Extra Credit E1
Modeling a Biological System
Due: May 12, 2006 at 8:30 AM

- Find a published journal paper(s) that describe(s) a biological or biochemical system
- Build a model of the system using Excel, Maple, Mathematica or Matlab
- Find good estimates of the model parameters and boundary conditions
- Run the model and display appropriate results for at least two sets of parameters or conditions
- Hand in via blackboard: (a) the Excel, Maple, Mathematica or Matlab file(s), (b) PDF files of journal articles describing the system and the estimates of model parameters and boundary conditions, and (c) a Word document with a brief written description of the model and output from at least two runs. If a PDF file is not available for one or more of the articles, hand these in as xeroxed copies.

The amount of extra credit received will be determined by two factors: the <u>complexity</u> of the model and the <u>soundness</u> of the implementation. A maximum of 40 points can be awarded only a single submissions is permitted.