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# Guide to the University of Chicago Department of Mathematics Records 1892-1975



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## Descriptive Summary

<b>Identifier</b>	ICU.SPCL.MATHDEPT
<b>Title</b>	University of Chicago. Department of Mathematics. Records
<b>Date</b>	1892-1975
<b>Size</b>	31 linear feet (15.5. boxes)
<b>Repository</b>	Hanna Holborn Gray Special Collections Research Center University of Chicago Library 1100 East 57th Street Chicago, Illinois 60637 U.S.A.

**Abstract** The Department of Mathematics was founded with the University of Chicago, with coursework beginning in October 1892. The records of the University of Chicago's Department of Mathematics span the years 1894-1975, with a concentration of material documenting the department's early development from the 1890s-1930s. The collection contains correspondence, reports, biographical writings, publications, lecture notes, and other material related to administration, research and teaching in the department.

## Information on Use

### Access

Open for research. No restrictions.

### Citation

When quoting material from this collection, the preferred citation is: University of Chicago. Department of Mathematics. Records, [Box #, Folder #], Hanna Holborn Gray Special Collections Research Center, University of Chicago Library

### Historical Note

The Department of Mathematics was founded with the University of Chicago, with coursework beginning in October 1892. Early faculty included Oskar Bolza and Heinrich Maschke, appointed by department chair Eliakim Hastings Moore. The department was instrumental in organizing an international congress of mathematicians during the 1893 World's Fair, and later the American Mathematical Society. Early graduates of the department included influential mathematicians such as Gilbert Ames Bliss, Oswald Veblen, George D. Birkhoff and Robert Lee Moore. Beginning in the early twentieth century, the department granted a huge number of Ph.D.s - far more than any of its nearest competitors, leading to criticism of the quality of the program and its graduates. That many of these graduates went on to faculty positions

contributed to a perception that scholarship and research in the department was complacent and overly narrow.

Attempts to diversify and improve the quality of faculty, students and programs began under the administration of Gilbert A. Bliss, who succeeded Moore as chair of the department in 1927. The department continued to struggle, due in part to the demands of World War II, until Marshall Stone was brought in from Harvard to restructure and strengthen mathematics research at the university. Important faculty appointments during this time included Saunders Mac Lane, who went on to chair the department from 1952-1958.

## **Scope Note**

The records of the University of Chicago's Department of Mathematics span the years 1894-1975, with a concentration of material documenting the department's early development from the 1890s-1930s. This collection is divided into three series.

Series I: Correspondence, contains administrative memoranda and letters from 1931-1938, primarily incoming and outgoing correspondence of the department secretary, and of department chair Gilbert A. Bliss. The correspondence is arranged by year, then alphabetically by correspondent. It is important to note that the names given in the inventory do not represent all correspondents, but the beginning and end of the alphabetical range in each folder. Correspondents include faculty, prospective and current students, university administrators, and researchers at other institutions. Additional administrative correspondence from the year 1929 is found in Series II.

Series II: Administration, Course Material and Writings, includes a variety of material spanning the years 1892-1975. The correspondence, reports, course material, writings, and other documents in this series represent several administrative periods of the department, beginning with Eliakim Hastings Moore and ending with meeting materials collected by Saunders Mac Lane in the 1970s. This series contains research material, drafts and reprints for several biographical writings about early faculty, composed around the 1930s-1940s.

Series III: Lecture Notes, contains student notebooks for courses taught by faculty such as Oskar Bolza, Harris Hancock, Heinrich Maschke, George Abram Miller, Eliakim Hastings Moore, J.W.A. Young, Forest Moulton, Kurt Laves, Leonard Dickson, Howard Mitchell, and Gilbert A. Bliss. Spanning the years 1894-1910, this series documents teaching and student work conducted early in the department's history. Some of the lecture notes relate to astronomy courses, rather than mathematics. The notes are organized by student note-taker, with the names of courses and lecturers given when identified. Among the many students included, the best represented are Benjamin Luce Remick, Arthur Dunn Pitcher (Ph.D. 1911), and E.B. Skinner.

## **Related Resources**

Browse finding aids by topic.

Albert, Abraham Adrian. Papers

Mac Lane, Saunders. Papers

Mathematical Club. Records

Moore, Eliakim Hastings. Papers

Wilczynski, Ernest J. Papers

### **Subject Headings**

- Bliss, Gilbert Ames, 1876-1951
- Bolza, O. (Oskar), 1857-1942
- Dickson, Leonard E. (Leonard Eugene), 1874-
- Hancock, Harris, 1867-1944
- Mac Lane, Saunders
- Maschke, H. (Heinrich), 1853-1908
- Miller, G. A. (George Abram), 1863-1951
- Moore, Eliakim Hastings, 1862-1932
- Moulton, Forest Ray, 1872-1952
- Pitcher, Arthur Dunn
- Remick, Benjamin Luce
- Skinner, E.B.
- University of Chicago. Department of Mathematics
- Mathematics-Study and teaching (Higher)
- Mathematics-Study and teaching
- Mathematicians

### **INVENTORY**

#### **Series I: Correspondence, 1931-1938**

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Walter Adams - Irene Bassett, 1931

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Donald P. Bean - J. H. Butchart, 1931

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L. L. Caldwell - Edgar E. DeCou, 1931

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Pierre Deltour - W. W. Elliot, 1931

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Wilhelm Engelman - E. E. Githens, 1931

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Rollin D. Hemens - Charles H. Judd, 1931

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Florence P. Lewis - Katherine Mann, 1931

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H. G. Landau - Roberta McCann, 1934

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Ernest Julius Wilczynski, biographical writing by Ernest P. Lane, 1930

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Mathematical Association of America, Committee on Educational Testing, report to the Board of Trustees of the Pittsburgh meeting, 1934

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Gilbert Ames Bliss, reprints, ca. 1900s-1930s

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List of courses, instructors and students, 1894-1903

**Series III: Lecture Notes, 1894-1910**

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Benjamin Luce Remick, Introduction to Function Theory, Math 23, Prof. Oskar Bolza, Autumn 1894

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Benjamin Luce Remick, notes on Quaternions, Math 21, O. Bolza, Autumn 1894

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Benjamin Luce Remick, Hyperelliptic Functions, Math 56, O. Bolza, Summer 1897

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Benjamin Luce Remick, Invariants I, Math 51, O. Bolza, Winter 1897

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Benjamin Luce Remick, Invariants II, Math 52, O. Bolza, Winter 1898

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Benjamin Luce Remick, Theory of Abstract Groups, Math 59 I & II, O. Bolza, Summer 1899

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Benjamin Luce Remick, Abstract Groups III per DeCou, copy of notes taken by Edgar Ezeikiel DeCou, 1899, O. Bolza, Autumn 1899

**Box 20**

Benjamin Luce Remick, Calculus of Variations, Math 23A, Prof. Harris Hancock, Spring 1895

**Box 20**

Benjamin Luce Remick, Higher Plan Curves, Math 16, Prof. Heinrich Maschke, Autumn 1894

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Benjamin Luce Remick, Analytic Mechanics, Math 13, H. Maschke, Spring 1895

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Benjamin Luce Remick, Algebraic Surfaces, Math 17, H. Maschke, Spring 1895

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Benjamin Luce Remick, (Weierstrass's Theory of) Elliptic Functions, Math 24, H. Maschke, Winter 1895

**Box 20**

Benjamin Luce Remick, Modern Analytical Geometry, Math 53, H. Maschke, Autumn 1896

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Benjamin Luce Remick, Higher Plan Curves, Math 55, H. Maschke, Winter 1897

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Benjamin Luce Remick, Function Theory I & II (Theory of Functions) Math 47, H. Maschke, Winter 1897

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Benjamin Luce Remick, Algebraic Surfaces, Math 57, H. Maschke, Spring 1897

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Benjamin Luce Remick, Linear Differential Equations, Math 54, H. Maschke, Spring 1898

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Benjamin Luce Remick, Elliptic Functions, H. Maschke, Spring 1897

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Benjamin Luce Remick, Seminar on Permutation Groups, Prof. George Abram Miller, Summer 1898

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Benjamin Luce Remick, Projective Geometry, Math 36, Prof. Eliakim Hastings Moore, Autumn 1896

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Benjamin Luce Remick, (Theory of) Numbers, Math 61, E. H. Moore, Autumn 1897

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Benjamin Luce Remick, General Arithmetic I, Math 62, E. H. Moore, Winter 1898

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Benjamin Luce Remick, General Arithmetic II, Math 63, E. H. Moore, Spring 1898

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Benjamin Luce Remick, Theory of Numbers, Math 61, J. W. A. Young, Summer 1900

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Theory of Elliptic Functions, lectures by Oskar Bolza, undated

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Walter Wilson Hart, Calculus of Variations, lectures by Oskar Bolza, undated

**Box 24**

Howard Hawks Mitchell, Course 323, Analytic Theory of Numbers, 1927

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W.V. Lovitt, Integral Equations, lectures by Oskar Bolza, 1913

**Box 24**

H.E. Jordan, Theory of Numbers, lectures by Leonard Eugene Dickson, 1902

**Box 25**

Frank D. Frazer, Twisted Curves and Surfaces, lectures by Heinrich Maschke, 1902

**Box 25**

Cornelius Gouwens, An Expository paper on Kummer's Quartic Surface and the 16-6 Configuration, 1924

**Box 25**

Oswald Veblen and others, Advanced Integral Calculus, lectures by Eliakim Hastings Moore, Autumn 1900.

**Box 25**

Definite Integrals, lectures by Eliakim Hastings Moore, ca. 1901

**Box 26**

Arthur Dunn Pitcher, Differential Equations From the Standpoint of Lie, Gilbert A. Bliss, Summer 1908

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Arthur Dunn Pitcher, Theory of Functions of a Real Variable, Oskar Bolza, Summer 1906

**Box 26**

Arthur Dunn Pitcher, Theory of Functions of a Complex Variable, Vols. I and II, Oskar Bolza, Summer 1909

**Box 27**

Arthur Dunn Pitcher, Theory of Functions of a Complex Variable, Vols. I and II, Oskar Bolza, Winter 1910

**Box 27**

Arthur Dunn Pitcher, Projective Geometry, Vols. I and II, Heinrich Maschke, Summer 1906

**Box 27**

Arthur Dunn Pitcher, General Analysis, With Application to Differential Equations, E. H. Moore, 1908-1909

**Box 28**

Arthur Dunn Pitcher, Integral Equations in General Analysis, E. H. Moore, 1908- 1910

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Arthur Dunn Pitcher, Analytical Mechanics, Forest Ray Moulton, Autumn and Winter, 1908-1909

**Box 28**

Arthur Dunn Pitcher, Differential Equations with Application to Celestial Mechanics, Forest Ray Moulton, 1909-1910

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E.B. Skinner, lectures by Oskar Bolza, 1891-1892, 1899

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E.B. Skinner, lectures by Heinrich Maschke, 1899-1900

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E.B. Skinner, unidentified, 1899

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E.B. Skinner, mathematics and astronomy lectures by Heinrich Maschke and Kurt Laves, 1899

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E.B. Skinner, notes on Weber's Algebra, Vol. II, 1899

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E.B. Skinner, lectures by Oskar Bolza, 1900

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E.B. Skinner, ca. 1900

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E.B. Skinner, Differential Geometry, lectures by Heinrich Maschke, 1900

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E.B. Skinner, Celestial mechanics courses, lectures by Forest Ray Moulton, 1900

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E.B. Skinner, Linear Homogeneous Differential Equations, lectures by Heinrich Maschke, 1900

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E.B. Skinner, Weierstrass theory courses, lectures by Heinrich Maschke, 1900

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E.B. Skinner, Modern Analytical Geometry, lectures by Heinrich Maschke, 1900

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E.B. Skinner, Problem of Three Bodies, lectures by Forest Ray Moulton, 1900

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E.B. Skinner, ca. 1900

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E.B. Skinner, Calculus of Variations, lectures by Oskar Bolza, 1900

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C.C. MacDuffee, Synthetic Projective Geometry, lectures by Ernest J. Wilczynski

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C.C. MacDuffee, Function Theory, lectures by Gilbert A. Bliss, 1920-1921

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Oswald Veblen, Advanced Integral Calculus, lectures by Eliakim H. Moore