

A Bibliography on Logic

by Arthur Buchsbaum

Elementary and Informal Logic:

- “Lógica”, by John Nolt & Dennis Rohatyn, McGraw-Hill & Makron Books.
- “Introdução à Lógica”, by Irving M. Copi, Editora Mestre Jou.
- “Introdução à Lógica”, by Cezar A. Mortari, UNESP.
- “Logic: A Very Short Introduction”, by Graham Priest, Oxford University Press.
- “Logic: An Introduction to Elementary Logic”, by Wilfrid Hodges, Penguin Books.
- “The Power of Logic”, by Charles S. Layman, Mayfield Publishing Company.
- “Elements of Deductive Inference: An Introduction to Symbolic Logic”, by Joseph Bessie & Stuart Glennan, Wadsworth Publishing Company.

Traditional Topics (proof and model theory for classical logic, number theory, set theory and recursion theory):

- “First Order Mathematical Logic”, by Angelo Margaris, Dover Publications.
- “A Friendly Introduction to Mathematical Logic”, by Christopher C. Leary, Prentice Hall.
- “A Mathematical Introduction to Logic”, by Herbert B. Enderton, Academic Press.
- “A Course in Mathematical Logic”, by J. L. Bell & M. Machover, North-Holland.
- “Mathematical Logic”, by H. D. Ebbinghaus, J. Flum & W. Thomas, Springer Verlag.
- “Logic and Structure”, by D. van Dalen, Springer Verlag.
- “Introduction to Mathematical Logic”, by Elliot Mendelson, International Thomson Publishers.
- “Mathematical Logic”, by J. R. Shoenfield, Addison-Wesley.

Dictionaries and Encyclopedias:

- “Notions and Theorems of Elementary Formal Logic”, by Witold A. Pogorzelski, Białystok Branch, Warsaw University.
- “Enciclopédia de Termos Lógico-Filosóficos”, by João Branquinho & Desidério Murcho, Gradiva.

Metalogic:

- “Metalogic: An Introduction to the Metatheory of Standard First Order Logic”, by Geoffrey Hunter, University of California Press.

Proof Theory:

- “Basic Proof Theory”, by H. Schwichtenberg & Anne S. Troelstra, Cambridge University Press.
- “Proof Theory and Automated Deduction”, by Jean Goubault-Larrecq & Ian MacKie, Kluwer Academic Publishers.
- “Normalization, Cut-Elimination and the Theory of Proofs”, by A. M. Ungar, CSLI Publications.
- “Structural Proof Theory”, by Sara Negri & Jan Von Plato, Cambridge University Press.
- “Proofs and Types”, by Jean-Yves Girard, Yves Lafont & Paul Taylor, Cambridge University Press.
- “Natural Deduction – A Proof-Theoretical Study”, by Dag Prawitz, Almqvist & Wiksell.

Model Theory:

- “Beginning Model Theory: The Completeness Theorem and Some Consequences”, by Jane Bridge, Oxford University Press.
- “Basic Model Theory”, by Kees Doets, CSLI Publications & FoLLI.
- “A Shorter Model Theory”, by Wilfrid Hodges, Cambridge University Press.
- “Model Theory”, by Wilfrid Hodges, Cambridge University Press.
- “Model Theory”, by Chen Chung Chang & H. Jerome Keisler, North-Holland.

Automation of Reasoning and Logical Programming:

- “Symbolic Logic and Mechanical Theorem Proving”, Chin-Liang Chang & Richard Char-Tung Lee, Academic Press.
- “Automated Theorem Proving – A Logical Basis”, by Donald W. Loveland.
- “The Resolution Calculus”, by Alexander Leitsch, Springer Verlag.
- “Clausal Form Logic: An Introduction to the Logic of Computer Programming”, by Tom Richards & Thomas J. Richards, Addison-Wesley.
- “First-Order Logic and Automated Theorem Proving”, by Melvin Fitting, Springer-Verlag.
- “Resolution Proof Systems: An Algebraic Theory”, by Zbigniew Stachniak, Kluwer Academic Publishers.
- “O Método dos Tableaux Generalizado e sua Aplicação ao Raciocínio Automático em Lógicas Não Clássicas”, by Arthur Buchsbaum & Tarcisio Pequeno, O que nos faz pensar – Cadernos do Departamento de Filosofia da PUC-Rio, 1990, nº 3.
- “Handbook of Tableau Methods”, by Marcello D’Agostino (editor), Kluwer Academic Publishers.
- “Proof Methods for Modal and Intuitionistic Logics”, by Melvin Fitting, D. Reidel.
- “First-Order Logic”, by Raymond M. Smullyan, Dover Publications.
- “Theory of Formal Systems”, by Raymond Smullyan, Princeton University Press.
- “Foundations of Logic Programming”, by J. W. Lloyd, Springer Verlag.
- “From Logic to Logic Programming”, by Kees Doets, MIT Press.

Logical Systems:

- “Intermediate Logic”, by David Bostock, Clarendon Press & Oxford University Press.
- “The Semantic Foundations of Logic – Propositional Logics”, by Richard L. Epstein, Oxford University Press.
- “Predicate Logic – The Semantic Foundations of Logic”, by Richard L. Epstein, Oxford University Press.
- “A Short Introduction to Intuitionistic Logic”, by Grigori Mints, Kluwer Academic / Plenum Publishers.
- “A Short Introduction to Modal Logic”, by Grigori Mints, Center for the Study of Language and Information, Lecture Notes, C. S. L. I. Publications.
- “Modal Logic – An Introduction”, by Brian F. Chellas, Cambridge University Press.
- “A New Introduction to Modal Logic”, by G. E. Hughes & M. J. Cresswell, Routledge.
- “First-Order Modal Logic”, by Melvin Fitting & Richard L. Mendelsohn, Kluwer Academic.

- “Uma Família de Lógicas Paraconsistentes e / ou Paracompletas com Semânticas Recursivas”, by Arthur Buchsbaum & Tarcisio Pequeno, Coleção Documentos – Série de Lógica e Teoria da Ciência nº 14, Instituto de Estudos Avançados, Universidade de São Paulo.
- “Paraconsistent Logic: Essays on the Inconsistent”, by Graham Priest, Richard Routley & Jean Norman (editores), Philosophia Verlag.
- “Mathematical Logic and Hilbert’s ϵ -Symbol”, by A. C. Leisenrigh, Gordon & Breach Science Publications.
- “Non Monotonic Logic: Context-dependent Reasoning”, W. Marek & M. Truszczyński, Springer-Verlag.
- “Nonmonotonic Logics: Basic Concepts, Results and Techniques”, by Karl Schlechta, Springer-Verlag.
- “Nonmonotonic Reasoning”, by Grigoris Antoniou & Mary-Anne Williams, MIT Press.

Philosophy of Logic:

- “Ensaio sobre os Fundamentos da Lógica”, by Newton C. A. da Costa, Hucitec.
- “Lógica Indutiva e Probabilidade”, by Newton C. A. da Costa, Hucitec.
- “O Conhecimento Científico”, by Newton C. A. da Costa, Discurso Editorial.
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- “Deviant Logic, Fuzzy Logic – Beyond the Formalism”, by Susan Haack, University of Chicago Press.

Recursion Theory:

- “Computability and Logic”, by George S. Boolos & Richard C. Jeffrey, Cambridge University Press.
- “The Logic of Provability”, by George Boolos, Cambridge University Press.
- “Gödel’s Incompleteness Theorems”, by Raymond M. Smullyan, Oxford University Press.
- “Modelos de Computação e Sistemas Formais”, by Roberto Lins de Carvalho & Claudia Maria Garcia Medeiros de Oliveira, 11^a Escola de Computação.

Logic for Computer Science:

- “Lógica para Ciência da Computação”, by João Nunes de Souza, Editora Campus.
- “Logic for Applications”, by Anil Nerode & Richard A. Shore, Springer.
- “Essence of Logic”, by John J. Kelly, Prentice Hall.
- “Computation as Logic”, by René Lalement, Prentice Hall.
- “Logic for Computer Scientists”, by Uwe Schöningh, Springer Verlag.
- “Mathematical Logic for Computer Science”, by Lu Zhongwan, World Scientific Pub. Co.
- “Mathematical Logic for Computer Science”, by M. Ben-Ari, Springer Verlag.
- “The Logical Basis for Computer Programming: Deductive Reasoning”, Vol. 1, by Zohar Manna, Richard Waldinger & Johar Manna, Addison-Wesley.
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Logic and Category Theory:

- “Teoria das Categorias para Ciências da Computação”, by Paulo Blauth Menezes & Edward Hermann Haeusler, Sagra-Luzzatto.
- “Sets, Logic and Categories”, by Peter J. Cameron, Springer.
- “Topoi – The Categorical Analysis of Logic”, by Robert Goldblatt, North-Holland.
- “Arrows, Structures and Functors – The Categorical Imperative”, by Michael A. Arbib & Ernest G. Manes, Academic Press.
- “Introduction to Higher-Order Categorical Logic”, by J. Lambek & P. J. Scott, Cambridge University Press.
- “Categorical Logic and Type Theory”, by B. Jacobs (Editor), Elsevier Science.

Logic and Artificial Intelligence:

- “Logical Foundations of Artificial Intelligence”, by Michael R. Genesereth & Nils J. Nilsson, Morgan Kaufmann Publishers.
- “Logics for Artificial Intelligence”, by Raymond Turner.
- “Handbook of Logic in Artificial Intelligence and Logic Programming”, 6 vols., editado por Dov. M. Gabbay, C. J. Hogger & J. A. Robinson, Oxford University Press.

Algebra of Logic:

- “Algebraic Methods in Philosophical Logic”, by J. Michael Dunn & Gary Hardegree, Oxford University Press.
- “Algebraic Introduction to Mathematical Logic”, by D. W. Barnes.

Philosophical Logic:

- “An Introduction to Philosophical Logic”, by A. C. Grayling, Blackwell.
- “Logical Forms: An Introduction to Philosophical Logic”, by Mark Sainsbury, Blackwell.

Logic and Visualization:

- “Line Diagrams for Logic: Drawing Conclusions”, by George Englebretsen, Edwin Mellen Press.
- “Logic and Visual Information”, by Eric M. Hammer, Cambridge University Press.
- “The Logical Status of Diagrams”, by Sun-Joo Shin, Cambridge University Press.

History of Logic:

- “Concise History of Logic”, by Heinrich Scholz, Wisdom Library / Philosophical Library.
- “A History of Formal Logic”, by Innocentius M. Bochenski.

History of Computation:

- “História da Computação – Teoria e Tecnologia”, by Cléuzio Fonseca Filho, LTR.

Logic for Mathematics:

- “Logic for Mathematicians”, by John Barkley Rosser, Chelsea Publishing Company.

Mathematics for Computer Science:

- “Introductory Logic and Sets for Computer Scientists”, by Nimal Nissanke, Addison-Wesley.
- “Matemática Discreta”, by Edward R. Schneiderman, Thomson Pioneira.

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Set Theory:

- “Teoria Ingênua dos Conjuntos”, by Paul R. Halmos, Editora Ciência Moderna.
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- “Elementos de Teoria Paraconsistente de Conjuntos”, by Newton C. A. da Costa, Jean-Yves Béziau & Otávio Bueno, Coleção CLE, Centro de Lógica, Epistemologia e História da Ciência, UNICAMP.