WICHITA STATE UNIVERSITY
Department of Mathematics, Statistics & Physics

The Lecture Series in the
Mathematical Sciences Presents Our Guest:

Prof. Susan G Sterrett
Wichita State University

“Logic That Fits Your 'If's”

Abstract:
Professor Sterrett is the author of a recent book: "Three Views of Logic: Mathematics, Philosophy, and Computer Science" which deals with the subject of "relevance logic". The following is from the Mathematical Association of America's review of her book.

"Sterrett, by contrast, discusses a kind of propositional logic that is entirely different than the classical version discussed in part 1 of the book. This is relevance logic, which arises from the observation that some correct deductions in the classical propositional calculus may nevertheless not seem to accord with the way people ordinarily think. Consider, for example, the statement “If Paris is the capital of France, then either the Collatz conjecture is true or it is not”. As a statement in the classical propositional calculus, this statement is, of course, true, yet the logical implication seems odd; the “if” clause really has no relevance to the concluding “then” clause. In relevance logic, both the semantics and syntax of the logic are altered so as to make some implications false that would be true in classical logic."

The relevance logic is developed using abstract algebra -- lattices, in particular -- so it is an interesting example of the interplay between logic and mathematics.

Friday, October 10, 2014
3:00 PM in 372 Jabara Hall

Please come join us for refreshments before the lecture at 2:30 p.m. in room 353 Jabara Hall.