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 by Gregory Johnson for the 1000-level logic course at Mississippi State University.

forallx: the Mississippi edition is licensed under a Creative Commons Attribution 4.0 International (CC BY 4.0) license.

FORALLX THE MISSISSIPPI STATE EDITION

forallx

THE MISSISSIPPI STATE EDITION