

Mini Scientific Paper and Peer Review

CLOs: After successfully completing this course students will be able to:

- Assess the efficacy of the methods, results, and conclusions of scientific literature, and provide critiques of faulty elements in peer reviewed works
- Construct the building blocks of a scientific paper. This includes providing background information, designing methods, formulating and discussing statistical results and providing citations.

This assignment will follow the submission of a primary literature review worksheet. Over the course of three weeks you and your assigned group will write a mini-paper and in the meantime practice scientific writing as well as critically reading and reviewing your peers' work.

Independent components of this project include brainstorming and discussing hypotheses, as well as conducting peer reviews. Writing the mini paper will be done in groups of about 4.

Hypotheses and discussions related to deciding on a hypothesis to use should take place on your group's canvas discussion board, but further discussions can take place in your group's slack channel or other preferred format. The timeline for the mini paper and peer review is as follows:

Part 1 - hypothesis

due Sunday week 2 - 11:59pm (individual work):

- Submit one testable hypothesis that is related to the primary literature review that was due on Wednesday this week.
- This hypothesis can correspond to areas of further study suggested by the paper, but must be different than the hypothesis discussed in the bulk of the paper.
- You will not be able to see the work of anyone else in your group until you've submitted to the discussion board.

Part 2 - introduction and methods

due Wednesday week 3 - 11:59pm (group work):

- Discuss the submitted hypotheses with your group and decide on one to write a mini paper about.
 - Each group member should weigh in with at least one pro and con for the hypothesis they would like to work on
 - If you can't decide on a topic after discussing it I recommend doing a group vote. A [ranked choice system](#) would probably get you a winning result that everyone will be at least somewhat happy about.

- As a group outline and write a very short introduction in a shared google doc. Provide some brief background information leading to the hypothesis you chose. Use the paper we read in class as a source. Be sure to cite properly using Journal of Wildlife Management formatting.
 - The introduction should be about two to three paragraphs, no longer than one page.
- As a group outline and write a very short methods section (a half to one page) following the introduction. Provide detailed procedures for your hypothetical experiment, including all materials and statistical tests you would use.
- One group member should submit the intro and methods to the intro/methods assignment page on canvas (as a word doc) for their group.

Part 3 - results and discussion
due Sunday week 3 - 11:59pm (group work):

- You will receive a dataset with relevant data following the submission of your introduction and methods.
 - Conduct the appropriate statistical analysis in excel as outlined in your methods section. Include at least one graphical figure. You may also include tables if it helps explain your findings.
- Write up your results in the same google doc you used for the introduction and methods. Be sure to reference any tables and figures you created. The results section should be brief - about a half page.
- Write a short discussion section explaining your findings.
 - Relate your findings to at least one reference paper (this can be the one we read as a class).
 - Be sure to state whether the results supported your hypothesis and explain why or why not.
 - State possible limitations to your study and what the results mean.
 - This should be two to three paragraphs, no longer than one page
- Include any citations you used in your paper at the end in a 'works cited' section. This should at least include the paper we read in class, cited in JWM (Journal of Wildlife Management) format.
- One group member should submit your whole draft - intro, methods, results (with figures), discussion and citations to the draft assignment page on canvas (as a word doc) for their group.

Part 4 - peer review**due Wednesday week 4 - 11:59pm (individual work):**

- Each student will be assigned a draft to peer review on Monday morning. Reviews are to be done individually through canvas, and members of each group will have different drafts to review.
- Follow the rubric provided on the canvas page where the group draft was submitted to assess the assigned paper and provide thoughtful feedback.
 - Please be thorough in your review. For each section of the rubric provide at least one constructive suggestion. If you think the group met the expectations for that section write a brief explanation of what they did well.

Part 5 - final submission**due Sunday week 4 - 11:59pm (group work):**

- Make revisions based on the feedback from your peer reviewers.
- One group member should submit your final draft to the final draft assignment page on canvas (as a word doc) for their group.
- Before grades are released each group member should also submit group participation reviews, rating each member's participation. These reviews will be visible to course instructors but not to your group-mates.