

Biology 1020: General Biology Laboratory
(Section 016)

Professor: Dr. John Lytle
Email: JLytle1@CSUStan.edu

Labs: N223, Mondays 11:00-1:50pm

Final exams:
Monday, December 9th room N223 at 11:00am

The final exam for this class is optional! It will be comprehensive and will be structured similar to lab quizzes. If you sign up (opt in) to take the final and don't show, you will receive a zero on it.

Grades: 100-90% = A
89.9-80% = B
79.9-67% = C
66.9-57% = D
<56.9 = F

Grades are not rounded

Approx. points:	Number of each	
Exam:	30	1*
Lab reports and participation:	5 to 15	15
Weekly quizzes:	10	11*
Approx. total*:	265	

***Note:** The lowest quiz scores will be dropped & not used for student grade assessment. Additionally, the final exam is optional and will not be used for assessment unless the student opts in to take the final. (Any zeroes earned from cheating will not be dropped!)

Check your grade online on Blackboard often! When you see a mistake, get it corrected right away. **DO NOT** wait until the end of the semester.

Supplies:

Required:

Scantrons: 100 question: **882E** for optional final & 15 question: **815** (used for lecture quizzes)

Lab handbook: *World of Biology 1020 Laboratory Workbook, by Stevens and Fleming.*

Bring this each week.

Recommended:

Pencil, ruler, good notebook, brain

Locating your professor:

JLytle1@CSUStan.edu

Office Hours: room N252, 9:10-11:00am

Mondays

Include **BIOL1020** in the subject of your emails when emailing me.

Note: You must put your full name on everything you submit for grading, or it will not be graded & it will receive a zero. Most students make this mistake only once!



Lab activities

Do your own paper-work

Work in teams on lab exercises

Return materials properly

No labs can be made up because the materials are shared by many classes and are only available that week.

Missed Labs

If you know ahead of time that you will not be able to attend a lab, you *might* be able to schedule with another instructor to take that lab earlier or later during that week. Students must provide *documented* hardships: doctor's note, tow-truck receipt, etc. See the course catalog for other instructors of Biol 1020. It is up to you to get approval from the other instructor.

Lab Reports

All lab reports will be due at the beginning of the following lab and must be written on the lab worksheets (reports on binder paper will receive half credit). In most labs you will work collaboratively in small groups, but each student is required to hand in their own work!

Weekly Quizzes

There will be a 10 point quiz each week.

Questions may include material covered in the past **and** upcoming lab material, so be sure to read the lab manual ahead of time!

Course Description: World of Biology is intended to provide students with laboratory experience in various biological contexts. We will explore topics covered in BIOL 1010 with the added luxury of actually performing some of the experiments discussed in lecture. Note that this class is graded *separately* from BIOL 1010.

General Learning Goals

1. To provide an overview of basic knowledge, principles, methodologies, theories, and perspectives in biology.
2. To offer opportunities to work in groups with other students to practice effective communication about concepts and issues in biology.
3. To provide a broad understanding and appreciation of biology and encourage continuous inquiry and lifelong learning.
4. To provide the framework to critically evaluate and use information from various scientific sources to answer questions relevant to biology.

5. To understand the relationship between the fields of biology, chemistry, physics, geology and other sciences.

6. To appreciate the interdependence of humans, natural ecosystems, and diversity of life on earth.

7. To develop more informed and responsible citizens with respect to issues concerning the living world.

8. Use math as it applies to biology. This mostly includes making and interpreting graphs, and may also include calculating averages and variation around an average.

Expected Learning Outcomes

2.1 Explain and apply basic scientific methods: Assessed by assignments: Daphnia; Transport; Metabolism

2.2 Demonstrate an understanding of the living and non-living physical world. Assessed by assignments: Microscope and Cells; Mitosis, Meiosis and Genetics; Evolution; Phylogenies; Animal Adaptations; Plant Biology; Population Parameters; Central Valley Ecology

Course Performance: To do well in this class, you must prepare by reading all required materials prior to lab. Ask questions about any concepts & materials you don't understand. Attend all meetings & take thorough notes. Expect to read, review, & study the material (lab manual chapters) & notes several times to earn a passing grade. If you have trouble with the material, please e-mail/call/see me immediately.

This course covers a substantial amount of material over the semester, and you will be exposed to a great deal of new scientific terminology. There is a significant failure rate, mainly because students profoundly underestimate the course requirements and the level of difficulty on the exams. You should be prepared to devote 4 hours a week outside of class to studying for this course.

Attendance: Excessive absences from lecture and/or lab will result in the student being dropped from the course. Arriving late, leaving early, and/or being removed from lecture and/or lab due to disruptive behavior may be considered an absence (& may result in further disciplinary action).

Suggested Study Approach – Be an active student:

- Read textbook chapter and lab manual
- Answer study questions at the end of chapters
- Re-write/re-type/review your lecture & lab notes
- Come to office hours
- Learn how you learn! Then do whatever works best for you.
- Review/Study often (short daily study sessions are best vs. long infrequent study sessions - This is the best way to learn new material of any kind)
- Form/join a study group!



There is help on campus for students struggling with biology! The Central Valley Math & Science Alliance, located in 124 Naraghi Hall, is a free walk-in science and math tutoring center that does not require appointments. With both student and faculty tutors available from 8am – 6pm daily, there should be someone available to answer your questions. The Biology Club is a group of students who have gone through general biology courses and they are willing to offer advice and help, especially if you buy them coffee or bring them cookies. Tutoring Services on the ground floor of the CSUS Library (L-112) has drop-in tutoring for biology; check their office or website for their schedule. The Advising Resource Center, Student Support Services and the Program for Academic and Career Excellence (P.A.C.E.) in the MSR Building may be useful sources of aid for you. Of course, I will work hard to help you in class and out. Come to office hours, communicate with me and let me know your frustrations and I will respond.

Academic Integrity: Dishonesty & Cheating:

Academic dishonesty defrauds all those who depend upon the integrity of the college, its courses, its certificates & degrees. Students are expected to follow ethical standards & policies at CSUS. These standards & policies will be strictly enforced in this course. Any student caught violating the academic integrity policies will receive a **zero** on the exam/

quiz/assignment/etc. in question, will lose any Extra Credit points earned, & may be dropped and/or receive an **F** in the course. Additionally, students may face further disciplinary action & consequences as described in the CSUS Catalog.

Classroom/Laboratory Conduct: Policy on Cell Phones, iPhones, PDAs, Electronic Devices, etc.: Please be courteous & respectful of your instructor & your fellow classmates by **turning off** any cell phones, iPhones, etc., prior to coming to class. Use of these devices (e.g., texting) is not allowed in class. **Note:** During exams, quizzes, etc., the use of electronic devices (cell phones, iPods, etc.) is not permitted. Any student caught using electronic devices will receive a **zero** on the exam/quiz/assignment/etc. in question, & may receive an **F** in the course.

Note: Talking and/or whispering during quizzes, exams, etc., will be considered a violation of the academic integrity (i.e., dishonesty and/or cheating). Students may be moved prior to and/or during quizzes, exams, etc. if talking and/or whispering occurs.

Disruptive behavior: Disruptive behavior may result in students being removed from lecture/lab and/or dropped from the course (this includes use of electronic devices as mentioned above). Additionally, students may face further disciplinary action & consequences as described in the CSUS Catalog.

Special Conditions: Please contact me if you have any special needs that need to be addressed in order for you to perform well in this course. Please register with the DRS *prior* to the week before an exam in order to set up necessary accommodations. **Note:** There are numerous resources available to help students at CSUS. Please feel free to seek help for tutoring, guidance, counseling, health care, etc., during your time at CSUS.

Note: Course Syllabus and/or Course Schedule are subject to change as needed to meet the course objectives. Any changes will be announced in class & be distributed to the students (i.e., posted on Blackboard).

BIO-1020 Tentative Course Schedule Fall 2019

Date	Tentative Lab Schedule
8/22	No labs this week
8/26	Syllabus, Lab Safety Science vs Pseudoscience
9/3	No labs this week
9/9	Lab 1: Scientific Method and Daphnia Lab
9/16	Lab 2: Cells and Microscopes
9/23	Lab 3: Transport
9/30	Lab 4: Metabolism
10/7	Lab 5: Cell Cycle & Mitosis.
10/14	Lab 6: Genetics and Meiosis
10/21	Lab 8: Evolution
10/28	Lab 7: Phylogenetics
11/4	Lab 9: Plant Biology
11/12	No lab this week
11/18	Lab 11: Population Parameters, includes an assignment
11/25	Lab 10: Animal Adaptations
12/2	Lab 12: Central CA Ecology
12/9	OPTIONAL Final Exam- scheduled with instructor