

## Tentative Schedule of Topics and Presentations

Date		Topic
W	Jan 23	Introduction to the process Mathematical Modeling
F	Jan 25	Case Study: Bacterial Growth in a Chemostat
M	Jan 28	Nondimensionalization
W	Jan 30	Nondimensionalization (continued)
F	Feb 1	Problems
M	Feb 4	Case Study: Modeling Traffic Flows
W	Feb 6	Traffic flow models (continued)
W	Feb 8	Problems
M	Feb 11	Analysis of a traffic flow model
W	Feb 13	Method of characteristics
W	Feb 15	Method of characteristics (continued)
M	Feb 18	Shock waves
W	Feb 20	Shock waves (continued)
W	Feb 22	Problems
M	Feb 25	Problems
W	Feb 27	Review
W	Mar 1	<b>Exam 1</b>
M	Mar 4	Case Study: Modeling bacterial mutations
W	Mar 6	Stochastic models
F	Mar 8	Probability
M	Mar 11	Probability (continued)
W	Mar 13	Random variables and distributions
F	Mar 15	Random variables and distributions (continued)
M	Mar 18	Spring Recess!
W	Mar 20	Spring Recess!
F	Mar 22	Spring Recess!
M	Mar 25	Random processes
W	Mar 27	Random processes (continued)
F	Mar 29	<i>Cesar Chavez Day (no class)</i>

M	Apr 1	Problems
W	Apr 3	Review
F	Apr 5	<b>Exam 2</b>
M	Apr 8	Modeling Project
W	Apr 10	Modeling Project
F	Apr 12	Modeling Project
M	Apr 15	Modeling Project Presentations
W	Apr 17	Modeling Project Presentations
F	Apr 19	Modeling Project Presentations
M	Apr 22	Modeling Project Presentations
W	Apr 24	Modeling Project Presentations
F	Apr 26	Modeling Project Presentations
M	Apr 29	Modeling Project Presentations
W	May 1	Modeling Project Presentations
F	May 3	Modeling Project Presentations
M	May 6	Modeling Project Presentations
W	May 8	Modeling Project Presentations