1067-97-916   **Warren W. Esty*** (`westy@math.montana.edu`), Department of Mathematical Sciences, Montana State University, Bozeman, MT 59717. *A course emphasizing mathematical logic and reasoning that is appropriate for general education and elementary education majors.*

Mathematics is a language in which mathematics is written and thought. Like other languages, it has symbols, vocabulary, grammar (principles which govern its correct usage), synonyms, negations, conventions, abbreviations, and sentence structure. Some of its paragraphs are called proofs and they employ logic.

This talk describes a 100-level course called "The Language of Mathematics," originally designed for math majors, that turned out, somewhat surprisingly, to be remarkably good for non-math majors including elementary education majors. Although the elementary education majors in the course typically do not love algebra, they became very good at some high-level algebra and reasoning skills.

The goal is for the students to become fluent in the symbolic language of mathematics so they can efficiently read, write, learn, and think mathematical thoughts. Proofs occur occasionally throughout and are the focus at the end. Research shows that even students who are not mathematically inclined develop abstract mathematical concepts normally taught only to advanced college math students, and they enjoy doing it. (Received September 16, 2010)

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