Collection Policy: Mathematics Program
Last reviewed July 2007

Purpose

The Collection Development policy is used as a guide to shape relevant collections and to ensure consistency in collection development. The decision to purchase library materials is primarily the responsibility of the Collections Librarian in consultation with faculty in the Department.

This policy has been developed by Michael Skelton, the Collections Librarian, in cooperation with and endorsed by Kathleen Cameron, the Department Faculty Library Liaison and the Department Chair.

Collection Focus

- To support teaching, study and research up to the graduate level, as well as to support faculty research
- Areas of special interest must include: algebra, analysis & topology, applied mathematics, computer science, financial mathematics, geometry, operations research, statistics & probability. Within each specific area individual faculty members may make recommendations for items to be included in the collection.

Collection Scope

- **Language:** Primarily English language materials are collected. Important publications primarily in French, German, Spanish and Russian will also be considered either in their original language or in translation if available.

- **Place of Publication:** emphasis is placed on Canadian or American publishers first, then British and European

- **Dates of Publication:** emphasis is placed on recently published works

- **Chronological Period:** both contemporary and historical works are acquired

- **Geographical Areas:** no restrictions

- **Publishers:** works from scholarly and academic publishers are emphasized

Types, Formats, and Readership of Materials Collected

- Materials with academic-level readership are selected

- Web-based formats for reference sources, journals and indexing sources are preferred. Print and microform are considered for reason of cost, availability, expected use or long term access.

- Single copies of books in print formats are generally selected. Web-based formats are selected on a title by title basis, especially if the title is of interest to users at multiple Laurier campuses. Duplication of print across Laurier campuses is generally avoided.

- Excluded types include textbooks, abridgements, study aids, limited editions, works by vanity presses, juvenile, pamphlets, reprints and partial contents (eg. single issues of journals, electronic versions of single chapters of books). Titles already held by the Universities of Waterloo and Guelph may be excluded.

- The following items, as they apply to Mathematics, will only be considered for inclusion in the collection upon the request of the Mathematics faculty:

  - Proceedings of conferences, symposia, international congresses, etc.
  - Selected Canadian and American theses
  - Reports of non-governmental organizations such as research centres, university departments, etc.
  - Numeric and/or spatial data

Subjects Collected and Collecting Priorities

Collecting priorities are categorized into 3 levels:

- A=highest emphasis. The collection includes major published materials required to support the core teaching and research at the highest degree level offered by the Department.

- B=secondary emphasis. The collection includes a selection of materials to complement the discipline as a whole, although it may not be a primary focus for courses. This level is also used to identify other departments that may have identified aspects of this area as something of highest emphasis

- C=selective emphasis. Materials, including reference materials and basic journals and indexes are collected to introduce and define an area

Subjects Collected	Classification	Collecting Priority Under-graduate	Collecting Priority Graduate or Faculty
Statistics			
General	HA 1-28		
Theory and Method	HA 29-32		
Time-series analysis	HA 30.3	C	
Economics			
Risk Management	HD 61	C	
Finance			
Mathematical Models	HG106	B	A
Mathematical models. Mathematics of investment	HG4515.2-4515.3	B	B
Future markets. General works	HG6024.A3	A	A

Mathematics			
General	QA1-QA74	C	
Applied mathematics (i.e. Business and other fields)	QA 39.2	A	A
Popular Work, Elementary Education	QA77-QA149	C	
Algebra (General)	QA150-QA272	A	B
Combinatorics. Combinatorial Analysis	QA164-QA167.2	A	A
Group Theory	QA174-183	B	B
Number Theory	QA 241-247.5	B	
Commutative Rings and Algebras	QA 251.3		
Noncommutative Rings and Algebras	QA251.4		
Associative Rings and Algebras	QA251.5		
Nonassociative Rings and Algebras	QA252-QA252.5		A
Game Theory	QA269-QA272.5	A	A
Probabilities	QA273-QA273.67	A	B
Stochastic Processes	QA274-QA274.8	A	A
Theory of Errors. Least Squares	QA275	A	A
Mathematical Statistics	QA276-QA280	A	A
Order Statistics	QA278.7		A
Nonparametric Methods	QA278.8	A	A
Decision Theory	QA279.4-QA279.7	B	B
Time Series Analysis	QA280	A	
Interpolation. Sequences. Series	QA281-296		
Numerical Analysis	QA297-QA299.4	B	
Numerical Analysis	QA299.5	B	
Analysis (General)	QA299.6-QA439	A	
Calculus	QA303-QA316		
Functional Analysis	QA319-QA329.9		A
Theory of functions	QA331-355		
Differential Equations	QA370-QA380	A	A
Continuous Groups (of Transformation). Infinitesimal Transformations (topological groups)	QA385-QA387		
Analytical Methods Used in the Solution of Physical Problems	QA401-QA425		
Nonlinear Theories. Nonlinearity	QA427		B

Difference Equations & Functional Equations. Integral Equations. Calculus of Differences	QA431	B	A
Geometry (General)	QA440-QA800		
Elementary Geometry	QA451-QA469	B	
Projective Geometry	QA471		
Modern Geometry	QA473-QA475		
Trigonometry	QA531-QA539	A	
Algebraic Geometry	QA564-QA609		
Topology. Knot theory	QA611-QA614		
Infinitesimal Geometry	QA615-QA639		
Differential Geometry	QA641-QA670		A
Non-Euclidean Geometry	QA685		
Analytic Mechanics (General)	QA801-QA939		A
Dynamics	QA 843-871	A	A
Fluid Mechanics	QA901-QA930		
Elasticity. Plasticity	QA931-939		
Technology			
Applied mathematics. Quantitative methods	T56.8-58.3	B	B

Related Programs and Support

Consortial purchases with the TriUniversity Group of Libraries (Guelph, Waterloo, Laurier university libraries), with the Ontario Council of University Libraries, and on a national level, are pursued.

Last Updated: March 2008