

MATH 5355
Final Project Rubric

Category	Exemplary (A)	Satisfactory (B)	Emerging (C)	Not Demonstrated (D)
Biological Application <ul style="list-style-type: none"> Details on biological system Cite literature 	<ul style="list-style-type: none"> Good literature sources cited Detailed presentation of biological problem to be modeled 	<ul style="list-style-type: none"> Limited literature sources cited Limited detail on presentation of biological system 	<ul style="list-style-type: none"> Limited literature sources cited Limited detail on presentation of biological system 	<ul style="list-style-type: none"> Lack or cited literature and/or lack of detail on biological description and application
Model Development <ul style="list-style-type: none"> Model formulation Variables/parameters defined Clear Model assumptions 	<ul style="list-style-type: none"> Correct model and explanation Variables and parameters defined correctly Units defined and correct 	<ul style="list-style-type: none"> Mostly correct model and explanation Most variables and parameters defined correctly Units defined and mostly correct 	<ul style="list-style-type: none"> Somewhat correct model and explanation Some variables and parameters defined correctly Units defined and somewhat correct 	<ul style="list-style-type: none"> Incorrect model and explanation Variables and parameters not defined Units missing or incorrect
Model analysis <ul style="list-style-type: none"> Computational methods Analytical solutions 	<ul style="list-style-type: none"> Correct numerical solution to model Appropriate analytical analysis 	<ul style="list-style-type: none"> Minor errors in numerical solution to model Minor errors in analytical analysis 	<ul style="list-style-type: none"> Major errors in numerical solution to model Major errors in analytical analysis 	<ul style="list-style-type: none"> Completely incorrect or missing numerical solutions and/or analytical analysis
Interpretation and Next Steps <ul style="list-style-type: none"> Interpretation of results Conclusions Future directions <p>All discussed in context of biological problem</p>	<ul style="list-style-type: none"> Correct interpretation of results Correct conclusions drawn from results Next steps are discussed and appropriate 	<ul style="list-style-type: none"> Mostly correct interpretation of results Mostly correct conclusions drawn from results Next steps are discussed and mostly appropriate 	<ul style="list-style-type: none"> Partially correct interpretation of results Somewhat correct conclusions drawn from results Next steps are discussed and somewhat appropriate 	<ul style="list-style-type: none"> Incorrect interpretation of results Incorrect conclusions drawn from results Next steps are not discussed or not appropriate
Data Visualization <ul style="list-style-type: none"> Readability of graphs Units on labels 	<ul style="list-style-type: none"> All graphs are clear, readable All graphs are labeled and units are defined Correct choices of graphs for all figures 	<ul style="list-style-type: none"> Most graphs are clear Graphs are labeled and units are defined Most graphs are labeled and units are defined Correct choices of graphs for most figures 	<ul style="list-style-type: none"> Some graphs are clear Some graphs are labeled and units are defined Correct choices of graphs for some figures 	<ul style="list-style-type: none"> Graphs are unclear Graphs are not labeled and/or units are not defined Incorrect choices of graphs for figures