Syllabus for BIOL-7: Human Physiology

Course Information

Semester & Year: Fall 2023
Course ID & Section #: BIOL-7-V6387
Instructor's name: Wendy Riggs
Day/Time of required meetings: **No synchronous required meetings**
Location: **Online**
Number of proctored exams: **1** (Possibly HAPS Exam at the end of the semester)
Course units: 4

Instructor Contact Information

Office location: Online
Office hours: By appointment
Phone number: 707-476-4227
Email address: wendyk-riggs@redwoods.edu

Catalog Description

An organ system approach to the study of human physiology. Special emphasis is given to molecular and cellular mechanisms responsible for homeostasis. Labs include experiments on human subjects as well as computerized simulations of complex physiological processes. NOTE: This course is required for application to the nursing program.

Course Student Learning Outcomes *(from course outline of record)*

1. Illustrate how the integration and regulation of organ systems affects the maintenance of homeostasis in the human body.
2. Relate the key functions of major organ systems with the cellular and molecular mechanisms that enable these functions.
3. Analyze examples of disease processes and relate them to aberrations of normal physiological function.
4. Utilize the process of science to design and carry out physiological experiments, analyze resulting data, and relate results to physiological principles.

Prerequisites/co-requisites/ recommended preparation

Pre-reqs: BIOL-1 (or 3), BIOL-6, CHEM-2 (or 1a)

Accessibility

College of the Redwoods is committed to making reasonable accommodations for qualified students with disabilities. If you have a disability or believe you might benefit from disability-related services and accommodations, please contact your instructor or Disability Services and Programs for Students (DSPS). Students may make requests for alternative media by contacting DSPS based on their campus location:

- Eureka: 707-476-4280, student services building, 1st floor
- Del Norte: 707-465-2324, main building near library
- Klamath-Trinity: 530-625-4821 Ext 103

If you are taking online classes DSPS will email approved accommodations for distance education classes to your instructor. In the case of face-to-face instruction, please present your written accommodation request to your instructor at least one week before the needed accommodation so that necessary arrangements can be made. Last minute arrangements or post-test adjustments usually cannot be accommodated.

Biology 7 – Human Physiology

Fall 2023 (BIOL-7-V6387)

Asynchronous and fully online

F23 Tentative Schedule

(Last updated 6/8/23)

Instructor Information

Instructor: Wendy Riggs **Email**: wendyk-riggs@redwoods.edu **Chat**: Pronto!

Office: SC 216C (Eureka) **Office Hrs**: M 10-11am (SC104), online TBD **Phone**: (707)476-4227

Zoom study sessions: TBD **Face-to-face lab work (100% optional)**: W 10-1:15pm

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Welcome to Human Physiology online!

There will be a lot to learn during our first week of class. In addition to TWO full lectures about physiology (!!!), you will also learn how the course works, and meet your awesome classmates. Even though we are online, the learning we'll do is legit and having support from classmates will be very helpful. So here are our two very important tasks before we start our class:

FIRST- get oriented to our “classroom”

Getting oriented in an online class can be a wild ride. It seems like instructors often organize their courses differently, which means you have to figure out a new giddyup every time you take an online class. While the due dates (aka "best-by dates") in our class will likely be different from the due dates in your other online classes, know that I am happy to give you as much time as you need to get into the groove. Best-by dates are there to help pace your work, and to keep you from getting overwhelmed.

Most weeks, you'll have two video lectures and one lab (just like you'd expect in a traditional face-to-face class). On top of this work, we'll have other assignments to support your learning (like quizzes). After about 6 lectures (and 3-4 labs), we'll have an exam.

To help you get ready for this work, our course has a “Start here” orientation module. There is a lot of stuff in that module and it will help you start strong. In addition, I'll host a "course tour" during week 1 in Zoom. I encourage you to join me for the tour if you can-- it will be fun to meet you.

SECOND- meet your classmates (and meeee!)

While it is definitely important that you learn how our online classroom will function this semester, I think that meeting your classmates is equally as important. You all are experienced science students (think about that...you've passed general biology, chemistry, and human anatomy to be here!), so you are probably aware that this class will likely be challenging.

I am confident that for most of you, working together will make your learning richer, and it will lighten the load you have to carry on your own. These are two noble outcomes of teamwork. In fact, in every aspect of this course, I encourage you to work together, with the single exception of exams, which you will do on your own. (But don't worry-- we will have lots of strategies for helping you rock those things too!)

Now-- here’s the next important thing for you to know. **I trust you**. If working with classmates is a burden for you, please know you don’t HAVE to do group work in this class. I want all your course activities to focus on helping you learn, and I’m down with whatever makes that happen best for you.

Course schedule

You can access the Fall 23 (online) tentative course schedule here, but all the weekly content will be nicely organized for you in the Canvas modules. **There are no required synchronous meetings in this online class.** However, we will meet up for study sessions in Zoom. We’ll determine the best times for these based on folks’ schedules. *All study sessions will be recorded if you can’t make it.*

In addition to Zoom study sessions, we’ll sometimes host face-to-face labs on the Eureka campus. If you can’t make it to the Eureka campus, you can always Zoom in. This just provides us with a space to do lab work together. Watch the homepage in Canvas (the Weekly Wassssup!) for the meeting schedule.

Required materials

There is some flexibility around the required materials list for our course. Let me know if you have any questions about this.

Textbook: 3 options

A textbook is required for this class. However, you have two main textbooks to choose from (and possibly a third option...in process). You do NOT need both books. But please take a look at all the required materials before making your decision.

1. **Option 1- Human Physiology: An Integrated Approach (any edition) by Dee Silverthorn**
   This is a phenomenal physiology text. The images are excellent, the explanations are clear, and the content is comprehensive. You can purchase any edition of the text from our bookstore or

any other bookseller (like Amazon). You do not need any codes or add-ons, unless you want them. Students who actually find reading a text LOVE this book.
    - eText ISBN: 978-0135212912
    - Hardcover book ISBN: 978-0134605197
    - Loose leaf book ISBN: 978-0134704203
2. **Option 2- Anatomy and Physiology: OpenStax**
   This is a good and FREE anatomy and physiology text. It is an Open Educational Resource, which means you can access the content for free. Because it covers both Anatomy and Physiology, you'll have to sort through the content a bit more than if you just purchase the Silverthorn book above. But the price point is VERY compelling. Here are your options:
    - Free online book with many ways to consume the text, including a PDF download.
    - Hardcover book (in color, ISBN 9781711494067) from Amazon.
3. ~~**Option 3 (hopefully)- Riggs chapters found under "helpful resources" in each Canvas lecture**~~
   ~~This is a new option and it hasn't been vetted yet. I'm hoping to have written a chapter of text for each lecture in the class. I'm very open to feedback, but the idea is to provide a free text resource that carefully matches the content I cover in the course.~~

Lab software

LT Sensors (≈$31/semester) will enable us to do five very robust data collection and analysis labs in our online class. Our first LT lab happens during Week 2, so we have time to get things figured out. However, if you want to get this all done now, you can purchase your LT subscription here. In addition to purchasing access to LT, you will need to create an account with them. I'll send you an email with those instructions. Then you'll be able to log into ltlogin.com.

Helpful technology

In our online class, we'll need technology to effectively engage with each other. Check out this list of helpful tech, and let me know if you think there will be an issue with anything.

- Reliable and updated computer (preferable, but let me know if you have issues with this). Be careful about assuming you can do all your coursework on your phone. There are a lot of moving parts in this course, and sometimes our phones don't do the best job facilitating online learning.
- If you do plan to access your course on your phone, I highly recommend using the Canvas student app.
- Most computers and internet providers are adequate for course success, though speedy internet access makes video conferencing easier (for example, in Zoom and Pronto).
- I really encourage video communication in our online class. A working webcam or cell phone that can take video helps with this.

Other items you might find helpful

To learn physiology, it is really helpful to engage with the material in as many ways as possible. You'll find some of the following items helpful when taking notes or studying for exams:

- Colored pencils or pens for note taking.
- Sticky notes (many colors) and/or 3x5" index cards (any color) for studying.
- Three ring binder or spiral notebook for your External Brain.
- Krieger, A Visual Analogy Guide to Anatomy and Physiology (ISBN 9781640434271). This coloring activity book is useful for both anatomy and physiology.

Canvas

All content is available to you and organized in Canvas, the official learning management system (LMS) of College of the Redwoods.

Log into Canvas

You can access Canvas from the single sign on link at the CR website.

You can get Canvas help directly from the folks at Canvas by visiting Canvas Help for Students. Just click on "contact support" in the top right corner to chat with a Canvas support human.

You can also get help from CR at the Student Tech Help website. You can email its@redwoods.edu, or call 707-476-4160.

You can get additional help with online learning at https://www.redwoods.edu/online.

Because this is an online class, you should plan on logging into Canvas ALMOST EVERY DAY. One of the most valuable resources is access to your classmates and instructor. We're all in this thing together, and Canvas is our classroom.

All content is organized in weekly MODULES. Each module has the same structure and is set up by DUE DATE. I will try to be organized and consistent, but if there is content you are looking for but can't find, PLEASE contact me ASAP. There are probably other folks looking for the same thing.

Extra help with Canvas and tech

If you want extra help with Canvas or computers, we also have a couple of really nice (and free!) non-credit courses you can take. Look for these on WebAdvisor. They won't add to your unit load, and can help provide "just in time" tech support when you need it.

- **EDUC-203: Getting Started in Online Classes with Canvas**
  A course preparing students to be effective learners in an online environment. This course will emphasize best practices in online learning, internet etiquette, and the effective use of the Learning Management System. It is intended for students taking an online course for the first time or for those in need of an online refresher. This course also serves as a great introduction to other software used in the workplace.
- **EDUC-207: Getting Started in Online Classes with Computers**
  A course in basic computer skills development designed for students who have little or no experience using a computer. Topics include fundamental components of computer and program operation such as an introduction to internet usage, MyCR, email, and file system management and navigation.

FYI: Designating pronouns in Canvas

You can designate pronouns to follow your name in Canvas. If you're interested in learning more about why you might do this, here's a helpful resource describing why pronouns matter. Reflecting on the power of inclusive and gender-neutral language is important for all of us, but it is especially important for those of us going into future careers that involve helping humans, such as healthcare. It is easy to designate your pronouns in Canvas:

- ☐ Log into Canvas.
- ☐ Click on Account (top left menu bar thing).

- ☐ Choose Settings from the options that appear.
- ☐ Click on Edit Settings (to the right).
- ☐ One of the new options in the Settings is a pronoun option dropdown.

Riggs's philosophy of learning

Active Learning in an Online Class

Learning happens when your brain changes. If your brain does not actually change the way neurons communicate with each other, then learning won't happen. And the best way to **change your brain** is to **DO SOMETHING**. This is the fundamental assumption that informs the methods, or pedagogy, I use in all my classes, including the online classes.

Research about how people learn (or how they change their brains!) overwhelmingly indicates that the most successful teaching methods inspire students to be **active participants** in the learning process. Collaboration and problem solving are just a few ways to engage fully in your own learning. To facilitate active learning, the job of your instructors moves away from passive delivery of content (usually via lecture) and toward the creation of engaging activities that motivate YOU to take charge of, and fully participate in, your own educational processes. In this class, you'll have a buffet of learning opportunities. Let's find what works best for you.

Learning is a PROCESS

Biology classes are challenging. There is a ton of new content and this includes not only new vocabulary, but also new concepts. My goal is that you TRULY LEARN the material, and this requires you to not only memorize new terms, but also THINK about what those terms MEAN. But here is the awesome part. **LEARNING IS A PROCESS**. My courses are set up to offer plenty of chances to capitalize on learning opportunities and IMPROVE YOUR UNDERSTANDING OVER TIME (and also your grade). Please embrace a GROWTH MINDSET in this class. Take feedback and grades as opportunities to improve your understanding. Set out to truly UNDERSTAND the material, and your grade will reflect that understanding. And I will do everything I can to help you along the way!

Diversity Statement

As you embark on the adventure of learning physiology, you can be assured we will work to co-create an inclusive, supportive, and rigorous learning community. One of the greatest benefits of education is learning from your classmates and instructors, and experiencing the many different perspectives they bring to the table.

Course activities (assignments)

The following activities are set up to help you learn the course content and become more comfortable talking (and thinking) about biology.

Lecture activities (≈ 5% of total grade)

Grading: 1 (complete) or 0 (incomplete)

Course content is delivered through video lectures, and each lecture is accompanied by a series of tasks. (If the video lectures are difficult for you, you can also acquire course content by reading the textbook.) Here's how the lecture activities work:

Part 1: Watch the lecture and take notes (do this before everything else)

Watch the video lecture (posted in a discussion forum in Canvas). Take notes and compile them in your "External Brain." This is where content delivery happens. If the video lectures are tricky for you, you can also access the content through the textbook. (You can find the lectures on YouTube, but I encourage you to watch them in Canvas, because then you don't have to watch ads.)

Part 2: Participate (meaningfully) in the discussion

The goal here is to engage with the course content in a way that is meaningful for your learning. I will populate the board with activities. These could include embedded polls, video case studies, or practice exam questions. I create these activities to help you check your own understanding. Often, I create activities that I know will be tricky, so we can clarify concepts BEFORE the exams! You can respond to my activity posts to engage with the activities you want, knowing your authentic learning is the goal.

There are no required post numbers or word counts. The only requirement is meaningful participation. Some ways you might participate are:

- **Post extra-value resources** like videos with explanations, images or links with descriptions, practice exam questions, vocabulary lists, or excerpts from your External Brain.
- **Share metacognitive insights** describing your thinking about the question and how your understanding may have changed (or deepened) as you engaged with the content.
- **Make authentic connections with classmates** and help build our learning community.
- **Ask questions** about the things that confused you.

I highly encourage you to visit and participate in the discussion a couple times. Because we're running an asynchronous class, the discussion forum will change over time. Come back and see what else you can learn.

Online Quizzes (≈ 5% of total grade)

Grading: 1 (complete) or 0 (incomplete)

Administered through Canvas, these weekly quizzes (one per lecture) will cover the week's material. You can take them as many times as you want and Canvas will record your high score. Quizzes mimic the format of the multiple choice exams in this class. Each quiz will cover one topic, so you can practice that topic as much as you want. Most quizzes are 5 questions long, timed (1 min/question), and they pull from a bank of questions, so each time you take the quiz, you'll get a different set of questions on the topic. All quizzes are "best by" Saturday night by 11:59pm, but please continue taking them for practice, even after the due date.

Labs (≈ 5% of total grade)

Grading: 2 (handout and teamwork complete) or 0 (incomplete)

Each week, there will be one lab assignment to complete. Each lab will include some sort of task as well as a discussion forum (to facilitate teamwork!). If you work on the lab in a group, you do not have to participate in the discussion. Lab assignments are "best by" Fridays at 11:59pm. I highly encourage

doing the lab work in groups. And please know-- each lab is designed to take about 2 hours to complete. If they are taking you much longer, let's talk.

Applications (≈ 5% of total grade)

Grading: 1 (complete) or 0 (incomplete)

This is a sort of "choose your own adventure" assignment and is an opportunity to dig deeper into course content, and learn about something beyond our course material itself. The goal of this assignment is that you apply your knowledge to something new. You could do a case study, write a summary of a research article, or explain a complex new topic.

There is a TON of freedom with this assignment, which isn't always a good thing. There are officially four application assignments throughout the semester.

Weekly Check-in (≈ 5% of total grade)

Grading: 1 (complete) or 0 (incomplete)

Each week ("best by" Saturday night at 11:59pm), you will have some sort of check-in. This is just an easy way for us to stay connected, which is a really important ingredient that helps me support your success in this class. There are 3 ways to complete this task each week:

- Record a simple (and very BRIEF- 1 minute or less) video in Canvas. I love this option because I get to see YOUR face and hear your voice, and I feel like I know you better after that. It doesn't facilitate very good back-and-forth conversations, though.
- Connect with me in Pronto, our super amazing (and easy) chat tool. I love this option because it is really easy to spend some time chatting.
- Schedule a phone call or Zoom video chat, so we can have a more in-depth discussion.

External Brain (≈ 5% of total grade)

Grading: 1 (complete) or 0 (incomplete)

Over the course of the semester, you will create your own unique resource referred to as your "External Brain (EB)." This is basically just a compilation of any notes you take while learning. You want your external brain to be in a format that is optimally useful and accessible to YOU. You will be able to use your External Brain on all exams.

Your External Brain should contain your original work, although of course you are welcome to share ideas and discuss concepts with your classmates. Your External Brain will be assessed for completion (not accuracy).

External Brain Rules

1. All content in your EB must be your own work.
2. You may include UNLABELED images in your External Brain, even if you do not draw them yourself. (You can white-out the labels on the image if you want.) You are welcome to LABEL any images by hand. It is wise to cite the image source if you do this.
3. Please do NOT include MY typed lecture notes or text chapters in your External Brain. However, you CAN include all your own stuff (and you are welcome to copy any material into your EB. Again, it is wise to cite the source.
4. It is often ok to include lab instructions in your EB. Refer to the EB assignments in Canvas for a list of things you can include if you want.

Exams (≈ 70% of total grade)

Grading: Critically assessed for correctness and points. I highly encourage you to opt-in for the video feedback on the written (SA) exams.

Your future likely has exams in it. In a high-content biology course like this one, it therefore makes sense to practice taking exams. Please try to approach these exams as opportunities to improve your skills. I am delighted to focus on improvements rather than scores when it comes to exams in this class.

Midterm Exams (4)

There will be four midterm exams throughout the semester that cover material from both lecture and lab. There will also be an optional comprehensive final exam that can replace lower midterm scores. Each exam has 2 parts:

- **Multiple choice (MC)**: MC exams mimics the quizzes and consists entirely of questions that can be automatically graded (mostly multiple choice). You have two attempts at this exam, and Canvas will record your high score. All questions are pulled from question banks, so each attempt will present a unique set of questions.
- **Written (short answer, or SA)**: You can only take SA exams 1 time, because they are manually graded. They consist of a pile of written short answer/essay questions. We will practice these kinds of questions in the lecture discussions, so stay tuned for Padlet activities. SA exams are also timed, and the questions are also pulled from question banks. On the first three SA exams, you'll have the option of receiving video feedback from me. I highly encourage you to take advantage of this option.

You may use your External Brain on all exams. I do this because I don't need you to memorize every little detail, though I do need you to be able to look it up and find it in your notes. Because the exams are also timed, you will still want to study and prepare for them. Before each exam, you will also agree to this honor statement:

> **HONOR STATEMENT**
> *I promise that the work I do on this exam is my own. I will not consult with any other humans when completing this exam. I understand that I am allowed to use the resources I've created and collected in my External Brain, but I will not use the internet or my textbook to search for information or answers.*

This honor statement is designed to ensure the integrity of the exam process, which is an important part of helping support your deep learning and skill building in this class. Please let me know if you have questions or concerns about this.

Final Exam (Optional)

You will have the option of taking a comprehensive multiple choice final exam. This exam will not count toward your grade directly, but if you take it, you can use it to replace any (and ALL!) lower midterm scores. If your final exam grade is lower than your midterm grades, it will not impact your final grade at all. You don't have to decide about this until finals week.

THE HAPS EXAM (Required)

Every semester since spring 2015, I've administered the comprehensive HAPS A&P exam to our Human Physiology students. This exam covers both anatomy and physiology and is very challenging (the national average is around 50%). We give the exam to help assess our pre-nursing biology courses.

Because it covers both anatomy and physiology (and we don't know when you last had anatomy!), the exam is extra credit. It is scored out of 100 points, and the following chart is used to determine how your score impacts your final course grade.

HAPS Exam Score Range	Points added to final course grade
0-1%	**0**
1%-29%	**0.25**
30%-39%	**0.5**
40%-49%	**0.75**
50%-59%	**1**
60%-69%	**1.25**
70%-79%	**1.5**
80%-89%	**2**
90%-99%	**2.5**

We will take the HAPS exam during finals week. I am hoping to have the option of you taking it from home OR taking it at CR with us. Stay tuned for more information.

A typical week

Human Physiology is one of the most important courses you'll take to prepare you for a future career in health. At the same time, online learning can be challenging, especially if (for many reasons) you'd rather be in a face-to-face classroom. I want to assure you that I will provide you with ample opportunities to authentically engage with the content to ensure deep and meaningful learning. Please take a look at our F23 Tentative Schedule for the SEMESTER-LONG PLAN. But to help you visualize how this translates to your workload, check out this example of a typical week in this class:

MONDAY

Watch the first video lecture of the week and take notes in your External Brain. If there are things you don't understand, consult the textbook for clarification. Check your understanding of the material by participating in the activities I post in the lecture discussion. There are no "due dates" associated with this task. It is individual and independent and the External Brain you build can be used on your exams. This whole thing should take you 1-2 hours and is similar to experiencing a face-to-face "lecture."

TUESDAY

Check back in with the lecture discussion. See if there are questions you can answer. See if I've chimed in on any of the activities. Consider taking the Quiz related to this content.

WEDNESDAY

Watch the second video lecture of the week and take notes in your External Brain. Repeat the Monday tasks with the new lecture material.

THURSDAY

Repeat the Tuesday tasks with the new lecture material.

FRIDAY

You'll have a lab due every Friday (best by 11:59pm). I want you to work together (because it is easier that way), and please don't spend more than 2 hours doing the lab activity (though you might need a little extra time to finish up the assignments). In other words, you should be able to collect all your data with only 2 hours of work. **Sometimes** we will be able to meet up at the **Eureka CR campus (location TBD)** to do our lab work. Watch the "Weekly Wassssup" for times.

SATURDAY

Saturday is the end of our week (with Sundays reserved for whatever you need to get ready for the next week, including taking care of yourself). Though you'll likely do them earlier, our lecture quizzes are best completed by Saturday, as well as the weekly check-in, so you can shift your focus to new content next week. You should plan on putting in some work on application assignments each week, though they aren't due until exam week. If you plan ahead, you can match your application assignment with the course material you're studying!

Assigning grades

Oh my. Where to begin with this one?

The purpose of grading is to somehow quantify how well you are mastering the material in this course. Grades can help you pinpoint troublesome topics that might impact your understanding of future content (in this course or even in future programs). And your "grade" in this class matters, because it can determine whether or not you get into the programs you are aiming for. However, grades can be tricky and I've spent a lot of time reflecting on this.

I've moved toward **weird grading**. It probably won't feel that new at first, but we will focus on learning and improvements...and not the number that represents my judgment of you.

I know this is vague, and the only thing I can assure you of with absolute confidence is that this move is GOOD FOR YOU and it is GOOD FOR YOUR LEARNING.

With the caveat that we'll be doing things a little differently this semester, in the end I must submit a final grade for each of you. I am including the approximate % scale I've used in the past to determine letter grades in my classes.

100.0 – 93.00% = A	89.99 – 87.00% = B+	79.99 – 77.00% = C+	69.99 – 60.00% = D
92.99 – 90.00% = A-	86.99 – 83.00% = B	76.99 – 70.00% = C	< 59.99% = F
	82.99 – 80.00% = B-		

Canvas will report a grade for you. This is the lowest possible grade you can earn in the class. Eventually, you'll get your own Riggs-style weird grading calculator so you can see how **growth** and **learning** drive your final course grade.

Course policies

This section is full of course details (and some required "fine print"). Some of this content is included because it is required by College of the Redwoods (I've put that stuff toward the bottom). Other parts describe policies that might be a little different from other classes you've encountered. Take some time browsing what you need, and holler if you have questions.

“Best by” dates (aka “Late work policy”)

You are probably used to hard due dates and policies around late work. In this class, instead of "due dates," we have "best by" dates. I encourage you to treat these "best by" dates as hard due dates because they are designed to keep you on track with the class and help you pace your learning in a way that also maximizes the support around you.

However, if life happens (and if the last 4 years are any indication....life WILL happen), you can absolutely prioritize as needed, and catch back up when you can.

I trust you and know that you want to learn the course content. We can work together for the win-win.

Communication

Online classes can feel lonely and isolating. If you have a question or concern, please Please PLEASE get a hold of me. I am very available to help. It is very important that we create a meaningful online community in this class, and being in touch with each other is clutch. So if you have a question or concern, just holler.

It is also important that we communicate with each other in a way that most effectively supports sharing and learning (which means it has to be safe to try things out). Learning is a process, and we don’t really make progress in our understanding unless we clearly identify what we DON’T understand. This can be a vulnerable experience, especially when the course content (biology!) is so important. Thank you for helping nurture a safe learning environment.

Here are some guidelines that might help:

- **Might your question benefit other people in the class**? Then post it to the “Questions for Riggs?” discussion forum in Canvas. You'll find this discussion at the bottom of every single module in the class. I do my best to keep tabs on this discussion and always try to respond within 24 hours (though it might take longer on the weekends).
- **Is your message private**? Send a Pronto (preferred), an email (to wendyk-riggs@redwoods.edu), or a message through Canvas (click on INBOX in the far left menu in Canvas).
- **Is your message urgent**? Pronto is a fantastic way to reach out to me. I will do my best to get back to you ASAP.
- **Let’s be honest**. I know we are all working really hard right now, and honestly, most of us are operating within unusually challenging circumstances. Let’s work hard to be open and honest, to advocate for ourselves, and to treat each other (and ourselves) with respect and regard. I really look forward to working with you.

Pronto

Pronto is a crazy cool chat tool that is embedded in Canvas and seriously ROCKS. You can access Pronto through an app on your phone, through Canvas, or in the web browser. We will use Pronto often, and it is a fantastic way to access your instructors and your fellow students. It is, hands down, the fastest and most efficient way to make contact with me.

Pronto lets us text each other without sharing phone numbers, or requiring us to connect up on the same social media site. And the awesome thing is that you can have a private message with me, or you can easily form groups for chatting!

One of our orientation activities involves connecting with Pronto. I look forward to connecting with you soon! (You can get started now by downloading Pronto from your app store on your phone. Log in using your CR email address, and let's chat!)

Where to get extra help

CR has many services available to support you. This is not a comprehensive list, but it might be helpful.

Online learning support

- CR-Online (Comprehensive information for online students)
- Library Articles & Databases
- Canvas help and tutorials
- Online Student Handbook

Mental health support

Counseling offers assistance to students in need of professional counseling services such as crisis counseling. Students seeking to request a counseling appointment for academic advising or general counseling can email counseling@redwoods.edu.

Library support

The Learning Resource Center includes the following resources for students

- Academic Support Center for instructional support, tutoring, learning resources, and proctored exams. Includes the Math Lab & Drop-in Writing Center
- Library Services to promote information literacy and provide organized information resources.
- Multicultural & Diversity Center is an amazing space for students to connect.

Special programs

- Extended Opportunity Programs & Services (EOPS) provides services to eligible income disadvantaged students including: textbook award, career academic and personal counseling, school supplies, transportation assistance, tutoring, laptop, calculator and textbook loans, priority registration, graduation cap and gown, workshops, and more!
- The TRiO Student Success Program provides eligible students with a variety of services including trips to 4-year universities, career assessments, and peer mentoring. Students can apply for the program in Eureka or in Del Norte
- The Veteran's Resource Center supports and facilitates academic success for Active Duty Military, Veterans and Dependents attending CR through relational advising, mentorship, transitional assistance, and coordination of military and Veteran-specific resources.
- Klamath-Trinity students can contact the CR KT Office for specific information about student support services at 530-625-4821

Community College Student Health and Wellness

- Resources, tools, and trainings regarding health, mental health, wellness, basic needs and more designed for California community college students, faculty and staff are available on the California Community Colleges Health & Wellness website.
- Wellness Central is a free online health and wellness resource that is available 24/7 in your space at your pace.

The Light Center

Do you need help with your coursework this semester? The LIGHT Center is open and available! We can help you navigate Zoom and Canvas, provide one-on-one instructional assistance with your work, help you form study groups, and provide a quiet place to study.

Location: You can find the LIGHT Center on Zoom (Virtual Light Center – VLC) as well as on campus (in the back of the Eureka Student Services building). To get a Zoom invite, please call 707-476-4290 or email one of us.

In Person Hours: Mon-Thurs 9am-4pm and Fridays 9am-2:30pm

Virtual Hours: Mon/Tues 9am-4pm; Weds/Thurs 9am-8pm; Fridays 9am-2:30pm

What is required? You need to sign up for GUID 145, 146, 147, or 148 on WebAdvisor or come in for help. It is a one unit course, requiring 30 hours of time in either the VLC or in person center.

Who is available to help? Linda Phelps can help you with Chem 1A, Chem 2, Biology, Anatomy, Physiology, and other sciences, as well as ASL 1. Email her at linda-phelps@redwoods.edu. There are other staff members available to help with other subjects if you need it.

Accessibility

College of the Redwoods is committed to making reasonable accommodations for qualified students with disabilities. If you have a disability or believe you might benefit from disability-related services and accommodations, please contact your instructor or Disability Services and Programs for Students (DSPS). Students may make requests for alternative media by contacting DSPS based on their campus location:

- Eureka: 707-476-4280, student services building, 1st floor
- Del Norte: 707-465-2324, main building near library
- Klamath-Trinity: 530-625-4821 Ext 103

If you are taking online classes, DSPS will email approved accommodations for distance education classes to your instructor. In the case of face-to-face instruction, please present your written accommodation request to your instructor at least one week before the needed accommodation so that necessary arrangements can be made. Last minute arrangements or post-test adjustments usually cannot be accommodated.

Students will have access to this course that complies with the Americans with Disabilities Act of 1990 (ADA), Section 508 of the Rehabilitation Act of 1973, and College of the Redwoods policies. If you discover access issues with this class, please let me know so I can fix it for you.

Admissions deadlines

Fall 2023 Dates

- Classes begin: 8/19/23
- Last day to add a class: 8/25/23
- Last day to drop without a W and receive a refund: 9/1/23
- HOLIDAY: Labor Day 9/4/23
- Census date: 9/5/23 (or 20% into class duration)
- Last day to petition to graduate: 10/26/23
- Last day for student-initiated W (no refund): 10/27/23
- Last day for faculty-initiated W (no refund): 10/27/23
- HOLIDAY: Labor Day 11/10/23
- HOLIDAY: Fall Break 11/20/23-11/25/23
- Final examinations: 12/9/23 – 12/15/23
- Last day to petition to file P/NP option: 12/15/23
- Semester ends: 12/15/23
- Grades due: 12/22/23
- Transcript release: 1/5/24

Drop policy

It is really important that you show up for our online class during the first week to make sure you aren't dropped from the course. However, sometimes it can be tricky to get oriented to the requirements and patterns in a brand new online class, especially if you get started late. So take some deep breaths, and if you plan to stick out the class, just let me know what's up. I'm delighted to work with you as we (all!) find our grooves.

Confirming your presence in the online classroom

Canvas is our classroom. As soon as possible, please log in to our course in Canvas and begin completing the tasks in the "Start here" Module to ensure you keep your spot in the online classroom. Doing so will confirm your enrollment in the course and prevent you from being dropped as a "no show."

Academic Integrity

There is zero tolerance for any form of academic dishonesty, including cheating, helping others to cheat, falsification of data, or plagiarism. However, I enthusiastically encourage you to work together in this class on many activities. If you are wondering about whether or not something would be considered cheating, please please please ask me! Let's decide together. I know you want to truly learn the content of this class, and "grades" tend to be the way we've always quantified someone's learning. But I want your grade to accurately reflect your learning, and if you don't do your own work, then this won't happen. So let's be really clear and open about this part of our online class.

(Now...I do have to include the following information in my syllabus, for legal reasons. But please know that I trust you and am confident in your success this semester.)

Academic dishonesty in any form will result in a formal report and details will be submitted to the appropriate authorities. Refer to the Student Code of Conduct and Disciplinary Procedures at http://www.redwoods.edu/District/Board/New/Chapter5/Ap5500.pdf for more information about CR policies.

Emergency procedures/Everbridge

College of the Redwoods has implemented an emergency alert system called Everbridge. In the event of an emergency on campus you will receive an alert through your personal email and/or phones. Registration is not necessary in order to receive emergency alerts. Check to make sure your contact information is up-to-date by logging into WebAdvisor and selecting 'Students' then 'Academic Profile' then 'Current Information Update.'

Please contact Public Safety at 707-476-4112 or security@redwoods.edu if you have any questions. For more information see the Redwoods Public Safety Page.

In an emergency that requires an evacuation of the building anywhere in the District:

- Be aware of all marked exits from your area and building
- Once outside, move to the nearest evacuation point outside your building
- Keep streets and walkways clear for emergency vehicles and personnel

Do not leave campus, unless it has been deemed safe by the campus authorities.

Final Thoughts

Human physiology is a challenging course. There is a lot of new information and the course has a lot of moving parts to ensure you GET IT. It can be a bit overwhelming, if you aren't on top of it. To help you with this challenge, I have compiled a list of suggestions that will help you learn the content. Please keep in mind that you probably won't have time to carry out every single suggestion. So choose from the list of suggestions below and get organized. Identify the grade you'd like to earn in this class and make a clear plan for the semester that will enable you to meet your goal. Stick to your plan, maximize your efficiency, and make the most of your time in this course. Physio is a difficult course, but the material is fascinating and easily applicable to your life

and the careers you are interested in. The effort you make toward true understanding will be totally worth it.

Here are a couple resources that might be helpful in all your classes:

- 20 minute video entitled: "Study Smarter, Not Harder: Ten Tips for Studying Physiology"
- 4 week long class (FREE) through Coursera: "Learning How to Learn"

Advice from Riggs

1. Study physio every single day. Some suggestions...
   - Watch the video lectures and TAKE GOOD NOTES. Then rewrite your notes and answer the study guide questions (found with each lecture discussion) within 24 hours of class.
   - Explain physio topics to your dog, cat, friends, kids, and neighbors.
   - Make note cards, and carry them around with you, everywhere you go. (You can make them part of your External Brain!)
   - Draw lots of pictures and hang them on the fridge.
2. Be conscious during video lectures. Make lists of your questions and bring them to the discussion forum. Holler when you don't understand something.
3. Be diligent and disciplined in lab activities. It might be tempting to skate through lab activities. Don't! Labs are designed to offer hands-on experiences with the complex materials presented in lecture. Take advantage of this opportunity to improve your learning.
4. Keep detailed notes in your External Brain. This will help all aspects of your understanding.
5. Stay ahead of the game. Don't miss lectures or labs, and utilize all the study aids offered through Canvas.
6. Form study groups with your classmates, online and in person. Hang out, eat fun food, and talk biology 1-2x/week.
7. Practice writing the answers to short essay questions. Have your classmates read your answers and grade them. Practice being CLEAR, CONCISE, PRECISE and CORRECT.
8. Make up practice exams based on the External Brain questions. Share them with your classmates. Grade each other!
9. If the going gets tough, READ your textbook! IT WILL HELP (especially if you use it to answer tough questions).
10. And if the going is still tough, buckle down and repeat after me: "I can do anything for 16 weeks." You CAN do this class. All you need to do is find the time to make it happen.
11. Finally...embrace the GROWTH MINDSET. You deserve it!

Advice from previous online physiology students

During the 20-21 school year, BIOL-7 students created a Padlet of advice for future online physiology students. Check it out!

In Spring 2022, the BIOL-7 students made a special Padlet, about grading stuff. Check it out!

Advice from previous face-to-face students

- Watch the lectures and try to immediately review the notes and complete the questions. Double time the lectures repeatedly (not necessarily right before the exam). Right down the quiz questions and answers in EB, take class notes (clicker questions). When studying double time lecture, then reread notes, EB questions, quiz, and class notes until you get it.
- Read all test questions carefully.
- If the Flip lectures don't work for you, watch the lectures and take notes, but then go through the book and take notes that are helpful to you.
- Be prepared to work your ass off...
- I would suggest students to watch every video, and take every opportunity they can to challenge what they know or watch. This class wasn't difficult conceptually, however the sheer

amount of information made it challenging. In fact, I wasn't honestly expecting this class to be too difficult but it prove otherwise (ha).

- Be willing to ask questions, Riggs is a great teacher and I guarantee that she will answer them to the best of her ability, even if it is not within her scope.
- I didn't use the book, so I can't really commentate on how effective it would be. But I did just fine in this class without it, so that just goes to show you that good notes on Wendy's material is essential to doing well in this class
- WATCH THE VIDEOS! You know that lecture handout she just gave you? It's not for show, USE IT! And use it *NOW*, not just before the exam hoping it'll magically jump into your brain. It won't work. I tried.
- Stay on top of the lectures and do the external brain questions immediately following the lab. Don't get behind or procrastinate (else you may find yourself staying up until the wee hours of the morning finishing last minute benchmarks and watching lecture half asleep in double-time). Also take the lecture opportunity to ask lots of questions to clarify anything that you might not understand.
- Consult your anatomy notes often to keep a clear picture of how the structure and function relate. Watch videos from other sources, too. There are some amazing computer-graphic simulations that show how things work in ways a textbook can't.
- Always flip the lectures so you can take advantage of class time with Riggs. Take the time you need, and ask the questions you have to understand the material.

DRAFT Online Physio (Tentative) Schedule: RIGGS

Updated 9/4/2023 15:14

The F23 course syllabus is also found online.

Essential Question: How do different parts of the human body communicate?

	DATE	Video Lecture + Discussion *due by 11:59pm*		Reading *Silverthorn*	Reading *OpenStax*	Laboratory *due by 11:59pm*	Application *due by 11:59am*
1	M 8/21						
	T 8/22	0	Orientation				
	W 8/23						
	Th 8/24	1	Homeostasis	1, 6	1, 26.1		
	F 8/25					Lab 1: Transport	
	Sat 8/26	***Weekly quizzes and check-in due 11:59pm***					
	Sun 8/27	**REST, STUDY, PREPARE FOR NEXT WEEK**					
2	M 8/28						
	T 8/29	2	Fluid compartments and osmosis	3, 5	3.1		
	W 8/30						
	Th 8/31	3	Communication and pathways	6	1.5, 4.2, pg 88		
	F 9/1					Lab 2: Homeostatic Pathways	
	Sat 9/2	***Weekly quizzes and check-in due 11:59pm***					
	Sun 9/3	**REST, STUDY, PREPARE FOR NEXT WEEK**					
3	M 9/4	HOLIDAY: LABOR DAY					
	T 9/5	4	The endocrine system	7	17.1-3, 17.10		
	W 9/6						
	Th 9/7	5	The action potential	8	12.4, 12.5		
	F 9/8					Lab 3: Endocrine Rats (LT)	
	Sat 9/9	***Weekly quizzes and check-in due 11:59pm***					
	Sun 9/10	**REST, STUDY, PREPARE FOR NEXT WEEK**					
4	M 9/11						
	T 9/12	6	Sensory receptors and the afferent NS	10	14.1		
	W 9/13						

	Th 9/14	**EXAM 1 (and EB 1) OPENS** ***due Monday 9/18 by 11am***					
	F 9/15				Lab 4: Sensory physiology (LT)		
	Sat 9/16	***Weekly quizzes and check-in due 11:59pm***					Application 1
	Sun 9/17						

Essential Question: How does the human body DO SOMETHING?

	DATE		Video Lecture + Discussion *due by 11:59pm*	Reading *Silverthorn*	Reading *OpenStax*	Laboratory *due by 3pm*	Application *due by 11:59pm*
5	M 9/18		**EXAM 1 (and EB 1) DUE** *due Monday 9/18 by 11am*				
	T 9/19						
	W 9/20						
	Th 9/21	7	Autonomic NS	11	15.2-3, 17.6		
	F 9/22					Lab 5: Process of science, reaction time, and data analysis	
	Sat 9/23		***Weekly quizzes and check-in due 11:59pm***				
	Sun 9/24		**REST, STUDY, PREPARE FOR NEXT WEEK**				
6	M 9/25						
	T 9/26	8	Skeletal muscle	12	10.2, 10.3		
	W 9/27						
	Th 9/28	9	Muscle biomechanics	12, 13	10.4, 10.5, 10.6		
	F 9/29					Lab 6: Muscle and EMG (LT)	
	Sat 9/30		***Weekly quizzes and check-in due 11:59pm***				
	Sun 10/1		**REST, STUDY, PREPARE FOR NEXT WEEK**				
7	M 10/2						
	T 10/3	10	Cardiac muscle	14	10.7, 19.2, 19.4		
	W 10/4						
	Th 10/5	11	Cardiac cycle	1, 14	19.2, 19.3, 19.4		
	F 10/6					Lab 7: Heart and ECG (LT)	
	Sat 10/7		***Weekly quizzes and check-in due 11:59pm***				

	Sun 10/8	**REST, STUDY, PREPARE FOR NEXT WEEK**					
8	M 10/9						
	T 10/10	12 Blood pressure	15, 16	19.4, 20.2			
	W 10/11						
	Th 10/12	**EXAM 2 (and EB 2) OPENS** ***due Monday 10/16 by 11am***					
	F 10/13				Lab 8: Blood pressure (LT)		
	Sat 10/14	***Weekly quizzes and check-in due 11:59pm***				Application 2	
	Sun 10/15						

Essential Question: How does the human body regulate homeostasis of the extracellular fluid?

	DATE	Video Lecture + Discussion *due by 11:59pm*	Reading *Silverthorn*	Reading *OpenStax*	Laboratory *due by 3pm*	Application *due by 11:59pm*
9	M 10/16	**EXAM 2 (and EB 2) DUE** *due Monday 10/16 by 11am*				
	T 10/17					
	W 10/18					
	Th 10/19	13 Capillary exchange and hemostasis	15-16	20.3, 20.4?, 21.1		
	F 10/20				Lab 9: PhysioEx (Ex 11- Blood typing)	
	Sat 10/21	***Weekly quizzes and check-in due 11:59pm***				
	Sun 10/22	**REST, STUDY, PREPARE FOR NEXT WEEK**				
10	M 10/23					
	T 10/24	14 Breathing	17	22.3		
	W 10/25					
	Th 10/26	15 Gas exchange	18	18.3, 22.4, 22.5		
	F 10/27				Lab 10: LT Breathing	
	Sat 10/28	***Weekly quizzes and check-in due 11:59pm***				
	Sun 10/29	**REST, STUDY, PREPARE FOR NEXT WEEK**				
11	M 10/30					
	T 10/31	16 The nephron	19	25.4, 25.5-7, 25.8		

	W 11/1						
	Th 11/2	17	Filtrate reabsorption	19	25.6		
	F 11/3					Lab 11: LT Pee lab	
	Sat 11/4	***Weekly quizzes and check-in due 11:59pm***					
	Sun 11/5	**REST, STUDY, PREPARE FOR NEXT WEEK**					
12	M 11/6						
	T 11/7	18	Fluid balance	20	25.1, 25.9, 25.10, 26.1-4		
	W 11/8	**EXAM 3 (and EB 3) OPEN** *due Sunday 11/14 by 11:59pm*					
	Th 11/9						
	F 11/10	**VETERAN'S DAY HOLIDAY**				Lab 12: PhysioEx (Ex 9 and 10- Kidneys)	
	Sat 11/11	***Weekly quizzes and check-in due 11:59pm***					Application 3
	Sun 11/12	**EXAM 3 (and EB 3) DUE** *due Sunday 11/15 by 11:59pm*					

Essential Question: How does the human body acquire and manage energy?

			Video Lecture + Discussion	Reading		Laboratory	Application
	DATE		*due by 11:59pm*	*Silverthorn*	*OpenStax*	*due by 3pm*	*due by 11:59pm*
13	M 11/13						
	T 11/14	19	Innate immunity	24	18.4, 21.2		
	W 11/15						
	Th 11/16	20	Acquired immunity	24	18.6, 21.1, 21.3, 21.4		
	F 11/17					Lab 13: Take a break!	
	Sat 11/18	***Weekly quizzes and check-in due 11:59pm***					
	Sun 11/19	**REST, STUDY, PREPARE FOR NEXT WEEK**					
	M 11/20	**THANKSGIVING HOLIDAY**					
	Sun 11/26						
14	M 11/27						
	T 11/28	21	Digestion	21, 22, 25	17.9, 23.2, 23.7, 24		
	W 11/29						

	Th 11/30	23 Thyroid function	22, 23	17.4-5, 24, 6.6, 6.7 (Ca)			
	F 12/1				Lab 14: PhysioEx (Ex 8- Digestion)		
	Sat 12/2	***Weekly quizzes and check-in due 11:59pm***					
	Sun 12/3	**REST, STUDY, PREPARE FOR NEXT WEEK**					
15	M 12/4						
	T 12/5	24 Reproduction	26	27.2, 17.8			
	W 12/6						
	Th 12/7	**EXAM 4 (and EB 4) OPEN** *due Monday 12/11 by 11:59pm*					
	F 12/8	**FINAL EXAM OPENS** *due Wednesday 12/13 by 11:59pm*			Lab 15: PhysioEx (Ex 4- Hormones)		
	Sat 12/9	***Weekly quizzes and check-in due 11:59pm***					Application 4
	Sun 12/10						

Finals Week

16	M 12/11	**EXAM 4 (and EB 4) DUE** *due Monday 12/13 by 11:59pm*
	T 12/12	
	W 12/13	**HAPS & FINAL EXAMS DUE** *due Wednesday 12/15 by 11:59pm*
	Th 12/14	

** Schedule is subject to change**