COLLEGE OF THE REDWOODS

BIOL-7 Human Physiology

Course Information

- Semester & Year: Fall 2025
- Course ID and Section number: BIOL-7-V9333
- Instructor's name: Wendy Riggs
- NO required synchronous meetings
- NO proctored exams
- Course units: 4

Instructor Contact Information

- Office location or Online: SC216C
- Office hours: By appointment
- Phone number: 707-476-4227
- Email address: wendyk-riggs@redwoods.edu
- Other method (Pronto, Canvas In-box, social media): Always contact me through Pronto!

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

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

Prerequisites/corequisites/ recommended preparation

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

Educational Accessibility and Support

College of the Redwoods is committed to providing reasonable accommodations for qualified students who could benefit from additional educational support and services. You may qualify if you have a physical, mental, sensory, or intellectual condition which causes you to struggle academically, including but not limited to:

- Mental health conditions such as depression, anxiety, PTSD, or bipolar disorder
- Common ailments such as arthritis, asthma, diabetes, autoimmune disorders, and diseases
- Temporary impairments such as a broken bone, recovery from significant surgery, or a pregnancy-related disability
- Neurodevelopmental disorders such as a learning disability, intellectual disability, autism, acquired brain injury, or ADHD
- Vision, hearing, or mobility conditions

Available services include extended test time, quiet testing environments, academic assistance and tutoring through the LIGHT Center, counseling and advising, alternate formats of course materials (e.g., audio books, braille, E-texts), assistive technology, learning disability assessments, approval for personal attendants, interpreters, priority registration, on-campus transportation, adaptive physical education and living skills courses, and more. If you believe you might benefit from disability- or health-related services and accommodations, please contact Student Accessibility Support Services (SASS). If you are unsure whether you qualify, please contact Student Accessibility Support Services (SASS) for a consultation: sass@redwoods.edu.

SASS office locations and phone numbers

Eureka campus

- Phone: 707-476-4280
- Location: Learning Resource Center (Library)

Del Norte campus

- Phone: 707-465-2353
- Location: main building, near the Library

Klamath-Trinity campus

- Phone: 707-476-4280

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F25 Tentative Schedule

Instructor Information

Instructor: Wendy Riggs

Email: wendyk-riggs@redwoods.edu

Chat: Pronto!

Office: SC 216C (Eureka)

Office Hours: Th 1-2pm in Zoom

Office phone: 707-476-4227

Zoom study sessions (optional): TBD

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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.

Course schedule

You can access the Fall 25 (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. They will be posted in each relevant exam module.*

Diversity, Equity, Inclusion and Accessibility

As you embark on the challenging adventure of learning human 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. The diversity of our experiences, backgrounds, and perspectives enriches our collective understanding and enhances our ability to think critically and creatively. We celebrate the uniqueness of every individual and

encourage open-mindedness, respect, and empathy. By fostering an environment where all voices are heard and valued, we aim to build a space where everyone can thrive, contribute, and succeed.

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Course materials

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

Textbook: Two options

A textbook is required for this class. However, you have two main textbooks to choose from. 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. You do not need any codes or add-ons, unless you want them. Students who actually find reading a text helpful 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 b/w or color, ISBN 9781711494067) from KendallHunt.

Required lab software

Labs are a required part of this course. If you do not earn 70% of the lab points, you cannot pass the class. **Lt Sensors (≈$35/semester)** will enable us to do several very robust data collection and analysis labs in our online class. Lt offers a 21 day free trial if you need some time to get the funds figured out. When we do our first Lt lab, you'll be prompted to purchase your Lt subscription. Please wait to complete this purchase until you do the first Lt lab.

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.
- You may want to take screenshots of lab activities in this class. Be sure you have the tools you need to do this. (The tools vary, depending on the device you are using.)
- You will also need to take pictures (selfies) that include your face for lab work. Please be prepared to make this happen.

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. Folks get serious about this, especially since I am an instructor who looooooves color. Being able to match the colors I use might be helpful for your learning.
- Sticky notes (many colors) and/or 3x5" index cards (any color) for studying.
- Three ring binder or spiral notebook for your External Brain.
- A Visual Analogy Guide to Anatomy and Physiology by Paul Krieger (ISBN 9781640434271). This coloring activity book is useful for both anatomy and physiology.

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Canvas

All content is available to you and organized in Canvas, the official learning management system (LMS) of College of the Redwoods. I recommend accessing all course materials from the modules. This will ensure you see all support materials and you can see the assignments within the appropriate overall course context.

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. Please also make sure you watch the video announcements I post. 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:

1. Log into Canvas.
2. Click on Account (top left menu bar thing).
3. Choose Settings from the options that appear.
4. Click on Edit Settings (to the right).

One of the new options in the Settings is a pronoun option dropdown.

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Course activities (assignments)

The following activities are set up to help you learn the course content and become more comfortable talking (and thinking) about human physiology. Your grade in the class is heavily weighted on exams. The other activities are designed to help you learn the content you'll need for the exams.

Lectures (≈ 5% of total grade)

Scoring: Credit for completion

Course content is delivered through video lectures found in discussion forums. (If the video lectures are difficult for you, you can also acquire course content by reading the textbook.) To complete these lecture assignments, you have two tasks.

First: Watch the lecture and take notes

Watch the video lecture and take notes in your External Brain. (You can also find the lectures on YouTube, but I encourage you to watch them in Canvas, because then you don't have to watch ads.) Treat the video just like an in-person lecture. Your ability to take good notes is critical for your success in this course (and likely in following courses).

Next: Participate (meaningfully) in the discussion

The goal here is to engage with the course content *and your classmates* in a way that is meaningful for your learning. There are no required post numbers or word counts. The only requirement is meaningful participation. Some ways you might participate are:

- **Share something muddy or fun**. This can include something you were confused about from the lecture, or something you thought was particularly cool.
- **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 content and how your understanding may have changed (or deepened) as you engaged with the process.
- **Make authentic connections with classmates** and help build our learning community. If you find something helpful, say so. That will help guide the quality of the forum.
- **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.

Want Riggs's input?

You can now "tag" people in the Canvas discussion forums. If you and your discussion groupmates can't come to an agreement about something, feel free to tag me in a post by using the @ sign. This is a cool way to get my attention, so I can hop into your forum and

provide some perspective. Please use this only after deciding you can't figure it out yourselves.

Quizzes (≈ 5% of total grade)

Scoring: Credit for correctness

Administered through Canvas, these short 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 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 (about 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. You are not shown the correct answer on the quizzes, but I encourage you to discuss them with your classmates, especially if you find something tricky. You are welcome to continue taking quizzes as many times as you want for practice, even after the "best by" date.

Labs (≈ 5% of total grade)

Scoring: Credit for completion

Labs are a required part of this course. If you do not earn 70% of the lab points, you cannot pass the class.

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!). Each lab consists of one of the following types of assignments:

- **Lt** labs take place in a separate platform. All instructions for completing the lab are included in the Lt platform. Some Lt labs require the use of Lt Sensors, which are awesome little data collectors that allow you to collect and analyze physiological data on yourself or someone in your life. You must check these sensors out from the Eureka CR campus. You can partner up with someone and do the Lt activities through Zoom, if you can't get your hands on a set of sensors. Some Lt labs require you to gather household materials (or maybe even groceries). Because of this, it is a good idea to read through the lab assignments before they are due.
- **PhysioEx** activities are canned lab simulations. They are free (glory days), but can be tech-clunky. The PhysioEx tool generates a PDF of your data and questions, and provides a decent opportunity to engage with the course content by simulating complex physiological experiments.
- **Miscellaneous assignments** are Riggs-generated assignments that ask you to carry out various tasks to practice with the course material.

To turn in your lab, you must create one document that includes evidence of your learning. Lt labs are integrated, so completing the lab in Lt will automatically submit your work in Canvas. PhysioEx will generate printouts for you. You can also print your work, and submit pictures of your printed work.

I highly encourage doing the lab work in groups. You should have an average of 3 hours of lab work per week. Please know that I've matched the lab activities with the lecture content, and labs vary in the amount of time they take. Some weeks will be more lab-heavy than others.

Applications (≈ 5% of total grade)

Scoring: Credit for completion

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, read a book, or explain a complex new topic.

There is a TON of freedom with this assignment, which isn't always a good thing. There are four application assignments throughout the semester and they are due at the same time as your exams. You get one point for the product that demonstrates your understanding, and one point for reflecting on your learning.

Check-ins (≈ 5% of total grade)

Scoring: Credit for completion

Four times over the semester, you will have the chance to do some sort of check-in with me. 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 your check-in assignments:

- Record a simple (and very BRIEF- 2 minutes 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. We can even do an impromptu video chat in Pronto.
- Schedule a phone call or Zoom video chat, so we can have a more in-depth discussion.

External Brain (≈ 5% of total grade)

Scoring: Credit for completion

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)

Scoring: Credit for correctness

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 any lower midterm scores. Exams are sometimes divided into different types, so during exam week, you might have more than one exam.

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 familiar enough with the material 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 code:

> **Honor Code for Exams in Riggs Classes**
>
> - I promise that the work I do on this exam is my own.
> - I am allowed to use the resources I've created and collected in my External Brain.
> - I will NOT consult with any other humans when completing this exam.
> - I will NOT use the internet to search for information or answers.
> - I will NOT use my textbook to search for information or answers.
> - I will NOT consult any AI tool for help.

This honor code 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 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. (Note: Replacing your lower midterms is a manual process, so it will not happen automatically in Canvas.)

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 any kind of 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 grade you can earn in the class. At the end of the semester, I will look at all the scores in our class and may adjust these ranges a little.

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A typical week

Human Physiology is one of the most important courses you'll take to prepare you for a future career in health or kinesiology. 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 F25 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. 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."

After watching the lecture, share some thoughts in the discussion forum. What is muddy? What was cool? For credit, post something meaningful.

TUESDAY

Check back in with the lecture discussion. See if there are questions you can answer. Consider taking the quiz related to this content. Also check to see if there is a lab associated with this lecture. Consider completing the lab activity.

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. Also check to see if there is a lab associated with this lecture. Consider completing the lab activity.

FRIDAY

Friday is a great day to complete labs if you haven’t done them yet. I encourage you to work together (because it is easier that way), and please don't spend more than 3 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 3 hours of work.

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, Saturday is a

great day to do the quizzes again, to ensure you are retaining the course material. Studying on Saturday sets you up 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 the day the exam is due. If you plan ahead, you can match your application assignment with the course material you're studying!

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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.

Lab work policy

This is a lab course and one that many traditional educators believe cannot be effectively taught online. I disagree and have carefully designed a course that I know will facilitate deep and meaningful learning, including lab experiences. Your labs include identifying structures on images taken from human cadaver donors, histology work using digital slides, and four dissections of animal organs. Because your lab work is only worth 5% of your total grade, you can technically pass the class without doing the labs at all. Our lab work policy, however, will prevent this. There are two important things for you to know.

1. You must earn 70% of the lab points in the class to pass. If you are in danger of falling below this mark, you will hear from me.
2. You must complete all four dissections to pass the class.

Both of these things are manually checked by me. I do not like failing people who actually have passing grades in Canvas. However, I cannot justify letting you get lab credit for a class in which you've done no meaningful lab work...hence this policy.

Late work policy (aka, introducing "best by" dates)

You are probably used to hard due dates and policies around late work. In this class, our due dates are more complex. Instead of hard (inflexible) "due dates," we have "best by" dates. I encourage you to treat these "best by" dates as hard due dates as much as possible, 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 5 years are any indication....life WILL happen), you can absolutely prioritize your time 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.

Best-by dates allow for flexibility, but all assignments (with the exception of quizzes) have hard due dates indicated on the course schedule. These hard due dates were chosen because some assignments lose value after a certain point. Hard due dates are as follows:

- **Th 9/18**
  - EB 1
- **Sun 9/21**
  - Lectures 1-6
  - Labs 1-4
  - Exam 1
- **Th 10/16**
  - EB 2
- **Sun 10/19**
  - Lectures 7-12
  - Labs 5-8
  - Exam 2
- **Sat 11/8**
  - EB 3

- **Tues 11/11**
    - Lectures 13-18
    - Labs 9-13
    - Exam 3
- **Th 12/11**
    - EB 4
- **Sun 12/14**
    - Lectures 19-24
    - Labs 14-15
    - Exam 4

After these hard due dates, you cannot turn in late work for credit. This is especially important to keep track of for the lab work in the class, because you must earn at least 70% of the lab points in the class if you want to pass. Assignments that are not included on this list have a hard due date of the last day of class, or Thursday May 15, 2025.

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."

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.

Drop policy

Every week, we'll have up to six different assignments. If it looks like you aren't keeping up with the best-by dates on these assignments, I will likely reach out to you through Canvas messages with a "friendly reminder." Please watch for these messages and respond promptly if you receive one. If I don't hear back from you, you might get dropped from the class.

Academic Integrity and AI

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.

Please know-- if you submit ChatGPT or other forms of AI content generation and claim it as your own, that is a form of academic dishonesty. This doesn't further your learning and wastes everyone's time. However, I understand that generative AI tools might provide study aids or perspective for you. As long as you aren't submitting it as your own original work, I am fine with you seeing how these tools can help you master the material.

(Finally, I 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.

Admissions deadlines

Fall 2025 Enrollment Services Calendar

- Classes begin: 8/23/25
- Last day to add a class: 8/29/25
- HOLIDAY: Labor Day 9/1/25
- Last day to drop without a W and receive a refund: 9/5/25
- Census date: 9/8/25 (or 20% into class duration)
- Last day to petition to graduate: 10/30/25
- Last day for student-initiated W (no refund): 10/31/25
- Last day for faculty-initiated W (no refund): 10/31/25
- HOLIDAY: Veteran's Day 11/11/25
- HOLIDAY: Fall Break 11/24/25-11/28/25
- Final examinations: 12/13/25 – 12/19/25
- Last day to petition to file P/NP option: 12/19/25
- Semester ends: 12/19/25
- Grades due: 12/26/25
- Transcript release: 1/2/26

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.

Biology 7 – Human Physiology

Fall 2025 (BIOL-7-V9333)

F25 Tentative Schedule

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. I use Pronto often, and it is a fantastic way to make contact with me and your fellow students. It is, hands down, the fastest and most efficient way to connect 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 me in Pronto. I look forward to chatting with you soon!

Where to get extra help

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

Educational Accessibility & Support

College of the Redwoods is committed to providing reasonable accommodations for qualified students who could benefit from additional educational support and services. You may qualify if you have a physical, mental, sensory, or intellectual condition which causes you to struggle academically, including but not limited to:

- Mental health conditions such as depression, anxiety, PTSD, or bipolar disorder
- Common ailments such as arthritis, asthma, diabetes, autoimmune disorders, and diseases
- Temporary impairments such as a broken bone, recovery from significant surgery, or a pregnancy-related disability
- Neurodevelopmental disorders such as a learning disability, intellectual disability, autism, acquired brain injury, or ADHD
- Vision, hearing, or mobility conditions

Available services include extended test time, quiet testing environments, academic assistance and tutoring through the LIGHT Center, counseling and advising, alternate formats of course materials (e.g., audio books, braille, E-texts), assistive technology, learning disability assessments, approval for personal attendants, interpreters, priority registration, on-campus transportation, adaptive physical education and living skills courses, and more. If you believe you might benefit from disability- or health-related services and accommodations, please contact Student Accessibility Support Services (SASS). If you are unsure whether you qualify, please contact Student Accessibility Support Services (SASS) for a consultation: sass@redwoods.edu.

SASS office locations and phone numbers

Eureka campus

- Phone: 707-476-4280
- Location: Student Services building, first floor SS113

Del Norte campus

- Phone: 707-465-2353
- Location: main building, near the Library

Klamath-Trinity campus

- Phone: 707-476-4280

Student Support Services

Good information and clear communication about your needs will help you be successful. Please let your instructor know about any specific challenges or technology limitations that might affect your participation in class. College of the Redwoods wants every student to be successful.

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

CR Online Learning Support

Tech support, laptop loans, guides to using Canvas, installing Office 365 for free, and more.

Library Articles & Databases

Find the best library databases for your research.

Online Tutoring Resources

Participate in tutoring over Zoom.

Klamath-Trinity students can contact the CR Klamath-Trinity Office for specific information about student support services at 530-625-4821.

Community College Student Health and Wellness

National Suicide Prevention Lifeline

If you are in distress or are with someone at risk right now, call or text the National Suicide Prevention Lifeline.

Call the National Suicide Prevention Lifeline

1-800-273-TALK (8255)

Text the National Suicide Prevention Lifeline

741-741

Timely Care

When you're not feeling well physically or distressed mentally, Timely Care can offer the help you're looking for in just a few quick taps. Students can schedule an appointment anytime via phone, video, and chat. Log in or set up an account with Timely Care.

Mental Health Counseling

Students should text, email, or fax Shawna Bell directly for scheduling and/or services.

- Text: 707-496-2856
- Email: shawnabmft@gmail.com
- Fax and voicemail: 707-237-2318

Wellness Central

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 Wellness Central.

Counseling

Counseling and Advising can assist students in need of academic advising and professional counseling services. Call, email or stop by one of our offices to make an appointment!

Counseling and Advising office locations and contact info

Eureka campus

- Phone: 707-476-4150
- Location: Student Services Building, first floor
- Email: counseling@redwood.edu

- Hours: Monday through Friday, 9am to 4pm. Summer hours may vary

Del Norte campus

- Phone: 707-476-2300
- Location: Main Building, next to the library
- Hours: Summer hours may vary

Klamath-Trinity campus

- Phone: 530-625-4821
- Email: KT-staff@redwoods.edu
- Hours: Summer hours may vary

Basic Needs Center

Basic Needs Center provides for the health and safety of students by providing access to healthy food, financial resources, and referrals to safe and secure housing. Submit a request for services and information.

Basic Needs Center contact info

- Phone: 707-476-4153
- Email: the-grove@redwoods.edu

Learning Resource Center

The Learning Resource Center includes the following resources for students:

Library Services

Introduction - Library Services for Students - LibGuides at College of the Redwoods promotes information literacy and provides organized information resources.

Multicultural and Equity Center (MCE)

The Multicultural and Equity Center is a dynamic and inclusive place that supports all students in their academic and personal journeys at the college. We do this by creating community, home away from home, and a safe place for cultural expression, cross-cultural learning, access to college and dignity resources, and social justice work opportunities. The MEC is committed to retention and student success by offering activities related to leadership development, student connectedness and student equity. We are a student-centered program that fosters respect for all people.

Academic Support Center

The Academic Support Center offers tutoring and test proctoring for CR students.

Student Tech Help

Technical Support provides students with assistance around a variety of tech problems.

Extended Opportunity Programs and Services (EOPS)

EOPS/CARE (EOPS) provides services to eligible income disadvantaged students including: textbook awards, grants, career academic and personal counseling, transportation assistance, tutoring, laptop, calculator and textbook loans, priority registration, graduation cap and gown, workshops, and more!

TRiO Student Success Program

The TRiO Student Support Services Program provides eligible students with a variety of services including academic advising, career assessments, assistance with transfer, and peer mentoring. Students can apply for the program with the Eureka TRiO office or the Del Norte TRiO office.

Veterans Resource Center

The Veterans 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.

CalWORKS

California Work Opportunity & Responsibility to Kids (CalWorks) provides supportive services to student parents with children under the age of 18, who are receiving cash assistance (TANF benefits), to become self-sufficient. Services include: transportation assistance, basic student supplies, tutoring, priority registration, laptop and calculator loans, career, academic, and personal counseling, and more!

Biology 7 – Human Physiology

Fall 2025 (BIOL-7-V9333)

F25 Tentative Schedule

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.

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. Take advantage of this to find what works best for you.

Learning is a PROCESS

All biology classes are challenging, but human physiology is especially 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 strategies and maximize 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!

Final Thoughts

The material presented in this course is relevant and stimulating. Throughout this semester, you will gain knowledge and skills that will help you critically evaluate many pressing issues in our modern society, enabling you to be an educated participant in important social conversations and your own healthcare. I am therefore quite motivated to see you succeed in this class. 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. Think about what you want to learn 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.

Physiology 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 physiology 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 physiology topics to your dog, cat, Victor, 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. Your goal is to identify all required structures by providing hands-on experiences with the complex materials presented in lecture. Take advantage of your lab work 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 skip 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 anatomy 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 study guide 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. Embrace the GROWTH MINDSET. You deserve it!
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.

Advice from past students

1. Watch the video lectures but also dig a little deeper
2. Reading the textbook really helped me get context for the video lectures. I would recommend doing that. Sometimes the lectures would be so zeroed in on a specific process that it could be confusing how it tied into the whole system. Reading the textbook helped me put it all together.
3. I would say take your time with the lecture, pause and rewatch if you need because the information is there and to have the study guide out as you do.
4. Don't get behind on lecture videos and actually watch the lecture videos. Treat it as an in person class because the time and work load is the same
5. don't fall behind.
6. Keep studying and reviewing the material. Rather than studying all at once, thinking about the concepts throughout the day is easier and less stressful. It also works just as well.
7. Read all the lecture comments it's an awesome study tool!
8. take copious notes and draw the diagrams, make graphs and tables when appropriate.
9. Consult third-party texts
10. Watch the lectures
11. Do this material every day and stay on schedule. Also try to do stuff before they are due, so you can spend more time thinking about the material.
12. PLAN AHEAD.

13. I always recommend this class and Riggs' Anatomy to people and would advise them to take advantage of in-person days if they can, in addition to completing all of the course content- every assignment has a direct application and is worth doing!
14. Don't dismiss the lecture discussions just because they aren't worth much for your grade. They can be a very helpful learning tool if you actually use them to think about what you learned.
15. Work on your homework daily including week ends. Ask a lot of questions about the labs. Understanding the lectures is just a small part most of the questions on the exam, what I found hard were trying to figure out what happens where the lecture leaves off and you have to think through what would happen, I was not very good at that part. It is a different type of learning that I found hard as a visual learner.
16. Please please start the work early and finish the work on time. As well as read your book for helpful tips and more info
17. Do the optional on campus lab sessions.
18. TAKE THE TIME TO STUDY AND TAKE NOTES. THIS PROFESSOR HAS ALL LECTURES ON YOUTUBE AND YOU CAN REWATCH AND ADD ALL THE NOTES YOU WANT!!!! TAKE THIS CLASS SERIOUSLY AND WHEN YOU HAVE QUESTIONS, ASK! "Closed mouths don't get fed."
19. PARTICIPATE!!! and ask questions! stay organized and keep up with discussions so you can get the absolute most out of this!
20. Watch the videos, and download the notes provided by Profesor Riggs to add to your notes. Complete the study guides in your own words. Ask questions and study your booty off!!!! Enjoy, this class is by far one of the coolest classes I have taken.

Fall 2025 BIOL-7 (Tentative) Schedule: RIGGS

Last updated: 9/2/25 11:28

The F25 Course Syllabus is also found online

CR 2025-26 Academic Calendar

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

	DATE		Video Lecture + Discussion "Best by" 11:59pm	Laboratory "Best by" 11:59pm	Reading (as needed) Silverthorn	 OpenStax	Other Assignments "Best by" 11:59pm
	Sat	8/23	COURSE OFFICIALLY BEGINS				
	Sun	8/24					
W	M	8/25	0 Orientation activities				
E	T	8/26	1 Homeostasis	Lab 1: Lt Orientation (Lt)	1, 6	1, 26.1	Quiz 1
E	W	8/27					
K	Th	8/28	2 Fluid compartments & osmosis	Lab 2: Transport (PhysioEx)	3, 5	3.1	Quiz 2
	F	8/29					
1	Sat	8/30					Checkin 1 due
	Sun	8/31	*REST, STUDY, PREPARE FOR NEXT WEEK*				
W	M	9/1	**Labor Day (HOLIDAY)**				
E	T	9/2	3 Communication and pathways		6	1.5, 4.2, pg 88	Quiz 3
E	W	9/3					
K	Th	9/4	4 The endocrine system	Lab 3: The rat lab (Wksht)	7	17	Quiz 4
	F	9/5					
2	Sat	9/6					
	Sun	9/7	*REST, STUDY, PREPARE FOR NEXT WEEK*				
W	M	9/8					
E	T	9/9	5 The action potential		8	12.4, 12.5	Quiz 5
E	W	9/10					
K	Th	9/11	6 Sensory receptors & afferent NS	Lab 4: Sensory physiology (Lt)	10	14.1	Quiz 6
	F	9/12					
3	Sat	9/13					
	Sun	9/14	*REST, STUDY, PREPARE FOR NEXT WEEK*				
W	M	9/15					
E	T	9/16	*Bonus study day for Exam 1*	Lab 5: Communication pathways (Wksht)			
E	W	9/17					
K	Th	9/18	**Exam 1 opens**	**Hard due date for External Brain 1**			
	F	9/19					
4	Sat	9/20					
	Sun	9/21	**EXAM 1 DUE**	**Hard due date for lectures 1-6 and labs 1-5.**			Application 1 due

Essential Question: How does the human body DO SOMETHING?

	DATE		Video Lecture + Discussion "Best by" 11:59pm	Laboratory "Best by" 11:59pm	Reading (as needed) Silverthorn	 OpenStax	Other Assignments "Best by" 11:59pm
W	M 9/22						
E	T 9/23	7	Autonomic NS		11	15.2-3, 17.6	Quiz 7
E	W 9/24						
K	Th 9/25	8	Skeletal muscle contraction	Lab 6: Muscle & EMG (Lt Sensors)	12	10.2, 10.3	Quiz 8
	F 9/26						
5	Sat 9/27						Checkin 2 due
	Sun 9/28		*REST, STUDY, PREPARE FOR NEXT WEEK*				
W	M 9/29						
E	T 9/30	9	Muscle biomechanics	Lab 7: Skeletal muscle (PhysioEx)	12, 13	10.4, 10.5, 10.6	Quiz 9
E	W 10/1						
K	Th 10/2	10	Cardiac muscle	Lab 8: Heart and Peripheral Circulation (Lt Sensors)	14	10.7, 19.2, 19	Quiz 10
	F 10/3						
6	Sat 10/4						
	Sun 10/5		*REST, STUDY, PREPARE FOR NEXT WEEK*				
W	M 10/6						
E	T 10/7	11	Cardiac cycle	Lab 9: Heart and ECG (Lt Sensors)	1, 14	19.2, 19.3, 19.4	Quiz 11
E	W 10/8						
K	Th 10/9	12	Blood pressure	Lab 10: Blood pressure (Lt Sensors)	15, 16	19.4, 20.2, 2	Quiz 12
	F 10/10						
7	Sat 10/11						
	Sun 10/12						
W	M 10/13						
E	T 10/14		*Bonus study day for Exam 2*				
E	W 10/15						
K	Th 10/16		**Exam 2 opens**	**Hard due date for External Brain 2**			
	F 10/17						
8	Sat 10/18						
	Sun 10/19		**Exam 2 due**	**Hard due date for lectures 7-12 and labs 6-9.**			Application 2 due

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

	DATE		Video Lecture + Discussion "Best by" 11:59pm	Laboratory "Best by" 11:59pm	Reading (as needed) Silverthorn	Reading (as needed) OpenStax	Other Assignments "Best by" 11:59pm
W	M 10/20						
E	T 10/21	13	Capillary exchange and hemostasis	Lab 11: Blood typing (PhysioEx)	15-16	20.3, 21.1	Quiz 13
E	W 10/22						
K	Th 10/23	14	Breathing	Lab 12: Breathing (Lt Sensors)	17	22.3	Quiz 14
	F 10/24						
9	Sat 10/25						Checkin 3 due
	Sun 10/26		*REST, STUDY, PREPARE FOR NEXT WEEK*				
W	M 10/27						
E	T 10/28	15	Gas exchange	Lab 13: Process of science, reaction time, and data analysis (Kitchen)	24	18.6, 21.1, 21.3, 21.4	Quiz 15
E	W 10/29						
K	Th 10/30	16	The nephron		19	25.4, 25.5-7,	Quiz 16
	F 10/31						
10	Sat 11/1						
	Sun 11/2		REST, STUDY, PREPARE FOR NEXT WEEK				
W	M 11/3						
E	T 11/4	17	Filtrate reabsorption	Lab 14: Pee lab (Lt)	19	25.6	Quiz 17
E	W 11/5						
K	Th 11/6	18	Fluid balance	Lab 15: Fluid balance (PhysioEx)	20	25.1, 25.9, 25	Quiz 18
	F 11/7						
11	Sat 11/8						
	Sun 11/9		REST, STUDY, PREPARE FOR NEXT WEEK				

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

	DATE		Video Lecture + Discussion "Best by" 11:59pm	Laboratory "Best by" 11:59pm	Reading (as needed) Silverthorn	Reading (as needed) OpenStax	Other Assignments "Best by" 11:59pm
W	M 11/10						
E	T 11/11		**Veteran's Day (HOLIDAY)**				
E	W 11/12		**Exam 3 opens**	**Hard due date for External Brain 3**			
K	Th 11/13						
	F 11/14						
12	Sat 11/15		**Exam 3 due**	**Hard due date for lectures 13-18 and labs 10-13.**			Application 3 due

	Sun 11/16	REST, STUDY, PREPARE FOR NEXT WEEK				
W	M 11/17					
E	T 11/18	19 Innate immunity		17	22.3	Quiz 19
E	W 11/19					
K	Th 11/20	20 Acquired immunity		18	18.3, 22.4, 22.5	Quiz 20
	F 11/21					
13	Sat 11/22					Checkin 4 due
	Sun 11/23	REST, STUDY, PREPARE FOR NEXT WEEK				
	M 11/24	**FALL HOLIDAY**				
	Sun 11/30	REST, STUDY, PREPARE FOR NEXT WEEK				
W	M 12/1					
E	T 12/2	21 Digestion	Lab 16: Insulin (PhysioEx)	21, 22, 25	17.9, 23.2, 23.7, 24	Quiz 21
E	W 12/3					
K	Th 12/4	23 Thyroid function and calcium	Lab 17: Endocrine- Thyroid (PhysioEx)	23	17.4-5, 24, 6.6, 6.7 (Ca)	Quiz 23
	F 12/5					
14	Sat 12/6					
	Sun 12/7	REST, STUDY, PREPARE FOR NEXT WEEK				
W	M 12/8					
E	T 12/9	24 Reproduction		26	27.2, 17.8	Quiz 24
E	W 12/10					
K	Th 12/11	**Exam 4 opens**	**Hard due date for External Brain 4**			
	F 12/12					
15	Sat 12/13					
	Sun 12/14	**Exam 4 due**	**Hard due date for lectures 19-24 and labs 14-17.**			Application 4 due

Finals Week: No new content! Just finish strong!

W	M 12/15	**Optional final exam opens**
K	T 12/16	
	W 12/17	**Optional final exam due**
16	Th 12/18	ALL COURSE ASSIGNMENTS ARE DUE-- (This is a hard due date to allow time for final course grades to be calculated!)