RESEARCH PAPER CHECKLIST

I. Writing style, clarity & effort (includes grammar, spelling, and vocabulary; 25% of total points):
  Have you...
  • proofread the paper to be sure that there are no mistakes in spelling, punctuation, and grammar?
  • written the paper in a clear, concise manner? Is it easy to follow your arguments and explanations?
  • used at least two pieces of primary literature?
  • followed the format guidelines specified in the Instructions to Authors?

II. Content & Presentation (50% of total points)
  Title: Does it...
  • convey the basic gist of your study?
  Abstract: Does it...
  • make sense without reading the entire manuscript?
  • contain the central question or objective of the study?
  • contain a brief mention of your methods?
  • contain a summary of your major results?
  • contain a summary of your major conclusions?
  • do all of the above in 200 words or less?
  Introduction: Does it...
  • begin with general yet CLEARLY RELATED statements about your topic?
  • provide a context for your work (citing the appropriate literature)?
  • give an idea of why your study is important/interesting and provide the motivation behind your study?
  • conclude with your specific hypothesis, predictions, or purpose?
  Materials and methods: Does it...
  • describe what you did and how you did it so your experiment can be repeated?
  • NOT read like a play-by-play of what you did that day in lab?
  • use the past tense?
  • cite a published source when needed?
  • include any equations, recipes, or concentrations used in the study?
  • contain the appropriate level of detail?
  Results: Does it...
  • summarize your data in the most appropriate way?
  • contains text that guides your reader through the major trends of your results?
  • report the data objectively not subjectively?
  • refer to any tables and figures within the text portion (often parenthetically)?
  • accompany each figure and table with a caption that includes the name of the animal from which the data came, defines any symbols used, and briefly explains the ‘take home message’?
  • include the appropriate statistical tests?
  • refer to statistical results only parenthetically?
  • use the past tense?
  Discussion: Does it...
  • compare your results with similar published results?
  • interpret your results, supporting your conclusions with evidence from the literature?
  • recognize the importance of negative results?
  • project confidence and not doubt?
  • incorporate suggestions for follow-up studies in a positive way without casting your study in a negative light?
  • place your work in a broader context?
  • consider the implications of your study within the field of physiology by discussing follow-up questions that were generated by your work?
  • follow a logical progression?
  • use the past tense when referring to the results of your study?

All sections: Do they...
  • contain only information which is appropriate to that particular section?
  • follow parallel organization to facilitate reading (especially the M & M, Results, and Discussion sections)
  Reference section: Does it...
  • list all (and only) the references that you have cited in the text of your paper?
  • conform to the accepted format? This criterion also applies to ‘in text’ citations.

III. Understanding (25% of total points)
  Is it...
  • clear that you have a solid understanding of the physiological processes that your project addressed and articulate this understanding in clear and logical arguments?
  • clear that you have read and understood the referenced papers?