

Rubrics for Assessing Students' Technical Writing Skills

Traits	Scoring Criteria						Score
	0 points	0.5 point	1 point				
Cover page	Not present	Present but incomplete	Present and complete				
	0 points	1 points	2 points	3 points	4 points	5 points	
Objective -determine the conc of a standard EDTA soln - determine the %CaO in an unknown by titration with EDTA -determine the mg of Ca in a calcium supplement and multivitamin tablet	Objectives not stated	There are objectives stated but they may be incomplete or too general	Objectives are specific experimental objectives (rather than technique oriented) and are accurate				
Summary of Results -state avg conc of EDTA with SD as appropriate - present avg %CaO with SD as appropriate - present mg of Ca in supplement and vitamin tablet (probably w/o SD)	Not present	Some results are presented but are not in the first paragraph	Results are summarized in the first paragraph; Of the four main results requested, the list is incomplete, missing at least 2 major items	Of the four main results requested, the list is incomplete, missing 1 major item	Of the four main results requested, they are complete and accurate but not presented in requested format	Of the four main results requested, they are complete and accurate and presented in requested format	

This represents the end of the first paragraph.

	0 points	1 points	2 points	3 points	4 points	5 points
<p>Standardization of EDTA</p> <ul style="list-style-type: none"> -provides brief description of background inform -discusses how many titrations done and why - uses precision to discuss confidence 	Not discussed	Contains only some of the requested content elements (60%)	Contains many of the requested content elements (70%)	Contains most of the requested content elements (80%)	Contains all of the requested content elements (90%)	Contains all of the requested content elements and is organized in a logical fashion
<p>Calcium Supplement Tablet</p> <ul style="list-style-type: none"> - why analysis done -how many titrations, why? - assessment of precision (may not have enough samples) - assessment of accuracy - does accuracy provide addn inform on confidence in EDTA conc. 	Not discussed	Contains only some of the requested content elements (60%)	Contains many of the requested content elements (70%)	Contains most of the requested content elements (80%)	Contains all of the requested content elements (90%)	Contains all of the requested content elements and is organized in a logical fashion
<p>Multivitamin tablet</p> <ul style="list-style-type: none"> - why analyzing this sample (how differ from Ca) - how decide on sample sizes - discussion of accuracy 	Not discussed	Contains only some of the requested content elements (60%)	Contains many of the requested content elements (70%)	Contains most of the requested content elements (80%)	Contains all of the requested content elements (90%)	Contains all of the requested content elements and is organized in a logical fashion
<p>Calcium Unknown</p> <ul style="list-style-type: none"> - how many titrations? - discussion precision - confidence in results based upon Ca supplement 	Not discussed	Contains only some of the requested content elements (60%)	Contains many of the requested content elements (70%)	Contains most of the requested content elements (80%)	Contains all of the requested content elements (90%)	Contains all of the requested content elements and is organized in a logical fashion
<p>Conclusion</p>	Not present	Present but not effective in addressing the accomplishments of objectives (may be merely a restatement of the objectives)	Present and contains requested information but not a strong finish due either to organization or language	Contains requested information and effectively addresses whether the objectives were achieved		
<p>Error Analysis</p> <ul style="list-style-type: none"> - this section can be addressed in several places throughout the document or in a single section - are errors discussed specific to this expt or just generic? - are they consistent with direction and magnitude of error 	Not present	Makes an attempt to use in discussing the results but not used effectively	Makes a reasonable attempt to discuss error analysis but general conclusions are inconsistent with the data as far as magnitude or direction of error	Makes a reasonable attempt to discuss error analysis but general conclusions may not be effectively substantiated	Error analysis demonstrates a strong understanding of the techniques used	Error analysis demonstrates a strong understanding of the techniques used and is consistent with the data in terms of magnitude and direction of error

	0 points	1 points	2 points	3 points	4 points	5 points
Paragraphs	Paper not organized effectively into paragraphs	Paragraph structure used but in general they are too long without appropriate introductory and transitional sentences	Paragraphs limited in general to one major idea but are not well connected to each other in order to improve readability	Paragraph structure is strong and each flows well into the next		
Tables, graphs and supporting information	Would have enhanced readability but not present	Present, used effectively or not necessary				
Voice	Paper does not utilize third person passive voice	Paper utilizes a mix of first and third person but is written in the past tense	Writer effectively uses third person passive voice			
Grammar, Spelling and Punctuation	Paper has so many errors that communication of content is impaired	Paper has some errors in grammar, spelling and punctuation but readability is not impaired to a great degree	Paper is largely free of errors.			
Conciseness	Paper contains a lot of extraneous information and does not effectively utilize technical terms	Paper contains a lot of extraneous information due largely to too much procedural detail	Paper contains a lot of extraneous information but makes an attempt to utilize the appropriate technical terminology with a focus on largely appropriate content	Most of the time the content is appropriate but not presented as concisely as it could be	The paper effectively targets the intended audience both in the amount of information and the way in which it is presented	
Citations	Necessary but not present	Necessary and present but not complete and/or in correct format	Necessary, accurate and correctly presented or not necessary			