Manuscript   Name:

Mechanics (4 points)
☐ Title page: concise and informative title, author names and affiliations – including postal address and email address. *(-1 point if missing)*
☐ 12-15 pages not including figures and graphs
☐ 12 point Times New Roman font, double spaced
☐ Proper grammar *(-2 points for mistakes more than 4)*
☐ Article divided into clearly defined and numbered sections and subsections
Safe Assign match
Suggestions:

| | **Total points** | **/4** |

Abstract (2 points)
☐ 200 words
☐ Introduction sentence(s)
☐ Methods sentence(s)
☐ Results sentence(s)
☐ Conclusion sentence(s)
Suggestions:

| | **Total points** | **/2** |

Introduction (5 points)
State the objectives of the work and provide an adequate background, avoiding a detailed literature survey or a summary of the results.
☐ Minimum 2 pages
☐ Basic information available about this topic. *(-3 for inaccurate information)*
      ☐ Description of resting membrane potential
      ☐ Description of Nernst equation
      ☐ Description neuromuscular junction
      ☐ Description of muscle contraction
      ☐ Description of how glycerinated rabbit muscle is different than *in vivo*
☐ Proper in text citations that match the reference section
☐ Predictions
Suggestions:

| | **Total points** | **/5** |

Methods (4 points)
Provide sufficient detail to allow the work to be reproduced. Methods already published should be indicated by a reference: only relevant modifications should be described.
☐ Minimum 1 page
☐ Original photographs *(-1 for pictures copied from protocol)*
☐ Written explanation of statistical calculations (*-1 point is missing)*
Suggestions:

| | **Total points** | **/4** |

Results (3 points)
Results should be clear and concise.
☐ Data/Observations *(-1 results not presented verbally)*
☐ Claims / Interpretation
☐ Evidence / Statistics

☐ Lab 6: linear regression test and reported p value
☐ Lab 7: ANOVA reported on % change means
☐ Lab 7: t-test reported on means with and without serotonin
☐ Class Data with average & standard errors *(-1 for reporting raw data)*
☐ Reference to figures, tables, and graphs in text
Suggestions:

Total points   /3

Discussion (3 points)
This should explore the significance of the results of the work, not repeat them. A combined Results and Discussion section is often appropriate. Avoid extensive citations and discussion of published literature.
☐ Answered questions found at the end of the lab.
☐ New understanding
☐ Connections made between the lab activity and the lecture concept *(-3 if inaccurate information)*
Suggestions:

Total points   /3

Conclusion Paragraph (2 points)
The main conclusions of the study may be presented in a short Conclusions section, which may stand-alone or form a subsection of a Discussion or Results and Discussion section.
Suggestions:

Total points   /2

Tables and Graphs (4 points)
☐ Proper labels Titles, independent and dependent variables, legend.
    ☐ Proper formatted title / caption- not on figure itself
    ☐ Independent and dependent variables labeled with units
    ☐ Legend
    ☐ Error bars reported on averages
☐ Correct type of graph used for reporting data
    ☐ Individual group data reported on membrane potential graph
    ☐ Bar graph with error bars for rabbit muscle data
☐ Figure of muscle histology
☐ Separate section for Tables and Graphs
Suggestions:

Total points   /4

References (3 points)
☐ 5 sources minimum
☐ Proper format:
    Article example: Axelsson, M., Farrell, A.P., 1993. Coronary blood flow in vivo in the coho salmon (Oncorhynchus kisutch). Am. J. Physiol. 264, R963 - 971.

    Book example: Moyle, P.B., Cech, J.J., 2004. Fishes. An introduction to ichthyology. 5th ed. Prentice Hall, Upper Saddle River, NJ.
Suggestions:

Total points   /3

Grade   /30