Brochu - Phylogeny Assignment Grading Rubric

Criteria	1 Unacceptable	2 Needs Improvement	3 Satisfactory	4 Good	5 Exemplary
Introduction	Does not sufficiently introduce the topic, providing no context for the work.	Does not provide sufficient background information to put the work in context.	Introduces the topic and provides some background information.	Introduces the topic and provides sufficient background knowledge to put the work in context.	Explicitly integrates the background information with the context of the work and its importance.
Choice of Characters	Characters are inappropriate and not well justified.	Characters are appropriate, but not explained or justified.	Characters are appropriate and adequately justified.	Characters are appropriate and well justified.	Characters are appropriate, well justified, and explicitly connected to the taxonomy.
Data Matrix	Characters not labeled and coded incorrectly.	Characters not well-labeled and coded incorrectly.	Characters labeled and most are coded correctly.	Characters labeled with coding described, with most coded correctly.	Characters labeled with coding described, and all coded correctly.
Phylogeny	Incorrectly drawn tree, not labeled.	Incorrectly drawn tree, but labeled with taxa.	Correctly drawn tree, labeled with taxa.	Correctly drawn tree, labeled with taxa and characters.	Correctly drawn tree, labeled with taxa, characters, and classification.
Classification	Not based on phylogeny, with paraphyletic groups.	Based on phylogeny, but with paraphyletic groups.	Based on phylogeny with higher taxa representing monophyletic groups.	Based on phylogeny, higher taxa represent monophyletic groups with clear descriptions.	Based on phylogeny, higher taxa represent monophyletic groups with clear descriptions that relate to specific characters.
Species Descriptions	No mention of defining characters.	Unclear description of defining characters.	Clear description of defining characters.	Clear description of defining characters as well as how they relate to and are differentiated from other species.	Clear description of defining characters, how they relate to and are differentiated from other species, and clear explanation for name choices.

Discussion of Results	Does not integrate distribution data with phylogenetic evidence, and cannot reconstruct speciation pattern.	Refers to distribution data and phylogenetic evidence, but speciation pattern reconstruction has many errors.	Integrates distribution data and phylogenetic evidence, but speciation pattern reconstruction has some errors.	Integrates distribution data with phylogenetic evidence to reconstruct likely speciation pattern for group, with minor errors.	Thoughtfully integrates distribution data with phylogenetic evidence to successfully reconstruct likely speciation pattern.
Conclusions	Incomplete or unclear.	Does not reiterate main goal or indicate main finding of paper.	Reiterates main goal of paper and summarizes main finding of paper.	Reiterates main goal of paper, summarizes main findings of paper, but only hints at its importance.	Reiterates main goal of paper, summarizes main findings of paper, and clearly indicates its importance.
Use of Literature	Inappropriate sources.	Appropriate sources, too few citations or many inconsistencies in formatting.	Appropriate sources, correct number of citations, some inconsistencies in formatting.	Appropriate sources, correct number of citations, with proper formatting.	Well-chosen sources, correct number of citations, with proper formatting.
Spelling, Grammar, Clarity, and Style	Many spelling and grammar errors, unclear prose to the point of distraction from the content.	Some spelling and grammar errors, some errors in sentence structure and word usage.	Clear prose, with minor spelling and grammar errors, or minor errors in sentence structure and word usage.	Clear and concise prose, no spelling or grammar errors.	Engaging style, clear and concise prose, no spelling or grammar errors.