

AMSC/MATH 420, Spring 2015
First Project on Modeling Epidemics: Forecasting Future Epidemics
Oral presentation due Tuesday March 24
Written presentation due Thursday March 26

Start by downloading monthly AIDS diagnoses data for the entire U.S. and for the Philadelphia reporting area. The goals of this project are to develop and test methods for fitting parameters of a modified SIR model (to be discussed further in class) to the data in order to predict future diagnoses as well as possible, and to assess how well this model is able to predict the future of an epidemic from data collected during the epidemic – this will depend among other things on how early or late in the epidemic one is making the prediction. After working with your two assigned data sets for a while, choose some other cities from the northeastern U.S. and see how broadly your methods and conclusions apply.