of the answers to the questions will need to be found from another source such as the internet. **The Clinical Applications and Diagrams are due on the first day of class. To receive credit you will need to have at least 90% complete.**
- 10) **Complete the Study Guide for Chapter 1 once the semester starts.** The study guide can only be accessed in **Canvas**. Canvas usually opens about a week before the semester starts so you can certainly start this assignment early. Don't worry if you are not able to start it before the semester starts as you will **have one week to complete this assignment once we start the semester.** I will go over how to access Canvas on the first day.
- 11) **Study the information in Quizlet and the physiology word roots, prefixes and suffixes.** See **Additional Learning Tools and Materials** below for more information.
- 12) **Take the written practice quiz. This will not be turned in.** The practice quiz is for you to assess your understanding after you have learned the information. The practice quiz is located in the “**Human Physiology Lecture Note Outline**” section.

**Assignment 2. Complete the following before the first class meeting:**

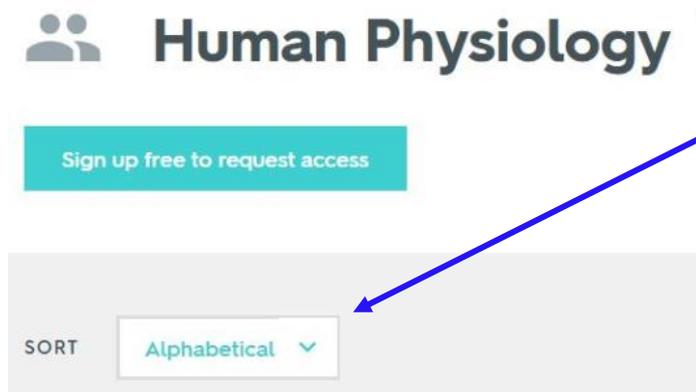
- 1) **Read chapters 2 and 4** of your physiology text book. Chapter 2 is on the chemical composition of the body and chapter 4 explains characteristics of enzymes and energy. I have posted these chapters on my website located in the “**Physiology Lecture Note Outlines**” section. This is meant for you to preview the information and **I will lecture on most important concepts during class.**

For those of you that have not taken chemistry, this chapter may seem a little overwhelming. **This is not a chemistry course and chemistry is not required to take physiology.** However, a basic understanding of the material that you will learn in this section will greatly enhance your ability to understand how the body works. For example, when we talk about lactose intolerance, from the chemistry section you will have learned that lactose is a disaccharide made up of a molecule of glucose and galactose. You will not need to draw a lactose, glucose, or galactose molecule, but should know how carbohydrates are classified (monosaccharide, disaccharide, and polysaccharide) and be able to give examples of each. **During class I will go over key points to the chemistry section and can answer your questions.**

**Additional learning tools and materials for your academic development. Note: This is for the most serious of students that are striving to earn a B or A in the class.**

- 1) **Learn the common “Physiology Word Roots, Combining Forms, Prefixes and Suffixes”.** This is located near the top of the “**Clinical Applications and Diagrams**” section of my website. This should be done after you have mastered the preceding information. There is a great deal of terms here and **I do not expect you to know all of them before the semester starts.** When you take the practice quiz you will see questions on these terms but on **the actual quiz you will take in class questions on these terms will be in form of bonus questions.** As we go through the semester I will have select terms for each unit that you will need to know. The **more you can learn now that better your understanding** as we progress through the course. It will be beneficial for you to know this material but you should save it for later – kind of like an after dinner mint. First, learn the information found above, which is the main course and then treat yourself to the physiology word roots like the after dinner mint that you put in your pocket to enjoy later.
- 2) **Check your knowledge by testing on Quizlet.** This is located in the “**Physiology Clinical Applications and Diagrams**” section of my website. To test your progress I have set up a number of practice sets for you on each unit. Go to the “**Physiology Clinical Applications and Diagrams**” section of my webpage and toward the top of this page click on the “**Quizlet – Learning Activities for Human Physiology**”. Click on the various group sets (Body Cavities and Planes, Body Systems, etc.,) that you would like to test yourself. **Joining the group is optional and recommended so you will be notified of updates. Enter the following URL and you can join automatically: <https://quizlet.com/join/f7rsMAfdZ>** You do not have to join to participate in the activities. This site enables you to review the information covered in the introduction, make flash cards, quizzes and play some really fun games that enhance your ability to learn.

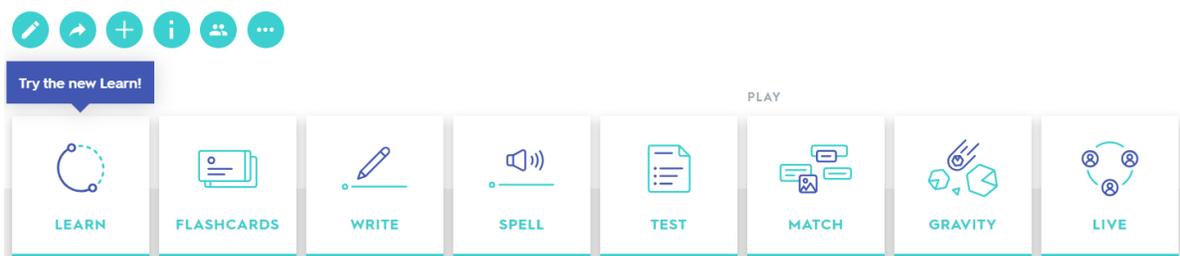
**Directions to get you started in Quizlet:** When you go onto Quizlet click on the sort button and select to sort the sets as "**alphabetical**" which will list the Units in numerical order. This will make it easier to find the sets of study cards for each Unit that we cover.



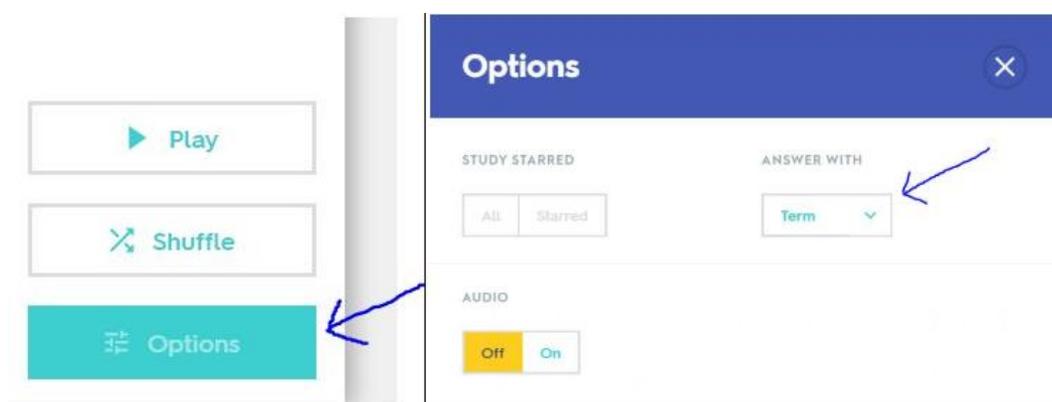
**Selecting alphabetical is the best option for organization of Units**

When you select on a set there will be a number of study options for that set of cards.

3)



**Flashcards** are a great place to start as a study option. When you select Flashcards you can select how you want to answer the questions - either with the term or with the definition. I recommend to select to answer with "**Term**" initially. To do this, at the lower right can side of the screen go into "Options" and then in the "Answer With" select "Term".



- 4) This is a non-graded resource and you are not required to turn anything in. Research has shown that more ways you incorporate learning activities (reading, coloring, quizzes, explaining to another person, etc.) and the **power of repetition** greatly enhances your ability to learn. This resource is meant to help in your mastery of human physiology.

Keep in mind that as you prepare for your career in the medical field you will need to have a strong command of the vocabulary that is associated with human anatomy and physiology. **The time and preparation you put in now is an investment for your success in a future career, so get ready for a full semester of preparation and investment!** In the words of Albert Einstein "Never regard study as a duty, but as the enviable opportunity to learn."

**Organization is an important component to being successful.** I highly recommend that you have a binder with labeled dividers for the following sections: **Lecture Notes, Clinical Applications/Diagrams, Key Medical Terms, Power Quizzes, Blood Tests, Case Studies, Returned Papers, and Lab Manual.** I suggest the following two options for your binder system:

**Option 1)** Have a single 2 ½" to 3" binder where you combine both the lecture information and the lab manual. This works well because you have all your information in one binder but it is bulky to carry to each class.

**Option 2)** Have two binders; a 1" binder for your lab manual and current lecture information for the upcoming lecture exam and a second 2" binder to put past sections into once that lecture exam is completed. The advantage is that you take a smaller lighter binder to each class.

**Dear Wait listed Students:**

I know that being on a wait list is a stressful situation. You want to complete your education and start your career, but a required class is full. It is difficult to say how many students I will be able to add from the waitlist. It depends on how many of the regularly enrolled students show up on the first day. **I drop any student, both enrolled and wait listed that are not present on the first day.** By the time the semester starts I have seen a number of spots open due to student absence but this number varies from semester to semester. **Note: Students that I am able to add from the wait list will have until the beginning of the second week of school to complete the first assignment. You are encouraged to complete the assignment before class since it will be less stressful and you will not be behind.** Wait listed students **should not** purchase the text book or lab manual until you are added to the class.

**Due to safety regulations for the lecture hall we can no longer put chairs on the side of the classroom. The addition to the class from the wait list will be dependent on a regularly enrolled student either dropping before the semester starts or not showing up on the first day.** Unfortunately I cannot give you a more definite answer on your enrollment into the class. I hope that for those that are serious about their education, I will be able to add you to my class.

**For Everyone:**

Doing the pre-semester assignments and becoming familiar with my website will help you prepare for a great learning experience in physiology. I look forward to working with you and please let me know if you have any questions,

Dr. Croes