



Grades

[Print](#)

Final Calculated Grade

Weight Achieved

97.23 / 100

Grade

97.23 %

| Grade Item | Points | Weight Achieved | Grade | Comments and Assessments |
|--------------------------------|---------------------|---------------------|---------|--------------------------|
| Attendance Grade | | 5 / 5 | 100 % | |
| Lab 1 Attendance Points | 2 / 2 ⓘ Dropped! | 0 / 0 ⓘ Dropped! | 100 % ⓘ | |
| Lab 2 Attendance Points | 2 / 2 ⓘ Dropped! | 0 / 0 ⓘ Dropped! | 100 % ⓘ | |
| Lab 3 Attendance Points | 2 / 2 | 0.42 / 0.42 | 100 % | |
| Lab 4 Attendance Points | 2 / 2 | 0.42 / 0.42 | 100 % | |
| Lab 5 Attendance Points | 2 / 2 | 0.42 / 0.42 | 100 % | |
| Lab 6 Attendance Points | 2 / 2 | 0.42 / 0.42 | 100 % | |
| Lab 7 Attendance Points | 2 / 2 | 0.42 / 0.42 | 100 % | |
| Lab 8 Attendance Points | 2 / 2 | 0.42 / 0.42 | 100 % | |
| Lab 9 Attendance Points | 2 / 2 | 0.42 / 0.42 | 100 % | |
| Lab 10 Attendance Points | 2 / 2 | 0.42 / 0.42 | 100 % | |
| Lab 11 Attendance Points | 2 / 2 | 0.42 / 0.42 | 100 % | |
| Lab 12 Attendance Points | 2 / 2 | 0.42 / 0.42 | 100 % | |
| Lab 13 Attendance | 2 / 2 | 0.42 / 0.42 | 100 % | |

| Points | | | |
|----------------------------|-----------------------|---------------------|--------|
| Lab 14 Attendance Points | 2 / 2 | 0.42 / 0.42 | 100 % |
| Pre-Lab Quizzes | | 20 / 20 | 100 % |
| Week 2 Pre-Lab Assignment | 20 / 20 | 2.22 / 2.22 | 100 % |
| Week 3 Pre-Lab Assignment | 20 / 20 | 2.22 / 2.22 | 100 % |
| Week 4 Pre-Lab Assignment | 20 / 20 | 2.22 / 2.22 | 100 % |
| Lab 5 Pre-Lab Assignment | 20 / 20 | 2.22 / 2.22 | 100 % |
| Week 7 Pre-Lab Assignment | 20 / 20 | 2.22 / 2.22 | 100 % |
| Week 8 Pre-Lab Assignment | 20 / 20 | 2.22 / 2.22 | 100 % |
| Lab 9 Pre-lab Assignment | 20 / 20 | 2.22 / 2.22 | 100 % |
| Week 10 Pre-Lab Assignment | 20 / 20 | 2.22 / 2.22 | 100 % |
| Week 12 Pre-Lab Assignment | 18 / 20 ⓘ Dropped! | 0 / 0 ⓘ Dropped! | 90 % ⓘ |
| Week 13 Pre-lab Assignment | 10 / 10 | 2.22 / 2.22 | 100 % |
| In-Lab Assignments | | 40 / 40 | 100 % |
| Week 1 In-Lab Work | 20 / 20 | 2.86 / 2.86 | 100 % |
| Week 2 In-Lab Work | 20 / 20 | 2.86 / 2.86 | 100 % |
| Week 3 In-Lab Work | 20 / 20 | 2.86 / 2.86 | 100 % |
| Week 4 In-Lab Work | 20 / 20 | 2.86 / 2.86 | 100 % |
| Week 5 In-lab work | 20 / 20 | 2.86 / 2.86 | 100 % |
| Week 6 In-lab work | 20 / 20 | 2.86 / 2.86 | 100 % |
| Week 7 In-lab work | 20 / 20 | 2.86 / 2.86 | 100 % |
| Week 8 In-Lab Work | 20 / 20 | 2.86 / 2.86 | 100 % |
| Week 9 In-lab work | 20 / 20 | 2.86 / 2.86 | 100 % |
| Week 10 In-lab work | 20 / 20 | 2.86 / 2.86 | 100 % |
| Week 11 In-Lab Work | 20 / 20 | 2.86 / 2.86 | 100 % |

| | | | |
|---|-------------|-------------|---------|
| Week 12 In-Lab Work | 20 / 20 | 2.86 / 2.86 | 100 % |
| Week 13 In-lab work | 20 / 20 | 2.86 / 2.86 | 100 % |
| Week 14 In-Lab Work | 20 / 20 | 2.86 / 2.86 | 100 % |
| Lab Reflections & Surveys | | 5 / 5 | 100 % |
| Pre Surveys (Nature of Science and Estrada) Completion | 7.5 / 7.5 | 0.76 / 0.76 | 100 % |
| Lab Reflection 1 | 15 / 15 | 1.52 / 1.52 | 100 % |
| Lab Reflection 2 | 15 / 15 | 1.52 / 1.52 | 100 % |
| Post Surveys (Nature of Science and Estrada) Completion | 7.5 / 7.5 | 0.76 / 0.76 | 100 % |
| Project Ownership Survey Completion | 4.25 / 4.25 | 0.43 / 0.43 | 100 % |
| Lab Writeups | | 27.23 / 30 | 90.75 % |

| Week 3 Lab Assignment - Membrane Transport Writeup | 39 / 45 | 5.85 / 6.75 | 86.67 % | Overall Feedback | | | | | | | | | | |
|---|--|-------------|---------|--|---------|----------|--|------|--|---|---|------|---|--|
| | | | | <table><tr><th>Section</th><th>Comments</th></tr><tr><td>Introductory Paragraph (5/5 pts) - There is a paragraph describing the lab and introducing the write up.</td><td>Good</td></tr><tr><td>Results (17/20 pts)<ul style="list-style-type: none">• Data are described as observed for each condition.• The results from each condition are interpreted.• A figure is included for each condition.• Both in-class and additional published data are presented and discussed.</td><td><p>You talk about the 28kDa data and “aquaporins”, but it doesn’t say anything about this particular protein. It mentions the same as 28kDa, but where did you get this from? You had to present the additional 28kDa data not just talk about it.</p><p>Good observations and interpretations</p></td></tr><tr><td>Models (5/5 pts)<ul style="list-style-type: none">• Old and revised model drawings are included.• A few sentences describing the initial model are included.</td><td>good</td></tr><tr><td>Model Explanation (12/15 pts)<ul style="list-style-type: none">• Model is described—it is clear and seeks to explain the phenomenon.• A logical explanation of how the data support the model is presented.• Data presented in support of the model are consistent with the data presented in the Results section.• Revised model is</td><td><p>In this section you are trying to convince the reader that your model makes biological sense and is a good explanation of what’s going on with cells in different environments. You do this by referencing all the relevant data and making specific connections with parts of your model.</p><p>You do a good job of incorporating the additional data into your model bringing a lot of outside background information in, but you hardly mention any of the other results! How did the plant and blood cell data help support your revised model?</p></td></tr></table> | Section | Comments | Introductory Paragraph (5/5 pts) - There is a paragraph describing the lab and introducing the write up. | Good | Results (17/20 pts) <ul style="list-style-type: none">• Data are described as observed for each condition.• The results from each condition are interpreted.• A figure is included for each condition.• Both in-class and additional published data are presented and discussed. | <p>You talk about the 28kDa data and “aquaporins”, but it doesn’t say anything about this particular protein. It mentions the same as 28kDa, but where did you get this from? You had to present the additional 28kDa data not just talk about it.</p> <p>Good observations and interpretations</p> | Models (5/5 pts) <ul style="list-style-type: none">• Old and revised model drawings are included.• A few sentences describing the initial model are included. | good | Model Explanation (12/15 pts) <ul style="list-style-type: none">• Model is described—it is clear and seeks to explain the phenomenon.• A logical explanation of how the data support the model is presented.• Data presented in support of the model are consistent with the data presented in the Results section.• Revised model is | <p>In this section you are trying to convince the reader that your model makes biological sense and is a good explanation of what’s going on with cells in different environments. You do this by referencing all the relevant data and making specific connections with parts of your model.</p> <p>You do a good job of incorporating the additional data into your model bringing a lot of outside background information in, but you hardly mention any of the other results! How did the plant and blood cell data help support your revised model?</p> |
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|---|---|---|------|---|---------|---------------|--|---|--|---|---|---|--|-------------|--|--|
| Week 6 | 47 / 50 | 7.05 / 7.5 | 94 % | Overall Feedback | | | | | | | | | | | | |
| Assignment - Bacteria | | | | <table><tr><th>Section</th><th>Comments</th></tr><tr><td>Introduction (10/10 pts)<ul style="list-style-type: none">There is a paragraph describing the lab and introducing the write up.There is a hypothesis presented.There is a step-by-step protocol presented.</td><td><p>Your intro has a lot of good background info, but I would also include specifics about the observations you made and let the reader know the question you are dealing with (that species E can survive in m2 with species A or something like that). Also, the crystal violet is always purple. You just add a counterstain (safranin) that is the color you observe in gram – bacteria.</p><p>Your hypothesis should be a statement and not a question or problem.</p><ol style="list-style-type: none">Colominic acid is harmful to species E and ASpecies A breaks down CA<p>Clear protocol</p></td></tr><tr><td>Results (15/15 pts)<ul style="list-style-type: none">Initial Observations, Team Results and Other Results are presented.Data are described and interpreted for each condition, and images are included, where appropriate.Relevant results from other teams are discussed.</td><td><p>Great job with the observations and interpretations. The format made everything easy to follow and the results from other team members were relevant and helped to fill gaps</p></td></tr><tr><td>Conclusions (5/5 pts) - How results either support or refute the hypothesis is discussed logically.</td><td><p>Nice job breaking it up and making it easy to read and follow. Your conclusions make sense and are consistent with the data.</p></td></tr><tr><td>Model (5/5 pts)<ul style="list-style-type: none">Initial and revised model drawings are included.A few sentences describing the initial model are included.</td><td><p>Good</p></td></tr><tr><td>Model Explanation (12/15 pts)<ul style="list-style-type: none">Model is described—it is clear and seeks to explain the phenomenon.A logical explanation of how the data support the model is presented.All relevant data are discussed and connected to the model.Revised model is compared to the old model and necessary changes are discussed.</td><td><p>Great job tying all the data together and coming up with an explanation that makes sense and is consistent with your data. You also have conflicting results in your conclusion, but just say that the other results are unreliable without giving a reason why. Spend more time talking about specific changes from old and new model.</p></td></tr></table> | Section | Comments | Introduction (10/10 pts) <ul style="list-style-type: none">There is a paragraph describing the lab and introducing the write up.There is a hypothesis presented.There is a step-by-step protocol presented. | <p>Your intro has a lot of good background info, but I would also include specifics about the observations you made and let the reader know the question you are dealing with (that species E can survive in m2 with species A or something like that). Also, the crystal violet is always purple. You just add a counterstain (safranin) that is the color you observe in gram – bacteria.</p> <p>Your hypothesis should be a statement and not a question or problem.</p> <ol style="list-style-type: none">Colominic acid is harmful to species E and ASpecies A breaks down CA <p>Clear protocol</p> | Results (15/15 pts) <ul style="list-style-type: none">Initial Observations, Team Results and Other Results are presented.Data are described and interpreted for each condition, and images are included, where appropriate.Relevant results from other teams are discussed. | <p>Great job with the observations and interpretations. The format made everything easy to follow and the results from other team members were relevant and helped to fill gaps</p> | Conclusions (5/5 pts) - How results either support or refute the hypothesis is discussed logically. | <p>Nice job breaking it up and making it easy to read and follow. Your conclusions make sense and are consistent with the data.</p> | Model (5/5 pts) <ul style="list-style-type: none">Initial and revised model drawings are included.A few sentences describing the initial model are included. | <p>Good</p> | Model Explanation (12/15 pts) <ul style="list-style-type: none">Model is described—it is clear and seeks to explain the phenomenon.A logical explanation of how the data support the model is presented.All relevant data are discussed and connected to the model.Revised model is compared to the old model and necessary changes are discussed. | <p>Great job tying all the data together and coming up with an explanation that makes sense and is consistent with your data. You also have conflicting results in your conclusion, but just say that the other results are unreliable without giving a reason why. Spend more time talking about specific changes from old and new model.</p> |
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| Week 8 | 22.5 / 25 | 3.38 / 3.75 | 90 % | Overall Feedback | | | | | | | | | | | | |
| Computational Cancer Presentations | | | | <table><tr><th></th><th>Points Earned</th><th>Comments</th></tr><tr><td>Drug Tested (3 pts):<ul style="list-style-type: none">Description of drug and its biological effects is included.</td><td>2</td><td>Included</td></tr><tr><td>Drug Test Design Overview (12 pts):<ul style="list-style-type: none">Adjusted parameters are described.A clear rationale for how the adjusted parameter(s) mimics the biology of the drug is presented.Outputs/how drug effectiveness was evaluated is presented.A clear rationale for why the outputs measured allow evaluation of the drug effectiveness is presented.</td><td>12</td><td>Parameters make sense and your rationale is sound</td></tr></table> | | Points Earned | Comments | Drug Tested (3 pts): <ul style="list-style-type: none">Description of drug and its biological effects is included. | 2 | Included | Drug Test Design Overview (12 pts): <ul style="list-style-type: none">Adjusted parameters are described.A clear rationale for how the adjusted parameter(s) mimics the biology of the drug is presented.Outputs/how drug effectiveness was evaluated is presented.A clear rationale for why the outputs measured allow evaluation of the drug effectiveness is presented. | 12 | Parameters make sense and your rationale is sound | | | |
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|--|--|--|--|--|------|--|
| | | | | Drug Test (2 pts): <ul style="list-style-type: none">Simulation parameter settings are specified. | 1 | What is a tick? Give exact values changed |
| | | | | Results/Conclusion (8 pts): <ul style="list-style-type: none">Data are presented in way that allows audience to understand results. Both effectiveness and toxicity are considered.Conclusion(s) are stated. They are clear and follow logically from the results. | 6.5 | Using a table for results is good, but give a brief summary of your key results at the end. And you mention toxicity, but what was it? |
| | | | | Total Points (25) | 22.5 | |

| | | | | | | |
|---------------|---------|------------|------|--|--|-----------------|
| Week 11 Lab | 45 / 50 | 6.75 / 7.5 | 90 % | Overall Feedback | | |
| Assignment: | | | | | | |
| Chlamydomonas | | | | | | |
| | | | | | | Comments |
| | | | | Introduction (5/5 pts) <ul style="list-style-type: none">There is a paragraph describing the lab and introducing the write up.There is a hypothesis presented. | Explain what phototaxis is | |
| | | | | Experiment (10/10 pts) <ul style="list-style-type: none">Bulleterd protocol is included (step-by step not necessary)Experimental conditions are related to the hypothesis.Controls are explained. | Good | |
| | | | | Results (8/10 pts) <ul style="list-style-type: none">Results are reported in an appropriate format (images, graphs, etc.)Results are described and interpreted.Relevant data from other groups are described. | Good job mentioning issues with your control cells, but you ar missing the interpretation on most of your experimental results | |
| | | | | Conclusion (5/5 pts) - How results either support or refute the hypothesis is discussed logically. | Good explanation | |
| | | | | Model (5/5 pts) - Initial and revised model drawings are included. | Good | |
| | | | | Model Explanation (12/15 pts) <ul style="list-style-type: none">A clear explanation of the model is presented.The model seeks to explain the phenomenon.Data are discussed and connected to the model.Any changes to the model are discussed.Speculative elements of model are discussed. | Good job incorporating your data and thinking about a mechani would have helped if you thought about how negative or positiv phototaxis occurs with your mechanism. You are missing a disc on the speculative elements in your model | |

| | | | | | | |
|-------------|---------|-----------|---------|---|--|--|
| Week 14 Lab | 28 / 30 | 4.2 / 4.5 | 93.33 % | Overall Feedback | | |
| Assignment: | | | | | | |
| Yeast | | | | | | |
| | | | | Section | Comments | |
| | | | | Question (5/5pts) - There is a description of what the team hoped to learn from their experiment(s). | Good | |
| | | | | Results Summary (10/10 pts) - Relevant results are described and/or presented. - Groups are cited for their data. | Good | |
| | | | | Model (5/5 pts) - Model drawing is included. | Good | |
| | | | | Model Explanation (8/10 pts) - Model is described—it is clear and seeks to explain the phenomenon. - A logical explanation of how the data support the model is presented. | Good model, but we mention what data shows the role FUS1 | |
| | | | | Total: 30 pts | | |

