1035-D1-201   **Ken Smith** (`ksmith@iusb.edu`), PO BOX 7111, South Bend, IN 46634-7111, and **Morteza Shafii-Mousavi*** (`mshafii@iusb.edu`), P.O.Box 7111, South Bend, IN 46634-7111.

Environmental Mathematics Modeling in Connections: College Algebra and English Composition.

This paper describes environmental modeling used in Connections, an interdisciplinary general education program for students who take College Algebra and English Composition. Connections creates a learning/teaching community for at-risk students, bridging subjects through shared languages and pedagogies as faculty engage in interdisciplinary scholarship of teaching and test research in student retention. Environmental mathematics modeling connects the two academic subjects. Student teams research about ozone layers, download national data about kinds of ozone, build spreadsheets, analyze the data, model regression lines, forecast and interpret future outcomes, write technical reports, and present their findings. We will offer actual student projects completed in linked classes that coached students to implement and evaluate spreadsheet models, write reports, and present outcomes. A supportive learning and revision assignment structure put problem solving within the capability of all students. We will also summarize the assessment techniques employed in the courses. (Received August 16, 2007)