Science Papers Outlines

Generally, as this is a community college, you’ll only need to be writing response essays to research journals, literary reviews, and lap/experimental reports. This sheet seeks to give you a basic outline for all three.

Response Essay

I. Abstract (Optional, depending on instructor’s requirements)
   A. A paragraph summarizing your intent and directly referencing the subject of your response

II. Introduction
   A. Introductory Hook
   B. Background Information detailing the subject, usually the article you are responding to, usually title and author of the article’s name
   C. Summary of main ideas
      1. Article’s main idea
      2. Your purpose
   D. Thesis Statement: a firm stance regarding the material, critical and analytical

III. Body Paragraph(s)
   A. Transition/Topic Sentence
   B. Main idea of the paragraph
   C. Assertions (Taking stances on the content of the report or essay you are responding to)
      1. Support (Quotes or Data or Extrapolations from former studies)
   D. Transition/Ending Thoughts

IV. Conclusion
   A. Reworded thesis statement
   B. Show how causes/reasoning is supported by evidence

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C. Re-assert your ideas.
D. Deal with potential opposing view
E. Transition into final thoughts
F. Wrap-up sentence(s)

Lab/Experimental Report
I. Introduction
   A. Address the experiment/lab events
   B. Introduce relevant literature
   C. Hypothesis
   D. Prediction/Results (Depending on whether this takes place before or after the experiment - or at what stage the experiment)

II. Materials and Methods
   A. Explain and detail the materials used in the lab
   B. Discuss the processes (numbers, variables) and significance of said processes

III. Results
   A. Place your graphs and tables; explicate
   B. Discuss outcomes
   C. Reference former trials/experiments related to this experiment

IV. Discussion
   A. What does this mean for your field of study?
   B. What does this mean quantitatively?

V. Conclusions and Implications
   A. How do you move forward from this in your study?
   B. Reiterate your outcome concisely

Literary Review
I. Abstract
II. Index

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III. Introduction
   A. Background information to the field of study (or recent research)
   B. Discuss background and purpose of the text
   C. Present the problem/issue/conflict with the text
   D. Thesis/Stance

IV. Body Paragraph(s)
   A. Mention the paper’s methodology, research, analytical standpoint, tools
   B. Discuss, refute, or deconstruct the paper’s claims
   C. Include research from outside sources
   D. Keep bias limited

V. Conclusion
   A. Discuss the text’s intentions
   B. Closing thoughts

VI. Bibliography

Additional Sources

https://www.enago.com/academy/how-to-write-a-good-scientific-literature-review/