

Syllabus for General Biology (BIOL-1), Fall 2022

Course Information

Semester and Year: Fall 2022

Course ID: BIOL-1-E4261

Instructor's Name: Katie Terhaar (she/her)

Course Units: 4.0

Instructor Contact Information

Office Hours and Location: Online, by appointment

Email address: Katie-Terhaar@Redwoods.edu

Phone Number: **EMERGENCY USE ONLY!** (Text works best) (616) 502-0419

Class 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.*

*****NOTE: There will be an OPTIONAL field trip, probably on a Saturday. You will be responsible for your own transportation. We will likely be outdoors, so please plan accordingly. ***More information to follow*****

Course Student Learning Outcomes (from course outline of record)

1. Apply the scientific method to critically evaluate observable phenomena.
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.

Required Materials

Textbook: <https://openstax.org/books/concepts-biology/pages/1-introduction>
(Yep, its free!)

Lab thingies:

We will be drawing on several resources for our labs. **Keep an eye on Canvas, as labs and REQUIRED lab manual supplements may be posted. BIG BOLD LETTERS: YOU MUST PRINT THE LAB MATERIALS BEFORE COMING TO LAB!!**

Accessibility

Students will have access to online course materials that comply with the Americans with Disabilities Act of 1990 (ADA), Section 508 of the Rehabilitation Act of 1973, and College of the Redwoods policies.

Students who discover access issues with this class should contact the instructor.

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

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

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

Stuff about Life and whatnot..

Yeesh, it's been a crazy couple of years. But here you are!! In your lane, hydrated, thriving, glowing! Just the fact you have signed up for this class, that you are taking on this extra can of stressful worms to either begin or continue your academic career is a huge accomplishment! Yay you!! Give yourself a pat on the back! This being said, life happens. I know we all know to stay home if we're not feeling well, but to me, this means both **mentally** or **physically**. Depression and anxiety are at all-time highs among young adults (a demographic many of you fit). If you need a day to hang out in your PJs, cuddle with your cat, and binge watch Bob's Burgers while eating an entire tub of chocolate chip cookie dough Haagen-Dazs, yes, do it. If the ocean is flat, and the visibility **finally** is amazing in Trinidad harbor, and you need a day to go spearfishing because staring at a computer screen for **one more second** will make your brain turn to scrambled eggs, and this is how you self-care, go do it!...full disclosure, I have skipped classes to do both of these things (ha! Bet you didn't know your instructor is a human too!). Whatever your "I need a break" day looks like. Just don't forget to study up on what you missed when you're finished with your break (asking a trusted pal for notes is always a good plan). Please use this power wisely. Missing two or more labs **without talking to me** may result in you not having a thorough understanding the material, and potentially receiving a lower grade. As always, good communication is key (science included! Just ask the research team for NASA's Mars Climate Orbiter...).

Seriously though, I don't know what your life beyond school is like, or what challenges you may be facing. As your instructor, I am here to support you in your academic career in any way I can. If something interfering is with your learning, whether in class or outside of class, please reach out to me and I will try to help. This class is going to be a lot of work for most of you. The best thing you can do is keep up with the lessons and ask questions when they arise. If you have read this far, email me a picture of a baby capybara, and you will get ten points extra credit. Don't forget, I am here to help you succeed.

Additional Support:

- Resources, tools, and trainings regarding health, mental health, wellness, basic needs and more designed for California community college students, faculty and staff are available on the California Community Colleges Health & Wellness website.
- Wellness Central is a free online health and wellness resource that is available 24/7 in your space at your pace.
- Students seeking to request a counseling appointment for academic advising or general counseling can email counseling@redwoods.edu.

Evaluation & Grading Policy

• Lecture Quizzes (12-Lowest two will be dropped)	10%	(100 pts)
• Lecture Midterm (1)	15%	(150 pts)
• Lecture Final (1)	20%	(200 pts)
• Lab Midterm (1)	15%	(150 pts)
• Lab Final (1)	15%	(150 pts)
• Group Project (1)	15 %	(150 pts)
• Participation (Mostly Lab Attendance)	10%	(100 pts)

Grading Scale

< 60%	60-69%	70-76%	77-79%	80-82%	83-86%	87-89%	90-92%	93-100%
F	D	C	C+	B-	B	B+	A-	A

Important for Nursing Program Students:

- The CR Nursing Program's "Repeatability Rule": Students must earn a cumulative 2.5 GPA in BIOL-2, BIOL-6, and BIOL-7 in order to apply to the CR nursing program. If you pass these classes with C's, you will not earn a 2.5 GPA. Additionally, if you pass a class with a C, you cannot retake it at CR to improve your grade. The only way you can retake a class at CR is if you fail it (with a D or F). Keep this in mind when deciding whether or not to drop one of these 3 biology courses.
- The prerequisites for BIOL-7 (Human Physiology) include: BIOL-6 and CHEM-2 (or 1A). You can't register for BIOL-7 unless you've taken AND PASSED the prerequisites. If you think this might affect you, please plan ahead.
- Before you can register for BIOL-2 (Microbiology), you must be taking, OR HAVE TAKEN, CHEM-2 or CHEM-1A.
- To register for CHEM-2, there are no math prerequisites. To register for CHEM-1A, you need at least MATH-120.
- While CHEM-2 is required for the previous courses, CHEM-1A will also meet the requirement. However, you must have taken either high school chemistry OR CHEM-100 if you want to register for CHEM-1A.

Admissions deadlines & enrollment policies

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

Academic dishonesty **(Yo. Just don't cheat)**

In the academic community, the high value placed on truth implies a corresponding intolerance of scholastic dishonesty. Let me repeat that. ***In the academic community, the high value placed on truth implies a corresponding intolerance of scholastic dishonesty.*** This philosophy extends FAR beyond your academic career and is one of the primary creeds of science. Your scientific integrity is worth far more than a grade.

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.

Note: Plagiarism is a form of cheating. Therefore, **all written work you turn in must be in YOUR OWN WORDS.** If you choose to use someone else's exact words, you must credit the source and put the words in quotations. *If you choose to plagiarize any work for this class, you will receive a zero on the assignment, even if you have permission to work on an assignment with other students from the class. This is particularly important for labs and exams.* (To sum this up-give credit where credit is due. You would be really unhappy if someone quoted your research or work without giving you credit...)

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

Canvas Information

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

Log into Canvas at <https://redwoods.instructure.com>

Password is your 8 digit birth date

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

Canvas Help for students: <https://www.redwoods.edu/online/Help-Student>

Canvas online orientation workshop: <https://www.redwoods.edu/online/Home/Student-Resources/Canvas-Resources>

Student Support Services

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

- CR-Online (Comprehensive information for online students)
- Library Articles & Databases
- Canvas help and tutorials
- Online Student Handbook
- Counseling offers assistance to students in need of professional counseling services such as crisis counseling.
- Learning Resource Center includes the following resources for students
- Academic Support Center for instructional support, tutoring, learning resources, and proctored exams. Includes the Math Lab & Drop-in Writing Center
- Library Services to promote information literacy and provide organized information resources.
- Multicultural & Diversity Center

Special programs are also available for eligible students include

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

- The TRiO Student Success Program provides eligible students with a variety of services including trips to 4-year universities, career assessments, and peer mentoring. Students can apply for the program in Eureka or in Del Norte
- The Veteran's Resource Center supports and facilitates academic success for Active Duty Military, Veterans and Dependents attending CR through relational advising, mentorship, transitional assistance, and coordination of military and Veteran-specific resources.
- Klamath-Trinity students can contact the CR KT Office for specific information about student support services at 530-625-4821

Schedule (Tentative. Subject to change, cuz y'know...life..)

Week	Lecture	LAB	Lecture Quiz	Group Project
1	Intro, Chemistry of Life	Lab 1-Hypothesis Testing	Yes	
2	Chemistry of Life, Cellular Organization	Lab 2- Chemistry of Life	Yes	
3	Cellular Dynamics	Lab 3- Microscopes and Cells	Yes	
4	Energy and Metabolism, Cellular Respiration	Lab 4- Osmosis and Diffusion	Yes	Group Member List
5	Cellular Respiration, Photosynthesis	Lab 5-Cellular Respiration and Photosynthesis	Yes	
6	DNA Structure, Mitosis and the Cell Cycle	Lab 6-DNA Structure and Function	Yes	Subject Selected
7	Mitosis and Meiosis	Lab 7- Mitosis and Meiosis	Yes	
8	Transcription and Translation, Mendelian Genetics	Lab Midterm	Yes	Outline
9	Chromosomes and Genes	Lab 8-Mendelian Genetics	Lecture Midterm	
10	Darwin and Evolution, Natural Selection, Speciation	Lab 9- Human Inheritance	Yes	
11	Diversity of Life: Viruses, Bacteria, Archaea, Protists	Lab 10- Evolution and Natural Selection	Yes	
12	Diversity of Life: Fungi, Plants, and Animals	Lab 11- The Diversity of Life	Yes	Questions Due
13	Diversity of Life: Animals, Ecology	Group Projects		
14	Thanksgiving Break	No LAB	NO	
15	Diversity in the Sciences	Diversity in the Sciences: Guest Speaker TBA	Yes	
16	Biosphere, Space, Mass Extinctions, Environmentalism	LAB FINAL	Lecture Final During Finals Week	

