1095-34-160   **Lisette G. de Pillis*** (`depillis@g.hmc.edu`), Department of Mathematics, Harvey Mudd College, 301 Platt Blvd., Claremont, CA 91711. *Classroom Module for Mathematical Modeling of the AIDS Epidemic.*

Using the AIDS epidemic in the U.S. as a motivating topic, we have developed a classroom module that brings students through the process of model building using ODEs, numerical ODE system solutions, and model refinement. Finding model-based research literature that is still accessible to the student is useful in creating projects with relevant applications. This project was developed using a paper by J.R. Thompson and K.W. Go that was published in 1989, when much about AIDS was still unknown. It is interesting to start with an older model, since students are then in a position to scrutinize model assumptions and predictions in light of information that has surfaced only after publication of the paper. Understanding the epidemiology of AIDS is still of interest to our students; the systems of ODEs used to model the spread of the disease are fairly straightforward extensions of the basic SIR model, and are easily accessible to a student with some introductory ODEs exposure. We will present an outline of the classroom lectures and guided discussions, sample project assignments, and the research literature upon which the project is based. (Received September 07, 2013)