

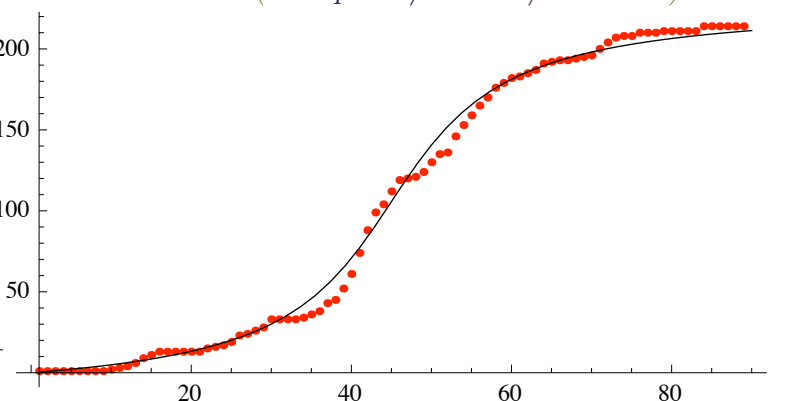
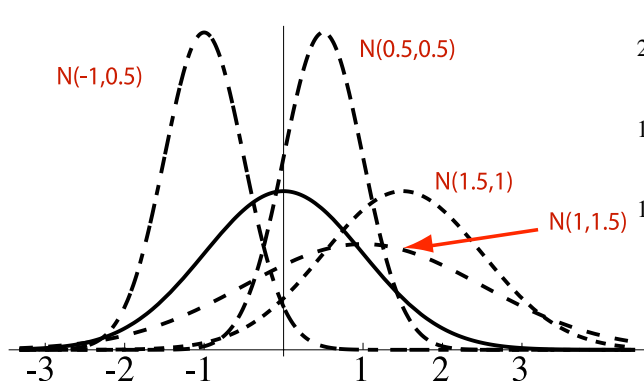
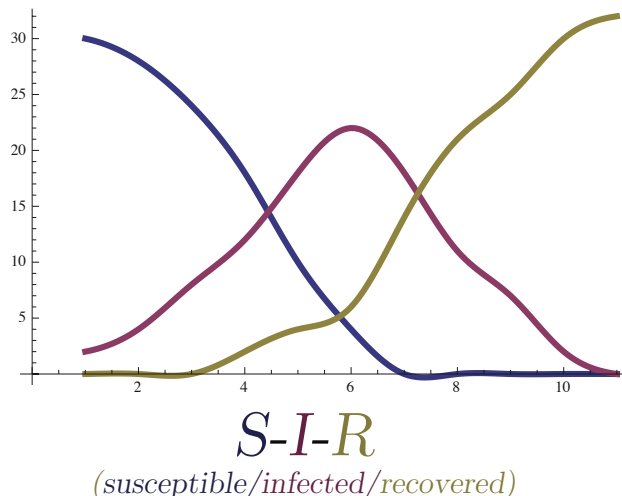
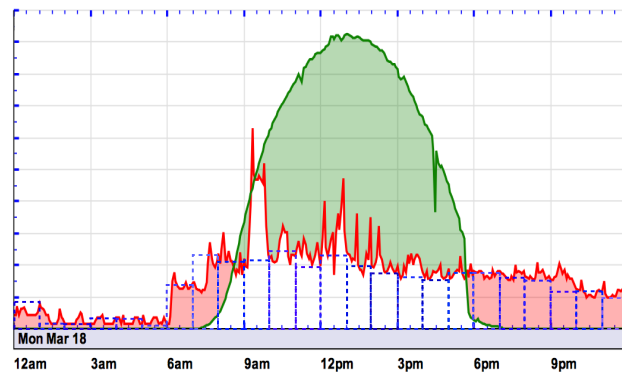
MATH 1310: Calculus, Systems, and Modeling (CSM)

A systems approach to mathematics for the life sciences

In this course, calculus concepts are developed through the analysis and modeling of complex systems, ranging from gene networks and cells to populations and ecosystems. Fundamental concepts of probability and statistics are also explored, through the lens of calculus and with an eye towards life sciences applications.

In addition, basic computer computation methods (utilizing the open-source Sage software package) are employed to generate explicit solutions to a variety of mathematical models investigated in the course. No previous programming experience is required.

This course is similar to MATH 1300: Calculus I, but a greater emphasis is placed on relevance and applications in biology and other life sciences.



Additional information regarding Math 1310: CSM

- Credit not granted for this course and MATH 1081, MATH 1300, APPM 1345, APPM 1350 or ECON 1088. Approved for GT-MA1. Approved for arts and sciences core curriculum: quantitative reasoning and mathematical skills. Prerequisites: Requires prerequisite course of MATH 1150, or APPM 1235, or MATH 1011 and MATH 1021 (minimum grade C-), or an ALEKS math score of 76% or greater.
- This course is approved as a prerequisite course for MATH 2300: Calculus II.
- Questions? Please contact course coordinator Eric Stade, Professor of Mathematics, at stade@colorado.edu