

BIOL 1114 Laboratory

Fall 2021

Section: _____

Instructor: _____
Office/hours by appointment only through Zoom

Lab Time: _____
E-mail: _____

Personal Protection

Equipment: Students are expected, for their own safety, to wear a lab coat, goggles or face shield, gloves, following [NSTA Safety Guidelines](#). Students can purchase goggles and lab coats through the OSU bookstore. We will supply 1 pair of nitrile gloves/student/lab period. Students may supply additional gloves.

Face Masks: OSU encourages you to wear a mask indoors in public settings regardless of whether you are fully vaccinated, consistent with the current CDC recommendations. This is especially important **in this laboratory because people are close together for up to 3 hours**. Wearing a mask during lab not only protects you but also helps protect those around you who may be more vulnerable. This is a simple way we can look out for all members of the Cowboy family. **If you feel sick, do not attend class.** Contact University Health Services at 405-744-7665 immediately and communicate with me as soon as possible to arrange remote participation (if possible). Otherwise, you are to follow the procedure outlined under attendance. We have a limited number of masks available if you wish one but have forgotten yours.

COVID-19: We will follow OSU's instructions and policies. These may change with changes in CDC guidelines. As of 15 August:

- **IF fully vaccinated** and in close contact with someone who has COVID-19,
 - you are **not required** to quarantine **if you show no symptoms**. You should **get tested 3-5 days after your exposure**, even if you don't have symptoms. You should also **wear a mask indoors in public for 14 days** following exposure or until your test result is negative.
 - You should isolate for 10 days if your test result is positive.
- **IF NOT vaccinated** you should quarantine for seven days if exposed to someone with COVID-19, as well as provide proof of a negative test, which should be taken after day five from point of exposure.

Textbooks: French, D. 2021. *Investigating Biology: A Laboratory Resource Manual*. 2021 Edition. Fountainhead Press: Fort Worth, TX (**Required**)
Journal of Introductory Biology Investigations (you will receive a free subscription to this).
Pechenik, J.A. 2016. *A Short Guide to Writing about Biology*. 9th Edition. Pearson Longman Publishers: NY. (**Recommended**)

The **Guide to Success** in your laboratory manual provides substantially more information about the goals and structure of lab, and the following policies and requirements. You are responsible for learning and adhering to what is stated there.

Special Needs: This includes **allergies!** - See the lecture syllabus & BIOL 1114 webpage for details and required actions

Grading policy: Points earned in lab (maximum of 400) are added to the points earned in lecture. The total points are then used to determine your final grade for the course. The lab counts for 40% of the final grade.

Component	Point Value	Total
Lab reports	100	400
Lab Final	50	<u>50</u>
Available		450*

***Peer Evaluation:** The scores you receive from your group will affect your grade – see your lab manual for details.

Lab Reports: Each week your lab team of 2-4 students will submit a lab report. We refer to them as **manuscripts** (prior to publishing) **or articles** (after they are published). For each of the four investigations, you will

receive comments on the first two drafts. The manuscript you submit at the end of each investigation will be scored by three experts and you will receive the average of the highest two scores for each.

Absence: **What do you do if you miss any part of any lab for ANY reason?** Your coauthors (team members + TA mentor) will determine the contributions you will make to compensate your team for the time missed. This will be posted on your personal page. Each team must submit a “**description of authorship**” form with each final manuscript describe the **extra contribution** you made **to compensate for each absence**. If it is not sufficient, you will lose 1/3 of the manuscript grade for each absence. We are not judging the legitimacy or nature of the absence, just whether you have contributed appropriately to the final products.

Lab Final: There will be a 50 point assessment the week after Thanksgiving. We want to offer you a final chance to demonstrate the scientific reasoning skills you have learned. It will also allow you to compensate for a less than perfect manuscript score or an absence for which you could not contribute sufficiently to the research to make up for it. This will be conducted on-line.

Planning Forms: are **required** each week and **due online by 5:00p day before lab**. On each, you write a brief plan of action for the lab that week including such items as experimental designs and manuscript revisions. If submitted on time, you will receive valuable feedback. **Failure to submit a planning form will be treated as an absence, until it is submitted** (see policy below).

Teamwork: You will work in teams of 2-4 at finalizing plans for, conducting, and reporting the results of experiments. Teams will divide responsibilities, develop rules to guide their interactions, and be accountable to each other. Teammates help each other succeed!

Publishing: Manuscripts of sufficient quality will be published in the *Journal of Introductory Biology Investigations* (JIBI). This is an accomplishment you can use to demonstrate your skills and work quality to others and will contribute permanently to current and future students and scientists.

More Help: The **Lab Resources and Institution Pages** on <http://biol1114.okstate.edu> contain materials and guidance for the lab in general and for each investigation.

Lab Schedule Fall 2021

Week	Starting date	Lab Topic
1	Aug 16	Introduction to Lab
2	Aug 23	Planning Form and Manuscript writing
3	Aug 30	Research in the Institute of Comparative Respiratory Research – Week 1
4	Sept 7	Research in the Institute of Comparative Respiratory Research – Continued research
5	Sept 13	Research in the Institute of Comparative Respiratory Research – Final analysis & Submission
6	Sept 20	Research in the Acme Brewing and Baking Company – Week 1
7	Sept 27	Research in the Acme Brewing and Baking Company - Continued research
8	Oct 4	Research in the Acme Brewing and Baking Company - Final analysis & Submission
9	Oct 11	Research in the Biofuels Research and Aquatic Quality Collaborative Biofuels Division ONLY – Week 1
10	Oct 18	Research in the Biofuels Research and Aquatic Quality Collaborative Biofuels Division ONLY - Continued research
11	Oct 25	Research in the Biofuels Research and Aquatic Quality Collaborative Biofuels Division ONLY - Final analysis & Submission
12	Nov 1	Research in the Center for the Study of Sexual Selection in Fishes – Week 1
13	Nov 8	Research in the Center for the Study of Sexual Selection in Fishes – Continued research
14	Nov 15	Research in the Center for the Study of Sexual Selection in Fishes – Final analysis & Submission
15	Nov 22	No Lab
16	Nov 29	Laboratory Final

ACADEMIC INTEGRITY: Be sure that you have read and understand this policy as the penalties for violations of Academic Integrity can be very serious. We follow the **OSU policies** on (<http://academicintegrity.okstate.edu/>) and adhere to OSU values of Honesty, Trust, Respect, Fairness, and Responsibility.

Plagiarism, fabrication of data, falsification of results, copyright violations, fraudulent authorship and similar actions are taken very seriously in the professional world and can result in the loss of jobs and careers. Because we are treating you as professionals-to-be, we will act on violations of academic integrity accordingly. Although reviewers will warn you if they suspect a violation on an initial manuscript, no sanctions will be applied. If a violation is identified on a final manuscript, all authors will receive a “0” for that investigation. Second violations (in lecture or lab) will merit application of a Level 2 (F!) sanction. ALL violations and sanctions become a part of a permanent educational record. Some examples of violations of Academic Integrity more specific to this **LAB** include:

- Using information from **ANY** source without properly **paraphrasing** (writing in your own words) **and citing**.
Refer to the Cheating & Plagiarism section (pp.G6 – G10) of your lab resource manual for further details, explanations, and advice on how to avoid
- Using any part of an unpublished manuscript without properly paraphrasing and citing, the permission of the original authors, and the permission of your mentor. This is **unauthorized collaboration or plagiarism**.
- **Falsifying authorship**, i.e. including as an author a student who did not adequately contribute to the production of a manuscript submitted for credit OR failing to include an author who did is considered **fabricating information** by all authors on a manuscript. All authors who miss a part of a lab must have their contributions explained truthfully on the authorship form.

Please see your lecture syllabus for more information on Academic Integrity violations in this course.

You must complete BOTH sections, take a picture of the signed, form a and email to your lab instructor by the end of the 2nd week of lab.

BIOL 1114 Team Contract

I, _____, understand that I am part of Team _____ and as such I am responsible for contributing to my group’s success as are the rest of my Team’s members.

I understand that...

- lab reports and most in-class exercises will be a team effort (pre-labs and planning forms are not)
- my peers will evaluate my contribution to the group (according to the procedure in the laboratory manual) and their evaluation of me will directly affect my total lab score
- I am responsible for checking my peer evaluations when they are released online
- if I receive an average peer review score below 7 (out of 10), I will fail the course
- I am responsible for accurately describing the contributions of each author on authorship forms submitted with final manuscripts and holding my co-authors accountable for making expected contributions when they are absent.
- if I am dissatisfied with my partners, the instructor will not act unless I express this through the peer evaluation process.
- I may not use personal cell phones, laptops, tablets or other electronic devices in lab.



I promise my teammates that I will...

- come to class prepared.
- participate and express my opinions, respectfully.
- allow others to participate by offering them the opportunity to do so.

☆☆

BIOL 1114 Academic Integrity Contract

I, _____, understand that in addition to the expectations stated in OSU's Academic Integrity Policy (see: <http://academicintegrity.okstate.edu/>), this course has specific requirements for academic integrity to which I must adhere. These are listed in the course syllabi and website (<http://biol1114.okstate.edu/schedule/syllabus/AIP-Pete.pdf>) with an extensive explanation of plagiarism in my laboratory manual.

I understand that...

- in accordance to OSU's policy, neither intention nor ignorance is considered when identifying violations of academic integrity.
- it is the action and/or the result, not the person, that will be judged.
- I am responsible for adhering to the course policy as written.

I promise to maintain the level of academic integrity expected of me by my BIOL 1114 instructors and Oklahoma State University.

[CLICK TO SIGN](#)