DELTA STATE UNIVERSITY

A guide to finding information in the Roberts-LaForge Library

Subject Guide to Mathematics

Browsing the Mathematics Collection

The call number heading for mathematics is QA. In the event that you do not find what you are looking for by simply browsing, please consult Merlin, the online catalog. Below is a table of the Library of Congress Classification scheme for math.

QA 1-43	General	QA 150-272.5	Algebra
QA 47-59	Tables	QA 273-280	Probabilities
QA 71-90	Instruments and machines	QA 299.6-433	Analysis
QA 75-76.95	Calculating machines	QA 440-699	Geometry, Trigonometry, Topology
QA 101-(145)	Elementary mathematics	QA 801-939	Analytic mechanics

Selected Reference Books

- **CRC Concise Encyclopedia of Mathematics** [QA 5 .W45 2003 Ref] – alphabetically arranged entries of definitions, formulas, figures, and tabulations. This work is more accessible and not as scholarly as some of the other math titles.

- **CRC Standard Mathematical Tables and Formulae** [QA 47 .M315 2003 Ref] – divided into broad chapters, this volume contains the essential reference material for all of the major disciplines in Mathematics. This edition is newly revised and contains a comprehensive index.

- **Encyclopedic Dictionary of Mathematics** [QA 5 .I8313 1987 4 volumes Ref] – 450 articles on advanced mathematical topics. This work is of a scholarly and theoretical nature and is intended for faculty and advanced students of mathematics.

- **Facts on File Dictionary of Mathematics** [QA 5 .F35 1999 Ref] – over 3,000 definitions of mathematical terms. Entries range from two or three lines to several paragraphs. Aimed at undergraduates. Illustrations included.

- **Penguin Dictionary of Mathematics** [QA 5 .P4425 2003 Ref] – Consisting of nearly 3500 entries, this work provides "concise explanations of mathematical terms" as well as entries on noted mathematicians are also included.

- **Table of Integrals, Series, and Products** [QA 55 .G6613 1994 Ref] – intended use by upper-level math students and mathematicians. One must become familiar with the authors' classification system of the tables in order to find anything. The material is set up by the order of outer function according to the authors' ranking. For more information, please see the preface material. Several pages are dedicated to how material is arranged.

Selected Databases

- **JSTOR** [Off-Campus] – Cover to cover full-text of selected mathematics journals and indexing for hundreds more.
- **Scirus** (1930-present) [Off-Campus] – scholarly and authoritative journal and Internet literature for computer science, math, biology, chemistry, and space. Includes access to the Society for Industrial and Applied Mathematics (SIAM) and the Mathematics Preprint Server.

The availability of online databases relating to mathematics is limited. In addition to **Scirus**, consult our general databases such as **Academic Search Premier** and **MasterFile**. These databases provide access to material from a variety of sources from different disciplines.

Selected Web Sites

- **Center for Innovation in Mathematics Teaching** [http://www.cimt.plymouth.ac.uk/] – designed to improve the state of mathematics teaching and learning. Sections include "Resources," "Courses and In-Service for Teachers," and "Research."

- **Math Forum** [http://mathforum.org/] – provides several different avenues for finding information. You can search by topic, resource type, educational level, and education topics. These four main groupings are separated into categories and subcategories so you can easily locate the Internet resource most helpful to you. As with most "searching" sites, **Math Forum** provides a keyword search utility in case you do not find what you are looking for in the subject section of the site.

- **Mathematical Association of America** [http://www.maa.org] – provides tables of contents and article summaries for its serial publications.

- **Mathematical Atlas** [http://www.math-atlas.org/welcome.html] – covers everything from foundations and history to complex analysis and combinatorics. This site also includes a "Layman's Guide to the Math Subject Areas."

- **Mathematics Articles** [http://www.math.hmc.edu/journalsearch/] – a searchable database of *Mathematics Magazine* and *College Math Journal*. Only citations and summaries are provided. No full-text.

- **Mathematics WWW Virtual Library** [http://www.math.fsu.edu/Virtual/index.php] – provides several forms of mathematical information available through the Internet. Topics include electronic journals, education, academic department web sites, newsgroups, etc. The section, *General Resources,* is where you will find subject listings for math Web sites.

- **MathWorld** [http://mathworld.wolfram.com/] – similar to *Mathematical Atlas* and *Mathematics WWW Virtual Library*, this site bills itself as "the web's most extensive mathematics resource … with contributions from the world's mathematical community."