Neuroscience: Rubric for Dissertation

Task Description: Briefly review the background of the field, state the goals, aims or hypotheses of your research, showing how the research is important and addresses unknown questions. Explain your experimental or computational methodology and data analysis plan. Includes statement regarding ethical use of animals or human subjects if appropriate. Describe the results in terms of the questions or hypotheses, and demonstrate how the control experiments/simulations exclude alternative explanations of the results. Lastly, explain how your results relate to prior research, extend the field, open up new questions, etc.

A score of 15 out of 25 is considered a passing score.

Dimension	Excellent (4-5 points)	Competent (2-3 points)	Needs Work (0-1 point)
WRITING (20%)	Ideas and description are well organized into paragraphs with good topic sentences. Paragraphs are logically ordered, with good transitions between paragraphs and between topics. Sentences are clearly understandable.	Some paragraphs contain a mix of different topics. Paragraphs are not always related to prior or following paragraphs, or transitions between paragraphs are poor. Sentences are somewhat understandable.	Most paragraphs contain a mix of different topics, and descriptions of single topics are scattered throughout multiple paragraphs. Paragraphs have no logical order. Sentences are unintelligible.
CONTENT Introduction (20%)	Student has identified highly significant questions in neuroscience. Goals of research are clear and specific. Displays superior knowledge and understanding of prior research in the field.	Student has identified somewhat significant questions in neuroscience. Goals of research are vague. Displays basic knowledge and understanding of prior research in the field.	Significance of questions to be addressed is uncertain. Goals of research are unclear. Unaware or confused about several areas of prior research.
CONTENT Methods 20%	Experimental methodology is clearly explained and demonstrates outstanding proficiency; appropriate controls are included. Limitations in methodology are acknowledged. As appropriate, includes statement regarding ethical use of animals or human subjects.	Experimental methodology is moderately well explained, and demonstrates moderate proficiency; controls are included but not sufficient.	Experimental methodology is poor explained, and suggests insufficient understanding or proficiency with technique.

Name of student_____ Name of Examiner _____ Date_____

Dimension	Excellent (7-10 points)	Competent (4-6 points)	Needs Work (0-3 points)
CONTENT Results 40%	Results clearly answer the research question and are presented with appropriate use of graphs and tables. Analysis of results is clearly explained, and demonstrates superior understanding of statistical tests. Interpretation of results in the context of prior research and knowledge demonstrates their significance and implication for the field as a whole.	Results partly answer the research question. Graphs and tables are moderately explicative. Analysis of results demonstrates modest understanding of statistical tests. Interpretation of results in the context of prior research and knowledge is weak. The significance and implication of the results for the field are modest.	Results do not answer the research question or test the hypotheses. Graphs and tables are incorrectly used or absent. Analysis of results is poorly explained and demonstrates lack of understanding of statistical tests. The significance and implications of the results are unclear.

Score (0 to 5 points for writing, introduction and methods, 0 to 10 points for results): _____ out of 25.

Name of student_____ Name of Examiner _____ Date_____