Jennifer Wilson* (wilsonj@newschool.edu), Eugene Lang College, 65 W. 12th. Street, New York, NY 10011. Mathematical Models in Nature - a project-based course in mathematical biology.

This one-semester course, focusing on discrete dynamical systems in biology and ecology, serves as the sole mathematics requirement in an interdisciplinary Science, Technology and Society program. The final third of the course is devoted to collaborative student projects in which small groups of students select specific models to study in depth. Students learn mathematical techniques of non-linear analysis, locate examples of these models in primary literature, and present their findings in class. Past projects have included using eigenvalues to investigate non-linear behavior in predator-prey models, and the role of screening and treatment in multi-population models of infectious diseases. (Received September 26, 2006)