1077-I1-867 Alex Capaldi* (alex.capaldi@valpo.edu). Using Infectious Disease Models in Calculus and Differential Equations Courses.

Infectious diseases fill the media. Avian flu and swine flu have graced the news in recent years while pop culture has seen the new Hollywood movie "Contagion" and countless examples of zombie apocalypses in movies and games. Because of this high level of exposure to the topic, students are likely to appreciate seeing this application to the content taught in their mathematics courses. We will present multiple examples and projects drawn from the field of epidemiology that could be used in calculus and differential equations courses. (Received September 13, 2011)