Section	Goal	Evaluation		
Title	To give content information to reader	Engaging	Appropriate	Not enough/too much content or information
Abstract	To concisely summarize the analysis question, general methods, major findings, and implications to current knowledge.	 - Key information is presented completely and in a clear, concise way. - Logical organization. - Understandable by readers with any background. 	 Sufficient information is presented. May benefit from some reorganization. Understandable by readers with some knowledge of the field. 	 Some key information is missing or irrelevant information is included. Structure is hard to follow Incorrect information is used.
Introduction	To identify central analysis questions, and appropriate background information. To present a plausible hypothesis and potential implications of results.	- Relevant background information is presented in a balanced and engaging way Analysis goals and predictions are clearly specified Analysis question flows consistently from background information presented Potential implications of results explain the importance of the analysis.	 Background information is presented but could benefit from reorganization or reframing. Analysis goals and predictions are included. Analysis question's connection to background understandable by readers with prior knowledge of the field. Implications of analysis are not clearly explained. 	 - Background information is too general or too specific or inaccurate. - Analysis goals and predictions are not included or are incorrectly specified. - Connection between analysis question and background not explained. - Implications of analysis are not discussed.
Methods	To describe analysis procedures correctly, clearly, and succinctly.	- Methods description sufficient for someone else to reproduce the analysis.	- Methods description allows someone with prior knowledge of the field to reproduce the analysis.	- Methods description is not sufficient for someone to reproduce analysis.
Results	To present data using text AND figures/tables.	- Major findings presented in a clear and logical progression Figures are formatted to ensure easy interpretation Figure legends facilitate interpretation of results without reading main text.	 Major findings presented but could benefit from reorganization to aid in understanding. Figures present results but could be reformatted to enhance clarity and interpretability. Figure legends omit some information required for adequate interpretation of results. 	- Some major findings omitted or information more appropriate for other sections included. - Figures present results in a way that is difficult to read or interpret. - Figure legends are missing or include irrelevant information
Conclusion and Discussion	To evaluate meaning and importance of major findings	- Conclusions follow logically from presented results. - Unexpected results, inconsistencies, and limitations of analysis discussed clearly.	 Appropriate conclusions drawn form results but could benefit from clearer explanation. Unexpected results, inconsistencies, and limitations not discussed thoroughly. 	- Conclusions do not follow clearly from presented results. - Unexpected results, inconsistencies, or limitations are not discussed.

	- Connection to background	- Connection to background context	- Results and conclusions are not
	context explained clearly.	not explained clearly.	linked back to general context of
	- Appropriate future directions	- Future directions do not follow	analysis.
	discussed and follow logically	clearly from presented results and	- Future directions are not discussed.
	from results and conclusions.	conclusions.	

Other components that can be included in evaluation

- References

Adapted from MIT OCW 20.109 (spring 2010)

 $\frac{https://ocw.mit.edu/courses/biological-engineering/20-109-laboratory-fundamentals-in-biological-engineering-spring-2010/assignments/guidelines-for-writing-up-your-research/\#Evaluation$