Mathematical and Computational Biology (Math 227B)

Instructor - Qing Nie

Office - MSTB 275 (824-5530)
qnie@math.uci.edu
http://www.math.uci.edu/∼qnie

Grading:

- 2-3 homeworks and one project

Reference: *1) Introduction to Numerical Analysis*
J. Stoer and R. Bulirsch (Springer-Verlag, 1997)
2) *Introduction to Scientific Computing*
Charles F. Van Loan, (Prentice Hall, 2000)
3) *Numerical Solutions of Partial Differential Equations*
K. W. Morton and D. F. Mayers, Cambridge University Press, 2005.

Office Hours: 11am Thursday or by appointment

Syllabus:

- Numerical Solutions for Initial Value Problems (Dynamical Systems)

- Bifurcation Studies

- Numerical Solutions for Boundary Value Probelms (ODEs)

- Numerical Solutions for Reaction-diffusion Equations (PDEs)