

Biology 1441 Grading Rubric for Lab Report #1

Possible # of points	Section	Checklist
1	Title	Thorough and descriptive?
6	Introduction	<ul style="list-style-type: none"> <li>• Describe diffusion?</li> <li>• Describe osmosis?</li> <li>• Explain concentration gradients?</li> <li>• Introduce these concepts and how they relate to semipermeable membranes?</li> <li>• Describe how plant cells respond to environments of different tonicity?</li> <li>• Propose a reasonable hypothesis for experiment 1B?</li> <li>• Propose a reasonable hypothesis for experiment 3A?</li> <li>• Have you properly cited your secondary source(s)?</li> </ul>
4	Methods	<ul style="list-style-type: none"> <li>• Written in past tense?</li> <li>• Don't list materials!</li> <li>• Don't include results or discussion!</li> <li>• Thoroughly describe how to conduct both experiments including but not limited to:                             <ul style="list-style-type: none"> <li>• Solutions types?</li> <li>• Amounts of solutions?</li> <li>• Concentrations of solutions?</li> <li>• Equipment used?</li> <li>• Time durations?</li> <li>• Programs to graph/analyze results?</li> <li>• Data conversions?</li> <li>• Detailed description of what was performed?</li> </ul> </li> </ul>
5	Results	
(2 pts)	Written portion	<ul style="list-style-type: none"> <li>• Does what was written part agree with the figure(s)?</li> <li>• Are the figure(s) and table(s) referenced properly?</li> <li>• Is it detailed?</li> <li>• Does it make sense?</li> <li>• Does the written portion of the results precede the figures and tables as is typical?</li> <li>• Don't include discussion or methods!</li> </ul>
(3 pts)	Figures/tables	<ul style="list-style-type: none"> <li>• Are the figures and tables labeled correctly with captions? (Figures below, tables above)</li> <li>• Are figures plotted correctly so that they utilize all of the graphing space?</li> <li>• Are legends clear if needed?</li> <li>• Does the figure match the actual results?</li> <li>• Axis scale and labeling correct?</li> </ul>

		<ul style="list-style-type: none"> <li>• Overall appearance?</li> </ul>
7	Discussion	<ul style="list-style-type: none"> <li>• Discuss any trends you observed?</li> <li>• Discuss why the results are important?</li> <li>• Discuss any observed errors you may have encountered?</li> <li>• Discuss how the results compare with other research being done?</li> <li>• Discuss how your results are/aren't explained by the general concepts mentioned during the introduction?</li> <li>• Discuss if the hypotheses were correct and why?</li> <li>• Properly cite your primary source(s)</li> </ul>
2	Literature Cited	<ul style="list-style-type: none"> <li>• Do you have at least 2 sources?</li> <li>• 1 primary?</li> <li>• 1 secondary?</li> <li>• Are they in alphabetical order?</li> <li>• Are they in the proper format?</li> <li>• Hanging indent?</li> <li>• Did you remember to cite all listed sources and list all cited sources?</li> <li>• Did you attach a copy of the primary article's first page?</li> </ul>
TOTAL=	25 points	
	General rules	<ul style="list-style-type: none"> <li>• Typed?</li> <li>• Grammar?</li> <li>• Spelling errors?</li> <li>• Computer generated graphics?</li> </ul>