In the evolution of the modern library, the most natural division of work has been along functional lines. A division of labor has been made between the technical processes of procuring and preparing a book for use, and the services to the reader. Cataloging and classification belong in the first category of this division of labor. Because one of the chief problems of any library has been the arranging of its materials for accessibility to the users, problems of cataloging and classification have existed throughout the history of libraries. Therefore, training in cataloging and classification has been included, in one form or another, in the curricula of library schools since their advent.

The purpose of this paper is to present the role that cataloging and classification have taken in the curriculum of the University of Illinois Library School from September, 1893 to September, 1949. Much of the credit for the organization and execution of the classes in these subjects for the period from 1912 to 1949 is due to the unceasing work of Professor Ethel Bond (now retired). Her devoted and faithful service will be long remembered by those of us who were her students in cataloging and classification, and her influence will be continuing in the field of librarianship.

The History

In September, 1893, when the Illinois State Library School was established at the Armour Institute of Technology in Chicago, a course in cataloging was included in the curriculum(1). The texts used for the course were Dewey's Library School Rules, Cutter's Rules for a Dictionary Catalog, and the American Library Association's List of Subject Headings. Since the Armour Institute library had a classified catalog at that time, instruction was first given in that form. The dictionary catalog was briefly touched upon.

In the following year, a course in "Comparative Classification" offered a comparison of classification systems including Perkins, Cutter, Schwartz, Fletcher, Dewey and Rowell(2).

In September, 1897, the University of Illinois established a School of Library Economy incorporating the Library School that had been conducted at the Armour Institute. In the opening year at Urbana, work in cataloging and classification was included in the course entitled "Elementary Library Economy". "The Dewey decimal classification is taught by classifying books... After each lecture, students are required to catalog independently a number of books. The class is taught to modify the rules to suit different types of libraries. Lectures are given on forms of card catalogs and mechanical accessories. Library handwriting is practiced in connection with all the work"(3). Also offered was "Advanced Library Economy" which included a comparative study of classification schemes and cataloging codes.
In 1910, cataloging and classification were separated, making two courses. A course in "Classification" offered a study of book classification with special emphasis on practice in using the Dewey classification scheme. Four class hours were to be given to Cutter expansion classification and four to the assigning of book numbers by the Cutter-Sanborn alphabetic order tables and by other special tables. "Cataloging" was to be a study of dictionary cataloging, including the assigning of subject headings followed by a briefer study of classed cataloging. Each class period involves the usual two hours work of preparation, which is spent chiefly in cataloging books from a special collection of uncataloged books kept for the purpose. Each student makes a sample catalog of 340 representative books. The last month of the course consists of 60 hours of cataloging for the University Library. A course in "Advanced Classification and Cataloging" was described as "a comparative study of the principal systems of book classification and rules for cataloging books." In 1911, the course in "Classification" was altered to include subject headings also.

Although the name had been changed to "Comparative Classification and Cataloging" in 1916, the description of the advanced course was the same as the former "Advanced Classification and Cataloging." Three courses in the field were still listed in 1924-25. Shelf listing was now discussed and practiced in connection with classification work. The content of the course in "Cataloging" was much the same as was found in the earlier course, but the ordering and use of Library of Congress cards had now become important to libraries and had been added to the training course. In 1925-26, subject headings were considered in the course for cataloging, and the advanced course again became known as "Advanced Classification and Cataloging." In 1931-32, subject headings were again placed in the classification course. In 1933-34, "Advanced Classification and Cataloging" was made continuous throughout the first and second semesters and "bibliographic and research problems in cataloging" were added to the previous content of the course.

The 1935-36 curriculum introduced a brief study of the Library of Congress classification into the "Classification" course. On the advanced level, cataloging and classification were separated to make two courses--"Advanced Cataloging", a study of the "comparative rules for cataloging books; bibliographic and research problems in cataloging" and "Advanced Classification", a "comparative study of systems of subject headings and classification with emphasis on the Library of Congress system." The cataloging classes of 1937-38 studied dictionary cataloging according to the Library of Congress practice. In the second semester, there were two sections of cataloging. One section emphasized college and university library cataloging problems while the other emphasized public library and high school library cataloging.

The year 1944 found a curriculum change. Cataloging and classification were combined into one course required of all first-year library students. This course included an introduction to the principles of cataloging and classifying books and assigning subject headings, with practical applications to many types of books. The basic reference books used by catalogers were studied and a brief introduction to the Library of Congress classification was included. A second semester elective was called "Problems in Cataloging and Classification." This course was a continuation of the first semester course and emphasized the cataloging and classification of special types of material and the administrative problems of the catalog department. The cataloging of maps, music, dissertations, serials, monographic sets and other material requiring descriptive notes, various types of analytics, and debatable entries were included. Practice in filing into the catalog and in the use of the Library of Congress classification was given.
Two courses were offered in this area for graduate students (16). "Advanced Classification" considered the history and philosophy of classification, a comparative study of classification systems with special emphasis on the system used by the Library of Congress, a critical study of subject headings, and individual studies of special administrative problems or of the problems of classification of special types of material. "Advanced Cataloging" included the history and philosophy of cataloging, a comparative study of cataloging rules and of rules for filing in a catalog, the cataloging of more difficult types of material such as incunabula, rare books, manuscripts and archives, and the administrative problems involved in cataloging.

Present Courses Offered

Within the library profession, the general discontent with education for librarianship during the years 1939-47 was marked by a reappraisal of library schools' curricula. While changes in curricula were keyed largely to current demands, library schools attempted to keep in mind in their revision policies the necessity of maintaining high standards with a view toward permanent improvement in library education leading ultimately to improvement in library service. In 1948 following this trend in education for librarianship, a basic change occurred in the Illinois curriculum. The University of Illinois Library School now offers work on the undergraduate level and on the graduate level for the master's and doctor's degrees. Classes in cataloging and classification are to be found in the work for all three degrees.

Library Science 252 (Organization and Operation of Libraries II) is "concerned with the organization and arrangement of the materials in a modern library. Cataloging methods and classification schemes are studied and practiced" (17). This is an undergraduate course (open to juniors or seniors) offered during the second semester and during the summer session. It is one of the core courses required of all students who enter the graduate courses in Library Science. Before registering in the course, students have had an introduction to the catalog, to the Dewey decimal classification, to the shelf list, and to the problems of filing in a catalog, in Library Science 201 (Use of Books and Libraries). During the past year, the first under the new curriculum, this introductory course has not been common to all students enrolled in Library Science 252 because of the time that it takes a program to start operating according to sequence. Some students enrolled in the two courses concurrently. Others are from outside the Library School and have had or are enrolled in only this one course.

Following is an outline, by class periods, of Library Science 252 as presented in the past year:

A. Cataloging and Classification

1. Introduction to course, explanation of purpose and of books and materials.


3. Assign problem on classification of books in 400, study of classification and subject headings to be used.
4. Assign problem in 800’s, classify and assign subject headings when needed.

5. Assign problem in classification and subject headings for 940-999’s.


10. Titles of honor and address. Make necessary cross reference cards.

11. Pseudonyms; change names.

12. Anonymous works; works published with initials or asterisks in place of an author’s name.


15. Review of sacred books and anonymous classics.


17. Review books classed in 400, 800, 940-999.

18.-25. Classify and assign subject headings:
(a) 700-719, 950-959 (b) 300 (c) 500 (d) 600 (e) 700
(f) 100-000 (g) review (h) building numbers review.

26. Entry under editor or compiler as author.

27. Collections entered under title.

28. Catalog and classify works requiring contents (single authors; multiple authors).

29. Works requiring simple notes, e.g., series notes, bibliography notes.

30.-32. Corporate entries: government bodies, institutions, societies, and miscellaneous.
33. Filing.


B. Services to readers.

35.-38. Lending: registration of borrowers; loan procedures and records; charging systems.

39.-44. Assistance to readers; information services, including telephone, reader's questions, reader's advisory service, teaching the use of libraries.

During the fall semester, the course offered for graduate students is Library Science 407 (Cataloging). This course is concerned with "the cataloging of special types of library materials such as maps, music, pamphlets, dissertations, serials, monograph sets, films, records, etc.; administrative problems of the catalog department(18). More difficult types of cataloging problems are studied in this class than in L.S. 252. Some practical work is done in the course, but the theoretical and administrative aspects of the work are also discussed and considered. An outline of the course as given during the year 1948-49 follows:


2. Study of the L.C. Rules in class.

3. Same work with different titles.

4. Debatable entries.

5. Sequels.

6. Dissertations.

7. "Bound with" analytics.

8.-10. Pamphlets; caption title; cover-title notes; readings on administrative decisions in regard to pamphlets; talk by a member of the U. of I. Catalog Department whose work is largely with pamphlets; assign readings on maps.

11. Cataloging of maps; discussion of readings and policy; visit U. of I. map library.

12.-13. Music cataloging; readings; Music Library Association rules; examination of music scores to get an understanding of problems; talk by music cataloger of the U. of I. Library.


15. Series notes; added entries for series.

16. Contents for a single author's works; title and subject analytics; policy depending on type of library.
17. Review of collections under title; editor or compiler as author. Contents for such books.

18. Analytics for books with multiple authorship. Various types of analytics, e.g., use of unit card and of "in analytics".


20. First filing problem.

21. Sets of author's works.

22. Analytics of sets.

23. Title page review of analytics and sets of author's works.

24. Introduction to problems involved in serials.

25.-26. Monographic sets, University studies, main entries and analytics.


29. Early English Text Society and other publications with analytics.

30. "In" analytics of serials.


32. Yearbooks, annuals, serials which may be cataloged with checking cards.

33.-35. Cataloging of periodicals. Students are divided into groups of three and each group assigned the title of a periodical. They are to examine a sampling of the volumes of the set to try to find changes of titles, titles absorbed or merged with other titles, changes in editors, or any other information which might affect the cataloging of the set. They then make a catalog card using this information, compare their findings with cards in the U. of I. catalog, the Union Catalog, and the Union List of Serials. A corrected card for each periodical is shown to the class by means of a baloptican.

36. Newspapers, visit to newspaper collection after talk by librarian of the collection at the U. of I.


38.-45. Reports by students on cataloging problems in which they were especially interested. Most of these reports were given orally without a prepared paper to be handed in. A few of the brief bibliographies prepared by the students in connection with their reports were mimeographed for the use of other students in the class.
In the spring semester, Library Science 408 (Classification and Subject Headings) is offered. This course is thus described by the Library School catalog: "Development of systems of classification for books. Problems in classification and subject headings based on the use of the decimal and the Library of Congress classifications and the Library of Congress subject headings; classification systems for special libraries; modification of classification systems; shelf listing; book numbers; administrative problems of classification and subject heading work" (18).

During the past year, problems involving 10-12 books were prepared for the students. The students analyzed the books, and then assigned subject headings and Dewey and Library of Congress classification numbers. This gave them an opportunity to make a comparison of the two schemes. Classification schemes and subject heading lists for special libraries of music, art, religion, government documents, public administration, and law were studied through the media of special reports given by the students. Administrative problems such as reclassification, methods of keeping subject headings up-to-date, and division of work were studied. An outline of the course for the past year follows:

1. Survey of classification systems in use or formerly used in American libraries.
2. Survey of subject headings, development of accepted lists.
27. Review.
28. Subject cross references—"see" and "see also".
29.-32. Problems of books classed in 300's in Dewey which are classed from A-Z in L.C.
34. Bliss and other general classifications.
35.-43. Administrative problems, such as selection of system of classification for various types of libraries based on the comparative study of Dewey and L.C., reclassification, classification schemes for special libraries, and student reports.

Library Science 426 (Advanced Classification and Cataloging) is designed primarily as a course for those students who completed a B.S. in L.S. course under the old program or for those with a wider background of cataloging and classification than the average beginning graduate student. The course includes the "history and philosophy of classification and cataloging of books; comparative study of classification systems, of lists of subject headings, and of cataloging rules; cataloging and classification of more difficult types of materials; administrative problems of catalog departments" (20). Most of the problems
discussed are from the historical, theoretical or administrative viewpoints. Special reports are made by the students and a term paper on some specialized aspect is required. Reports are made by members of the University of Illinois Library staff upon aspects of cataloging and classifying specialized types of material, such as incunabula, rare books, and 16th century books.

The order of presentation of material during the 1948-49 year was as follows:

1. Introduction to classification, assignment of readings on the development of classification systems.
2. Reports on readings, assign readings on subject headings.
3. Subject headings, theory of use and development of accepted lists, modifications for special situations and for special libraries, maintenance of up-to-date headings, assign readings on the history of cataloging, examination of cataloging rules.
5. Problems in L.C. classification and subject headings.
7. Discussion, assign readings on manuscripts.
8. Discussion, assign readings on incunabula.
9. Talk by the U. of I. librarian of the Rare Book Room on rare books and incunabula, assign readings on 16th century books.
10. Talk by the U. of I. cataloger of 16th century books on the special problems involved in the cataloging of such books, assign brief individual reports to the students on special topics.
11. Reports on microcards, upkeep of the catalog.
12. Reports on centralized cataloging, professional and non-professional duties in the catalog department.
13. Reports on subject bibliographies versus subject headings, pamphlets, government documents--pro and con their cataloging, assign readings on archives.
15. Reports on term projects.

Library Science 453 (Problems in Cataloging and Classification) is offered for doctoral candidates. This course attempts "an analysis of the major technical and organizational problems of cataloging and classification. Not a course in methods but the careful study of the best and latest thinking through reading and discussions of the persistent problems in this area of librarianship. Individual studies on selected topics"(20).

The Materials for Teaching

Books that are basic to the study of most of these subjects are American Library Association, Catalog Rules; Library of Congress, Rules for Descriptive Cataloging; Dewey's Decimal Classification (14th ed.); Library of Congress, Subject Readings (4th ed.), and A.L.A. Rules for Filing Catalog Cards.

Ordinarily, students purchase their own copies of the cataloging and filing rules. Until June, 1949, copies of the Dewey classification and L.C. subject heading lists were rented from the Illini Union Bookstore, affiliated with the University. Rental charges were approximately $1.50 per volume per semester. As several students were often able to share the same volume, the cost for each student was low. In June of 1949, the bookstore transferred the books to the
Library School and no rentals will now be necessary. Copies of the Library of Congress classification schemes are available through the Library School Library.

Problems are selected from the Library School cataloging collection of books. Some 5,760 volumes have been accessioned since 1904, when the collection was first established. Subtracting withdrawals during that period, about 5,400 volumes still remain. Most of the volumes are acquired from the duplicate copies available in the Exchange Division of the Acquisitions Department in the University of Illinois Library. A few books have been ordered from dealers. The Library School cataloging collection is stored in the Library's main stacks.

Five files of cards for these books are maintained. The shelf list (arranged in classification number order) and the author file (in alphabetical order) are permanent records of the collection. Usually cards are not pulled from these files unless the books they represent have been withdrawn. For books that have been withdrawn from the collection, only the shelf list card is retained and it is filed alphabetically by author.

The subject file is arranged in shelf list order as a classed catalog. From this file cards are removed preparatory to bringing up the books to be used for classification problems. These cards are kept out of the file as long as the books are being used for problems. Measurement of the number of cards in the subject file (using the standard of 1 inch equaling 100 cards) produced the following estimate of books under each of the ten main Dewey class divisions: 000-099, 155; 100-199, 255; 200-299, 250; 300-399, 1300; 400-499, 135; 500-599, 350; 600-699, 595; 700-799, 265; 800-899, 1050; 900-999, 850.

Cards in the problem file are arranged according to the problem represented by the book. Books from the main stacks are also represented in this file if they are especially good examples of the problem being illustrated or if there are too few illustrations of that particular problem in the Library School collection. Headings under which problems are arranged in this file include: Added entry; Analytics- Bound with; Analytics, In; Analytics-Multiple authorship; Anonymous books and phraseonyms; Anonymous classics; Attributed authorship; Changed titles; Classical and Oriental names; Contents; Continuations; Corporate entry-Government; Corporate entry-Institution; Corporate entry- Miscellaneous; Corporate entry-Society; Cover-title and caption title; Debatable entry; Editor or compiler as author; Indexes, keys and supplements; Initials; Maps and atlases; Monographic sets- Government publications; Monographic sets-University studies; Music; Notes; Periodicals; Prefix and compound names; Pseudonyms and changed names; Sacred books; Series; Sets of author's works Simple name, married women's names, unused forenames; Theses and dissertations; Title, Entry under; Title page reviews; Titles of honor and address; Yearbooks, annuals, etc. Cards may be taken from this file to be used with the problems.

The fifth file is arranged according to the Library of Congress classification scheme. On these cards, the Library of Congress numbers are analyzed. Measurement of the cards in this file showed the following distribution of cards by Library of Congress divisions: A, 40; B, 365; C, 215; D, 265; E, 165; F, 165; G, 165; H, 66; J, 165; L, 290; M, 80; N, 120; P, 965; Q, 320; R, 120; S, 120; T, 265; U, 55; V, 40; Z, 128.

Cards that have been removed from the subject, problem, and Library of Congress files for use with the books during a semester are marked with the year (e.g. 1948-49) before they are returned to the file, as an indication of when that particular book was used as a problem.
Other types of problems for which books are not necessary are used in the courses. These involve giving the student much of the information that he will need to classify or to catalog the book described. An example of this practice is the preparation of annotated classification problems. Annotations from the A.L.A. Booklist are edited to give the student enough of the idea of the book for him to be able to use the tools to classify the book and assign subject headings. An example from an annotated classification problem follows:

Jones, Chester Lloyd. Guatemala, past and present. 1940.
A survey of Guatemala covering its history, economics and social conditions, written by an economist well versed in matters relating to Central America.

For classification problems in which books are used, a mimeographed sheet is usually prepared to provide a convenient form on which the student can record the results of his work. For some cataloging problems, sample title pages with the necessary information for cataloging are supplied. Other problems reproduce only the title page, and the student secures the additional necessary information from reference works.

Another type of problem is used to provide practice in corporate entries. To give the student an opportunity to supply the corporate headings for a number of examples, sheets with about fifteen problems are provided. The student is expected to supply the heading but not to catalog the work.

Reading lists and other aids for the students have been mimeographed. These are designed to give the students a broader background in the subject, to interest them in further exploration of the subjects mentioned in class, and to facilitate their understanding of and their work in classification and cataloging. There are other facilities of the University Library and Library School that are available to the students of cataloging and classification. The Library School Library contains a collection of more than 18,000 bound volumes. It has been estimated that about 600 of them pertain to cataloging and classification. A haloptican for visual instruction is available, as are motion picture and slide films.

Members of the staff of the University Library are cooperative in rendering their services to the instruction in cataloging and classification. They describe and explain the work of their special fields—the handling of periodicals, newspapers, incunabula, rare books, 16th century books, etc.—in relation to the classroom instruction. Inspection trips are sometimes made to the Card Division to see how cards are typed for the catalog or how they are reproduced, and to the Catalog Department to see the actual working of such a department.

Besides the instructor of the courses, a professional assistant and a student assistant help perform the work in connection with the courses and in maintaining the book collection. The professional assistant, who also works for other members of the faculty, helps with the selection of problems, prepares bibliographies and reading lists, keeps files of cards and mimeographed material up-to-date and in order, catalogs and adds books to the collection, prepares classification and catalog problems, helps prepare examinations and reviews, does the first revision of the students' work, and gives individual help to the students. The student assistant performs clerical duties such as filing cards, bringing the books from the stacks, and reshelving the books. Typing and mimeographing are done by the faculty secretaries.
Conclusion

As noted earlier in this paper, cataloging and classification have always held a position in the curricula of library schools. Although concepts are changing in regard to the amount and nature of the training, some work in cataloging and classification is still required of students following prescribed courses of study in library training. At the University of Illinois Library School successive changes in the cataloging and classification courses through the years have been made as reported in this paper (just as other changes may be expected in the future). In addition there has been presented here a detailed description of the organization of the courses presently offered here and of the teaching methods currently employed. In brief, this constitutes a case study of how these essential courses have been handled at one library school.

FOOTNOTES


(2) Ibid., p. 17.

(3) University of Illinois State Library School, Circular of Information, 1897-98 (Urbana: University of Illinois, 1897), pp. 8-10.


(5) Ibid., p. 22.

(6) Ibid., February 20, 1911, No. 25 (1911), p. 21.


(16) Ibid., p. 15.
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