**FISH 406: Parasite Ecology**

**Peer review worksheet**

***Directions:***

Peer review makes the scientific world go 'round! You will receive the papers of two classmates and your assignment is to make both better. You will not be providing line edits on your colleague's papers at this time, because your goal for this early draft is to engage with the content – not the grammar and spelling. This worksheet is designed to help you think deeply about the questions, hypotheses, tests, inferences, and logic of your colleague's paper, and will help you provide feedback that is maximally useful to your colleagues.

For this assignment, you will be scored on the quality of the two peer reviews you perform. Complete one worksheet for each of the two papers you are assigned. In addition to providing written feedback to your colleagues, you will also perform another vital service: you will score their first draft using the term paper rubric, the same rubric that I will use to score the final drafts at the end of the quarter. By seeing how their first draft is likely to score on each dimension of the rubric, your colleagues will know where to invest their efforts as the revise their research paper. The score you provide will not be used to grade your colleague in any way, shape, or form – it is merely for your colleague's own information.

Don’t forget to leave some words of encouragement on the last page!

***Written feedback***

*Completeness*

Does this rough draft contain all of the required sections? Does it meet all of the formatting requirements? If you need a reminder about what is required, check the term paper grading rubric.

*Introduction*

Does the Introduction provide all of the background information you need to appreciate why this research was done and why it is important? Is any background information missing? Does the Introduction cite enough studies so that you can appreciate the scientific foundation on which this research rests? Does the Introduction "funnel" - i.e., does it provide a broad context before narrowing in to the purpose of the paper?

*Research question*

Is the research question clearly presented? Is it novel, interesting, and testable? Is the motivation for the research question clearly established?

*Methods*

Are the methods reported clearly, accurately, and in logical order? Are there extraneous details, or important logical steps that are missing?

*Results*

Are the results stated concisely and clearly? Are they accurate? Do you understand what the result is, or is the presentation make it confusing?

*Graphs*

Are the graphs clear and accurate? Do they pertain to the research question? Do they illustrate the results plainly or would a different format make it easier to appreciate the results? Are the graphs appropriately labeled?

*Discussion*

Does every paragraph have a topic sentence? Does every paragraph have thoughtful supporting details that bolster the main idea? Do paragraphs proceed in a logical sequence? Is the reader able to follow the arc of the writer's argument easily?

*Conclusion*

Does the conclusion explain the outcome of the reported test of the research question? Does the conclusion bring us full circle, relating back to the original thesis statement and the context described in the Introduction? Is the Conclusion in agreement with the other components of the paper? After reading the Conclusion, do you know what the research question of the paper is?

*Mechanics*

Here's where you can comment on grammar, style, punctuation, spelling, and other mechanics of writing. Did you detect many errors? What kinds of errors were most common? What resources could your colleague use to eliminate these errors?

*References*

Comment on your colleague's references section. Are all references cited in the text present in the references section? Are references formatted according to the reference formatting guidelines? Are all (or almost all) references from scientific sources (i.e., peer-reviewed literature and NOT websites, textbooks, or FISH 406 lectures)?

**Rubric score**

In the leftmost column of the rubric on the next page, please score your colleague’s draft on all 9 dimensions of the rubric. The score you give in each row should be equal to the quality score (e.g., 9) multiplied by the weight of the dimension (e.g., 0.1). A perfect score will add up to 1.0.

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| --- | --- | --- | --- | --- | --- |
| **Category** | **Exceeds expectations (9–10)** | **Meets expectations (7–8)** | **Nearly meets expectations (5–6)** | **Does not meet expectations (3–4)** | **Incomplete (0–1)** |
| Required elements present?**SCORE =** | All required elements are present. | One required element is missing. | Two required elements are missing. | Several required elements are missing. |  |
| Introduction**SCORE =** | The introduction successfully “funnels” by providing a broad context and narrowing in to the purpose of the paper. | The introduction provides appropriate background context but does not “funnel”. | The introduction states the main topic but does not provide appropriate background context. | There is no clear introduction or main topic and no background context. | Absent |
| Research question/ hypothesis**SCORE =** | Research question and predicted results are stated, the explanation is clear and accurate based on what has been studied. | Research question and predicted results are stated, but the explanation is unclear or not quite logical. | Research question and predicted results are stated, but not explained. | No research question or predicted results stated. | Absent |
| Methods**SCORE =** | Methods are reported clearly, accurately, and in logical order. | Methods are reported mostly accurately and somewhat clearly, but may lack logical order or are difficult to follow. | Methods are reported but do not accurately represent the steps of the study or are missing important pieces. | Methods are missing. | n/a |
| Results**SCORE =** | Concise, clear, and accurate statement of results.  | Accurate statement of results. | Statement of results included. | No results included. | n/a |
| Graphs**SCORE =** | Clear, accurate graphs illustrate the results well and are labeled neatly and accurately. | Clear, accurate graphs are included and labeled. | Graphs are included and are labeled but may be missing important labels or have some inaccuracies. | Graphs are missing or mostly inaccurate. | n/a |
| Discussion**SCORE =** | Writer demonstrates logical and subtle sequencing of ideas through well-developed paragraphs; transitions are used to enhance organization. | Paragraph development present but not perfected. | Logical organization; organization of ideas not fully developed. | No evidence of structure or organization. | n/a |
| Conclusion**SCORE =** | The conclusion is engaging and explains the outcome of the reported test of the research question. | The conclusion explains the outcome of the reported test of the research question. | The conclusion does not adequately explain the outcome of the reported test of the research question. | Incomplete and/or unfocused. | Absent |
| Mechanics**SCORE =** | No errors in punctuation, capitalization, spelling, sentence structure, or word usage. | Almost no errors in punctuation, capitalization, spelling, sentence structure, or word usage. | Many errors in punctuation, capitalization, spelling, sentence structure, or word usage. | Numerous and distracting errors in punctuation, capitalization, spelling, sentence structure, or word usage. | n/a |
| References**SCORE =** | All references are cited in the correct format with no errors. All sources are legitimate. | Some references are cited in the correct format. All sources are legitimate. | Few references are cited in the correct format. Some illegitimate sources (e.g., websites). | No references are cited in the correct format. Reference list contains illegitimate sources. | Absent |

**Note of encouragement**

It is great practice to end every critique with a note of encouragement – a positive aspect of the paper that you admired and that can serve as a jumping-off point for further improvement. Leave your colleague a note of encouragement here!