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# Guide to the Alfred L. Putnam Papers 1928-1977

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## Descriptive Summary

**Identifier** ICU.SPCL.ALPUTNAM

**Title** Putnam, Alfred L. Papers

**Date** 1928-1977

**Size** 3.5 linear feet (7 boxes)

**Repository** Special Collections Research Center
University of Chicago Library
1100 East 57th Street
Chicago, Illinois 60637 U.S.A.

**Abstract** As a professor in the Department of Mathematics, Alfred L. Putnam surveyed mathematics research in Eastern Europe and the Soviet Union, and developed the influential mathematics core requirement in the University of Chicago College. This collection contains lecture notes collected by Alfred L. Putnam, documenting the teaching of some of the most influential mathematicians of the 20th century.

## Information on Use

### Access

Open for research. No restrictions

### Citation

When quoting material from this collection, the preferred citation is: Putnam, Alfred L. Papers, [Box #, Folder #], Special Collections Research Center, University of Chicago Library

## Biographical Note

Mathematics professor Alfred L. Putnam was born in Dunkirk, New York on March 10, 1916. He was educated at Hamilton College (B.S., 1938) and Harvard University (Ph.D., 1942), where he studied under Saunders Mac Lane. After teaching at Yale for a short time, Putnam joined the faculty of University of Chicago as Assistant Professor of Mathematics in 1945, becoming a Professor Emeritus in 1987.

Putnam's work focused on mathematics education research and undergraduate teaching. During the Cold War, Putnam surveyed mathematics education and research in Eastern Europe and the Soviet Union. Interest in this area exploded after the launch of Sputnik, and Putnam's research led to the translation and broader publication of important Soviet research in mathematics.

During Robert Hutchins' term as University president, Putnam served as chair of the College Mathematics Staff. This group designed a mathematics core requirement that influenced mathematics curricula at the college level as well as elementary and secondary schools.

Alfred Putnam died of cancer at his home in Chesterton, Indiana on March 11, 2004.

## Scope Note

This collection contains lecture notes collected by Alfred L. Putnam during his work as a mathematician. Most of the notes are in bound, printed form, and others were mimeographed and collected in folders; some contain additional annotations or have sheets of handwritten notes inserted. The notes are arranged alphabetically by lecturer; where an editor, translator, or other contributor is known, the name is noted, as is information given about the date and location of the lecture

Represented here are many of the most influential mathematicians of the 20th century, including Abraham Adrian Albert, Emil Artin, Garrett Birkhoff, Richard Brauer, Henri Cartan, David Hilbert, Nathan Jacobson, Carl L. Siegel, and Hermann Weyl. In addition to the lecture notes, a copy of mathematician Harley Flanders's doctoral dissertation is also included.

## Related Resources

The following related resources are located in the Department of Special Collections:

http://www.lib.uchicago.edu/e/spcl/select.html

Albert, Abraham Adrian. Papers

Mathematics, Department of. Lecture Notes

Mathematics, Department of. Records

## Subject Headings

- Putnam, Alfred L.
- Mathematics -- study and teaching
- Mathematicians

## INVENTORY

**Box 1**
**Folder 1**
Albert, Abraham Adrian, "Solid Analytical Geometry," University of Chicago, 1947
**Box 1**
**Folder 2**

Artin, Emil, "Modern Higher Algebra," notes by Albert A. Blank, New York University, 1947

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**Folder 3**

Artin, Emil, "Modern Higher Algebra, Part III, Algebraic Theory, notes by Albert A. Blank, New York University, 1948

**Box 2**

**Folder 1**

Artin, Emil, "Algebraic Numbers and Algebraic Functions," Princeton University and New York University, 1950-1951

**Box 2**

**Folder 2**

Artin, Emil, "Elements of Algebraic Geometry," notes by G. Bachman, New York University, 1955

**Box 2**

**Folder 3**

Birkhoff, Garrett, "A First Course in Modern Algebra," n.d.

**Box 2**

**Folder 4**

Brauer, Richard, "Galois Theory," Harvard University, 1958

**Box 3**

**Folder 1**

Brauer, Richard, Mathematics 211-212, n.d.

**Box 3**

**Folder 2**

Cartan, Henri, "Algebraic Topography," edited by George Springer and Henry Pollak, Harvard University, 1949

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**Folder 3**

Hilbert, David, "Hilbert's Theoretical Logic," translated by George Gaines Leckie and Lewis M. Hammond, 1928

**Box 3**

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Jacobson, Nathan, "Theory of Rings," Mathematics 330, n.d.

**Box 4**

**Folder 1**

Kaplansky, Irving, "Topological Algebra," 1952

**Box 4**

**Folder 2**

Kaplansky, Irving, "Theory of Fields," Mathematics 322, University of Chicago, 1965

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Kaplansky, Irving, "Homological Dimensions of Rings and Molecules," University of Chicago, ca. 1960s

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Kaplansky, Irving, "Hilbert's Problems," University of Chicago, 1977

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Kaplansky, Irving, "Infinite Abelian Groups," n.d.

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**Folder 6**

Mackey, George W., "Theory of Group Representations," notes by James M.G. Fell and David B. Lowdenslager, University of Chicago, 1955

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Rademacher, Hans, "Analysis," Haverford College, 1952-1953

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**Folder 1**

Rademacher, Hans, "Elementary Mathematics from an Advanced Viewpoint," University of Oregon, 1954

**Box 5**

**Folder 2**

de Rham, Georges, "On Multiple Integrals," Hamburg, 1938

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**Folder 3**

de Rham, Georges, and Kunihiko Kodaira, "Harmonic Integrals," Institute for Advanced Study, Princeton University, 1950

**Box 5**

**Folder 4**

Schilling, O.F.G., "Modern Aspects of the Theory of Algebraic Functions," University of Chicago, 1938

**Box 5**

**Folder 5**

Serrin, James, "Foundations of Classical Thermodynamics," University of Chicago, 1975

**Box 5**

**Folder 6**

Siegel, Carl L., "Analytic Number Theory," notes by B. Friedman, 1945

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**Folder 1**

Siegel, Carl L., "Geometry of Numbers," notes by B. Friedman, New York University, 1945-1946

**Box 6**

**Folder 2**

Siegel, Carl L., "Analytic Functions of Several Complex Variables," notes by P.T. Bateman, Institute for Advanced Study, Princeton University, 1948-1949

**Box 6**

**Folder 3**

Siegel, Carl L., "Lectures on the Analytic Theory of Quadratic Forms," notes by Morgan Ward, Institute for Advanced Study, Princeton University, 1949

**Box 7**

**Folder 1**

Weyl, Hermann, "Structure and Representation of Continuous Groups," notes by Richard Brauer, Institute for Advanced Study, Princeton University, 1934-1935

**Box 7**

**Folder 2-3**

Whitney, Hassler, "Basic Concepts of Algebra," 1964

**Box 7**

**Folder 4**

Geometry of Numbers Seminar, Institute for Advance Study, Princeton University, 1949

**Box 7**

**Folder 5**

Flanders, Harley, "Unification of Class Field Theory," dissertation, University of Chicago, 1949