

BIOL 1 General Biology

Semester & Year: Spring 2025

Course ID and Section number:BIOL-1-V8306-2025S

Instructor's name: Samar El-Abdallah

Online, asynchronous

There will be no required meetings for this course

Course units: 4

Instructor Contact Information

Office zoom link: [click here](#)

Office hours: Thursdays 10:00-11:00 am on zoom, or email to make an appointment to meet me with me at a different time. (at least three business days prior).

Email address: samar-abdallah@redwoods.edu

You can send me an email or canvas message any time! But you can expect a response from me during business hours (M-F: 9-5 pm).

Catalog Description

An introductory course in life science dealing with basic biological concepts including molecular and cell biology, metabolism, heredity, evolution, ecology, natural history, and biodiversity. Note: This course is designed for non-science majors and nursing/health occupation students. Not open to students who have completed or who are currently enrolled in BIOL-3.

Course Student Learning Outcomes

1. Apply the scientific method to critically evaluate observable phenomena.
2. Describe attributes of life and how cells fulfill these characteristics.
3. Relate the mechanisms of evolutionary change to the production of biological diversity.

Prerequisites/corequisites/ recommended preparation

None.

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: 3 options

A textbook is required for this class. However, you have three textbook options to choose from. You do NOT need all of them. But please take a look at all the required materials before making your decision.

1. Option 1- Concepts of Biology by OpenStax

This is an excellent biology text. It is an Open Educational Resource, which means you can access the content for free. Here are your options for accessing this text:

- Free [online textbook](#)
- Free [PDF download](#) of the textbook
- Hardcover book (in color, ISBN 978-1938168116) [from Amazon](#) (\$30)

0. Option 2- chapters found under “helpful resources” in each Canvas lecture

This is a new option and it hasn't been vetted yet. I've written a chapter of text for almost every lecture in the class. I'm very open to feedback, but the idea is to provide a free text resource that carefully matches the content I cover in the course.

0. Option 3- Any non-majors biology textbook:

Not kidding-- any biology text will do. I really like the book “[Biology: Concepts and Investigations](#)” by Marielle Hoefnagels (ISBN 978-1260575880).

Lab materials- purchase on your own

Lab materials- purchase on your own

Labs are a required part of this course. If you do not earn 70% of the lab points, you cannot pass the class. To save you money, we will NOT be using a lab kit for the class. However, that means you'll have to prep your own kitchen labs. I highly encourage you to check out the lab work each week and make sure you have the materials you need on hand so you can keep up with the lab activities.

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 find it useful 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 biology, 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.

Canvas

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

Log into Canvas

- You can access Canvas from the [single sign on link](#) at the CR website.
- You can **get Canvas help** directly from the folks at Canvas by visiting [Canvas Help for Students](#). Just click on "contact support" in the top right corner to chat with a Canvas support human.
- You can also **get help from CR** at the [Student Tech Help](#) website. You can email its@redwoods.edu, or call 707-476-4160.
- You can **get additional help** with online learning at <https://www.redwoods.edu/online>.
- Because this is an online class, you should plan on logging into Canvas ALMOST EVERY DAY. One of the most valuable resources in any online class 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.

Course Activities and Grades

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

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.

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 multiple tasks, as well as a discussion forum (to facilitate teamwork). Lab tasks include some combination of the following types of activities.

- **Kitchen** activities require you to gather household materials (or maybe even groceries) and carry out experiments. Labs always have a materials list, so you know what kind of resources you need to acquire. Because of this, it is a good idea to read through the lab assignments before they are due.
- **Digital** activities are facilitated by online tools and simulations.
- **Worksheet** activities ask you to answer questions and solve problems delivered in a worksheet format. You can print the worksheet and do it by hand, or you can do it digitally.
- **Cut-n-paste** activities require you to print something, cut it up, and paste it onto a new paper. Some people have digital skills that allow them to do these labs without paper, scissors, and glue. That's cool too.
- **Outside** activities are instructor-generated assignments that ask you to carry out various tasks outside, which is fun.

To turn in your lab, you must create one document that includes evidence of your learning. Each lab assignment includes clear instructions about what must be submitted. The ability to take screenshots of computer activities might be helpful. You can also print your work, and submit pictures of your printed work. Please submit one document that includes all the required lab work.

Labs will be graded on completeness, which means the actual thing you turn in is less important than the learning you do. I highly encourage doing the lab work in groups. And please know-- each lab is designed to take about 3 hours to complete. If they are taking you much less, consider it an opportunity to study the material. If they are taking you much longer, let's talk.

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 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). You have an interest in accuracy, though, because you can use your EB on your exams.

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 images 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 handouts in your EB. Refer to the EB assignments in Canvas for a list of other course materials you can include if you want.

Exams ($\approx$ 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 mimics the format of the quizzes and consists entirely of questions that can be automatically graded (mostly multiple choice). You have two attempts at each exam, and Canvas will record your high score. All questions are pulled from question banks, so each attempt will present a unique set of questions.

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 statement:

HONOR STATEMENT

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

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

Final Exam (Optional)

You will have the option of taking a comprehensive 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.

Assigning grades

Exams	70%
Labs	5%
Quizzes	5%
Lecture activities	5%
External Brain	5%
Applications	5%
Check-ins	5%
Total	100%

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 – 73.00% = C	< 59.99% = F
	82.99 – 80.00% = B-	73.00 – 70.00% = C-	

Lab policy: Students must complete 70% of the lab work in the course to pass, regardless of how you do in the rest of the course material.

Additional grading policy. A consistent positive attitude and effort can bump up your grade if you are on the borderline between two grades. This is the prerogative of the instructor, if they feel that you have been making a *consistent positive effort* in learning the material. Keep in mind that participation and how many assignments you have completed is also considered.

A Typical Week

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 [Sp25 Tentative Schedule](#) for the SEMESTER-LONG PLAN.

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. Your participation in the lecture activity is best by 11:59pm.

WEDNESDAY

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

THURSDAY

Repeat the Tuesday tasks with the new lecture material.

FRIDAY

Friday is a great day to work on your lab. Be sure to pay attention-- some labs need several days of preparation, and you'll need to plan ahead. 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, consider repeating the lecture quizzes to make sure you're retaining the content. Finishing up the week on Saturday ensures 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 your exam is due. If you plan ahead, you can match your application assignment with the course material you're studying!

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

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](#) and as follows:

Sun 1/26

- 0.1 Getting to know you
- 0.2 Connect up in Pronto
- 0.3 Build our community
- 0.4 Plan your life

Th 2/26

EB 1

Sun 3/1

- Lectures 1-6
- Labs 1-4
- Exam 1

Sat 4/2

EB 2

Tues 4/5

- Lectures 7-12
- Labs 5-8
- Exam 2

Sat 5/7

EB 3

Tues 5/15

- Lectures 13-18
- Labs 9-12
- Exam 3

Th 5/15

- Lectures 19-23
- Labs 13-15
- 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.

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

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

[Spring 2025 Enrollment Services Calendar](#)

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.

Getting Support

Communication

Online classes can feel lonely and isolating. If you have a question or concern, 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 Samar" 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-the-instructor@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 commit to being open and honest, to advocate for ourselves, and to treat each other (and ourselves) with respect and regard. I really look forward to working with you.

Pronto

Pronto is a crazy cool chat tool that is embedded in Canvas and seriously ROCKS. You can access Pronto

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

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

One of our orientation activities involves connecting with Pronto. I look forward to connecting with you soon!

Where to get extra help

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

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

Mental health support

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

Library support

The Learning Resource Center includes the following resources for students

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

Special programs

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

Community College Student Health and Wellness

- Resources, tools, and trainings regarding health, mental health, wellness, basic needs and more designed for California community college students, faculty and staff are available on the [California](#)

- [Community Colleges Health & Wellness website.](#)
- [Wellness Central](#) is a free online health and wellness resource that is available 24/7 in your space at your pace.

The Light Center

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

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

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

Accessibility

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

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

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

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

Advice

Active Learning in an Online Class

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

Research about how people learn (or how they change their brains!) overwhelmingly indicates that the

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

Learning is a PROCESS

Biology classes are challenging. There is a ton of new content and this includes not only new vocabulary, but also new concepts. My goal is that you *truly learn* the material, and this requires you to not only memorize new terms, but also *think* about what those terms MEAN. But here is the awesome part. **LEARNING IS A PROCESS**. My courses are set up to offer plenty of chances to capitalize on learning opportunities and IMPROVE YOUR UNDERSTANDING OVER TIME (and also your grade). Please embrace a **GROWTH MINDSET** in this class. Take feedback and grades as opportunities to improve your 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. 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.

BIOLOGY 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 the instructor

1. Study biology 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 biology 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.
0. Be conscious during video lectures. Make lists of your questions and bring them to the discussion forum. Holler when you don't understand something.

0. 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.
0. Keep detailed notes in your External Brain. This will help all aspects of your understanding.
0. Stay ahead of the game. Don't skip lectures or labs, and utilize all the study aids offered through Canvas.
0. Form study groups with your classmates, online and in person. Hang out, eat fun food, and talk anatomy 1-2x/week.
0. Practice writing the answers to short essay questions. Have your classmates read your answers and grade them. Practice being CLEAR, CONCISE, PRECISE and CORRECT.
0. Make up practice exams based on the study guide questions. Share them with your classmates. Grade each other!
0. If the going gets tough, READ your textbook! IT WILL HELP (especially if you use it to answer tough questions).
0. Embrace the GROWTH MINDSET. You deserve it!
0. 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 online BIOL-1 students

1. You can learn a lot from this class, do the lab work, it's something you do not want to fall behind in.
2. Take extremely detailed notes of every lecture and even when The instructor doesn't write something down but just says it, write it down.
3. Stay on task, it's easy to fall behind in an online class. The instructor makes it super easy to get things done, but all the tools need to be utilized.
4. I think my colored highlighters were the key to my success in this class.
5. Do NOT procrastinate, nothing is too hard and you can get it done if you consistently apply yourself.
6. Lots of notes!!
7. Don't skip the update videos from your instructor!! Those are important and if you skip them, you'll definitely miss out on some info.
8. Make sure you have a good system for note taking, and enough space. If ever confused during video lectures, keep the chapters provided open to refer back and forth. This helped me out tons.
9. Do the work when it's first assigned.
10. Work ahead!
11. I would say, watch those lectures on time, and always before trying to do a lab, all the information you need is in there. And always take very detailed notes. It is important to have a good record to go back too.
12. My advice to any future students taking this class would be to make sure you do not fall behind and be 100% committed to the work at hand. Make sure you are fully understanding the material we are learning and don't just try to get by because the way this course is laid out you will not get far by doing that.
13. Stay on top of your work and have fun!
14. Buy more than one notebook if you take notes
15. ALWAYS check the weeks assignments at least TWO days before they are due
16. Watch the lectures slowly and take notes
17. Take better notes, like every thing the instructor says, write it down. All of it. And if you miss a thing, go back!!!
18. Be prepared to dedicate some time to this class and don't fall behind because of the way the lectures build on top of each other it's important to understand each step. And keep up with labs and buy materials early!

19. 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.

Diversity, Equity, Inclusion and Accessibility

As you embark on the challenging adventure of learning biology, 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.