

THIS INTRODUCTION TO FORMAL LOGIC covers truth-functional logic (which is also often called *propositional logic*) and first-order logic.

The title *forallx* (i.e., “for all  $x$ ”) is a reference to first-order logic. This is a symbolic expression in first-order logic:  $\forall x(Kx \rightarrow Gx)$ , and it is read, “for all  $x$ , if  $x$  is  $K$ , then  $x$  is  $G$ .” Hence, the name of the textbook. And if, for instance, we have  $K$  stand for “is a king,” and  $G$  stand for “is greedy,” then “ $\forall x(Kx \rightarrow Gx)$ ” represents “for all  $x$ , if  $x$  is a king, then  $x$  is greedy,” or “everyone who is a king is greedy.”

This book is based on a text—the original *forallx*—written by P. D. Magnus and then revised and expanded by Tim Button, J. Robert Loftis, Aaron Thomas-Bolduc, and Richard Zach. It has been further revised for the 1000-level logic course at Mississippi State University.

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**forallx**  
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