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NY. *Predicting Flu Season Requirements: An Undergraduate Modeling Project*. Preliminary report.

Is your university prepared for flu season? We present a two-part lesson or project designed to exercise modeling techniques in the context of biological and human health applications. The exercise places each student in the role of a university preventative medicine administrator. The student must decide which influenza vaccine to order for the university based on trends observed in past and current flu seasons. The student's decision is subject to fiscal and production constraints, with the objective of minimizing the total number of flu victims within the student body.

The second portion of the project extends that decision to examine the university's ability to handle possible contingencies. Using the US Center for Disease Control's FluSurge 2.0 decision tool, students must determine if the university has the necessary bed space and respirators to serve the student body through the flu season. They must then report findings to the school to either dispels existing concerns or advocate for additional resources.

The briefing will cover the underlying logistic function modeling techniques the student must apply, the CDC's FluSurge decision tool, and the terminal learning objectives the students should exhibit when complete. (Received September 20, 2007)