

Biology 16, Introduction to Biology for Non-Majors

Section 2423 - Course Syllabus

You can find a pdf of this syllabus here: [Fall 2022 Bio 16 syllabus](#)

Welcome!

Welcome to Biology 16! I am so excited to work with you this semester, and hopefully help you accomplish goals beyond this course. I hope that you are just as excited to get to know and work with each other and to learn more about the natural world.

We will be learning and growing as Biology students (myself included!) together this semester. We all have our own valuable talents, skills, experiences, and perspectives to bring to the table, and we all have things to learn from one another.

In this classroom, you have the right to determine your own identity. You have the right to be called by your correct name, and for that name to be pronounced correctly. You have the right to be referred to by your correct pronouns. If the name or pronouns you go by need to be changed, you can do that at any point in your education. You are your own person, and you are not expected to or believed to speak for a whole group just because they may share some identity with you.

If you find that there are aspects of course instruction, subject matter, or classroom environment that are barriers to your inclusion, please talk with me. My goal is to help you access information and skills, and students are always teaching me how to do that better.

Return to the Syllabus page in the course navigation to see an index of linked sections of this syllabus.

Course Description

An introduction for non-majors to the core concepts of biology by studying current issues in modern biology with an emphasis on the scientific method and scientific literacy.

Student Learning Outcomes

Upon completion of the course, students will be able to:

1. Apply the scientific method to investigating and evaluating biological phenomena.
2. Explain the application of the core concepts of biology to current issues.
3. Evaluate the scientific background of and debate on current biological issues.
4. Demonstrate knowledge of laboratory and field biology techniques, including microscopy.

Objectives

During the course students will:

1. Explain the scientific method and assess information about current scientific issues using this methodology
2. Compare and contrast science and pseudoscience

3. Assess the role of science in society
4. Demonstrate knowledge of each of the following core concepts: evolution, structure and function, flow of information, flow of matter, systems biology
5. Apply core concepts to specific current issues in modern biology
6. Analyze and critically evaluate a current issue in biology and current events using the principles of the scientific method
7. Apply the steps in the scientific method for problem solving and biological investigation
8. Apply laboratory techniques, including proper microscope use, to observing and experimenting with biological phenomena

Instructor Contact

Riva Bruenn

Please call me Riva (pronounced REE-vah) and use she/her pronouns for me.

Office Hours

- I will schedule 2 office hours per week using a student survey to find the times the most people are available. These are walk-in hours to speak with and help students, no appointment necessary.
- Also available for 1 on 1 or group meetings by appointment - send me a Canvas message with a few days and times that work for you

I respond to Canvas Inbox message within 24 hours M-F, by Monday afternoon if sent between 5pm Friday and 5pm Sunday.

I prefer Canvas messages (I will see those first), but you may also email me at rbruenn@santarosa.edu

What are office hours for?

Office hours are a time when I will be available by zoom (and some in person) to help any and all students who stop in. You don't have to make an appointment. There may be other students in the session.

I LOVE having students come to office hours - you are never a bother, always a joy.

Ideas for things to discuss during office hours:

- get help answering a study question, or another content question you have
- go over a quiz after your first attempt to improve for the 2nd attempt
- go over a graded exam
- go over an assignment before you submit it, or discuss feedback on a graded assignment
- get help navigating Canvas
- get help finding an SRJC or community resource (like writing help, mental health care, food, equipment loans, etc.)
- get help figuring out what to focus on to catch up, make a priority list and schedule, and set course goals together
- chat and help me get to know you (great idea if you might ever want me to write a recommendation letter for you, which I love to do)
- get advice or ask for help connecting with helpful people for your future academic or professional career

- ask random biology questions I may or may not be able to help you with
- work on an assignment quietly by yourself and ask me questions when they come up as you work
- come with your study group and study, asking me questions when they come up

Course Web Site

Students will use this Canvas course web site for instructional content, assignment instructions, submitting assignments, viewing classmate's work, sharing resources, and viewing grades.

Instructor Announcements and Q and A Forum

I will post announcements on the “Announcements” page in Canvas throughout the semester. Canvas notifies students according to their preferred Notification Preferences as soon as the instructor creates an Announcement. Make sure to set up your notifications so you get one when I post an announcement.

There are also two discussion boards you can use to post questions. I encourage students to answer each other's questions, but if no one has answered, I will respond within 48 hours.

1. Q and A about course and assignment details
2. Q and A about course content

Concepts of Biology, OpenStax free online textbook

You can find our textbook for free online here: <https://openstax.org/books/concepts-biology/pages/1-introduction>

You can also locate and order a paper copy of the textbook online via the SRJC Bookstore. Note that if you want to pick your books up in Petaluma, you need to order them from the Petaluma Bookstore website.

- OpenStax Concepts of Biology
- Fowler, Samantha and Roush, Rebecca and Wise, James
- ISBN for digital (free) version: ISBN-10: 1-947172-03-4
- ISBN for paperback (buy it if you want a paper copy) version: ISBN-13: 978-1-50669-653-9

Bio 16 Lab Manual

You can purchase this lab manual at the SRJC Bookstore. Note that if you want to pick your books up in Petaluma, you need to order them from the Petaluma Bookstore website.

- Bio 16 Lab textbook
- Zoger, Abigail
- ArborCrest publishing
- ****make sure to buy from the school bookstore, as amazon and other online merchants have older versions without some labs.**

Grading Policy

Visit the “Grades” page in Canvas course navigation to keep track of your grades. I grade and post grades and comments on the online Canvas gradebook. I will return grades and/or feedback 1 week after the deadline for

most assignments (2 weeks for written assignments and projects, 2 weeks after the unit close date for exam short answers). If work is submitted late I will have it graded within 2 weeks of the submission date.

I encourage you to keep a close eye on your grades and feedback. For most assignments you can resubmit with corrections to earn more points. Keep your goals in mind to decide when this is worth your time, and make a 1 on 1 appointment if you want help strategizing.

Grades will be assigned as follows:

Letter grade percents and points		
A	90%	900 points or more
B	80%	800 to 899 points
C	70%	700 to 799 points
D	60%	600 to 699 points

If taking Pass/No Pass you need at least 700 points to pass the course.

Grades are transferred directly from Canvas into the final grade system, so what shows in Canvas is accurate.

You can use the What If? grade function in Canvas to set specific goals on assignments - it will show you how your grade will change given an assignment grade you enter.

Points will come from the following assignments and assessments:

Breakdown of points for the semester

Assignment/assessment	Description	Points	% of your final grade
2 scientist spotlights (each worth 10)	350 word reflections on a scientist's life and/or research	20	2
4 discussions (each worth 10)	Initial post and reply to a classmate	40	4
Microgreens project (6 journals each 5pts, 3 results discussions each 5pts, report 55pts)	We will plant microgreens 3 times to learn about growing plants and to practice the scientific method.	100	10
Scientific claims project (annotated bibliography 15pts, practice peer review 10pts, draft 15pts, peer review 10pts, final 50pts)	An individual or group project evaluating a claim using database research and a graphical presentation of your findings.	100	10
Nature journal project (3 journal entries each worth 10pts, final sharing and reflection 10pts)	We will practice making detailed drawings and written observations of living things. You will not be graded on how realistic your drawing looks.	40	4

20 graded labs each 5pts	Lab activities usually completed during lab period, but occasionally some groups will need to finish for homework	100	10
9 quizzes each 25pts (best 8 count)	open note multiple choice and short answer quiz on lecture and lab material	200	20
3 unit exams and cumulative final each 50pts	close note multiple choice and short answer exam on lecture and lab material	200	20
3 self assessments each 15pts	Surveys taken after each unit about your study strategies and their effectiveness. Also an opportunity to give course feedback.	45	4.5
3 surveys each 15pts	Surveys to help me (Riva) assess how I am doing on non-grade related metrics of student success and get to know students individually	45	4.5
2 success activities each 25pts	1 activity per Unit (for units 1 and 2) from a list of activities that typically help students succeed in college courses	50	5
2 Note taking sessions each 5pts	Sign up to be a note taker for 2 lectures over the semester, take a picture of or otherwise share notes for the class (notes don't have to be perfect!)	10	1
10 Entrance and exit tickets each 5pts	Short activity to hand in at the start or end of some lectures. There will be between 15 and 20 chances to turn in tickets.	50	5
totals:	----- -----	1000	100

See each assignment page for more details.

The course outline of record is the required organization of this course for any instructors that teach it. The % of your grade that comes from each category is part of the course outline of record. The following table illustrates which assignments and assessments fit into each required category.

See the course outline of record for more information.

Assignments in each COR category

Course Outline Category	Assignments & Assessments	% of your grade from that category
writing - response papers	scientist spotlights, discussions, lab projects: microgreens, scientific claims, nature journal	30

problem solving - analysis of case studies	labs (aside from sessions devoted to lab projects)	10
Exams lecture & lab	quizzes and exams	40
Other - oral report, participation	self assessments, surveys, success activities, notes, exit tickets	20

Extra Credit

Each student is assigned as note taker for 2 lectures in the semester. Students may sign up to be a note taker for 1 additional lecture, to earn +5 extra credit. These points will be added to the lowest exam score.

Occasionally, a unique opportunity or event occurs which is directly related to our class material. If this happens, I will consider providing extra credit for attendance/participation at this event, but only if the date and time make it accessible to everyone (and/or a recording or other alternative is available). I do not wish to penalize students with non-flexible schedules (ex. care giving, jobs, and other responsibilities).

Turning in assignments

In this course, most assignments will be submitted through Canvas. I will not accept assignments through email, because I grade anonymously using the Canvas grading system. Each assignment will have a due date (listed in the course schedule) and a close date (the Unit close date except for essay assignments and surveys). I will accept assignments for full credit up until the close date.

Some assignments will require file uploads. The acceptable file formats are: pdf, jpg, jpeg, tiff, png, doc, docx, xls. Never submit a .pages document or a live document (like google docs). I cannot accept these, as I won't be able to view them through the Canvas grading tool.

Each assignment page will have directions and upload help links. Make sure to start your upload at least 30min before the close time (11:59pm). Submit a day in advance if you might need help from me.

Exams and quizzes

There will be open note semi-weekly quizzes taken through Canvas, as well as closed note in-person lecture exams. The material comes from the textbook/readings, lectures, labs, and supplemental materials provided to you. I will work with the Disability Resources Department to ensure any accommodations requirements are met. A makeup lecture exam may be possible, but only in the event of unforeseen emergencies. This policy is to protect my time, as proctoring an exam takes hours away from my other work, which is difficult for me to do without advance notice and planning.

Many students experience exam anxiety. Some strategies that have worked for other students:

- Go over your notes after each class (after lecture, after lab). Some students reorganize notes by making tables, charts, diagrams, and word banks or by color coding. Keep a well organized study guide.
- Write down questions you need help with and plan to come to office hours at least once a week to get help.
- Schedule time to study. Turn off all devices during this time. When your scheduled study time is over, move on to something else.
- Take your first quiz attempt early, treat it as a practice test.

- After your first quiz attempt, come to office hours to go over what you missed before taking the second attempt.

Late Policy

This course is set up so that you can learn from your mistakes by correcting work, and practice time management skills without fear of failure. Learning takes practice and failure the first time is normal. We do not decide whether a driver deserves a license based on their first driving lesson, and your final grade should likewise not be determined by your first quiz score. You should plan on completing good work on time, but when your work does not meet the criteria, or when you fall behind, you will have the space to fix mistakes and catch up again.

All assignments are due **at 11:59pm PST** on the due date. There is no need to ask for an extension: I will accept late work for full credit up until the unit closes except for projects that rely on all students finishing at the same time and some surveys when I need the results promptly (see assignments for details). To prevent any students from falling too far behind and to help me manage my own time, after a unit closes, I will not accept, give feedback on, or grade late work.

If you are struggling to keep up with the course, I encourage you to make a 1 on 1 appointment. We will talk about your grade goals and together as a team we will make a priority list and schedule to help you readjust.

Pass-No Pass (P/NP)

This class is a grade only class. P/NP is not an option for this course. See the course outline of record for more information.

Accommodations

Students with disabilities who need or may need accommodations in this class are encouraged to contact Disability Resources (527-4278), disabilityinfo@santarosa.edu as soon as possible to better ensure such accommodations are implemented in a timely fashion. You will need to provide the Authorization for Academic Accommodations (AAA letter) from the Disability Resources Department (DRD) to receive accommodations.

I want you to have what you need to succeed, so if you may be eligible, please seek all accommodations you are entitled to even if you have not done so in previous classes.

Additional resources for success

- Student Success Team – student coaches
- Tutorial Centers
- Library resources - Librarians are available online. Go to "online chat" or "zoom appointments." Libraries are open in person this semester (check website for hours)
- Need a Laptop or other equipment? Borrow from SRJC Library (look on the right side of the webpage)
- Apply for Crisis Financial Assistance: Emergency grant application
- Accessing Online Student Services
- Basic Needs – Student Resource Center supports meeting student needs for food, housing, transportation, and much more

My tips for success

- Regularly check Canvas, especially the tentative course schedule, and plan at least a week ahead.
- Plan to spend 5-8 hours on this class outside of lecture and lab hours.
- Make a schedule for yourself with reachable, prioritized goals for each study/work period.
- Review lecture notes after each class (especially study guide questions and questions in the lecture videos)
- Review and prepare for each lab. Read lab pages ahead of time and answer some questions.
- If you miss a question on a quiz or activity, figure out why your answer was not correct, what the correct answer is, and why.
- Use the student services.
- If you have a question or are confused, *please speak up!* Other students are almost certainly confused as well but may not want to ask.
 - ASK LOTS OF QUESTIONS during labs, office hours, and on discussion boards.
- Every class and every student is different – work with me to make this the most effective learning environment it can be by communicating your needs and giving me feedback.

Advice from Spring 2022 students, in their own words

- Many professors say there are no bad/dumb questions in their class, but for Riva this is actually true. Please, please, please speak up with your questions! You can be the difference-maker for another student with the same question.
- Never be shy asking questions and re-read other student's notes to get a better understanding or write down if you missed anything. Enjoy the class!
- Ask questions and go to office hours. This class is such a great course but you get out of it what you put in to it so you need to do your best!
- Remember that science is fun! Always try to answer the study guide questions.
- Look at the study guide, ask for help and breath!
- Be present as much as possible! Everything builds off of one another so the fewer absences you have, the better you will understand the material.
- As long as you show up to all the labs, you will do great in this class.
- Show up to class! It really helps solidify information and allows you to interact with the lecture.
- 1) Communicate! If you're struggling, go to office hours and just chat with her. 2) Color coded (using pens) is super helpful but make sure you start at the beginning of the course so you're organized. 3) Taking your 2nd quiz attempt right before (24-48hrs) the exam is an awesome study tool.
- Use the study guide and watch the videos on the content page, they help the most to prep for exams.
- Don't be afraid to ask peers to form a study group. It helps you see what you need to work on and allows you to deepen your knowledge by helping others.
- Create a study group with your classmates.
- Stay ahead. Complete work even if you try less it's better than not trying at all.
- If you do your readings and assignments and if you put your part, you will get an A!
- I advise them to answer study questions every week to stay on top of their studying and to make it easier for them to prepare for exams.

Important Dates

Day Class Begins: 8/16

Last Day to Add without instructor's approval: 8/21

Last Day to Drop with a refund: 9/4

Last Day to Add with instructor's approval: 9/4

Last Day to Drop without a 'W' symbol: 9/4

Census day: 9/6

Midterm progress indicators posted in student portals: 10/17-11/13

Last Day to Drop with a 'W' symbol: 11/13

Last Day to Opt for Pass/No Pass: 12/7

Day Of Last Class Session: 12/7

Day of Cumulative Final Exam: 12/13

No-show drop

If you do not sign into Canvas or if you do not attend the first two class meetings and I don't hear from you, I may drop you from the course to make space for waitlisted students. If you know you will miss sessions, communicate with me to avoid being dropped.

During the semester, if you do not sign into Canvas and miss 2 consecutive sessions and/or 5 assignments without contacting me, I may drop you from the course up until census day (when the college reports enrollments to the state).

I expect you to take responsibility for your own enrollment - if you plan to withdraw make sure you do so by the posted deadlines. Do not rely on me to drop you from the course.

Withdrawing and Excused Withdrawal (W and EW)

You might decide that this course doesn't fit into your life this semester. If you do, know that I am not judging you. I know that you have priorities outside of this class. Before you withdraw, I encourage you to check in with me 1 on 1 to see if we can work together to help you prioritize your time in the course to succeed. I also encourage you to meet with a counselor to make sure withdrawing is the best option, and to discuss whether you are eligible for an excused withdrawal.

- A regular withdrawal will show up as a W on your transcript and will count towards your number of attempts in the course.
- An excused withdrawal will show up as an EW on your transcript and will not count towards your number of attempts in the course.

Attendance

I expect you to attend all class sessions. That said, I am aware that students may have unavoidable conflicts and emergencies. If for some reason you cannot attend a class session, I expect you to contact me as far in advance as possible (or as soon after the absence as possible in unforeseen circumstances). We will work together as a

team to get you caught up. To set your expectations accurately, in my experience catching up after missing a class requires more time and effort than coming to the class.

Strategies to avoid falling behind in the case of absences:

Strategies to use ahead of time:

- work ahead of schedule to protect yourself from unforeseen events
- exchange contact information with lab group members so you have someone to go to for notes and help on what you missed

Strategies to use after you miss a session:

- come to office hours after the missed session to ask questions and get an overview of what you missed
- read the posted notes
- post in the course Q & A boards for help with things you missed or help finding resources you need to catch up
- schedule a 1 on 1 meeting to think through your priorities with my help and make a list and schedule for catching back up

Class goals and values

In our first class session we will brainstorm and agree together on a shared list of class goals and values (for students and for the instructor). Once that list is complete, we can revisit it any time this semester as needed/wanted by any of us.

I challenge you to present your own creative, original work

I trust you and believe that no student sets out to plagiarize (copy) the work of others. This can happen due to unbearable stress, mistake, or confusion about what counts as plagiarism.

Plagiarism is not just submitting someone else's paper as your own. It's taking sentences, even several-word phrases directly from another source or sources without proper attribution. You are a creative, intelligent, capable person and you can communicate in your own original way with your own words. If you're not doing original work, all the assigned work is really just busywork and is not a useful learning tool. Copy/paste is not worth your valuable time. I encourage students to share information and ideas, but not their work.

All work for this class must be original (in your own words) and completed individually (each student submits their own unique work) unless otherwise specified in the assignment details. Quotes, even if properly attributed, are not permitted in any assignment unless otherwise specified in the assignment details.

No credit will be earned for plagiarized assignments, quizzes, or exams.

My best advice for avoiding plagiarism is to always take notes in your own words, and never look at the original source while doing your work. If you're ever confused about whether you're writing in your own words or not, come to office hours or the writing center. We'd all love to help you!

SRJC Standards of Conduct

Students who register in SRJC classes are required to abide by the SRJC Student Conduct Standards. Violation of the Standards is basis for referral to the Vice President of Student Services or dismissal from class or from the College. See the Student Code of Conduct page.

Netiquette, or Why Is It Harder to Be Polite Online?

Netiquette refers to using common courtesy in online communication.

In our first week of classes we will come up with shared classroom goals and values. In the meantime, please use these guidelines for discussions and communications through Canvas:

- Forward emails and other private messages only with a writer's permission.
- Be considerate of others' feelings and use language carefully.
- Cite all quotations, references, and sources (otherwise, it is plagiarism).
- Use humor carefully. It is hard to "read" tone; sometimes humor can be misread as criticism or personal attack. Feel free to use emoticons like :) for a smiley face to let others know you are being humorous.
- To ensure that others can understand you, use complete sentences to compose posts. Review work before submitting it.
 - Abbreviations, such as "ur" for "your" or "ru" for "are you" etc., is confusing for many people, so please use full words.
 - If you don't understand what someone else has said, try asking for clarification.
 - If you notice wording that is confusing in an assignment or from me (the instructor), ask for clarification so I can fix it for everyone.
- Focus on impact first, not intent. If something you communicate has a negative impact (hurts someone for example), try to understand the impact and change your behavior first, before communicating what your intent was.

Tentative course schedule

If this schedule needs to change, I will send a course announcement.

Lab activities are due on the lab day.

Lecture exams and other in-class activities are due on the lecture day.

All other assignments are due at 11:59pm on Sundays

Tentative schedule

Week (dates)	lecture topics Tues/Thurs 10:30am-12:00pm room: PC 657	lab topics (graded lab number) Tues/Thurs 1-3pm room: PC 313	things due (date due) late work accepted until unit close date unless noted in <i>italics</i>	Readings (go to content pages for links)	SRJC events
1 (8/14-8/20)	<ul style="list-style-type: none"> Tu: Introductions, characteristics of life and viruses Th: how SARS-CoV-2 infects, and protein synthesis 	no labs until week 3	<ul style="list-style-type: none"> getting started surveys (8/21) <ul style="list-style-type: none"> <i>no late work</i> Discussion: introductions (8/21) 	Ch. 1.1, Khan academy article, HHMI virus explorer resource, Ch. 2.3, 9.3, 9.4, 17.1	none
2 (8/21-8/27)	<ul style="list-style-type: none"> Tu: how COVID-19 vaccines work Th: how COVID-19 vaccines work 	no labs until week 3	<ul style="list-style-type: none"> Quiz 1 (8/28) 	Khan academy article, Ch. 1.2, 17.1	8/21 last day to add without add code
3 (8/28-9/3)	<ul style="list-style-type: none"> Tu: case study: Moderna vaccine clinical trials Th: homeostasis and blood sugar 	Tu: none Th: intro/covid vaccines (1)	<ul style="list-style-type: none"> Scientist spotlight 1 (2/6) 	Ch. 16.4	8/28: last day to drop with refund
4 (9/4-9/10)	<ul style="list-style-type: none"> Tu: type 1 and type 2 diabetes Th: treatments for diabetes 	Tu: Enzymes 1 (2) Th: Enzymes 2 (3)	<ul style="list-style-type: none"> Quiz 2 (9/11) 	Harvard Health article, CDC page, Ologies podcast, FDA page, 2 Khan Academy videos with questions	9/4: last day to add with code, last day to drop without W 9/5: labor day NO CLASSES
5 (9/11-9/17)	<ul style="list-style-type: none"> Tu: healthy cell cycling and mitosis Th: mutations and cancer 	Tu: Water 1 (4) Th: Water 2, interpreting graphs (5)	none	Ch. 6.1-6.3	9/17: constitution and citizenship day
6 (9/18-9/24)	<ul style="list-style-type: none"> Tu: cancer treatments Th: class discussion and review of unit 1 	Tu: microscopes 1/NJ 1 (6) Th: 5-second rule 1, microscopes 2/NJ 2 (7)	<ul style="list-style-type: none"> Quiz 3 (9/25) Discussion: diseases (2/27) 	cancer.gov page, CDC page, NIH page	none

7 (9/25-10/1)	<ul style="list-style-type: none"> Tu: Unit 1 exam Th: chromosome movements in mitosis vs. meiosis 	Tu: microgreens planting 1 (journal 1) Th: 5-second rule 2, mitosis, pond water collection (8)	<ul style="list-style-type: none"> Success activity 1 (10/2) Last date to turn in any open Unit 1 work (10/2) 	Ch. 7.1-7.2	none
8 (10/2-10/8)	<ul style="list-style-type: none"> Tu: inheritance of traits Th: gene x environment, polygenic traits, and epigenetics 	Tu: Microscopes 3/NJ 3 (9), Microgreens journal 2 Th: intro to scientific claims project (10)	<ul style="list-style-type: none"> Quiz 4 (10/9) Scientist spotlight 2 (10/9) Self assessment 1 (10/9) <ul style="list-style-type: none"> <i>no late work</i> 	Ch. 8.1-8.3, Harvard publication, Khan academy article	none
9 (10/9-10/15)	<ul style="list-style-type: none"> Tu: genetic testing for diseases Th: ancestry tests 	Tu: microgreens results 1 (results discussion 1) Th: library workshop (11)	<ul style="list-style-type: none"> Quiz 5 (10/16) Mid-semester survey (10/16) <ul style="list-style-type: none"> <i>no late work</i> 	CDC pages on genetic testing and counseling, NCBI article about ethics, 3 news articles about genetic ancestry tests	none
10 (10/16-10/22)	<ul style="list-style-type: none"> Tu: Gene modification Th: Gene therapy 	Tu: microgreens planting 2 (journal 3), evaluating sources (12) Th: inheritance (13)	<ul style="list-style-type: none"> Discussion: Learning strategies (10/16) Scientific claims annotated bibliography (10/23) <ul style="list-style-type: none"> <i>no late work</i> 	Ch. 10.1-10.3, 2 government articles about gene editing, article about gene therapy, bioethics article, patient education page	10/17-11/13: midterm progress indicators available
11 (10/23-10/29)	<ul style="list-style-type: none"> Tu: GMOs Th: class discussion and review of unit 2 	Tu: pGLO1 (14), Microgreens journal 4 Th: pGLO 2 scientific claims meetings (15)	<ul style="list-style-type: none"> Quiz 6 (10/30) Discussion: genetic modification (10/30) 	3 government pages about GMOs, 1 article about a GMO of your choice	10/17-11/13: midterm progress indicators available
12 (10/30-)	<ul style="list-style-type: none"> Tu: Unit 2 exam 	Tu: microgreens results 2 (results	<ul style="list-style-type: none"> Scientific claims 	ch. 11.1-11.2	10/17-11/13: midterm

11/5)	<ul style="list-style-type: none"> Th: natural selection and adaptation 	<p>discussion 2)</p> <p>Th: microgreens planting 3 (journal 5)</p>	<p>practice peer reviews (11/6)</p> <ul style="list-style-type: none"> ◦ <i>no late work</i> <ul style="list-style-type: none"> Success activity 2 (11/6) Last date to turn in any open Unit 2 work (11/6) 		progress indicators available
13 (11/6-11/12)	<ul style="list-style-type: none"> Tu: biodiversity and climate factors 	<p>Tu: evolution (16), Microgreens journal 6</p> <p>Th: none</p>	<ul style="list-style-type: none"> Self assessment 2 (11/13) <ul style="list-style-type: none"> ◦ <i>no late work</i> Scientific claims drafts (11/13) <ul style="list-style-type: none"> ◦ <i>no late work</i> 	ch. 21.1-21.2	<p>10/17-11/13: midterm progress indicators available</p> <p>11/10: professional development day NO CLASSES</p> <p>11/11: Veteran's day NO CLASSES</p>
14 (11/13-11/19)	<ul style="list-style-type: none"> Tu: ecosystems in California and fires Th: the carbon cycle 	<p>Tu: NJ 4 - fungi</p> <p>Th: microgreens results 3 (results discussion 3), microgreens meetings</p>	<ul style="list-style-type: none"> Quiz 7 (11/20) Microgreens Report (11/20) 	CA ecosystems threats and responses report, article about fire management, Ch 5.1, 20.1-20.2	11/13: last day to drop with W
15 (11/20-11/26)	<ul style="list-style-type: none"> Tu: evidence of human caused climate change, consequences 	<p>Tu: NJ 5 - plants</p> <p>Th: none</p>	<ul style="list-style-type: none"> Quiz 8 (11/27) Scientific claims peer reviews (11/27) <ul style="list-style-type: none"> ◦ <i>no late work</i> 	ch. 21.2, parts of the 2018 national climate assessment	<p>11/25: professional development day NO CLASSES</p> <p>11/24-11/27: thanksgiving NO CLASSES</p>
16 (11/27-12/3)	<ul style="list-style-type: none"> Tu: climate change solutions Th: class discussion and 	Tu: NJ 6 - animals, owl pellets, scientific claims meetings (17)	<ul style="list-style-type: none"> Quiz 9 (12/4) Scientific claims final projects (12/4) 	Ch. 2.3, CA air resources page about cap and trade, project	none

	review of unit 3	Th: Photosynthesis/cell respiration (18)	◦ <i>no late work</i>	drawdown 3 solutions	
17 (12/4-12/10)	<ul style="list-style-type: none"> Tu: Unit 3 exam Th: guest speaker or case study 	Tu: class sharing of NJ (19) Th: class sharing of scientific claims projects (20)	<ul style="list-style-type: none"> Last date to turn in any open Unit 3 work (12/11) 	none	none
18 (12/11-12/17)	<ul style="list-style-type: none"> Tu: cumulative final exam 10am-12:45pm 12/13 	finals week no classes	<ul style="list-style-type: none"> Self assessment 3 (12/13) Post semester survey (12/13) Last date to turn in surveys (12/13) 		12/16: last day to declare pass/no pass