

	Criteria	Exemplary (4)	Proficient (3)	Developing (2)	Insufficient (1)	Missing (0)
1	Construct, utilize, and interpret model (Problems 1-3)	Model and calculations are correct. All steps are clearly justified and well-explained.	Model and calculations are mostly correct with minor errors. Explanations are generally clear and mostly complete.	Model and/or calculations contain several minor errors or one major error. Explanations are partially unclear or incomplete.	Attempted but largely incorrect. Explanations are minimal or mostly incorrect.	No meaningful attempt.
2	Model Implementation, visualization, and conclusions w/MATLAB (Problems 4-6)	Code runs correctly, is well-commented, and includes all required outputs. Visualizations are clear and easily interpreted. All questions are thoroughly and correctly answered.	Code runs correctly but could use more annotations/ explanation. Outputs and visualizations are present and mostly clear. Most questions are adequately addressed and correct.	Code has minor errors or lacks sufficient comments. Some outputs or visualizations are missing or unclear. Some questions are unanswered or incorrect.	Code has major errors. Outputs and visualizations are missing or incorrect. Some questions are unanswered, inadequate, or incorrect.	No meaningful attempt.
3	Exploration of survival rates and long-term outcomes (Problems 7-8)	Thoughtful exploration of model scenarios. Correctly implements adjustments. Visualizations/ outputs are clear and easily interpreted. Analysis and discussion is clear and well-supported.	Exploration is mostly correct with minor issues in implementation or display of output/visualizations. Analysis is generally sound and supported.	Exploration is attempted but contains errors and/or the outputs/visualizations are unclear. Analysis is superficial and/or partially incorrect.	Exploration is minimal or incorrect. Analysis is missing and/or unsupported.	No meaningful attempt.
4	Adaptation of Model to Species of Choice (Problem 9)	Background is clearly explained with documentation. Variables are well-chosen and defined. Model construction is correct and fully explained. Visualization is clear. Predication is justified and presented in context of the model.	Background and documentation is mostly clear. Variables and model are appropriate, but could use more explanation in some places. Visualization is clear and prediction is justified.	Background/documentation is unclear/insufficient. Model construction has some errors and/or lacks explanation. Visualization is unclear or incorrect. Prediction is made but only somewhat justified.	Background/ documentation is unclear/insufficient. Model is incorrect. Final plot is unclear or incorrect. No prediction, or prediction is unsupported.	No meaningful attempt.
	Synthesis: Written Introduction and Conclusion	Introduction is accessible to a general audience and clearly explains the background, significance, learning goals, and report structure. Conclusion effectively summarizes learning outcomes and proposes thoughtful next steps.	Introduction is mostly clear and includes most required elements. Conclusion summarizes learning outcomes and suggests next steps.	Introduction or conclusion is missing key elements or lacks clarity. Connections to learning goals are weak	Introduction and/or conclusion are present but unclear, incomplete, or disconnected from the assignment goals.	No meaningful attempt.

General notes:

- Make sure you include an introduction and a conclusion in your final report.
- Before submitting, run your entire live script and make sure that all output is present and displays as expected.
- Effective and clear communication is essential throughout your written report. Solutions written using incomplete sentences and/or with significant grammatical errors earn a maximum rating of 2 for that criteria category.
- Visualizations must be clear and easy to interpret. Font sizes must be readable and colors/markers easily distinguishable. All plots should include labels and a title (and a legend when applicable).