

1035-B1-634      **Timothy D Comar\*** (tcomar@ben.edu), 5700 College RD, Lisle, IL 60532. *Laboratory Projects for a Second Semester of Biocalculus.*

The presentation will highlight several computer laboratory projects used in the second semester biocalculus course at Benedictine University. Examples of projects presented will include an application of life tables using (approximations of) improper integrals, a matrix model for age-structured populations, and difference equation models for host-parasitoid interactions. In addition to providing useful examples which require students to apply mathematics to biological models, there are several benefits derived from these projects. The students develop skills using computational software to analyze biological problems. The computer implementation of these models enables students to observe dynamic behavior graphically and readily allows students to see how the behavior of a model changes by changing parameter values. These projects can be used in other mathematics courses as well. (Received September 12, 2007)