# Syllabus for BIOL-7 Human Physiology

## Course Information

Semester & Year: Fall 2020
Course ID & Section #: BIOL-7-E9879 Human Physiology
Instructor's name: Wendy Riggs
Day/Time of required meetings: N/A
Location: N/A
Number of proctored exams: Possibly 1 nationally normed HAPS exam during finals week (if we can get funding)
Course units: 4

## Instructor Contact Information

Office location or *Online: SC216C or online via Zoom
Office hours: To be determined, depending on when students can meet
Phone number: 707-496-0661 (personal cell)
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, BIOL-6, CHEM-2 (or 1a)

## Accessibility

Students will have access to online course materials that comply with the Americans with Disabilities Act of 1990 (ADA), Section 508 of the Rehabilitation Act of 1973, and College of the Redwoods policies. Students who discover access issues with this class should contact the instructor.

College of the Redwoods is also 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

During COVID19, approved accommodations for distance education classes will be emailed to the instructor by DSPS. In the case of face to face instruction, please present your written accommodation request to your instructor at least one week before the first test so that necessary arrangements can be made. Last-minute arrangements or post-test adjustments cannot usually be accommodated.

## Support for online learners during COVID-19

In response to COVID-19, College of the Redwoods moved the majority of its courses online to protect health and safety. As the faculty and students adjust to this change, clear communication about student needs will help everyone be successful. Please let me know about any specific challenges or technology limitations that might affect your participation in class. I want every student to thrive.

## Admissions deadlines & enrollment policies

Fall 2020 Dates

- *Classes begin: 8/22/20*
- *Last day to add a class: 8/28/20*
- *Last day to drop without a W and receive a refund: 9/4/20*
- *Labor Day (all-college holiday): 9/7/20*
- *Census date: 9/8/20 or 20% into class duration*
- *Last day to petition to file P/NP option: 9/18/20*
- *Last day to petition to graduate or apply for certificate: 10/29/20*
- *Last day for student-initiated W (no refund): 10/30/20*
- *Last day for faculty initiated W (no refund): 10/30/20*
- *Veteran's Day (all-college holiday): 11/11/20*
- *Fall break (no classes): 11/23/20-11/28/20*
- *Thanksgiving (all-college holiday): 11/25/20-11/27/20*
- *Final examinations: 12/12/20-12/18/20*
- *Semester ends: 12/18/20*
- *Grades available for transcript release: approximately 1/8/21*

Students who have experienced extenuating circumstances can complete & submit the ***Excused Withdrawal Petition*** to request an Excused Withdrawal (EW) grade instead of the current Withdrawal (W) or non-passing (D, F & NP) grades. The EW Petition is available from the Admissions and Records Forms Webpage. Supporting documentation is required.

## Academic dishonesty

In the academic community, the high value placed on truth implies a corresponding intolerance of scholastic dishonesty. In cases involving academic dishonesty, determination of the grade and of the student's status in the course is left primarily to the discretion of the faculty member. In such cases, where the instructor determines that a student has demonstrated academic dishonesty, the student may receive a failing grade for the assignment and/or exam and may be reported to the Chief Student Services Officer or designee. The Student Code of Conduct (AP 5500) is available on the College of the Redwoods website. Additional information about the rights and responsibilities of students, Board policies, and administrative procedures is located in the College Catalog and on the College of the Redwoods website.

## Disruptive behavior

Student behavior or speech that disrupts the instructional setting will not be tolerated. Disruptive conduct may include, but is not limited to: unwarranted interruptions; failure to adhere to instructor's directions; vulgar or obscene language; slurs or other forms of intimidation; and physically or verbally abusive behavior. In such cases where the instructor determines that a student has disrupted the educational process, a disruptive student may be temporarily removed from class. In addition, the student may be reported to the Chief Student Services Officer or designee. The Student Code of Conduct (AP 5500) is available on the College of the Redwoods website. Additional information about the rights and responsibilities of students, Board policies, and administrative procedures is located in the College Catalog and on the College of the Redwoods website.

## Inclusive Language in the Classroom

College of the Redwoods aspires to create a learning environment in which all people feel comfortable in contributing their perspectives to classroom discussions. It therefore encourages instructors and students to use language that is inclusive and respectful.

## Setting Your Preferred Name in Canvas

Students have the ability to have an alternate first name and pronouns to appear in Canvas. Contact Admissions & Records to request a change to your preferred first name and pronoun. Your Preferred Name will only be listed in Canvas. It does not change your legal name in our records. See the Student Information Update form.

## Canvas Information

If using Canvas, include navigation instructions, tech support information, what Canvas is used for, and your expectation for how regularly students should check Canvas for your class.
Log into Canvas at https://redwoods.instructure.com
Password is your 8 digit birth date
For tech help, email its@redwoods.edu or call 707-476-4160
Canvas Help for students: https://www.redwoods.edu/online/Help-Student
Canvas online orientation workshop: https://www.redwoods.edu/online/Home/Student-Resources/Canvas-Resources

## 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.
Students seeking to request a counseling appointment for academic advising or general counseling can email counseling@redwoods.edu.

# 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 https://webadvisor.redwoods.edu 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.

## Student Support Services

The following online resources are available to support your success as a student:

- CR-Online (Comprehensive information for online students)
- Library Articles & Databases
- Canvas help and tutorials
- Online Student Handbook
- Counseling offers assistance to students in need of professional counseling services such as crisis counseling.

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

Special programs are also available for eligible students include

- Extended Opportunity Programs & Services (EOPS) provides financial assistance, support and encouragement for eligible income disadvantaged students at all CR locations.
- 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

# Biology 7 – Human Physiology

Fall 2020, online

## Instructor Information

Wendy Riggs wendyk-riggs@redwoods.edu Office: 476-4227 Cell: 496-0661
Office: SC 216C Office Hours: We will determine office hours together (additional hrs available)

---

## Course schedule

You can access the tentative course schedule here, but please be advised that the weekly content is also organized for you in the Canvas modules.

---

## Required materials

### Textbook

It is my opinion that the cost of materials for a course should NOT exceed the cost of the course itself. That is why there is flexibility on the required materials lists for my courses. Let me know if you have any questions about this.

There are many ways you can purchase the required materials. Choose the one that seems best for you.

1. **A textbook is required for this class.** However, you have two textbooks to choose from. You do NOT need both. But please take a look at all the required materials before making your decision. The Silverthorn text can be bundled with the required lab software, PhysioEx.
    a. **Option 1- Human Physiology: An Integrated Approach, 8th edition by Dee Unglaub Silverthorn**
    This is a phenomenal physiology text. The images are excellent, the explanations are clear, and the content is comprehensive.
        i. Purchase *any edition of the text* on Amazon https://smile.amazon.com/s?k=silverthorn+human+physiology&ref=nb_sb_noss
        ii. Purchase the text in varied formats (with or without the Mastering A&P study tool) directly from Pearson. Before making purchase decisions, you may want to check out the PhysioEx requirements, because there are some text/physioex packages available. https://www.pearson.com/store/p/human-physiology-an-integrated-approach/P100000734798?tab=for-teachers
            1. eText only ISBN 9780135212912 ($44.99)
            2. eText + Modified Mastering (this comprehensive A&P study tool **also includes PhysioEx**, which we'll be using for labs. We won't be using the study tool for any assignments, but it might provide you with some valuable practice and support while using the text?), 18 month access, ISBN 9780134714868 $94.99 (you can add a loose leaf book to this package for an additional $44.99)
            3. Hardcover book ISBN 9780134605197 $197.32
            4. Loose leaf book only ISBN 9780134704203 $127.99
    b. **Option 2- Anatomy and Physiology: OpenStax**
    This is an excellent 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 purchased the Physio book above. But the price point is VERY compelling. Here are your options:

   i. Access the book totally free at https://openstax.org/details/books/anatomy-and-physiology. There are many ways to consume the text including a PDF download.
   ii. Purchase a hard copy of the text (in color, ISBN 978-1-938168-13-0) at https://smile.amazon.com/Anatomy-Physiology-Kelly-Young-dp-1938168135/dp/1938168135/ref=mt_other?_encoding=UTF8&me=&qid=1595194168

2. **PhysioEx™ 10.0 Laboratory Simulations in Physiology** will be the backbone of our lab activities in this online class. There are several ways you can purchase this resource.
   a. Visit https://register.pearsoncmg.com/reg/buy/buy1.jsp?productID=741511 and pay $29.99 for virtual access to the product.
   b. Purchase a hard copy of the lab book for $47.99 that includes access to the simulations: ISBN-13: 9780136643746 https://www.pearson.com/store/p/physioex-10-0-laboratory-simulations-in-physiology-plus-website-access-code-card-for-physioex-10-0----access-card-package/P100002815487/9780136643746
   c. You can also get PhysioEx in a package with the Silverthorn textbook. This option is described above in "eText + Modified Mastering" ISBN 9780134714868 $94.99
3. **TopHat Pro Subscription (4 months)** allows us to interact with the content in a dynamic manner. In Riggs's section, we'll use a set of TopHat questions to guide asynchronous discussions for each lecture. You can purchase the subscription from TopHat for $30 for 4 months (https://tophat.com/pricing), or you can get it in the bookstore. (Buying direct from TopHat is cheaper.)
   a. The subscription costs $30 for the semester. You will participate in the TopHat activities using Apple or Android smartphones and tablets, laptops, or via text message. You can register for our course by visiting our course website: https://app.tophat.com/students/759192 (Note: our Course Join Code is 759192.)
   b. Should you require assistance with Top Hat at any time, please contact their Support Team directly by way of email (support@tophat.com), the in app support button, or by calling 1-888-663-5491. They are awesomely helpful.

## Technology

- Reliable and updated computer (preferable, but let me know if you have issues with this)
- Most computers and internet providers are adequate for course success. Speedy internet access (cable, DSL, or satellite) is recommended because video lectures are a required multimedia component of the course.
- Each week you will upload a very brief video of yourself answering a reflective question about your learning during the week. You must have a working Webcam or cell phone that can take video to do this.

## Other items you might find helpful

- Colored pencils or pens for note taking.
- Sticky notes (many colors) and/or 3x5" index cards (any color) for lab and class activities.
- Three ring binder or spiral notebook for your notes.

## Canvas

All content is available to you in Canvas, the official Learning Management System (LMS) of College of the Redwoods.

1. To log into Canvas, you will need to go to https://redwoods.instructure.com.
   a. Your login is the same as your webadvisor login.
   b. Unless you have changed it, your password is your 8 digit birth date.
   c. For tech help, email its@redwoods.edu or call 476-4160.
2. Because this is an online class, you should plan on logging into Canvas ALMOST EVERY DAY. You can access an incredible number of resources through Canvas…so get used to it now.

3. All content is organized in weekly MODULES. Each module has the same structure and is set up by DUE DATE.
4. If there is content you are looking for but can't find, PLEASE email me ASAP. There are probably other folks looking for the same thing (and even though I am really amazing, I'm not perfect (YET) and I sometimes forget to publish things).
5. New modules will show up at the BOTTOM of your module list. All new modules will be published on Thursday or Friday of the current week. All old modules will remain available for you throughout the course.

---

# 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 you did not learning anything. 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 get 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, my job 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.

You might imagine that collaboration and ACTIVE LEARNING can't happen in an online class. This is not true! However, just like in a face to face class, YOU are responsible for how ACTIVE you choose to be. In this course, you will work in lab groups to facilitate collaboration, you will participate in weekly "Muddy-Fun" discussions, and you will take quizzes to make sure you're keeping up with the content.

One of the best ways to become an active learner is to TALK about what you are learning because another interesting fact about learning is that learning is social. In my face to face classes, you TALK to your classmates, because engaging with each other IS engaging with the content. I highly encourage you to find opportunities to talk to each other in this online course, though because of the asynchronous nature of online classes, this communication is often written. So do not be shy when participating in the weekly activities in the class. The more you engage with each other, the more you engage with the content. In a class like this, the more people you are connected to, the more opportunities you will have to really cement the material into your new neural networks! So please don't be shy. Form study groups and lecture groups and lab groups and find people to work with. Reach out to each other and take advantage of this important part of the process. You'll be happy you did.

## Learning is a PROCESS

Speaking of processes...Every single class I teach is HARD. 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 opportunities to capitalize on learning opportunities and IMPROVE YOUR UNDERSTANDING OVER TIME (and consequently, your grade). Please embrace a GROWTH MINDSET in this class. Take feedback and grades as opportunities to improve yourself. 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!

# Course assessment

## Assignments

- Weekly Check-in (5% of total grade)
  Each weekend (due Sunday night by 11:59pm), you will have some sort of metacognitive check-in assignment. Most weeks this will be a simple (and very BRIEF- 1 minute or less) video in which you answer some sort of question I pose. 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.

- Lecture Discussions (10%)
  There will be a series of tasks (including Top Hat "quizzes" and a discussion forum) for EVERY SINGLE video lecture you watch. Most weeks, that means you'll complete these lecture activities twice. Here's how the activities will work:
  a. **Part 1: Learn (Whenever it fits into your life)**
     Watch the video lecture (posted in a discussion forum in Canvas). Take notes! This is where content delivery happens! If there is something confusing, you are welcome to post questions to the discussion forum.
     *Not graded.*
  b. **Part 2: Check yourself (due by 5pm on Mon or Wed)**
     Visit Top Hat and complete the 5-10 "clicker" questions about that lecture. Answer the questions as many times as you want, and feel free to discuss the questions in the discussion forum. But please-- if you want to discuss a question, follow the posting rules, so we can have one thread per question (instead of billions of different threads on the same thing).
     *Grading: Full credit for completion.*
  c. **Part 3: Discuss (due by 11:59pm on Tues or Thurs)**
     By 7pm on Mon or Wed, I will check the Top Hat responses and record a quick video for each question, either providing kudos and rah rah (good work, team), or feedback and suggestions for further discussion. I will post these videos into the discussion forum, within the appropriate discussion thread. Contribute to the discussion at least 5 times in a meaningful and constructive way and you'll get full credit on the discussion. This is meant to simulate a traditional lecture setting, where questions can be asked and conversation takes place. Make the board helpful for you!
     *Grading: 1 point for each meaningful comment.*
  d. **Part 4: Commit (due by 11:59pm on Tues or Thurs)**
     Now return to Top Hat and complete the same 5-10 "clicker" questions about that lecture. Answer the questions as many times as you want, and feel free to discuss the questions in the discussion forum. But this time, you'll only get points for correct answers.
     *Grading: 1 point for each correct answer.*
- Weekly Online Quizzes (10%)
  Administered through Canvas, these weekly quizzes (usually 3) will cover lab and lecture material for the week. You can take them as many times as you want and we will keep your high score. Quizzes mimic the exam format, except they are smaller. Each quiz will cover one thing (either a lecture or a lab). Most quizzes are 5 questions long, timed (1 min/question), and 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 due Sunday night by 11:59pm, but you can continue taking them for practice, even after the due date.
- Labs (15%)
  Each week, there will be a LABORATORY assignment to complete. Each lab will include some sort of task (usually the completion of PhysioEx exercises) as well as a discussion forum. I highly encourage you to work together on lab assignments. While this is not a formal requirement (as of yet!), I have a strong interest in making the lab a "group" assignment. Lab assignments are always due on Fridays by 11:59pm.

- Case studies (25%)
  Over the entire semester, you will participate in 4 case studies. Each case will have 3 parts.
  a. Part 1: Flipgrid discussion (brainstorming)
     In this part of each case study, we'll engage in a Flipgrid (video) discussion about the case study. This will be the brainstorming phase of the project.
  b. Part 2: Canvas discussion (rough draft)
     In this part, you'll post a rough draft of your analysis of the case study. You will include a list of the resources you consulted for the assignment. Then you'll read and comment on at least 3 other students' essays.
  c. Part 3: Canvas assignment (final draft)
     In this part, you'll submit a final draft to a Canvas assignment. This will be critically graded by your instructor.

  Case study assignments are always due on Saturdays by 11:59pm.
- Midterm Exams (35%)
  There will be four midterm exams throughout the semester that cover material from both lecture and lab, as well as an optional comprehensive Riggs-final. (Note- if your score on the comprehensive Riggs-final is higher than ANY of your other midterm scores, your lowest midterm can be replaced with the final! Sweet!)
  Assuming we can get funding, there will also be a comprehensive HAPS exam covering both anatomy and physiology, to be taken at the end of the semester. By taking the HAPS exam, you will have the opportunity to earn up to 10 EXTRA CREDIT POINTS in this grading category.
  Each exam has 2 parts. The first part mimics the quizzes and is all multiple choice, but you only have 2 attempts. The second part offers only 1 attempt, but it is a pile of written short answer/essay questions, also timed. These will also be pulled from a question bank.

## A typical week

You will definitely want to take the time to plan how you'll complete the weekly activities. To help you do this, I've put together a typical week. With the exception of the periodic exams, this pattern will remain the same throughout the semester. Please use this to make your own plan for how you'll complete the course requirements each week.

- By **Monday (5pm):** Watch the first video lecture of the week and answer the TopHat questions
- By **Tuesday (11:59pm):** Participate in the first lecture discussion and answer the TopHat questions again
- By **Wednesday (5pm):** Watch the second video lecture of the week and answer the TopHat questions
- By **Thursday (11:59pm):** Participate in the second lecture discussion and answer the TopHat questions again
- By **Friday (11:59pm):** Complete the lab activities and participate in the discussion forum
- By **Saturday (11:59pm):** Complete the week's case study task
- By **Sunday (11:59pm):** Complete all the weekly quizzes and video check-in's

## Grades

The purpose of grading is to get an idea of how well you are mastering the material in this course. They help you pinpoint troublesome topics that might trip you up in future courses. There are a billion grades in the gradebook, which means you have a billion opportunities to earn points and improve your grade. Everything in the gradebook is driven by your performance on the assessments in the course…and nothing else. In other words, it doesn't matter how much I love you (and I DO love you!)…the grades you EARN on assignments will translate into the grade you EARN in the class.

I will use the following scale to determine the letter grade you earn in this class.

| | | | |
|---|---|---|---|
| 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- | | |

One more thing. I don't bump grades higher than the exact percentage you earn. This means that there is no rounding up (or down, glory days). Since grade-boundaries are by definition arbitrary, there is no good

rationale for letting the boundaries slide; there will always be a cut-off and there will always be someone who is close, but not quite there. Be grateful for the BILLION opportunities you have to earn points as outlined in this syllabus. The grade reported in Canvas is the grade you will earn in the course.

---

# Course policies

## Drop policy

It is really important that you complete ALL activities in the first week of class 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. 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.

## Late work policy

I understand that sometimes you'll miss a deadline (yes, I'm sure I will too). I've carefully set up the deadlines to help pace you through the content. I will, without question, always accept late homework before I get it graded. In other words, if I've not yet returned a score for your work, then you can still turn it in for full credit! That said…it is extremely easy to get behind, and then it can be quite challenging to catch up. Our goal in this class is to facilitate TRUE LEARNING. Human physiology is one of the classes you'll absolutely need to be successful in your future programs in healthcare, so we don't want to take any shortcuts here. Do your best to keep up with our schedule, but if you need some flexibility, just reach out and we'll come up with a plan.

## 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 "Module 0: Let's Roll," 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."

## Communication

If you have a question or concern, please Please PLEASE get ahold of me. I am very available to help you, as long as you are polite and respectful. Here are some guidelines to follow:

- **Might your question benefit other people in the class?** Then post it to the "Questions for Riggs?" discussion board in the Canvas Modules. If you are concerned that I might forget to check the board (this is a legit concern), feel free to email me a reminder (wendyk-riggs@redwoods.edu)
- **Is your message private?** Send me an email or a message through Canvas (click on INBOX in the left menu)
- **Is your message urgent?** You can text or call my cell phone, but unless we've been texting already, please identify yourself by name. I will do my best to get back to you ASAP.
- **Always be polite.** I know we are all working really hard right now, and honestly, most of us are operating inside unusually challenging circumstances. Let's work hard to be open and honest, to advocate for ourselves, and to treat each other with respect and regard. I really look forward to working with you.

## 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. We 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.

---

# 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:

- 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 physiology every single day. Some suggestions...
    1. Watch the video lectures and TAKE GOOD NOTES. Then rewrite your notes and answer the EB questions within 24 hours of class.
    2. Explain physiology topics to your dog, friends, kids, and neighbors.
    3. Make note cards, and carry them around with you, everywhere you go.
    4. 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 class. When in class, interact, sit in the front, and holler when you don't understand something.**
3. Be diligent and disciplined in lab. It might be tempting to skate through lab, take short cuts, finish early, and essentially be a slacker. 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 the study aids offered through Canvas.
6. Form study groups with your classmates, online and in person. Hang out, eat fun food, and talk physio 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!
9. Get started on the integration project EARLY...and do GOOD WORK on all benchmarks. They are designed to help you build a HIGH QUALITY end product. Take advantage of the feedback and opportunities to learn!
10. If the going gets tough, READ your textbook! IT WILL HELP (especially if you use it to answer tough questions).
11. 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.
12. Finally...embrace the GROWTH MINDSET. You deserve it!

# Advice from previous 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.

# F20 Online Physiology Schedule (Riggs)

Revised: 8/16/20 10:02

**The course syllabus is also found online.**

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

| | | DATE | | Video Lecture + Top Hat Activities<br>*Check due dates in Canvas* | Reading<br>*Silverthorn* | Reading<br>*OpenStax* | Laboratory<br>*Discussion and lab reports due 11:59pm* | Case Studies<br>*1st post due 11:59AM; Final posts due 11:59PM* |
|---|---|---|---|---|---|---|---|---|
| **1** | T | 8/25 | 0 | Orientation | | | | |
| | Th | 8/27 | 1 | Homeostasis | 1, 6 | 1, 26.1 | | |
| | F | 8/28 | | | | | Lab 1: Homeostatic Pathways | |
| | Sat | 8/29 | | | | | | Intro Discussion on Flipgrid |
| | Sun | 8/30 | | ***Weekly quizzes due 11:59pm*** | | | ***Weekly checkin due 11:59pm*** | |
| | | | | | | | | |
| **2** | T | 9/1 | 2 | Fluid compartments and osmosis | 3, 5 | 3.1 | | |
| | Th | 9/3 | 3 | Communication and pathways | 6 | 1.5, 4.2, pg 88 | | |
| | F | 9/4 | | | | | Lab 2: PhysioEx: Exercise 1 | |
| | Sat | 9/5 | | | | | | Case 1: Flipgrid Discussion |
| | Sun | 9/6 | | ***Weekly quizzes due 11:59pm*** | | | ***Weekly checkin due 11:59pm*** | |
| | | | | | | | | |
| **3** | T | 9/8 | 4 | The endocrine system | 7 | 17.1-3, 17.10 | | |
| | Th | 9/10 | 5 | The action potential | 8 | 12.4, 12.5 | | |
| | F | 9/11 | | | | | Lab 3: Endocrine Rats | |
| | Sat | 9/12 | | | | | | Case 1: Rough Draft |
| | Sun | 9/13 | | ***Weekly quizzes due 11:59pm*** | | | ***Weekly checkin due 11:59pm*** | |
| | | | | | | | | |
| **4** | T | 9/15 | 6 | Sensory receptors and the afferent NS | 10 | 14.1 | | |
| | Th | 9/17 | | **EXAM 1: due date TBD** | | | | |
| | F | 9/18 | | | | | Lab 4: PhysioEx: Exercise 3 | |
| | Sat | 9/19 | | | | | | Case 1: Final Draft |
| | Sun | 9/20 | | ***Weekly quizzes due 11:59pm*** | | | ***Weekly checkin due 11:59pm*** | |

## Essential Question: How does the human body DO SOMETHING?

| | | DATE | | Video Lecture + MF Disc.<br>*1st post due 11:59AM; Final posts due 11:59PM* | Reading<br>*Silverthorn* | Reading<br>*OpenStax* | Laboratory<br>*Discussion and lab reports due 11:59pm* | Case Studies<br>*1st post due 11:59AM; Final posts due 11:59PM* |
|---|---|---|---|---|---|---|---|---|
| **5** | T | 9/22 | 7 | Autonomic NS | 11 | 15.2-3, 17.6 | | |
| | Th | 9/24 | 8 | Skeletal muscle | 12 | 10.2, 10.3 | | |
| | F | 9/25 | | | | | Lab 5: PhysioEx: Exercise 2 | |
| | Sat | 9/26 | | | | | | Case 2: Flipgrid Discussion |
| | Sun | 9/27 | | **Weekly quizzes due 11:59pm** | | | **Weekly checkin due 11:59pm** | |
| | | | | | | | | |
| **6** | T | 9/29 | 9 | Muscle biomechanics | 10.4, 10.5, 10.6 | 12, 13 | | |
| | Th | 10/1 | 10 | Cardiac muscle | 14 | 10.7, 19.2, 19.4 | | |
| | F | 10/2 | | | | | Lab 6: PhysioEx: Exercise 6 | |
| | Sat | 10/3 | | | | | | Case 2: Rough Draft |
| | Sun | 10/4 | | **Weekly quizzes due 11:59pm** | | | **Weekly checkin due 11:59pm** | |
| | | | | | | | | |
| **7** | T | 10/6 | 11 | Cardiac cycle | 15 | 19.2, 19.3, 19.4 | | |
| | Th | 10/8 | 12 | Blood pressure | 15, 16 | 19.4, 20.2 | | |
| | F | 10/9 | | | | | Lab 7: PhysioEx: Exercise 5 | |
| | Sat | 10/10 | | | | | | Case 2: Final Draft |
| | Sun | 10/11 | | **Weekly quizzes due 11:59pm** | | | **Weekly checkin due 11:59pm** | |
| | | | | | | | | |
| **8** | T | 10/13 | | **EXAM 2: due date TBD** | | | | |

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

| | | DATE | | Video Lecture + MF Disc.<br>*1st post due 11:59AM; Final posts due 11:59PM* | Reading<br>*Silverthorn* | Reading<br>*OpenStax* | Laboratory<br>*Discussion and lab reports due 11:59pm* | Case Studies<br>*1st post due 11:59AM; Final posts due 11:59PM* |
|---|---|---|---|---|---|---|---|---|
| **8** | Th | 10/15 | 13 | Capillary exchange and hemostasis | 15-16 | 20.3, 20.4?, 21.1 | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | F | 10/16 | | | | | Lab 8: PhysioEx: Exercise 11 | |
| | | Sat | 10/17 | | | | | | |
| | | Sun | 10/18 | | ***Weekly quizzes due 11:59pm*** | | | ***Weekly checkin due 11:59pm*** | |
| | | | | | | | | | |
| | **9** | T | 10/20 | 14 | Breathing | 17 | 22.3 | | |
| | | Th | 10/22 | 15 | Gas exchange | 18 | 18.3, 22.4, 22.5 | | |
| | | F | 10/23 | | | | | Lab 9: PhysioEx: Exercise 7 | |
| | | Sat | 10/24 | | ***Weekly quizzes due 11:59pm*** | | | ***Weekly checkin due 11:59pm*** | Case 3: Flipgrid Discussion |
| | | | | | | | | | |
| | **10** | T | 10/27 | 16 | The nephron | 19 | 25.4, 25.5-7, 25.8 | | |
| | | Th | 10/29 | 17 | Filtrate reabsorption | 19 | 25.6 | | |
| | | F | 10/30 | | | | | Lab 10: PhysioEx: Exercise 9 | |
| | | Sat | 10/31 | | ***Weekly quizzes due 11:59pm*** | | | ***Weekly checkin due 11:59pm*** | Case 3: Rough Draft |
| | | | | | | | | | |
| | **11** | T | 11/3 | 18 | Fluid balance | 20 | 25.1, 25.9, 25.10, 26.1-4 | | |
| | | Th | 11/5 | | **EXAM 3: due date TBD** | | | | |
| | | F | 11/6 | | | | | Lab 11: PhysioEx: Exercise 10 | |
| | | Sat | 11/7 | | ***Weekly quizzes due 11:59pm*** | | | ***Weekly checkin due 11:59pm*** | Case 3: Final Draft |

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

| | | | | **Video Lecture + MF Disc.** | **Reading** | | **Laboratory** | **Case Studies** |
|---|---|---|---|---|---|---|---|---|
| | | ***DATE*** | | *1st post due 11:59AM; Final posts due 11:59PM* | *Silverthorn* | *OpenStax* | *Discussion and lab reports due 11:59pm* | *1st post due 11:59AM; Final posts due 11:59PM* |
| | **12** | T | 11/10 | 19 | Innate immunity | 24 | 18.4, 21.2 | | |
| | | Th | 11/12 | 20 | Acquired immunity | 24 | 18.6, 21.1, 21.3, 21.4 | | |
| | | F | 11/13 | | | | | Lab 12: Covid Case Study Lab | |
| | | Sat | 11/14 | | | | | | Case 4: Flipgrid Discusssion |
| | | Sun | 11/15 | | ***Weekly quizzes due 11:59pm*** | | | ***Weekly checkin due 11:59pm*** | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **13** | T | 11/17 | 21 | Digestion | 21, 22, 25 | 17.9, 23.2, 23.7, 24 | | |
| | Th | 11/19 | 22 | Metabolism | 21, 22, 25 | 17.9, 23.2, 23.7, 24 | | |
| | F | 11/20 | | | | | Lab 13: PhysioEx: Exercise 8 | |
| | Sat | 11/21 | | | | | | Case 4: Rough Draft |
| | Sun | 11/22 | | ***Weekly quizzes due 11:59pm*** | | | ***Weekly checkin due 11:59pm*** | |
| | | | | **Thanksgiving** | | | | |
| **14** | T | 12/1 | 23 | Thyroid function | 22, 23 | 17.4-5, 24, 6.6, 6.7 (Ca) | | |
| | Th | 12/3 | 24 | Reproduction | 26 | 27.2, 17.8 | | |
| | F | 12/4 | | | | | Lab 14: PhysioEx: Exercise 4 | |
| | Sat | 12/5 | | | | | | Case 4: Final Draft |
| | Sun | 12/6 | | ***Weekly quizzes due 11:59pm*** | | | ***Weekly checkin due 11:59pm*** | |
| **15** | T | 12/8 | | **EXAM 4: due date TBD** | | | | |
| | Th | 12/10 | | | | | | |
| | F | 12/11 | | | | | | |
| | Sat | 12/12 | | | | | | |
| | Sun | 12/13 | | ***Weekly quizzes due 11:59pm*** | | | ***Weekly checkin due 11:59pm*** | |

**Finals Week**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | ***DATE*** | | | | | | |
| **16** | T | 12/15 | | HAPS Exam (Required) | | | | |
| | Th | 12/17 | | Final Exam (optional) | | | | |

** Schedule is subject to change at any moment**