Bio 121 / Espitia-Loaiza
Lab Reports

Examples for Success
Lab Report Outline

Cover Page
- Title
- Your name (and lab partners)
- Instructors name
- Date

Introduction
- Concept being learned and studied
- Background information
- (Literature Review?)

Methods & Procedure
- How was the lab procedure conducted?
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- Figures (graphs, charts)

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- Meaning of the results
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- Alpha order
- List ALL sources you cited in the report
- APA format
All animals rely on senses of taste and smell to find acceptable food for survival. Chemoreceptors are found in the taste buds on the tongue in humans (Campbell, 2008, p. 30), for example, for tasting food. Flies are able to taste food by walking on it (Dethier, 1963, p. 92).


### Information from the textbook or lab manual

#### In-text Citation

Somewhere in your lab report you will use information you obtained from the textbook (Starr, Evers, & Starr, 2018, p.41) and from the lab manual (Perry, Morton, & Perry, 2015, p. 23).

#### References


Somewhere in your lab report you might use information you obtained from a handout created and provided by your instructor (Espitia-Loaiza, 2019). 

<table>
<thead>
<tr>
<th>In-text Citation</th>
<th>References</th>
</tr>
</thead>
<tbody>
<tr>
<td>Somehwere in your lab report you might use information you notes you took during a lecture and you will need to cite your instructor (<a href="#">Espitia-Loaiza, 2019</a>).</td>
<td><a href="#">Espitia-Loaiza, E. (2019, Oct. 6). Lecture. Biology 121.</a></td>
</tr>
<tr>
<td>In-text Citation</td>
<td>References</td>
</tr>
<tr>
<td>------------------</td>
<td>------------</td>
</tr>
<tr>
<td>Suppose in your lab report you use information from notes you took during a lecture (Espitia-Loaiza, 2019a) and from a handout (Espitia-Loaiza, 2019b) distributed by your instructor. Then you could add letters after the date to distinguish the two different sources. Use the same letters in the list of references.</td>
<td>Espitia-Loaiza, E. (2019a, Oct. 6). Lecture. Biology 121. Espitia-Loaiza, E. (2019b). Key concepts in photosynthesis. Biology 121 laboratory handout.</td>
</tr>
</tbody>
</table>
# Tables – good and bad


<table>
<thead>
<tr>
<th>chemical tested</th>
<th>number of 10 flies responding</th>
</tr>
</thead>
<tbody>
<tr>
<td>glucose</td>
<td>$3.2 \pm 1.5$</td>
</tr>
<tr>
<td>maltose</td>
<td>$7.8 \pm 2.3$</td>
</tr>
<tr>
<td>sucrose</td>
<td>$8.6 \pm 2.1$</td>
</tr>
<tr>
<td>saccharin</td>
<td>$0.2 \pm 0.5$</td>
</tr>
</tbody>
</table>

Table 1. The average number of flies in each lab group that fed from 0.3M concentrations of each chemical tested. The mean ± standard deviation is shown.
Tables must have labels, captions and legends

### Table 4. Population variation in hatch success (mean percent) of unfertilized eggs for females from populations sampled in 1997. N = number of females tested.

<table>
<thead>
<tr>
<th>Population</th>
<th>mean (%)</th>
<th>Standard deviation</th>
<th>Range</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beaver Creek</td>
<td>7.31</td>
<td>13.95</td>
<td>0-53.16</td>
<td>15</td>
</tr>
<tr>
<td>Honey Creek</td>
<td>4.33</td>
<td>7.83</td>
<td>0-25.47</td>
<td>11</td>
</tr>
<tr>
<td>Rock Bridge Gans Creek</td>
<td>5.66</td>
<td>13.93</td>
<td>0-77.86</td>
<td>38</td>
</tr>
<tr>
<td>Cedar Creek</td>
<td>6.56</td>
<td>9.64</td>
<td>0-46.52</td>
<td>64</td>
</tr>
<tr>
<td>Grindstone Creek</td>
<td>8.56</td>
<td>14.77</td>
<td>0-57.32</td>
<td>19</td>
</tr>
<tr>
<td>Jacks Fork River</td>
<td>5.28</td>
<td>8.28</td>
<td>0-30.96</td>
<td>28</td>
</tr>
<tr>
<td>Meramee River</td>
<td>5.49</td>
<td>10.25</td>
<td>0-45.76</td>
<td>45</td>
</tr>
<tr>
<td>Little Dixie Lake</td>
<td>7.96</td>
<td>14.54</td>
<td>0-67.66</td>
<td>71</td>
</tr>
<tr>
<td>Little Prairie Lake</td>
<td>6.86</td>
<td>7.84</td>
<td>0-32.40</td>
<td>36</td>
</tr>
<tr>
<td>Rocky Forks Lake</td>
<td>3.31</td>
<td>4.12</td>
<td>0-16.14</td>
<td>43</td>
</tr>
<tr>
<td>Winegar Lake</td>
<td>10.73</td>
<td>17.58</td>
<td>0-41.64</td>
<td>5</td>
</tr>
<tr>
<td>Whetstone Lake</td>
<td>7.36</td>
<td>12.93</td>
<td>0-63.38</td>
<td>57</td>
</tr>
</tbody>
</table>

* = temporary stream, ** = permanent streams, † = lakes.

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Figures – good and bad


Figure 2. Actual heart rate vs. perceived heart rate before, during and after moderate exercise on a rowing machine. The perceived heart rate was calculated by multiplying the rating of perceived exertion (RPE) by 10. N=3. Error bars show standard deviation.
Figures must have labels, captions and legends

You may insert photographs or diagrams to report and describe your lab experiment and results.

Figure 6. Onion skin cell observed through microscope at 40x magnification. Hines, M. 2019, Feb 4.

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Resources:


*Sample Lab Report*

Purdue Owl *Guide to APA Tables*

Purdue Owl *Guide to APA Figures*

Questions?

**Email Elkin!**

Email the library: library@qvcc.edu 860.932.4007