

Syllabus for General Biology (Bio 1)

Course Information

Semester & Year: Summer 2023 Course ID & Section #: Biol 1 #V6328 Instructor's name: Michael Best Course units: 4 Units: 3 Lecture, 1 Lab

Instructor Contact Information

Office Online: Michael Best Zoom Room (Meeting ID: 536 438 6623; Password: 6Zqm73) [Appointment] https://redwoods-edu.zoom.us/my/michaelbest?pwd=YmtJRU8zOE1JUExNM2g4dm1jU3RuQT09

Office hours: Office Hours will be scheduled as needed, by appointment 😊

Phone number: 315 657 3830

Email address: Michael-Best@redwoods.edu / Best.Michael.707@Gmail.com

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.

Course Student Learning Outcomes (from course outline of record)

- 1. Apply the process of science to critically evaluate observable phenomenon.
- 2. Describe attributes of life and explain how cells fulfill these characteristics.
- 3. Relate the mechanisms of evolutionary change to the production of biological diversity.

Prerequisites/co-requisites/ recommended preparation

Recommended Prep ENGL 150

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 <u>Disability Services and Programs for Students</u> (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.

Student Support

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.

Evaluation & Grading Policy

Your performance in the course will be assessed based on your execution of the following requirements.

• Muddy Fun Discussions (10%)

There will be a MUDDY FUN discussion board for EVERY SINGLE video lecture you watch. Most weeks, that means you'll have TWO or THREE of these discussions. Contribute to the board in a meaningful and constructive way and you'll get full credit on these assignments. This is meant to simulate a traditional lecture setting, where questions can be asked and conversation takes place. The purpose of this board is to clarify the CONFUSING concepts in the day's video, as well as celebrate the COOL ones.

There are two parts to these discussions. FIRST- you must post an original thought, with a meaningful title, talking (briefly- 200 words or less) about something CONFUSING or COOL about the lecture. This original post is due by 11:59am- this is just before noon! Once you publish your original thoughts, the rest of the board will be unlocked, and you will find some PRACTICE QUESTIONS that I've posted. You'll also find the original posts of your classmates. By the final due date (11:59pm- just before midnight!), you must engage in a meaningful and constructive way by adding 4 more posts to the board. You can answer my questions, or respond to your classmates, or both. Make the board helpful for you! For full credit, you must generate a total of 5 posts to add to the board. In total, you must:

| submit an original post that is interesting and generates conversation |
|--|
| submit the original post by the due date |
| submit at least one response that meaningfully and constructively engages with |
| classmates |
| come back to the board and participate at least two separate times (not all at |
| the same time) |

Labs (20%)

Each week, there will be 1-2 LABORATORY activity to complete. Lab will be accomplished at home using your purchased lab kit (Carolina Biological) and virtual lab notebook (Lab Archives).

• Weekly Check-in (5%)

Each weekend (due Saturday night at 11:59pm), you will have some sort of metacognitive check-in assignment. Most weeks this will be a simple (and very BRIEF- 1 minute or less) video in which you answer some sort of question I pose. This is just an easy way for us to stay connected, which is an important ingredient that helps me support your success in this class.

Weekly Online Quizzes (15%)

Administered through Canvas, these weekly quizzes will cover ALL lab and lecture material for the week. Every week, quizzes will be posted in MODULES. Quizzes will be due Saturday night by 11:59pm. No late quizzes will be accepted so it is not advised that you wait until 11:58 pm to complete the quiz. You may take the quiz twice, and I will keep the higher score. These are excellent practice for your exams. **BE**

AWARE: There are no make-up quizzes!

Exams (50%)

There will be four midterm exams and 1 comprehensive final throughout the semester that cover material from both lecture and lab. IF your score on the comprehensive final is higher than ANY of your other midterm scores, the lowest midterm score will be dropped and replaced with the final. BE AWARE: There are no make-up exams of any type, unless you have a verifiable, unavoidable and extreme circumstance.

Academic dishonesty

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

Disruptive behavior

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

Inclusive Language in the Classroom

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

Setting Your Preferred Name in Canvas

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

Canvas Information

Canvas Information

If using Canvas, include navigation instructions, tech support information, what Canvas is used for, and your expectation for how regularly students should check Canvas for your class.

Log into Canvas at My CR Portal

For help logging in to Canvas, visit My CR Portal.

For help with Canvas once you're logged in, click on the Help icon on the left menu.

For tech help, email its@redwoods.edu or call 707-476-4160

Canvas online orientation workshop: Canvas Student Orientation Course (instructure.com)

Required Materials

- 1. You must have a textbook for this course. Here are some options:
 - a. The OFFICIAL required textbook is Concepts of Biology, from OpenStax College. This book is available FREE online at: http://cnx.org/contents/b3c1e1d2-839c-42b0-a314-e119a8aafbdd:2/Introduction. You can purchase a color version of this text from Amazon for about \$30. http://www.amazon.com/Concepts-Biology-OpenStaxCollege/dp/1938168119/ref=sr_1_4?s=books&ie=UTF8&qid=1452293407 &sr=1-4.
 - b. ANY non-majors general biology text will do! Shoot me an email if you have any concerns:)

2. Online lab notebook- Lab Archives

Visit Canvas for more information about how to access this resource. It will cost you about \$15. I have already added you to your section of the digital lab notebook using your CR webmail address, simply open the email and accept the invitation.

3. Online lab kit- Carolina Biologicals

You MUST buy this lab kit (about \$80) so you have the materials you need for the lab component of this online course. You can get this kit from the CR bookstore, OR you can order it directly online at: https://www.carolina.com/catalog/detail.jsp?prodId=581013

4. Three ring binder or spiral notebook for your notes.

5. Reliable and updated computer

- a. Most computers and internet providers are adequate for course success. Speedy internet access (cable, DSL, or satellite)recommended because video lectures are a required multimedia component of the course.
- b. You need to have reliable access to the internet at least four times a week for 16 weeks. Anticipate problems with your computer and internet access (including power outages) by not waiting until the last minute to submit assignments. It is your responsibility to meet the course deadlines....

6. Webcam!

Each week you will upload a very brief video of yourself answering a reflective question about your learning during the week. You must have a working Webcam (and supportive software) to do this. OR you can just upload a video from your phone.

7. Cell phone or digital camera

You will need to document your lab work with digital images, then upload these images into your lab notebook. This is a course requirement. Cell phone camera would work perfectly.

Online Course Expectations

This online course will require at least as much time as you would dedicate to a traditional class (probably MORE). This four credit hour class will require at least 20 hours per week (for 8 weeks) if you want to succeed. You will need to watch video lectures and take good notes; record brief videos in Canvas; carefully read textbook chapters when something is unclear; complete labs at home using your purchased lab kit; participate in online discussions about lecture and lab content; complete weekly quizzes; and take FOUR exams. Conscientiousness, attention to details, and skills in reading and writing are critical for success. **You can do it!**

Student readiness

Are you ready for online classes? The first module in this course will help you make this assessment of your skills and preparation. If you are concerned, here are some modules about online learning that might be helpful: https://apps.3cmediasolutions.org/oei/students.html

Portable Devices vs. Computers

Although you can use late-model portable devices (such as Android or iOS phones & tablets) for SOME parts of this class, you should plan on doing the majority of your work (especially exams and assignments) from a reasonably late-model notebook or desktop computer (Mac or PC). Do NOT plan to participate in this class solely from a portable device, because some aspects of the class are clunky, awkward, and/or inefficient when viewed on portable devices! Clunk≠Cool. If you do decide to use your portable device for some of your class work, use the free Canvas app (called "Canvas by Instructure") available in iTunes (for iOS) and the Google Play Store (for Android). Do not try to connect to Canvas using a web browser on a portable device- this multiplies the clunk-factor. Your experience with Canvas will be a lot happier if you use the app.

CANVAS

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

- Because this is an online class, you should plan on logging into Canvas ALMOST EVERY DAY. You can access an incredible number of resources through Canvas...get used to it
- 2. All content is organized in weekly Modules. Each module has the same structure & set up by DUE DATE.
- 3. If there is content you are looking for but can't find, PLEASE email me ASAP. There are probably other folks looking for the same thing, I'm not perfect (YET) and I may forget to publish things).
- 4. New modules will show up at the BOTTOM of your module list. All old modules will remain available.

Video Lectures

You MUST watch the video lectures each week, unless you choose to READ (and understand) the TEXTBOOK instead. If you don't watch the videos or read the textbook, you are basically CHOOSING to skip class. Now...if you feel you can pass the class while skipping class every day, more power to you. But please make an informed decision about this, as it is always highly inadvisable to skip lectures for the courses you take.

All video lectures are published in YouTube. However, they are also posted in the weekly MODULES in Canvas. I recommend accessing the lectures in Canvas, just to be sure you're watching the most up-to-date video. I also organize the lectures on my YouTube channel, so you are welcome to watch them there if it is easier.

Riggs' YouTube channel: https://www.youtube.com/channel/UC-yQpFb89u7qb-duWMZvoog Please let me know if you are having ANY kind of technical difficulties with these videos.

Drop policy

You are expected to complete ALL activities in the first week of class to make sure you aren't dropped from the course! This is a HIGHLY COVETED class. You need to participate if you want to keep your spot!

I understand that sometimes you'll miss a deadline. I'm happy to chalk this up to "doo doo happens." However, if you miss five graded assignments in a row, I will drop you from the course. There is a LOT going on in this class- it is really important for your success in this class that you keep up with the fun!

Confirm your presence in the online classroom

Log in to the course in Canvas and begin completing the tasks in "Module 0: Let's Roll" no later than 11:59pm on Tuesday May 30th 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." You can and will be dropped from the class if you do not log in and begin participating in course activities. A student from the wait list will take your place.

Course Philosophy: Active Learning

Learning happens when your brain changes. If your brain does not actually change the way neurons communicate with each other, then you are not learning anything. And the best way to **change your brain** is to **DO SOMETHING**. This is the fundamental assumption that informs the methods I use in my classes.

Research about how people learn (or how they change their brains!) overwhelmingly indicates that the most successful teaching methods get students to be **active participants** in the learning process. Collaboration and problem solving are just a few ways to engage in your own learning. You might imagine that collaboration and ACTIVE LEARNING can't happen in an online class. This is not true! However, just like in a face to face class, YOU are responsible for how ACTIVE you choose to be. In this course, you will work in lab groups to facilitate collaboration, you will participate in weekly "Muddy-Fun" discussions, and you will take quizzes to make sure you're keeping up with the content.

One of the best ways to become an active learner is to TALK about what you are learning because the fact is, learning is social. In my face to face classes, you TALK to your classmates, because engaging with each other IS engaging with the content. In this online course, you WRITE to your classmates. Do not be shy when participating in the weekly discussion boardsthey represent an important part of the process.

Learning is a PROCESS

Every single class I teach is HARD. There is a TON of new content and this includes not only new vocabulary, but also new CONCEPTS. My goal is that you TRULY LEARN the material, and this requires you to not only memorize new terms, but also THINK about what those terms MEAN. And here is the awesome part. LEARNING IS A PROCESS. My courses are set up to offer plenty of opportunities to capitalize on learning opportunities and IMPROVE YOUR UNDERSTANDING OVER TIME (and consequently, your grade). Please embrace a GROWTH MINDSET in this class. Take feedback and grades as opportunities to improve yourself. Set out to truly UNDERSTAND the material, and your grade will reflect that understanding.

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. Identify the grade you'd like to earn in this class and make a clear plan for the semester that will enable you to meet your goal. Stick to your plan,

maximize efficiency, & take your time

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" http://www.screencast.com/t/18BCXS1H66bH
- 4 week long class (FREE) through Coursera: "Learning How to Learn" https://www.coursera.org/learn/learning-how-to learn

Advice from Riggs

- Study biology every single day. Some suggestions... 1.
 - Watch the video lectures and TAKE GOOD NOTES. Then rewrite your notes and 1. answer the study guide questions within 24 hours of class.
 - 2. Explain biology topics to your dog, friends, kids, and neighbors.
 - 3. Make note cards, and carry them around with you, everywhere you go.
 - Draw lots of pictures and hang them on the fridge.

Be conscious during video lectures. Make lists of your questions, and bring them to the Muddy Fun discussion forum. When in the discussion forum, interact, help others, and holler when you don't understand something.

- Be diligent and disciplined during the lab activities. It might be tempting to skate through 2. lab or take short cuts, Don't! Labs are designed to offer hands-on experiences with the complex materials presented in the video lectures. Take advantage of this opportunity to LEARN 😊
- 3. Keep detailed notes. This will help all aspects of your understanding.
- 4. Stay ahead of the game. Don't miss lectures/labs, utilize the study aids on Canvas.
- 5. Consider forming study groups with classmates. Hang out, and talk bio 1-2x/week.
- 6. Keep a list of questions that come up as you study. Then get your questions answered.
- 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.
- Make practice exams based on the Study Guide questions. Share them with classmates! 8.
- If the going gets tough, READ your textbook! IT WILL HELP, especially to answer 9. tough questions
- 10. And if the going is still tough, buckle down and repeat after me: "I can do anything for 16 weeks." You CAN do this class. All you need to do is find the time to make it happen.
- Finally...embrace the GROWTH MINDSET. You deserve it! 11.

Advice from previous students

- Make sure to keep up. Everything builds on prior material, so you can't expect to do well if you fall behind.
- I seriously recommend time management and definitely study study in every free moment that you have. I also recommend participating in the conference call to go over notes and ask questions.
- Take this class with only one other class! Do the labs and study guide questions. Don't lose faith, just breathe. Make the time to do office hours. They are super helpful in understand the concepts & succeeding.
- Just be sure to watch the lectures, and don't underestimate the exams, and you'll do fine.
- Be ready for an intense semester, but be open and ask all the questions that come up because she will help you in whatever way she can. RIGGS IS AMAZING!!!
- STUDY and STUDY more. I feel like I'm a strong student and make studying a priority but it was still a struggle to understand all topics and not to confuse names and definitions etcetera.
- Try to stay ahead, take good notes, and don't be afraid to ask questions via email.
- Expect a lot of time to focus on the studies. Literally make it a part of your schedule.
- Study reallillilly reallillilly hard for the exams!!!
- To stay on top of the work and not be afraid to ask for help! My biggest downfall was waiting until the muddy fun were due to watch the video and then realizing I was a little unsure about some of the information, which then I felt rushed and feel like I didn't retain the information as well as I could have.
- I would tell them to make sure to take notes and use note cards. And also to stay on top of doing labs towards the beginning of the week. Read the announcements. Read them! Make face-to-face contact with the instructor if feel you are lost or confused or simply not sure if you are even on track. Sometimes seeing a friendly face helps.
- Do not do the labs on the day they are due. They take more time than you think.
- You cannot fall behind watching lecture videos. NEVER skip one or you will be lost.
- Pay attention to the questions Riggs posts in Muddy Fun discussions!
- Time management is the biggest thing; don't get behind; it's very difficult to catch up.

Everything in this syllabus is subject to change...but I'll let you know if it does.

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.

<u>Wellness Central</u> is a free online health and wellness resource that is available 24/7 in your space at your pace.

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

Emergency procedures / Everbridge

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

Please contact Public Safety at 707-476-4112 or <u>security@redwoods.edu</u> 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.

Del Norte Campus Emergency Procedures

Please review the <u>Crescent City campus emergency map</u> for campus evacuation sites, including the closest site to this classroom (posted by the exit of each room). For more information, see the <u>Redwoods Public Safety Page</u>.

Eureka Campus Emergency Procedures

Please review the <u>campus emergency map</u> for evacuation sites, including the closest site to this classroom (posted by the exit of each room). For more information on Public Safety go to the <u>CR Police Department-Public Safety</u> It is the responsibility of College of the Redwoods to protect life and property from the effects of emergencies within its own jurisdiction.

In the event of an emergency:

- 1. Evaluate the impact the emergency has on your activity/operation and take appropriate action.
- 2. Dial 911, to notify local agency support such as law enforcement or fire services.
- 3. Notify Public Safety 707-476-4111 and inform them of the situation, with as much relevant information as possible.
- 4. Public Safety shall relay threat information, warnings, and alerts through the Everbridge emergency alert system, Public address system, and when possible, updates on the college website, to ensure the school community is notified.
- 5. Follow established procedures for the specific emergency as outlined in the College of the Redwoods Emergency Procedure Booklet, (evacuation to a safe zone, shelter in place, lockdown, assist others if possible, cooperate with First Responders, etc.).
- 6. If safe to do so, notify key administrators, departments, and personnel.
- 7. Do not leave campus, unless it is necessary to preserve life and/or has been deemed safe by the person in command.

Klamath Trinity Campus Emergency Procedures

Please review the responsibilities of, and procedures used by, the College of the Redwoods, Klamath-Trinity Instructional Site (KTIS) to communicate to faculty, staff, students and the general public during an emergency. It is the responsibility of College of the Redwoods, Klamath-Trinity Instructional Site (KTIS) to protect life and property from the effects of emergency situations within its own jurisdiction.

- 1. In the event of an emergency, communication shall be the responsibility of the district employees on scene.
 - a. Dial 911, to notify local agency support such as law enforcement or fire services.
 - b. If safe to do so, notify key administrators, departments, and personnel.
 - c. If safe to do so, personnel shall relay threat information, warnings, to ensure the school community is notified.
 - d. Contact 530-625-4821 to notify of situation.
 - e. Contact Hoopa Tribal Education Administration office 530-625-4413
 - f. Notify Public Safety 707-476-4111.
- 2. In the event of an emergency, the responsible district employee on scene will:
 - a. Follow established procedures for the specific emergency as outlined in the College of the Redwoods Emergency Procedure Booklet.
 - b. Lock all doors and turn off lights if in lockdown due to an active shooter or similar emergency.
 - c. Close all window curtains.
 - d. Get all inside to safe location Kitchen area is best internal location.
 - e. If a police officer or higher official arrives, they will assume command.
 - f. Wait until notice of all is clear before unlocking doors.
 - g. If safe to do so, move to the nearest evacuation point outside building (Pooky's Park), directly behind the Hoopa Tribal Education Building.
 - h. Do not leave site, unless it has been deemed safe by the person in command. Student Support Services (required for online classes)

Student Support Services

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

- <u>CR-Online</u> (Comprehensive information for online students)
- Library Articles & Databases
- Canvas help and tutorials
- Online Student Handbook
- Online Tutoring Resources

<u>Counseling</u> offers assistance to students in need of professional counseling services such as crisis counseling.

Learning Resource Center includes the following resources for students

- <u>Library Services</u> to promote information literacy and provide organized information resources.
- Multicultural & Diversity Center
- Academic Support Center offers tutoring and test proctoring for CR students.
- Student Tech Help provides students with assistance around a variety of tech problems.

Special programs are also available for eligible students include

 <u>Extended Opportunity Programs & Services (EOPS)</u> 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 <u>Veteran's Resource Center</u> 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.
- <u>CalWORKS</u> assists student parents with children under the age of 18, who are receiving cash assistance (TANF), to become self-sufficient.
- Klamath-Trinity students can contact the CR KT Office for specific information about student support services at 530-625-4821