

## **BIOL 2035 Human Physiology Survey Syllabus**

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**Textbook and Resources:** I decided to go with the resource below. I really like the way the author presents physiology, connects different systems together and attempts to create a structure that shows how systems interact and influence one another. The version below can be purchased as an e-version and can be rented as well for a smaller amount.

- Silverthorn, D.U. Human Physiology – An Integrated Approach (8th ed.). Pearson. 2019. ISBN: 9780134605197

Throughout the course, I may direct you to other resources for more information, or for an activity to help you connect to the material.

**Course Delivery:** This is an online course that is to be delivered in a largely asynchronous manner; that is, you can move along at your own pace for most of the course. The evaluation scheme for the course is comprised of three exams (85% of the final grade in total) and quizzes (15% of the final grade). The quizzes can be done at your convenience but the exams will be available at a set date and time (see the proposed delivery plan below).

**Asking Questions:** Hopefully my presentation of the material in this course will be clear and will make sense to you, but if it doesn't please make sure that you ask questions of me and of your colleagues in the course. If you don't have questions about the course material but have other questions, please share with me. You can post questions in the discussion board too. I love Physiology and will do my best to find you an answer!

My plan is to set up a zoom meeting every week to answer any questions that you might have about course content or connections to the world. If you have questions that can't wait, please email me and I am happy to set up a private meeting.

**Meeting with me:** In the not online world, I keep my door open and try to address questions or concerns as soon as I can. If you would like to meet individually to discuss any questions or concerns, please contact me by email and I will get back to you as soon as I can to connect.

### **Proposed Schedule**

I have posted a spreadsheet with a more detailed plan of content. My plan is to deliver most content through screencasts and to have you do activities to help you make sense of the material and connect it to your experiences. I try to limit the screencasts to about 10 minutes in length.

The course description includes the nervous system, skeletomuscular system, cardiovascular system, respiratory system and renal system as core pieces of content. I have included a couple of introductory sections as well on physiology, homeostasis and some cellular functions that are necessary to better appreciate how these body systems function. As an organism, we are able to sense elements of our environments (both internal and external), process that information (integrate), and then respond appropriately to that information. Our organ systems, organs and cells perform these same functions (sensation, integration and response) so that we can function as a coordinated whole. When our

systems function properly, we are able to maintain a steady state despite changes to conditions in the internal and external environment. This course is by no means an exhaustive dive into how these systems work and work together but should serve as in-depth introduction to them.

The text is pretty concise in explaining content and the figures are excellent for demonstrating how particular processes work. Most of what is in my screen casts should connect with the material in the text. The organization of the text is a little bit different from what I have on my screen casts but it should match up pretty well.

### **Evaluation Scheme**

Test 1 – 25%

Test 2 – 30%

Test 3 – 30%

Quizzes – 15%

The exams are non-cumulative but the integrative sections in Unit 5 (Control of Muscle Activity) and Unit 9 (Regulation of Fluid and Electrolyte Balance) will require to apply some knowledge from previous units. As indicated above, exams will be written on set dates at set times. Quizzes will be open to complete when you have done each unit or part unit. I

### **Evaluation Format**

Quizzes – 15 multiple choice questions (MCQ)

Exams – approximately 80% of the midterms and final exams will be MCQ; the remainder will be Short Answer questions.