Name:

Math 462 Project guidelines

Last day of class, Wednesday April 16
Projects due, Monday April 21, 5 PM

Hand in a write up that discusses the following (due 4/21 5:00 PM):

Project description:
1) What are you modeling?
2) What work has been done in this area? (provide a review of a paper from literature that you are considering)
3) What are the background assumptions both mathematically and physically?
4) What are the scientific questions to be answered?

Model description:
1) What are the equations and what do they mean?
2) How are previous models sufficient and insufficient?
3) What changes are you considering for your model?

Analysis:
1) Perform any analysis possible that was covered in class.
a) Including Bifurcations, computations, and model sensitivity and identifiability.
2) If standard analysis is to difficult then make supported conjectures about what you would expect to occur and why. How does compuational methods support this?
3) How does changing the model effect the dynamics? (either from what was previously done in literature or what you can determine from your analysis)
4) What techniques are needed to analyze the model (what analysis is necessary)?
5) What would your future plans be for this work if you had the summer to work on it?