



## **COLLECTIONS POLICY**

## **SUBJECT: MATHEMATICS AND STATISTICS**

### **General Purpose**

The general purpose is to collect materials in the subjects of Mathematics and Statistics to support undergraduate and graduate teaching, and research to the Ph.D. level. The M.Sc. program provides for emphasis in the fields of statistics and mathematics, with applications especially to the life sciences. The Ph.D. program emphasizes the fields of applied mathematics and applied statistics.

Collection development should be maintained at the level of current collecting intensity objectives by the effective utilization of funds available each year.

### **Languages**

Primarily English, but publications in other languages may be collected as dictated by research needs.

### **Geographic Areas**

Materials from any part of the world may be collected to support teaching and research programs, subject to the language limitation.

### **Chronological Limitation**

Material with a recent imprint date is preferred.

### **Types of Material Collected**

Monographs, periodicals, government documents, and research reports are emphasized in print or microform format, but other types of materials may be considered; e.g., CD-ROM, theses, electronic file, or audio visual.

### **Types of Material Excluded**

Normally manuscripts, rare books, patents and computer software are not acquired.

### **Access and Related Resources**

Many external resources can be identified through the Library's catalogue. A broad spectrum of additional information and collection resources may be made available through cooperative arrangements and be accessed via library servers, the Internet, document delivery, and interlibrary loan.

## Subjects and Collection Levels

Subject Area	Existing Collection Strength	Current Collecting Intensity	(Objective)
Algebra			
Abstract algebra	3E	3E	(3E)
Linear and multilinear algebra	3E	3E	(4E)
Theory of numbers	3E	3E	(3E)
Analysis			
Calculus	4E	3E	(3E)
Differential equations	4E	3E	(4E)
Functional analysis	4E	3E	(4E)
Theory of functions	4E	3E	(4E)
Analytical methods	4E	3E	(4E)
Analytical Mechanics	4E	3E	(4E)
Applied Mathematics			
Biomathematics	4E	3E	(4E)
Dynamical systems	4E	3E	(4E)
Operations research	4E	3E	(4E)
Optimization	4E	3E	(4E)
Applied Statistics			
Biometrics	4E	3E	(4E)
Environmetrics	4E	3E	(4E)
Sampling methods	4E	3E	(4E)
Survival analysis	4E	3E	(4E)
Arithmetic	4E	3E	(4E)
Geometry			
Algebraic geometry	3E	3E	(3E)
Differential geometry	3E	3E	(3E)
Topology	3E	3E	(3E)
Other (e.g., modern)	3E	3E	(3E)
Mathematical Statistics			
Experimental design	4E	3E	(4E)
Multivariate analysis	4E	3E	(4E)
Nonparametric methods	4E	3E	(4E)
Other	4E	3E	(4E)
Mathematics (general, incl. history, logic)	3E	3E	(3E)
Numerical Analysis	4E	3E	(4E)
Probability			
Stochastic processes	4E	3E	(4E)

For related resources see collections policies for Agricultural Economics and Business, Animal and Poultry Science, Biophysics, Chemistry and Biochemistry, Computing and Information Science, Economics, Physics, School of Engineering, Toxicology, and Zoology.

The attached Appendix indicates collection levels.

## Approval

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Department of Mathematics and  
Statistics

23 June 1995

T.D. Sauer  
Collection Development  
Division, Library

13 June 1995

## Appendix: Collection Levels

Six numeric codes establish a standard terminology to express assessments of the Existing Collection Strength (ECS) and Current Collecting Intensity Objective (CCI) levels. These codes reflect a broad national or international perspective relative to the universe of publications.

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Code	Label	Definition
0	Out of Scope	The Library does <b>not</b> collect in this subject area.
1	Minimal Level	A subject area in which few selections are made beyond <b>very basic works</b> .
2	Basic Information Level	A <b>selective collection</b> of materials that serves to introduce and define a subject and to indicate the varieties of information available elsewhere. It may include dictionaries, encyclopedias, access to appropriate bibliographic databases, selected editions of important works, historical surveys, bibliographies, handbooks, and a few major periodicals.
3	Study or Instructional Support Level	A collection that is adequate to impart and maintain knowledge about a subject in a systematic way but at a level of less than research intensity. The Collection includes a wide range of basic works in appropriate formats, a significant number of classic retrospective materials, complete collections of the works of more important writers, selections from the works of secondary writers, a selection of representative journals, access to appropriate machine-readable data files, and the reference tools and fundamental bibliographical apparatus pertaining to the subject. At the study or instructional support level, a Collection is adequate to <b>support undergraduate study and some graduate instruction</b> in master's degree programs.
4	Research Level	A collection that includes the major published source materials required for dissertation and independent research, including materials containing research reporting, new findings, scientific experimental results, and other information useful to researchers. It is intended to include all important reference works and a wide selection of specialized monographs, as well as a very extensive collection of journals and major indexing and abstracting services in the field. Pertinent foreign language materials are included. Older material is usually retained for historical research when pertinent. A collection at this level <b>fully supports doctoral and other original research by faculty</b> .
5	Comprehensive Level	A collection in which a library endeavours, so far as it is reasonably possible, to include <b>all significant works of recorded knowledge</b> (publications, manuscripts, other forms), <b>in all applicable languages</b> , for a necessarily defined and limited field. This level of collection intensity is one that maintains a "special collection"; the aim, if not the achievement, is exhaustiveness. Older material is retained for historical research with active preservation efforts.

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Eight alphabetic language codes amplify the ECS and CCI levels. As with Collection Levels, language coverage is viewed in the context of the universe of publishing rather than local perceptions of need.

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<b>Code</b>	<b>Definition</b>
<b>E</b>	English language material predominates. Little or no material in languages other than English is collected.
<b>P</b>	French language material predominates. Little or no material other than French is collected.
<b>V</b>	English and French materials predominate. Little or no material in languages other than English or French is collected.
<b>S</b>	Selected non-English material included in addition to English material.
<b>T</b>	Selected non-French material included in addition to French material.
<b>X</b>	Selected foreign language material included in addition to English and French material.
<b>W</b>	Wide selection of material in all applicable languages. No programmatic decision is made to restrict materials according to language.
<b>Y</b>	Material is primarily in one foreign language (excluding French or English). The overall focus is on collecting material in the local vernacular.

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