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ABSTRACT

This policy statement provides the guidelines for the development of library collections and coordinates all collection development efforts of the California Polytechnic State University library. It discusses clientele and user needs, subject boundaries, general priorities and limitations, and categories of materials. It defines the collections held by the various library departments and their collection policies. Collection development profiles in all subject areas represented in the library's collection are also provided, including the level of collection intensity for each area. (Author/PM)

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COLLECTION DEVELOPMENT POLICY

Robert E. Kennedy Library
California Polytechnic State University
San Luis Obispo, California 93407

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COLLECTION DEVELOPMENT POLICY

This Collection Development Policy has been formulated to provide guidelines for the development of the University Library's collections. The setting of guidelines for library collections is a major step toward coordinating collection development. Such a policy must be flexible to allow changes when needed.

This policy informs faculty, administrators, staff, and users as to the scope and nature of the plans for continued development of the library's resources. The specificity of the policy aids both Library Contacts and the Acquisitions and Collection Development Department in book selection, in the establishment of parameters for the approval plan, gift processing, deacquisitions, and budgeting.

CLIENTELE AND USER NEEDS

CLIENTELE:

The University Library seeks to serve the needs of the following clientele:

1. Registered students, undergraduate and graduate
2. Faculty, active and emeriti
3. Summer session, extension and external degree program faculty and students
4. Administrators and staff members, active and emeriti
5. Faculty and students within the CSUC System
6. Courtesy Card holders as determined by the University Library Director

Beyond the campus, there is an additional obligation on the part of the University Library, within its available resources, to serve as a resource unit for users in the Central Coast area, and to work cooperatively with other libraries and networks in the sharing of materials.

USER NEEDS:

The University Library procures within its financial capabilities multimedia library materials (books, periodicals, maps, pamphlets, newspapers, microforms, manuscripts, audio-visual materials, government documents, etc.) required to meet the needs of its users. It seeks primarily:

1. To procure and make available materials needed for all instructional programs of the University, including those reference and bibliographic tools required for preparing course materials and fulfilling general information needs.
2. To procure and make available materials basic to student research, and to faculty research.
3. To preserve all important materials relating to the history and development of the University.

The University Library also seeks within its available resources:

1. To procure and make available library materials of general information in subject areas not covered by instructional programs.
2. To procure and make available materials for general and recreational reading for both students and faculty.

SUBJECT BOUNDARIES OF THE POLICY

A collection development policy is contingent upon its subject boundaries. These boundaries include such factors as the curricular needs of the University; selection criteria for specific areas; recreational reading needs for students; etc. The boundaries, however, must be characterized by the resiliency that allows the policy freedom to expand, and, at the same time, to adjust to current demands. A dynamic collection policy assumes librarians will be constantly aware of lead time for future programs and courses in which the Library will be involved in the acquisition of materials for these programs. With these factors in mind, the subject boundaries must reflect the principle that a collection is built on its present strengths and should never sacrifice those strengths.

California Polytechnic State University is particularly noted for its occupationally centered curricula in such fields as agriculture, architecture, business, engineering, and science and mathematics which are integrated with closely-related career oriented or supporting fields of communicative arts, education, humanities and social sciences.

REGIONAL, NATIONAL, OR COOPERATIVE COLLECTION AGREEMENTS WHICH COMPLEMENT OR OTHERWISE AFFECT THE INSTITUTION'S POLICY

The University Library does not have any cooperative collection agreement. However, the University Library's collection is enhanced by interlibrary loan service with national and California State libraries including libraries within the CSUC System, UC Berkeley, UCLA, and the Total Interlibrary Exchange (TIE) System. In addition, the Library provides direct terminal access to several large computerized data bases covering many subject areas.

Other library resources available within San Luis Obispo County are: Cuesta College Library, the San Luis Obispo City-County Library, the County Law Library, the LDS Genealogical Library, and the Atascadero State Hospital Library.

GENERAL PRIORITIES AND LIMITATIONS GOVERNING SELECTION

A. The primary purpose of collection development for the University Library is the acquisition of materials:

1. Needed to supplement classroom instruction.

2. Essential to faculty members in preparation for instruction, and for keeping abreast of developments in their teaching fields.
3. Basic to student research which is associated with the writing of senior projects and graduate theses.
4. Basic to faculty research.
5. Needed for the general and recreational reading of both students and faculty.

B. The emphasis is on English language materials. Foreign language titles, except those supporting the foreign language curriculum, are acquired on a selective basis.

C. No limitation is made on the geographical scope as long as the subject area is appropriate to the collection. In general, most materials collected are published in English speaking countries.

D. The emphasis is on current acquisitions as (1) the Library tries to provide up-to-date material in all curricular areas; (2) it is more economical to purchase books and periodicals at current prices when they are readily available than to fill in gaps from the more expensive and elusive out-of-print market.

E. The University Library receives current English language books published in the United States or foreign books in English distributed by American firms for certain subject areas through an approval plan. This plan allows for the automatic selection of books according to subject profiles.

F. Since the University Library's funds do not permit the purchase of all materials for teaching, extension and research, duplicate copies of books and subscriptions to journals are acquired only when (1) heavy demand and continuous use are demonstrated, (2) an instructor intends to make extensive assignments in books to be placed in the Limited Loan/Reserve Room.

G. The University Library does not purchase library materials for indefinite retention by individuals, academic departments or administrative offices.

H. Gifts are added to the collection using the same criteria as purchased materials.

POLICIES GOVERNING CATEGORIES OF LIBRARY MATERIALS

The Library's major category of materials, the general collection, contains a wide selection of monographic and serial publications. This collection provides an in-depth selection of general and specialized materials that are required to support the university's curriculum and co-curricular activities. In addition to the general collection, the Library collects and maintains other categories of materials. The

policies that follow govern these categories, which may also be governed by the subject area profiles. They are grouped by library department where applicable.

REFERENCE DEPARTMENT

The reference collection includes those materials which provide both basic and in-depth information sources for all the curricula supported at Cal Poly, as well as subjects of current interest not directly within these academic disciplines.

Titles selected for reference collection are those intended by their arrangement and treatment to be consulted for definite items of information rather than to be read consecutively. Their use is usually restricted to the library building.

GENERAL REFERENCE COLLECTION

This collection is limited to only those works essentially reference oriented. The department periodically updates and weeds the collection to assure its relevance. Included in the collection are: bibliographies, indexes, encyclopedias, dictionaries, handbooks, manuals, directories, guides, yearbooks, gazetteers, as well as the categories listed below:

CURRENT PERIODICALS

The current periodicals collection contains a wide selection of titles designed to meet the curricular needs of the instructional departments, as well as a number of popular, general titles. New requests for periodical subscriptions are reviewed by the Periodicals and Serials Selection Review Committee in order to select those titles considered most appropriate for the collection.

Many of the periodical backfiles are maintained on microfilm (when available) rather than in bound volume format in order to conserve stack space and binding funds. The original physical volumes are retained for those titles that have a heavy emphasis on color, illustrations, photographs, and other non-textual matter. A microfilm copy is sometimes maintained in addition to the physical volumes if a title is heavily used or subject to theft and/or mutilation.

NEWSPAPERS

The newspaper collection contains a select number of titles from the local and Central Coast area, major California cities, some major American cities on a regional representative basis, a few of the major foreign papers, and some subject-oriented titles that are related to the curriculum. In addition to these geographical and subject content criteria, newspapers are selected for their journalistic quality, accuracy, and reliability. Newspapers are retained for a period of one to six months. Because of relatively poor paper quality and bulky format, backfiles are maintained on microform when available, and for those titles for which an index is published. Indexes to newspapers in the collection are obtained, when available.

MICROFORMS

The microform collection contains large sets of materials in both microfilm and microfiche formats, which would be too bulky and/or expensive to acquire and/or maintain in their original formats. Many of these materials are only available in a microform format.

- A. Microfilm. This collection primarily contains backfiles of periodicals and newspapers, as well as a small number of select monographic titles, including dissertations.
- B. Microfiche. This collection contains large, major sets or titles, that are closely related to the curriculum, such as ERIC, Library of American Civilization, Human Relations Area Files, Envirofiche Collection, the Newsbank Urban Affairs Library, and others.

COMPUTER MANUALS

The collection of computer manuals in the Reference Department includes manuals published by IBM and other companies, such as Burroughs, Honeywell, NCR, UNIVAC, Control Data, etc. The collection was established by joint agreement between the University Library and the Computer Center.

CORPORATE ANNUAL REPORTS

The department maintains an up-to-date collection of corporate annual reports, which is supplemented by individual requests from faculty and students.

COMPANY PRODUCT CATALOGS

The department maintains a representative collection of up-to-date company product catalogs related to subject areas, e.g., architecture, construction, engineering, and supplies for industry and interior design.

STANDARDS AND SPECIFICATIONS

The department collects the standards of many technical trade and professional associations related to the majors offered at this University.

VERTICAL FILE

The department maintains a limited collection of vertical file items, including pamphlets and brochures, which are of current or local interest. Material in the vertical file is purged frequently.

TELEPHONE DIRECTORIES

The department maintains a collection of telephone directories from the local office of the Pacific Telephone Company. Coverage includes:

1. all California cities and counties,
2. major cities in the United States and selected foreign countries,
3. some smaller cities located on the West Coast, as requested by patrons.

COLLEGE CATALOGS

The college catalog collection contains the catalogs of all the University of California and CSUC campuses, many of the private California colleges and universities, and a select number of California community colleges. Catalogs from the colleges and universities in the other states, particularly the Western states, are extensively collected, as well as from a select number of foreign schools.

The catalogs are kept current. Two copies of the catalogs of the more popular California schools are retained. A microfiche edition of college catalogs is also available, along with hard copy indexes to the fiche by school name and geographical location.

GOVERNMENT DOCUMENTS AND MAPS DEPARTMENT

The University Library is a selective depository for both United States and California State Government publications. The status of the University Library as a selective depository makes certain categories of government publications available free of charge. Publications are selected on the basis of the instructional and research needs of the University. The documents collection covers a broad spectrum of subjects, both as a result of its library depository status, and through the acquisition of non-depository materials.

U.S. FEDERAL GOVERNMENT PUBLICATIONS

Federal depository publications are received from the Assistant Public Printer (Superintendent of Documents), along with a selection of titles indexed in Congressional Information Service Index and American Statistics Index.

NATIONAL TECHNICAL INFORMATION SERVICE PUBLICATIONS

A. The University Library subscribes to NTIS publications under the SRIM (Selected Research in Microfiche) program in the following pre-selected subject fields.

1. Agriculture and Food
2. Building Technology

B. Other selected NTIS publications not received under the SRIM program are ordered separately.

CALIFORNIA STATE AND MUNICIPAL GOVERNMENT PUBLICATIONS

A. The department in its depository status receives from California State

Printer documents designated for a selective depository library. In addition to these documents, the department attempts to acquire non-depository materials directly from members of the legislature and government agencies.

B. Publications are received from county agriculture commissioners' offices and planning agencies of cities and counties. Publications from other agencies of cities and counties are acquired selectively.

C. Reports published by private consulting firms and submitted to planning agencies of the San Luis Obispo City and County Governments are also received.

AGRICULTURE EXPERIMENT STATION AND EXTENSION SERVICE PUBLICATIONS

A. All publications from California Agriculture Experiment Station and Extension Services are collected.

B. The major series of out-of-state agriculture experiment station and extension services are also received.

UNITED NATIONS PUBLICATIONS

The department subscribes to a microform edition of United Nations Documents and official records, including publications issued by the following bodies:

1. General Assembly
2. Security Council
3. Economic and Social Council
4. Secretariat
5. UN Development Program
6. International Court of Justice
7. Trusteeship Council
8. Disarmament Commission
9. UN Industrial Development Organization

Publications by UN related agencies such as FAO, ILO WHO, UNICEF, IMF, etc., are not included in the microform edition, but are ordered in hard copy format by the Acquisitions and Collection Development Department and the Serials Department and are cataloged with the general collection.

MAPS

The department maintains a collection of atlases and maps. The map collection contains the following types:

1. Topographic maps of the United States and California
2. Geologic maps
3. Soil maps
4. City planning maps
5. Street maps of cities in California
6. Scientific maps and atlases published by the UNESCO Press
7. Maps received as U.S. and California State Depository items

8. Various thematic maps closely related to the University curriculum with primary emphasis on California
9. Selected general foreign maps in small scale

LEARNING RESOURCES AND CURRICULUM DEPARTMENT

The Learning Resources and Curriculum Department provides a wide range of print and non-print materials in such fields as education, child development, children's literature, and some areas of the arts and sciences.

CHILDREN'S LITERATURE COLLECTION

The department provides a current collection of popular and outstanding children's books, both fiction and non-fiction, to serve the needs of faculty and students in the various university programs concerned with the education of the pre-school child up to and including the young adult level.

CURRICULUM MATERIALS

The department maintains a depository collection of curriculum materials from the California Department of Education and school districts in California. Non-depository materials issued by various school districts in California and other states are also maintained by the department on microfiche and in hard copy.

CALIFORNIA STATE ADOPTED TEXTBOOKS AND OTHERS

A continuously updated collection of California State adopted textbooks, in addition to smaller collections of elementary and secondary textbooks, is provided for the training of education students who will be entering the teaching profession.

NON-PRINT MEDIA MATERIALS

The Learning Resources and Curriculum Department selects or responds to requests for audio cassettes, videocassettes, phonodiscs, sound filmstrips, slides, media kits, prints, and similar multimedia instructional materials, except for 16mm films. The University Library does not attempt to duplicate the collections of nonprint materials maintained by the University Audiovisual Department, or purchase materials that are limited strictly to classroom use, but rather will seek to purchase those materials that may be used by students and faculty in a variety of learning situations related to the curriculum, and which are needed to supplement classroom instruction.

PROGRAMMED MATERIALS

A collection of programmed texts is provided by the department for the

purposes of individual study and reinforcement in areas related to the curriculum and general self-improvement.

STANDARDIZED TESTS

A specimen set collection of standardized tests is acquired by the department for use of faculty and students in courses relating to education, counseling and psychology where the study of tests and their administration is an integral part of the course.

INSTRUCTIONAL MATERIALS DISPLAY CENTER

The department serves the San Luis Obispo area as a depository for instructional materials K-8 being considered for state adoption, and for those materials that have been adopted by the State for a specified period of time. It also provides a secondary textbook display of current materials for grades 9-12.

SPECIAL COLLECTIONS AND ARCHIVES DEPARTMENT

The Special Collections and Archives Department is comprised of two separate sections, the Special Collections and the University Archives. The materials comprising these two sections are housed in separate locations in the Department.

SPECIAL COLLECTIONS

Special Collections houses research and curriculum support materials which, because of their specialized and extraordinary nature, are used on a restricted basis in a security monitored facility. All materials in Special Collections are part of individual, named collections, which are housed as separate units. Each of these collections is valuable and important as a unit, giving added depth to or supplementing a curricular area of the university. Each individual collection has its own collection development guidelines which serve to define its collecting boundaries and parameters. Although books constitute the major proportion of most collections, they may also contain materials such as manuscripts, periodicals, newspapers, photographic prints, negatives and slides, motion pictures, audio and video tapes, maps, architectural drawings, pamphlets, broadsides and works of art.

The Special Collections currently is comprised of the following collections:

Architecture Collection - Selected materials related to architectural history and design; including landscape architecture, city and regional planning, architectural engineering.

Fine Printing and Graphic Arts Collection - Materials on the history and development of printing and its related arts, including typography, design, presswork, papermaking, bookbinding, and illustration. Also collected are examples of printing from its beginning to modern times. The Fine Printing and Graphic Arts Press Collection

contains books and other printed materials representing many modern European and American fine printers and designers, with an emphasis on California printing.

McCarthy Thoroughbred Horse Collection - Thoroughbred horse racing, breeding, fox hunting, polo.

Oyez Collection - Entire output, to date, of the finely printed and designed works published by Oyez, Berkeley, California.

San Luis Obispo Regional History Collection - Selected materials in various formats documenting all phases of the history and development of San Luis Obispo County and the Central Coast region.

Rare Book Collection - General collection containing materials which, because of their value or scarcity, require special protection in a restricted use area. General guidelines for placing materials in the Rare Book Collection are:

- Early printed works of importance and value.
- First and limited editions of importance.
- Materials autographed by significant authors.
- Books exhibiting fine binding or illustrations.
- Works of art and other visual materials of value and importance.
- Manuscript materials of value and importance.

Special Collections Reference Collection - Reference works appropriate to the Special Collections Department includes price guides for rare and antiquarian materials, book and manuscript auction records, auction and book dealer catalogues, etc.

UNIVERSITY ARCHIVES

The University Archives houses those records and other materials which document the history, development, and activities of the University, including administration, faculty, students, staff, and alumni. The University Archives collects materials in the following categories:

Administrative Records: includes minutes, reports, correspondence and other records of administrative offices, academic units, Academic Senate, administrative and staff committees.

General Publications: includes academic catalogs, class schedules, handbooks, announcements, directories, commencement and performance programs, research publications, University conference and symposium proceedings, newsletters, brochures, ephemera.

Student Publications: includes campus newspapers, yearbooks, miscellaneous periodicals, ephemera, records of student administration and student organizations.

Campus Publicity: includes press releases, brochures, clippings and other publications about the campus.

Support Group Records: includes publications and records from

support groups such as the Alumni Association, Athletic boosters, Library Associates.

Masters Theses: one copy of all theses

Senior Projects: one archival microfiche copy of all Senior Projects

Cal Poly Authors: significant publications of University employees.

Pictorial and Visual Materials: photographs and photographic negatives, slides, motion pictures, video cassettes, maps, microforms, art works, architectural plans and drawings.

Audio Materials: speeches, events, oral interviews on audio or video tapes.

OTHER CATEGORIES OF MATERIALS

BROWSING COLLECTION

The University Library subscribes to the McNaughton Book Service, a recreational browsing collection of 750 volumes which are leased on a yearly basis. The collection is updated by the exchange of 75 newly published titles each month. Categories include: mysteries, book club selections, westerns, non-fiction, fiction, and science fiction. The University Library has the option to purchase, at a 75% discount, those titles meeting the selection criteria.

COURSE-ASSIGNED TEXTBOOKS

The University Library does not ordinarily order textbook titles that are assigned by instructors for their courses.

A single copy of a course-assigned textbook may be ordered when the title is to be assigned as collateral reading in another course, or when the title is unique to its field.

LABORATORY MANUALS

The University Library does not generally order laboratory manuals that have been assigned for use in laboratory courses. Titles not currently used as required manuals in laboratory courses may be ordered only if the requestor can demonstrate a legitimate curricular need. Only one copy of an approved request will be ordered.

Laboratory manuals purchased by the University Library are cataloged and housed in the Learning Resources and Curriculum Department.

THESES AND DISSERTATIONS

The University Library purchases a select number of theses or dissertations upon specific request. Microform copies will be preferred over

photoduplicated copies since the latter are more expensive, require more space, and will probably not receive heavy use.

COLLECTION DEVELOPMENT PROFILES

In order to keep the development of the collection relevant to the needs of the University's curriculum and users, up-to-date profiles for collecting materials in the various subject areas are necessary. These subject profiles are reviewed annually by the Library Contacts under the coordination of the Acquisitions and Collection Development Department.

A collection development profile covering a subject area contains the following factors:

- A. The general purpose of the collection policy for the subject area
- B. Languages collected and language restrictions. English is the predominant language for most of the collection, but foreign language titles are purchased upon individual request to fulfill curricular needs.
- C. Geographical areas for which materials are collected
- D. Types of materials collected
- E. Chronological limitations
- F. Specific subjects for the area
- G. Levels of collection intensity codes. The codes defined below, as recommended by the Collection Development Committee, Resources Section, Resources and Technical Services Division, American Library Association, are designed for use in identifying both the extent of existing collections in given subject fields (collection density) and the extent of current collection activity in the field (collecting intensity). Currently, the collection development policy recognizes the following levels which the University Library adheres to:
 1. Comprehensive level. A collection in which a library endeavors, so far as is reasonably possible, to include all significant works of recorded knowledge (publications, manuscripts, other forms), in all applicable languages, for a necessarily defined and limited field. This level of collecting intensity is that which maintains a "special collection"; the aim, if not the achievement, is exhaustiveness.
 2. Research level. A collection which includes the major source materials required for dissertations and independent research including materials containing research reporting new findings, scientific experimental results, and other information useful to researchers. It also includes 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.

3. Study level. A collection which is adequate to support undergraduate or graduate course work, or sustained independent study; that is, which is adequate to maintain knowledge of a subject required for limited or generalized purposes, or less than research intensity. It includes a wide range of basic monographs, complete collections of the works of secondary writers, a selection of representative journals, and the reference tools and fundamental bibliographical apparatus pertaining to the subject.
 4. Basic level. A highly selective collection which serves to introduce and define the subject and to indicate the varieties of information available elsewhere. It includes major dictionaries and encyclopedias, selected editions of important works, historical surveys, important bibliographies, and a few major periodicals in the field.
 5. Minimal level. A subject area which is out of scope for the University Library's collections, and in which few selections are made beyond very basic reference tools.
- I. An updated list of current library and departmental contact personnel is available in the Acquisitions and Collection Development Department.

ACCOUNTING

GENERAL PURPOSE: To support undergraduate study in the accounting concentration of the Bachelor of Science degree in Business Administration. To support graduate study in the accounting concentration of the Masters degree in Business Administration. This will include appropriate works on the application of the computer to accounting activities and responsibilities.

LANGUAGES: English is the primary language of the collection. Works in other languages are to be purchased in translation only.

GEOGRAPHICAL AREAS: Emphasis is on North America, Europe, Australia, and New Zealand.

TYPES OF MATERIALS COLLECTED: Selected society and association publications, and proceedings of conferences and meetings are collected. Looseleaf services and books in the various areas cited below will be typical acquisitions.

CHRONOLOGICAL LIMITATIONS: Generally, nothing over ten years old will be collected.

SPECIFIC SUBJECTS AND COLLECTING LEVELS:

Accounting Principles: Includes all publications by boards, associations, and other organizations whose work is directly or indirectly related to the development of accounting standards, either cost, financial or principles, in the U. S. and on an international basis. 3

Auditing: Includes works on the use of computers in auditing, internal auditing, financial auditing, and operational/management auditing in the U.S. and on an international basis. 3

Financial Accounting: Includes publications related to the preparation and filing of financial statements, statement analysis, etc., including the works of the Accounting Principles Board, the Financial Accounting Standards Board, and international organizations. 3

Cost Accounting: Includes publications related to the preparation and reporting of information from accounting records. Includes work of the Cost Accounting Standards Board. 3

Controllershship: Includes publications related to the operations and functions of the position of controller or chief financial officer of an organization, from such sources as the Financial Executives Institute, etc. 4

Laws: Including federal and state income tax laws and regulations, regulatory law by such agencies as the Securities and Exchange Commission, the Federal Trade Commission, and appropriate State of California agencies. Also, laws of the 50 states as to regulation of the accounting profession, licensure, etc. Includes relevant publications on income taxes. 3

International Accounting: Standards, principles, etc., as have been or may be developed for international business operations. 4

History of Accounting: Includes publications addressing the historical development of accounting principles, practices, standards, etc. 4

AERONAUTICAL ENGINEERING

GENERAL PURPOSE: To support undergraduate study leading to a Bachelor of Science degree in Aeronautical Engineering; and to support graduate study leading to the Master of Engineering degree with a specialization in Aeronautical Engineering.

LANGUAGES: English is the primary language of the collection. Generally, works in other languages are acquired in translation only. Some limited foreign language works are acquired on request, if equivalent information or point-of-view is not available in English.

GEOGRAPHICAL AREAS: Not applicable.

TYPES OF MATERIALS COLLECTED: Most of the journals, books, symposium and conference reports of the American Institute of Aeronautics and Astronautics (AIAA) are collected. Other society publications and the transactions and proceedings of conferences are purchased selectively. NASA and other relevant U.S. government documents are extensively collected. Individual theses, dissertations, and microform materials are purchased selectively or upon request.

CHRONOLOGICAL LIMITATIONS: The latest, most up-to-date, information is emphasized. Material more than five years old generally will not be collected.

SPECIFIC SUBJECTS AND COLLECTING LEVELS:

Aerodynamics: Includes all aspects of wing and other airfoil theory, lift and drag, aerodynamics of stability and control, plus instrumentation and data collection for flight testing. 2

Flight Vehicle Design: Includes all aspects of aircraft structural design, stress analysis for conventional and unconventional aircraft. 2

Aerothermodynamics: Includes thermodynamic relations, laminar and turbulent subsonic flows, and boundary-layer theory with reference to flight vehicles. 2

Propulsion Systems: Includes all types of aircraft and space power plants, principles of thrust, and energy utilization. 3

Gas Dynamics: Fundamentals of gas dynamics, shock propagation, plus potential flow theory for two and three dimensional bodies. 3

Aerospace Science: Includes selected historical works on aviation and space flight, fundamentals and descriptions of flight vehicle propulsion, trajectories, orbital mechanics, guidance systems, aerospace environment, and aspects of space technology, such as power for interplanetary travel and space vehicle design. 3

Energy Science: Scientific, engineering and technological fundamentals for the utilization of alternate energy resources for propulsion power, heat or other applications. 3

AGRICULTURAL EDUCATION

GENERAL PURPOSE: To support undergraduate study leading to a Bachelor of Science degree in Agricultural Science with emphasis on education and agriculture. To support graduate study leading to the Master of Science degree specializing in education and agriculture.

LANGUAGES: English.

GEOGRAPHICAL AREAS: Emphasis on North America and Europe.

TYPES OF MATERIALS COLLECTED: Society publications, conference transactions and proceedings, research reports, and some audiovisual material are to be collected.

CHRONOLOGICAL LIMITATIONS: Emphasis is on most recent works, but older material is also collected.

SPECIFIC SUBJECTS AND COLLECTING LEVELS:

<u>Agricultural Production Education</u>	3
<u>Agricultural Sales/Service Education</u>	3
<u>Agricultural Mechanics Education</u>	3
<u>Agricultural Products/Processing Education</u>	3
<u>Ornamental Horticulture Education</u>	3
<u>Agricultural Resources/Rural Recreation Education</u>	3
<u>Forestry Education</u>	3
<u>Rural Sociology: Rural social structure and communication.</u>	3
<u>Psychology of Learning in Agriculture Education</u>	3

AGRICULTURAL ENGINEERING

GENERAL PURPOSE:— To support undergraduate study leading to a Bachelor of Science degree in Agricultural Engineering or Mechanized Agriculture. To support the Master of Science in Agriculture degree with a specialization in Mechanized Agriculture.

LANGUAGES: English is the primary language of the collection. Works in other languages are purchased in translation only.

GEOGRAPHICAL AREAS: Emphasis is on North America but collecting is world wide.

TYPES OF MATERIALS COLLECTED. Society publications, transactions, proceedings from conferences and papers presented at meetings are selectively purchased. Theses, dissertations, audiovisual and microform materials are acquired in limited numbers. Textbooks, technical reports, juvenile materials and introductory textbooks are not ordinarily purchased.

CHRONOLOGICAL LIMITATIONS: Emphasis is on most recent works, but older material is also collected.

SPECIFIC SUBJECTS AND COLLECTING LEVELS:

Electric Power and Processing: Including electric power generation, distribution and the application of electricity to agriculture. 3

Agricultural Measurements: Including electronic, electric and mechanical measurement techniques and controls, and controllers and microprocessors as applied to agricultural problems. 3

Food Engineering: Including the relationship of engineering to food handling, processing, storage, treatment, and properties of biological materials. 3

Power and Machinery: Including agricultural machinery of all kinds including specialized machinery, engines and power units, the laws regarding machinery, its use and emission control techniques, equipment and requirements. 3

Soil and Water: Including all aspects of land use, soil conservation maps, technical bulletins, the relationship between water and the land, hydrology, irrigation, crop water requirements, water sources, treatment, distribution, conservation, residential and commercial irrigation systems. 3

Structures and Environment: Including agricultural structures and construction, environmental requirements for agricultural products and animals, and materials and techniques of construction. 3

Agricultural Mechanics: Including the basic hand and power tool applications, concrete, electrical, and plumbing skills as needed in agricultural situations. 4

Surveying: Including material on boundary control, survey of public lands, land survey systems, remote sensing, aerial surveying, geodetic surveying, construction surveying, hydrologic surveys, topographic surveys and hydrographic surveys. -3

AGRICULTURAL MANAGEMENT

GENERAL PURPOSE: To support undergraduate study leading to a Bachelor of Science degree in Agricultural Management with emphasis in agricultural economics, as well as marketing, finance, management and accounting related to agriculture. To support graduate study leading to the Master of Science in Agriculture with a specialization in International-Agriculture.

LANGUAGES: English.

GEOGRAPHICAL AREAS: United States with emphasis on California, less emphasis on comparative countries and underdeveloped countries.

TYPES OF MATERIALS COLLECTED: Scholarly publications (books and journals), newspapers, periodicals, statistical data from U.S.D.A., state and private companies.

CHRONOLOGICAL LIMITATIONS: Emphasis is on most recent works, but older material is also collected.

SPECIFIC SUBJECTS AND COLLECTING LEVELS:

<u>Production Agriculture:</u>	Current production practices.	3
<u>Statistical Data</u>		2
<u>Price Analysis</u>		2
<u>Linear Programming</u>		2
<u>Labor:</u>	Labor history	3
	Labor law, personnel management theories and techniques, and current wage rates and benefits	2
<u>Accounting:</u>	General body of knowledge	3
	Application of mini-computer	2
<u>Agricultural Marketing</u>		2
<u>Agricultural Finance</u>		2
<u>Real Estate:</u>	Law	2
	Planning	3
<u>Estate Planning</u>		3
<u>Farm Management*</u>		3
<u>Agricultural Business Management*</u>		3
<u>Agricultural Economics*</u>		3
<u>International Trade</u>		3
<u>Statistical Data</u>		2

*These subjects include many of the previous items (i.e., agricultural finance integrated with farm management). They are listed here to assure coverage.

ANIMAL SCIENCE

GENERAL PURPOSE: To serve and support the undergraduate education of students pursuing the Bachelor of Science and Technical degrees in Animal Science. To support graduate studies leading to a degree in Master of Science in Agriculture.

LANGUAGES: English is the sole language of the collection.

GEOGRAPHICAL AREAS: Collections should emphasize North America and Europe, but should include significant works from other countries of the world.

TYPES OF MATERIALS COLLECTED: Selective purchase of textbooks, scientific society journals and periodicals, proceedings of symposia and conferences. Publications of national agricultural ministries should be acquired when possible. Livestock newspapers need not be collected.

CHRONOLOGICAL LIMITATIONS: Emphasis should be on the most recent materials, but older important works should not be excluded.

SPECIFIC SUBJECTS AND COLLECTING LEVELS:

<u>Animal Genetics and Breeding</u>	2
<u>Animal Nutrition</u>	2
<u>Animal Physiology</u>	2
<u>Meat Animal Production</u>	2
<u>Feed and Grain Milling Technology</u>	3
<u>Horse/Equine Production and Science</u>	3
<u>Livestock Management Handling Equipment and Facilities</u>	3
<u>Livestock Production/Science</u>	3
<u>Range and Range Livestock Management</u>	3
<u>Agricultural/Farm Economics and Management</u>	4
<u>Animal Agriculture/Agricultural Biology</u>	4
<u>Forage Crop Management/Production</u>	5
<u>Animal Pathology</u> (see Veterinary Science profile)	
<u>Large Animal Veterinary Science Medicine</u> (see Veterinary Science profile)	
<u>Agricultural/Western U.S. History</u> (see History profile)	

ARCHITECTURAL ENGINEERING

GENERAL PURPOSE: To support undergraduate study leading to a Bachelor of Science degree in Architectural Engineering, with major emphasis on the structural engineering of buildings, especially in seismic zones.

LANGUAGES: English is the primary language of the collection. Works in other languages are purchased by special request only.

GEOGRAPHICAL AREAS: Emphasis is on North America, Europe, New Zealand, Japan, and Asia with selected works from the remaining parts of the world.

TYPES OF MATERIALS COLLECTED: Books, periodicals, research reports from universities and government research centers/institutes, society publications (regular journals) and proceedings of conferences. Theses and dissertations are purchased on a selective basis.

CHRONOLOGICAL LIMITATIONS: N/A

SPECIFIC SUBJECTS AND COLLECTING LEVELS:

Structural Engineering: Architectural structures, history and philosophy of structures, structural systems, structural analysis (classical and modern methods), structural design in different building materials: concrete (cast-in-place/precast/prestressed) structures, steel structures, timber structures, masonry structures, fiber-reinforced concrete and ferrocement, and plastics in building design and construction. Also, computer applications in structural engineering (i.e. finite element method, optimum design, etc.), experimental structural analysis, plates/panels and grids, shell structures, cable structures, composite construction, and sandwich design and construction. 2

Earthquake Engineering: Including structural dynamics. 2

Tall Buildings 3

Low Cost Housing: Emphasis on engineering and technological aspects only. 3

Geotechnical Engineering/Soil Mechanics/Foundation Engineering 2

ARCHITECTURE

GENERAL PURPOSE: To support undergraduate study leading to the Bachelor of Architecture degree; and, to support graduate study leading to the Master of Architecture degree.

LANGUAGES: English is the primary language of the collection. Works in other languages are purchased by special request only.

GEOGRAPHICAL AREAS: Emphasis is on North America, Europe, New Zealand, Japan, and Asia with selected works from the remaining parts of the world.

TYPES OF MATERIALS COLLECTED: Books, periodicals, research reports from universities and government research centers/institutes, society publications (regular journals), and proceedings of conferences. Theses and dissertations are purchased on a selective basis.

CHRONOLOGICAL LIMITATIONS: N/A

SPECIFIC SUBJECTS AND COLLECTING LEVELS:

Behavioral Science: Materials dealing with environmental urban studies, archaeology, anthropology, psychology, sociology, etc. Graphic skills including drawing, painting, model building, photography, etc. 3

History: Art and architectural history books including contemporary criticism. Many of these will be in foreign languages. French, German, Italian and Spanish would be common in this area. Maps would also be included in this category. 2

Design: Materials on or about design including but not limited to: buildings, cities, transportation systems, landscape, industrial, textiles, graphics, bridges, interiors, furniture, and color theory. 2

Mathematics, Computers and Building Science: Materials on this subject that relate in any way to buildings or behavior in building structural analysis, etc. 2

Materials of Construction: Materials related to the nature of any substance which could conceivably be used in buildings, including but not limited to: ferric metals, non-ferric metals, clay products, cement products, lumber, fabrics, technical coatings, etc. 2

Natural Sciences: Books relating to architecture. 3

ART

GENERAL PURPOSE: To expand collections related to general and specific areas of art history and criticism. To build a definitive collection in emphasis areas (crafts) of the present art major leading to the Bachelor of Science in Applied Art and Design. To improve and strengthen the collections in photography.

LANGUAGES: English is the primary language of the collection.

GEOGRAPHICAL AREAS: North and South America, Asia, Europe, Africa.

TYPES OF MATERIALS COLLECTED: Manuals, selected art exhibition catalogs, audiovisual materials, books and periodicals.

CHRONOLOGICAL LIMITATIONS: None

SPECIFIC SUBJECTS AND COLLECTING LEVELS:

Drawing: Basic design, study of form and composition, advanced methods and techniques in the study of form, structure and life drawing. 3

Photography: Basic and advanced fundamentals, black and white and 35mm color slide photography, fundamental techniques in color photography, creative b/w photography and illustration photography. 3

Crafts: Three-dimensional and multiple processes in crafts production for studio or industrial craftsman. 3

Ceramics: Handbuilding techniques and ceramic processes with emphasis on design, slab, coil and wheel forming, glazing, and advanced clay construction. 3

Water Color Technique: Beginning and advanced transparent water color painting. 3

Printmaking: Major intaglio processes for fine art prints, contemporary, and traditional printmaking techniques. 3

Sculpture: Elements of three-dimensional forms, advanced problem solving, and the exploration of sculptural techniques such as modeling, casting, carving, and assembly. 3

Art History: Study of the various periods, prehistoric through Roman, European medieval art, and Renaissance through Baroque. 3

Design: Exploration of basic graphic theory and practice, and survey of design in areas pertinent to the environment. 3

Wood Design: Development of design concepts and skills using sketches, drawings, wood and tool processes. Continued development of advanced design skills in wood and total processes at the level of professional designers. 3

(continued)

(ART, continued)

Metalsmithing: Nonferrous metal techniques, investigation of surface design techniques, and the introduction to casting for the jeweler with emphasis on lost wax techniques. 3

Glass: Techniques in offhand glassblowing, moderate energy forming, chemistry, stained glass, etc. 3

Painting Techniques: Physical characteristics of painting media. 3

Graphic Design: Investigation and experimentation in art structure, color and design. Laboratory problems in practical advertising design with emphasis on mass media. 3

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BIOLOGICAL SCIENCES

GENERAL PURPOSE: To support undergraduate study leading to Bachelor of Science degrees in Biological Sciences, Environmental and Systematic Biology, and Microbiology. To support graduate study leading to a Master of Science degree in Biology. To support studies in biology by students with a variety of majors from other departments, particularly within the School of Science and Mathematics, School of Agriculture and Natural Resources, and School of Human Development and Education.

LANGUAGES: English is the primary language of the collection. Selected materials in other languages that are of particular value to specific subjects within biological sciences will also be acquired. If satisfactory translations into English of such materials are available, they are preferred over the original.

GEOGRAPHICAL AREAS: No regions should be excluded; however, emphasis can vary among specific subjects within the biological sciences. Particular geographical areas that are of special importance to specific subjects will be designated under such subjects.

TYPES OF MATERIALS COLLECTED: Materials collected should include general references and a selection of periodicals, monographs, serials, government publications, proceedings, abstracts, National Technical Information Service publications, United Nations publications (particularly FAO and WHO related), maps, curricular materials for primary and secondary level instruction in biology, non-print audiovisual materials intended for multi-use supplementary instruction (other than 16 mm film), programmed materials, and university archival materials. Laboratory manuals, theses and dissertations are acquired in limited numbers. All materials will be selected for their contribution to support the curricula in biological sciences and related areas. Popularized treatments and non-curricular juvenile materials are not ordinarily purchased.

CHRONOLOGICAL LIMITATIONS: Inappropriate for many specific subjects (i.e., ecology, history of biology, natural history, systematics, etc.). Specific subjects where chronological limitations are possible without reduction in support of curricular goals will be designated below:

SPECIFIC SUBJECTS AND COLLECTING LEVELS: Many of the specific subjects included in this profile have significantly different collecting levels required to fulfill the needs of the various degree programs in biology. Where possible, the differences are designated under specific subjects.

Algology: Includes marine and freshwater algae, no geographical limits, but emphasis on marine algae of Pacific Coast of North America and emphasis on freshwater algae of North America. No chronological limits on taxonomic works for marine algae. Taxonomic works for freshwater algae are collected for 1970 to present. Physiological works for algae are collected for 1970 to present. 2

Anatomy: (1) Includes comparative anatomy (emphasize functional morphology, vertebrates over invertebrates) and human anatomy. 2

(2) Includes plant anatomy. 3

(continued)

(BIOLOGICAL SCIENCES, continued)

<u>Animal Behavior</u>	3
<u>Aquatic Biology:</u> See also Conservation, Ecology, Ichthyology, Limnology, and Marine Biology. Includes pollution studies from 1970 on.	3
<u>Bacteriology:</u> (1) Includes general dairy, food, industrial (other than antimicrobial drug production and research), public health and sanitary bacteriology. See also Ecology, Genetics and Heredity, Microbiology.	3
(2) Includes bacterial cytology and physiology, industrial (antimicrobial drug production and research) and medical bacteriology (emphasis on diagnostic laboratory bacteriology). See also Microbiology.	2
<u>Biochemistry</u>	2
<u>Biogeography</u>	3
<u>Bioinstrumentation and Biotechnology</u>	3
<u>Biology, general:</u> Specific subjects listed separately.	3
<u>Biology, applied:</u> Includes biological illustration, domestication of animals and plants, care and maintenance of museum collections, zoo-biology (collection, maintenance and care of wild animals), vertebrate pest control. Other specific subjects of an applied nature listed separately.	3
<u>Biometry and Biostatistics:</u> Includes general and multivariate biometry.	3
<u>Biophysics</u>	3
<u>Biosystematics:</u> Classification, nomenclature, taxonomy, and speciation of life forms. See also Plant Taxonomy.	3
<u>Botany, general:</u> Specific subjects listed separately.	3
<u>Computers in Biology</u>	3
<u>Conservation:</u> Includes general, aquaculture, and game management. See also Freshwater Fisheries and Marine Resources.	3
<u>Cytology, general</u>	3
<u>Cytology, Ultrastructural:</u> See also Electron Microscopy.	2
<u>Developmental Biology:</u> See also Embryology, Endocrinology, Entomology, Herpetology, Microbiology, Morphology, Neurobiology, Reproductive Biology, relevant to many other subjects in Biology and Botany.	2
<u>Ecology:</u> (1) Includes freshwater, microbial, plant terrestrial and community ecology.	2
(2) Includes general, human, invertebrate and vertebrate ecology. See also Entomology, Field Biology, Field Botany, Invertebrates, Limnology, Marine Biology, Microbiology, and Native Plants/plant communities.	3
<u>Electron Microscopy</u>	2

(continued)

(BIOLOGICAL SCIENCES, continued)

<u>Embryology</u>	2
<u>Endocrinology</u>	2
<u>Entomology</u> : Includes general, developmental, and economic entomology, and insect ecology and physiology.	3
<u>Enzymology</u>	3
<u>Epidemiology</u>	3
<u>Evolution</u>	3
<u>Exobiology</u> : Search for extraterrestrial life.	4
<u>Field Biology</u>	3
<u>Field Botany</u>	3
<u>Freshwater Fisheries</u> : See also Conservation and Freshwater Ecology.	2
<u>Genetics and Heredity</u> : Includes general genetics, cytogenetics, immunogenetics, molecular genetics, animal genetics, human genetics, microbial genetics, plant genetics and viral genetics.	3
<u>Health Professions</u> : Information about careers.	3
<u>Hematology</u>	3
<u>Herpetology</u> : No geographical limits, emphasize North America.	3
<u>Histology</u>	2
<u>History of Biology</u> : Includes autobiographies and biographies as well as histories of specific disciplines within biology.	3
<u>Ichthyology</u> : Emphasizes systematics, natural history and evolution of marine over freshwater forms.	2
<u>Immunology</u> : Includes general and comparative immunology, immunobiology, immunochemistry, immunogenetics and serology.	3
<u>Invertebrate Biology</u> : Includes anatomy and physiology, systematics of invertebrates, emphasize invertebrate ecology.	3
<u>Laboratory Animal Care</u>	3
<u>Limnology</u> : Includes limnology of lakes and streams, methods. Collected for North America only, only in English, 1970 to present.	2
<u>Mammalogy</u> : Emphasizes North America and Pan-Pacific area.	3
<u>Marine Biology</u> : Includes marine ecology and marine resources.	3
<u>Medicine</u> : Includes human and veterinary.	3
<u>Medical Laboratory Technology</u>	3

(BIOLOGICAL SCIENCES, continued)

<u>Microbiology:</u> (1) Includes microbial cytology and physiology, microbial ecology (emphasizes microbial ecology of soils, water, humans, and other vertebrates), antimicrobial drug production and research, and medical microbiology (emphasizes diagnostic laboratory microbiology).	2
(2) Includes general, dairy, food, industrial (other than antimicrobial drug production and research), public health, sanitary microbiology, microbial genetics and systematics. See also Algology, Bacteriology, Biochemistry, Epidemiology, Immunology, Medical Laboratory Technology, Molecular Biology, Mycology, Parasitology, Tissue Culture and Virology.	3
<u>Microscopy and Microtechnique</u> (other than electron microscopy)	3
<u>Molecular Biology</u>	2
<u>Morphology:</u> See also Anatomy.	3
<u>Mycology:</u> Includes general and medical mycology, general coverage of aquatic hyphomycetes and deuteromycetes ("fungi imperfecti") minimal.	3
<u>Native Plants/plant communities:</u> Emphasis on southwestern United States and Pacific Coast; collect rest of world at "3" level. See also Plant Ecology.	2
<u>Natural History:</u> Emphasizes North America and Pan-Pacific area.	3
<u>Nematology:</u> Emphasizes plant nematology, see also Plant Pathology.	3
<u>Neurobiology:</u> Includes neuroanatomy, neurophysiology, and visual science.	3
<u>Ornithology:</u> (1) Worldwide	3
(2) North America and Pan-Pacific area	2
<u>Paleontology:</u> Emphasizes vertebrates over invertebrates.	3
<u>Palynology</u>	3
<u>Parasitology</u>	3
<u>Pathology</u>	3
<u>Pest Management:</u> See also Biology, applied (vertebrate pest control).	3
<u>Physiology:</u> (1) Includes general, human, invertebrate, and neurophysiology. Complete journal holdings back to 1940 in general.	3
(2) Includes cellular, comparative, microbial, reproductive, plant physiology, and endocrinology.	2
<u>Plant Pathology</u>	2
<u>Plant Taxonomy</u>	2
<u>Population Biology</u>	3

(BIOLOGICAL SCIENCES, continued)

Public Health: See also Bacteriology, Biology, applied (vertebrate pest control), Entomology, Epidemiology, Microbiology, Parasitology, and Pest Management. 3

Radiation Biology 3

Reproductive Biology: See also Physiology, reproductive. 3

Secondary Education in Biology 3

Systematics: See also Biosystematics and Plant Taxonomy (latter collected at "2" level). 3

Tissue Culture 2

Toxicology 3

Virology: Includes general, animal, bacterial, human, medical, molecular, insect, plant, and comparative virology. 3

Wildlife Biology: Includes non-game animals. See also Conservation. 3

Zoology, general 3

SUBJECT PROFILE

DATE: May 22, 1979

BUSINESS ADMINISTRATION

GENERAL PURPOSE: To support undergraduate study leading to a Bachelor of Science degree in Business Administration, especially in the fields of Marketing, Finance and Property Management. Also, to support courses in Business Law, General Business and Business Research for all School of Business students, and students in other schools. To support graduate study leading to the M.B.A. degree.

LANGUAGES: English

GEOGRAPHICAL AREAS: Worldwide

TYPES OF MATERIALS COLLECTED: Texts, monographs, periodicals, yearbooks, looseleaf services, selected audiovisual materials, and annual reports.

CHRONOLOGICAL LIMITATIONS: N/A

SPECIFIC SUBJECTS AND COLLECTING LEVELS:

Marketing

3

Real Estate

2

Finance

3

Business Law

3

Business Research and Methods

3

International Business

4

General Business

3

History of Business

4

Legal, Political and Social Environment of Business

3

CHEMISTRY

GENERAL PURPOSE: To support undergraduate study leading to the Bachelor of Science degree in Chemistry and in Biochemistry. To support graduate study leading to the Master of Science degree in Chemistry. To support research essential to special problems, senior projects, and master's theses.

LANGUAGES: English is the primary language, but some works in French and German are purchased, as are occasional works in Russian, Japanese, and Italian in translation only.

GEOGRAPHICAL AREAS: No restriction, but most commonly the English-speaking countries, Europe, Asia.

TYPES OF MATERIALS COLLECTED: Emphasis is on books and journals in hard copy, although microfilms are collected when circumstances warrant. Included are society and other journals, monographs, continuing series, encyclopedias, dictionaries, compendia, compilations of data, handbooks, abstracts, indexes, and proceedings of symposia. Theses and dissertations are collected only upon specific request. Upper-division textbooks are purchased selectively, but lower-division texts are not ordinarily purchased.

CHRONOLOGICAL LIMITATIONS: Primarily the last ten years although some earlier publications may be appropriate in unusual cases.

SPECIFIC SUBJECTS AND COLLECTING LEVELS: Listed are the five major areas of chemistry and their subdivisions, following which are special topics related to advanced courses taught at Cal Poly.

Analytical

Chromatography: Gas, column, thin-layer, paper, ion-exchange, gel permeation, liquid, electrophoresis. 3

Electrochemistry: Coulometry, potentiometry, polarography, ion-selective electrodes. 3

Spectroscopy: Atomic absorption, flame, emission, fluorescence. 3

Biochemistry

Amino acids, proteins, enzymes 3

Carbohydrates 3

Hormones and vitamins 3

Lipids 3

Nucleic acids and molecular genetics 2

Inorganic

Chelates and ligands-complexes 3

Organometallics 4

Radiochemistry 4

Transition metals 4

(continued)

(CHEMISTRY, continued)

Organic

Heterocyclic	4
Natural products: Terpenes, antibiotics, steroids, alkaloids, and acetogenins	2
Organometallics	3
Photochemistry	4
Physical organic: Kinetics and mechanisms	3
Spectroscopy: Infrared, ultraviolet, mass spectrometry, nuclear magnetic resonance, optical rotatory dispersion, and circular dichroism	3
Stereochemistry	3
Synthesis	2

Physical

Quantum mechanics and theoretical	3
Spectroscopy: Electron spin resonance, Raman, light scattering, lasers, and x-ray crystallography	3
Statistical mechanics	3
Thermodynamics and kinetics	3

Other areas of interest

Agricultural chemicals, pesticides	3
Catalysis	3
Chemical education	4
Clinical chemistry	3
Computers in chemistry	4
Environmental chemistry	3
Food chemistry	3
Geochemistry	4
History of chemistry	4
Industrial chemistry	3
Pharmaceutical and medicinal chemistry	3
Polymers, macromolecules	3

CHILD DEVELOPMENT AND FAMILY STUDIES

GENERAL PURPOSE: To support the Bachelor of Science program in Child Development and Family Studies by providing resources on all aspects of human life span development, early childhood education, human services delivery systems, socialization and family structure (including cross-cultural and single-culture ethnographic studies of children and families), as well as resources on adolescence and aging.

LANGUAGES: English is the primary language of the collection.

GEOGRAPHICAL AREAS: The collection is international in scope with emphasis on material published in North America and Europe.

TYPES OF MATERIALS COLLECTED: Most material acquired will be in the form of monographs, periodicals, and serials. This will include selections of research materials, theoretical treatments, texts on applications, some primary journals, and government documents at the national, state and local level. Proceedings, theses, dissertations and non-print material will be obtained on a selective basis. Children's literature, pre-school to grade one, will also be purchased to support applicable special interest areas listed below.

CHRONOLOGICAL LIMITATIONS: Primary emphasis is on the twentieth century. Retrospective purchasing will be very selective.

SPECIFIC SUBJECTS AND COLLECTING LEVELS:

<u>Development of observation skills and assessment techniques.</u>	3
<u>Prenatal Development</u>	3
<u>Infant, Toddler, Preschooler, Middle Years, and Adolescent Development:</u> In areas of language, cognition, social, emotional and physical growth.	3
<u>Children (infancy through preschool years):</u> Dealing with programs, activities, and environments.	3
<u>Parent/Child Relationships:</u> In general, and including special areas of foster parenting, adoption, child abuse and legal rights.	3
<u>Introduction to Marriage and Family Living:</u> In general areas of marriage as process, dating, mate selection, marital communication, sexuality, conflict management, separation and divorce, alternatives to marriage.	3
<u>Personal Adjustment and Interpersonal Effectiveness:</u> Dealing with self-awareness, self-worth, self-acceptance, communication, personal adjustment, reality contact, relationship enhancement.	3
<u>Marriage and Family Counseling:</u> In areas of structural family therapy, communication therapy, sexual therapy, systems therapy, divorce therapy, family crises counseling, pre-marital counseling.	3
<u>Aging or Later Adulthood Development Literature:</u> Dealing with inter-generational relationships, sexuality, social psychology, social policy, mental health and adjustment.	3

(continued)

(CHILD DEVELOPMENT AND FAMILY STUDIES, continued)

Special Interest Areas: Family crises in general, including suicide, divorce, death, dying, bereavement, family violence, rape, incest, infidelity, unwanted pregnancies, teenage pregnancies, sexual dysfunction, sex roles, special needs, and multicultural education during the early years of childhood (infancy through elementary school).

3.

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CITY AND REGIONAL PLANNING

GENERAL PURPOSE: To support undergraduate study leading to a Bachelor of City and Regional Planning, with an emphasis on comprehensive physical/environmental planning and urban design; and, to support study leading to the Master of City and Regional Planning degree, with an emphasis in environmental management and planning, and rural development and planning.

LANGUAGES: English is the primary language of the collection.

GEOGRAPHICAL AREAS: Worldwide with emphasis on North and South America and Europe. Additional emphasis on California and the western states.

TYPES OF MATERIALS COLLECTED: Books, periodicals, research reports from universities, government agencies, the United Nations, relevant research institutes, professional publications and conference proceedings. Theses, dissertations, and microform materials are purchased in limited numbers.

CHRONOLOGICAL LIMITATIONS: Current and twentieth century materials with only selected elements prior to the nineteenth century.

SPECIFIC SUBJECTS AND COLLECTING LEVELS:

Planning Theory: A collection of material covering planning theory. 2
A limited collection supporting the theory of physical, social, economic and political processes of the urban and rural society. A limited collection supporting the theory of ecology in relation to environmental management and planning.

Planning Methods: Techniques or methods of urban, regional, and 2
environmental planning/design (natural and human) and policy analysis, quantitative methods dealing with operations research, econometrics, linear programming, computer applications, program evaluation techniques, techniques/applications of remote sensing and electronic monitoring relevant to planning emphasis.

Physical/Environmental Issues: A collection supporting the various 3
substantive issues involved in the department's planning emphasis, including growth management, developmental issues and controls, environmental quality control, solid waste management, water resource management, resource management, and natural (ecological) processes and functions in relation to human activities.

Agriculture and Regional Development: A collection supporting comprehensive 3
physical planning, and rural development and planning, including land and agricultural economics, agricultural policy, and regional market analysis.

Natural Resources: A collection supporting environmental management and 3
planning.

Site Analysis and Planning: Energy conservation, site planning criteria, 3
environmental and amenity assessment.

(continued)

(CITY AND REGIONAL PLANNING, continued)

Political Science, Urban/Rural Sociology, Social Psychology: A collection supporting theory, purpose and comprehensive physical planning, urban design, rural development and planning, and public administration/management. A limited collection on social services planning which supports comprehensive physical planning, urban design, rural development and planning. 3

Public Economics: Urban economics, public finance, capital programming, cost benefit analysis, and cost effectiveness analysis. 3

History: A limited collection covering the urbanization process, physical and design factors, and environmental/resource implications associated with Mediterranean, European and North American ancient and past cultures. 4

CIVIL ENGINEERING

GENERAL PURPOSE: To support an undergraduate program leading to a Bachelor of Science degree in Civil Engineering; and to support a graduate program leading to a Master of Engineering degree with a concentration in Civil Engineering. Both programs emphasize the broad areas of public works and transportation.

LANGUAGES: English is the primary language of the collection. Works in other languages are purchased in translation only.

GEOGRAPHICAL AREAS: Geographical considerations are not emphasized.

TYPES OF MATERIALS COLLECTED: Most of the publications of the Transportation Research Board and the American Society of Civil Engineers, and its divisions, are collected. Other transactions and proceedings are purchased selectively. Government publications are of importance. Popular treatments are not purchased.

CHRONOLOGICAL LIMITATIONS: Current information is desired.

SPECIFIC SUBJECTS AND COLLECTING LEVELS:

Structures

3

Operations Research

4

Air Pollution

4

Surveying

5

Traffic Engineering

2

Urban Planning

3

Soils Engineering

2

Mechanics of Materials

2

Public Transportation

3

Airport Planning and Design

3

Urban Transportation Planning

2

Highway Design and Geometrics

3

Hydraulics

3

COMPUTER SCIENCE

GENERAL PURPOSE: To support undergraduate study leading to a Bachelor of Science degree in Computer Science. To support graduate study leading to a Master of Science degree in Computer Science. To support the study of computer applications in many fields as the use of computers in applications to other disciplines is widespread and rapidly increasing.

LANGUAGES: English is the primary language of the collection. Works in other languages are purchased in translation only.

GEOGRAPHICAL AREAS: In order of importance, North America, Europe, Japan, Australia.

TYPES OF MATERIALS COLLECTED: Society publications and transactions and proceedings of conferences are extremely important because of the rapid development of the subject matter. Serials are important, also, as are computer manuals, and government publications on technical information and computer subjects. Popular treatments are selectively purchased.

CHRONOLOGICAL LIMITATIONS: Generally after 1940.

SPECIFIC SUBJECTS AND COLLECTING LEVELS:

Computer Architecture: Microcomputers, minicomputers, large computers, computer networks, and telecommunications. 2

Computer Systems and Software: Operating systems, compilers, programming languages, software engineering, and programming methodology. 2

Mathematical Applications: Numerical analysis, mathematical programming, computer simulation and modeling, operations research, and discrete structures. 2

Database Management Systems: Database systems, data structures, file structures, and query languages. 2

Computer Aided Instruction 2

Computer Graphics 3

Computer Applications 3

Process Control: Manufacturing computer control, real time systems and automation. 4

Artificial Intelligence: Pattern recognition, automata, and machine intelligence. 4

Theory of Computing 4

CONSTRUCTION

GENERAL PURPOSE: The four year program in Construction leads to the Bachelor of Science degree. Major emphasis is placed on organizing and managing the construction phase of society's efforts to improve the environment.

LANGUAGES: English language only.

GEOGRAPHICAL AREAS: Emphasis is on the United States and California when applicable.

TYPES OF MATERIALS COLLECTED: All types of materials are collected except dissertations, theses, and ephemera.

CHRONOLOGICAL LIMITATIONS: Current information is most desired.

SPECIFIC SUBJECTS AND COLLECTING LEVELS:

<u>History of Construction</u>	2
<u>Techniques and Materials:</u> Includes concrete construction and form work.	3
<u>General Construction Practice</u>	3
<u>Construction Regulations</u>	3
<u>Cost Estimating</u>	3
<u>Construction Planning and Control</u>	3
<u>Computer Applications</u>	3

CROP SCIENCE

GENERAL PURPOSE: To support undergraduate study leading to a Bachelor of Science degree in Crop Science (specializations in agronomy, plant protection, and Vegetable Science) and Fruit Science (specialization in Fruit Production or Plant Protection). To support graduate study leading to the Master of Science in Agriculture degree.

LANGUAGES: English is the primary language of the collection. Works in Spanish may be of interest in some cases, for example, special publications on tropical crops.

GEOGRAPHICAL AREAS: In order of preference, emphasis is on North America, Hawaii, Central America, the Caribbean, Europe, the Middle East, Australia, and South America.

TYPES OF MATERIALS COLLECTED: Major domestic and international journals are of interest. Also monographs, proceedings of important international symposia or conferences, and textbooks which may serve as references. Some theses or dissertations as well as audiovisual material may occasionally be purchased.

CHRONOLOGICAL LIMITATIONS: Emphasis on current materials.

SPECIFIC SUBJECTS AND COLLECTING LEVELS:

Agronomy: Extensive collection dealing with all aspects of field crop production and soil science. 2

Olericulture: Extensive collection stressing all aspects of vegetable crop production and handling. 2

Horticulture: Extensive collection dealing with all aspects of the production of fruit crops, nut crops, and berries of temperate, sub-tropical and tropical zones. 2

Plant Protection: Extensive collection stressing management of weeds, insect pests, vertebrate pests, and plant pathogens. 2

Biology: Collection supporting agriculture, focusing on plant anatomy, taxonomy, physiology, and ecology. 3

Chemistry: Collection supporting agriculture, focusing on field plot technique. 3

Statistics: Collection supporting agriculture, focusing on field plot techniques, experimental design and analysis. 3

Beekeeping 4

DAIRY SCIENCE

GENERAL PURPOSE: To support undergraduate study leading to Bachelor of Science and technical degrees in Dairy Science (dairy production and dairy processing).

LANGUAGES: English.

GEOGRAPHICAL AREAS: Collections should emphasize the U.S. and also include significant works from any country.

TYPES OF MATERIALS COLLECTED: Selective purchase of text and reference books, scientific and trade journals, proceedings of symposia and conferences, related government publications and statistics.

CHRONOLOGICAL LIMITATIONS: Emphasis should be on the most recent publications, but older important material should not be excluded.

SPECIFIC SUBJECTS AND COLLECTING LEVELS:

<u>Dairy Manufacturing Processes</u>	3
<u>Dairy Product Development</u>	2
<u>Dairy Product Chemistry</u>	3
<u>Dairy Manufacturing Management</u>	3
<u>Dairy Product Microbiology</u>	3
<u>Dairy Product Grading and Testing</u>	3
<u>Dairy Cattle Genetics and Breeding</u>	3
<u>Dairy Cattle Physiology: Reproductive and lactation</u>	3
<u>Dairy Cattle Nutrition and Feeding</u>	3
<u>Dairy Cattle Management</u>	3
<u>Dairy Cattle Equipment and Facilities</u>	3
<u>Dairy Cattle Diseases</u>	3
<u>Applied Computer Methods</u>	3
<u>Dairy Industry Statistics: Production, consumption, utilization and prices.</u>	3

~~ECONOMICS~~

GENERAL PURPOSE: To serve all schools of the campus by offering courses which help students understand the overall functioning of the American economy. To support an undergraduate program leading to the Bachelor of Science degree in Economics, and support the M.B.A. program in the School of Business.

LANGUAGES: English is the primary language of the collection. Works in other languages are purchased in translation only.

GEOGRAPHICAL AREAS: Emphasis is on the United States, other North American countries and Europe.

TYPES OF MATERIALS COLLECTED: Monographs and periodicals comprise the major part of the collection. Society publications and the transactions and proceedings of conferences are purchased selectively. State and federal government statistical information and United Nations materials are collected on a regular basis.

CHRONOLOGICAL LIMITATIONS: The emphasis is on current acquisitions. However, all aspects of economic theory are emphasized.

SPECIFIC SUBJECTS AND COLLECTING LEVELS:

Comparative Economic Systems: Analysis of economic principles and institutions applicable to capitalism, socialism, and communism. 3

Consumer Economics: Consumer-producer relationships, money management, buying methods, investments, insurance, housing, and agencies that help the consumer. 4

Econometrics: Application of statistical methods used in economics, the general linear regression model, specific issues and problems related to economic models: Multicollinearity, autocorrelation, heteroscedasticity, dummy variables, and simultaneous equation estimation. Also, application and evaluation of selected examples of empirical economic research. 3

Economic Growth and Development: Rigorous examination of micro-economic analysis and macro-economic analysis, and an in-depth study of principles. 3

Economic History: Analysis of the growth and development of economic institutions in the United States and Europe. 3

λ Economic Theory: Analysis of ideas related to the development of economic theory in the western civilization from the Greeks through the classical, neoclassical, Keynesian, and to the current post-Keynesian concepts. 2

Industrial Organization: Application of basic tools of economics to American industry. 3

(Continued)

(ECONOMICS, continued)

International Economics: Theory of comparative advantage, gains from trade, recent developments in trade theory, nature of international payments, theory and practice of international exchange. 3

Labor Economics: Wage determination theory, the labor movement and its impact. 3

Managerial Economics: Fundamental principles and analytical tools of economics used in business decision-making. 3

Monetary Economics: National economic fluctuation models and related corrective monetary and fiscal policies on income, employment, output, growth and prices. 3

Public Finance: Principles of government financing and its various economic and social effects. 3

Transportation Economics: Analysis of the allocation of resources to the U. S. transport sector, and specific transport modes as a result of their natural economic characteristics and public policy. 3

Urban Economics: Application of basic tools of economic analysis to problems of urban regions. 3

EDUCATION

GENERAL PURPOSE: The Education collection supports the resource and research needs of undergraduates, graduate students, and faculty. The undergraduate curriculum prepares students for the Bachelor of Vocational Education degree and the fifth-year teaching credential in the areas of Administrative Services, Agriculture, Multiple Subjects (Elementary level), Pupil Personnel Services (Counseling and Guidance), Reading, Single Subjects (Secondary level), and Special Education (Learning handicapped). The graduate curriculum prepares students for the fifth-year teaching credential and the Master of Arts degree in Administrative Services, Counseling and Guidance, Curriculum and Instruction, Reading, Social Sciences, and the Special Interest Option. Courses supporting the Education curriculum and teacher preparation program are taught by faculty in the Education Department and by faculty in the following departments: Agriculture, Chemistry, English, History, Home Economics, Industrial Technology, Music, Physical Education, Political Science, Psychology, Social Science, and Speech Communication.

LANGUAGES: English is the primary language of the collection. Works in other languages are purchased in translation only.

GEOGRAPHICAL AREAS: Emphasis is on North America. Works concerning, and published, in Africa, Asia, Europe, South and Central America are purchased selectively.

TYPES OF MATERIALS COLLECTED: Monographs, serials, association and society publications, proceedings, and nonprint materials are collected. Theses, dissertations, and pamphlets are purchased in limited numbers.

CHRONOLOGICAL LIMITATIONS: Emphasis is on current materials, although historical works are selectively collected.

SPECIFIC SUBJECTS AND COLLECTING LEVELS:

Administration and Supervision: Collection supports current trends and legislation from elementary through higher education levels. 2

Adult Education: Collection is limited, but emphasis is on adult basic education and lifelong learning. 4

Agricultural Education: Collection supports elementary through higher education levels. 3

Anthropology of Education: Collection is limited, but supports elementary through higher education levels. 4

Art Education: Collection supports elementary through higher education levels. 3

Audiovisual Education: Emphasis is on the production, design, and effect on the learner. Collection supports elementary through higher education levels. 3

Bilingual/Bicultural Education: Emphasis is on current trends and legislation from kindergarten through grade 12. 3

(continued)

(EDUCATION, continued)

<u>Career Education:</u> Emphasis is on current and historical viewpoints from kindergarten through grade 12.	3
<u>Comparative Education:</u> Limited collection supports elementary through higher education levels.	5
<u>Counseling and Guidance:</u> Emphasis is on elementary through higher education levels.	2
<u>Curriculum Development:</u> Collection supports elementary through higher education levels.	2
<u>Early Childhood Education:</u> Collection supports preschool through grade 3.	3
<u>Educational Psychology:</u> Collection supports current and historical trends from elementary through higher education levels.	3
<u>Elementary Education:</u> Collection supports current trends and historical perspectives from kindergarten through grade 6.	3
<u>English:</u> Collection supports elementary through higher education levels.	3
<u>English as a Second Language:</u> Collection supports elementary through higher education levels.	4
<u>Ethnic Studies:</u> Collection supports current and historical trends from elementary through higher education levels.	3
<u>Foreign Language Instruction:</u> Collection supports elementary through higher education levels.	4
<u>Higher Education:</u> Collection supports current trends, historical trends, and legislation.	3
<u>History of Education:</u> Very limited collection at all levels.	4
<u>Home Economics:</u> Collection supports elementary through higher education levels.	3
<u>Industrial Technology:</u> Collection supports elementary through higher education levels.	3
<u>Instructional Strategies:</u> Collection supports elementary through higher education levels.	3
<u>Language Arts:</u> Collection supports elementary through higher education levels.	3
<u>Measurement and Evaluation:</u> Collection supports elementary through higher education levels.	3
<u>Multicultural Education:</u> Collection supports kindergarten through grade 12.	3

(EDUCATION, continued)

<u>Music Education:</u> Collection supports elementary through higher education levels.	4
<u>Philosophy of Education:</u> Limited collection of major works.	4
<u>Physical Education:</u> Collection supports elementary through higher education levels.	3
<u>Pre- and In-Service Education:</u> Collection supports current trends from elementary through higher education levels.	3
<u>Reading:</u> Collection supports elementary through adult levels.	2
<u>Science Education:</u> Collection supports elementary through higher education levels.	3
<u>Secondary Education:</u> Collection supports trends in grades 7-12 instruction in all content areas.	3
<u>Social Science Education:</u> Collection supports elementary through higher education levels.	3
<u>Sociology of Education:</u> Very limited collection of major works.	4
<u>Special Education:</u> Including, but not restricted to the following areas: autism, blind and visually handicapped, dyslexia, gifted and talented, hyperactivity, learning handicapped, mentally handicapped, physically handicapped, speech and hearing disorders. Collection supports elementary through higher education levels.	2
<u>Teacher Education:</u> Collection supports kindergarten through grade 12.	2
<u>Vocational Education:</u> Collection supports elementary through higher education levels.	3
<u>Women's Studies:</u> Collection supports current trends and legislation supporting the elementary through higher education levels.	3

ELECTRICAL AND ELECTRONIC ENGINEERING

GENERAL PURPOSE: To support undergraduate study leading to Bachelor of Science degrees in Electronic and Electrical Engineering; and to support graduate study leading to the Master of Engineering degree with a primary field of study in either Electronic or Electrical Engineering.

LANGUAGES: English is the primary language of the collection. Generally, works in other languages are acquired in translation only. Some limited foreign language works are acquired on request if equivalent information or point-of-view is not available in English.

GEOGRAPHICAL AREAS: Topic not limited by geographic considerations.

TYPES OF MATERIALS COLLECTED: Virtually all the journals of the Institute of Electrical and Electronics Engineers (IEEE) are collected. A broad range of symposium and conference reports and other monographs published by the IEEE are also collected. Other society publications transactions and conference proceedings are selectively collected. Individual theses, dissertations, and microform materials are purchased selectively or upon request. There are selected collections of standards published through the American National Standards Institute and by trade and professional organizations, such as the National Electrical Manufacturers Association.

CHRONOLOGICAL LIMITATIONS: The latest, most up-to-date, information is emphasized. Material more than four years old generally is not collected.

SPECIFIC SUBJECTS AND COLLECTING LEVELS:

Power: Includes energy conversion, direct energy conversion, rotating machines, power transmission and distribution, illumination, photo voltaic cells, and solar cells. 2

Electronics: Physical electronics, electronic circuits, solid state devices, solid state electronics, integrated circuits, design and fabrication, computer-aided analysis and synthesis of electronic circuits, and modelling. 2

Communications: Communication theory, information theory, communications electronics (digital and analog), telecommunications, queuing theory, satellite communications, telephone and telegraph, fiber optics, and phase-locked-loop systems. 2

Circuits: AC and DC circuits, circuit theory and analysis, circuit synthesis, network analysis, linear networks, transform theory, computer-aided analysis and synthesis, computational approach to circuit analysis, and digital filters. 2

Electromagnetic Fields: Electrostatics, magnetostatics, electromagnetic waves, antennas, wave propagation, and microwaves. 2

Signal Processing: Passive filters, active filters, digital signal processing, fast fourier transform discrete time series, digital filters, and Z transform predicative enrading. 2

(ELECTRICAL AND ELECTRONIC ENGINEERING, continued)

Control Systems: Dynamics, optimal control, control theory, regulators, feedback, sampled data control, sensitivity, state variables, stability, root locus, state space, transfer functions, computer-controlled systems, describing functions, pontryagin and liapunov functions, and modelling. 2

Digital Electronics: Computer-aided analysis, computers, logic, sequential machines, theory of automata, switching theory, large integrated circuits, medium scale integrated circuits, system design, sub-system design, interface design, minicomputers, microcomputers, microprocessors, semiconductor memories, and digital storage systems. 2

Systems Engineering: Simulation and modeling, and stochastic processes. 2

Commercial Product Catalogs: Company specifications for electrical and electronic devices. 3

ENGINEERING TECHNOLOGY

GENERAL PURPOSE: To support undergraduate study leading to a Bachelor of Science degree in Engineering Technology with one or more areas of specialization from five options: Air Conditioning-Refrigeration Technology, Electronic Technology, Manufacturing Processes Technology, Mechanical Technology, and Welding Technology.

LANGUAGES: English is the language of the collection. Generally, works in other languages are collected in translation only. A limited range of foreign language works are acquired on request, if equivalent information or point-of-view is not available in English.

GEOGRAPHICAL AREAS: Not applicable.

TYPES OF MATERIALS COLLECTED: Most of the journals and other publications of the Institute for Electrical and Electronic Engineers (IEEE), and the American Society of Mechanical Engineers (ASME) are collected. The journals and annual handbooks or transactions of the American Society of Heating, Refrigeration, and Airconditioning Engineers (ASHRAE), the Society of Manufacturing Engineers (SME) and the American Welding Society (AWS) are collected. Monographs and special reports published by these organizations are extensively collected. Other related society publications and the transactions and proceedings of conferences are purchased selectively. Individual theses, dissertations, and microforms are purchased upon request. There are extensive collections of standards published by the IEEE, ASME, ASHRAE, SME and the AWS.

CHRONOLOGICAL LIMITATIONS: The latest, most up-to-date, information is emphasized. Material more than four years old generally is not collected.

SPECIFIC SUBJECTS AND COLLECTING LEVELS:

Air Conditioning-Refrigeration: Air conditioning, refrigeration principles and codes, environmental graphics, system design, plumbing, building sanitation, fuel services, fire protection in buildings, mechanical equipment of buildings and related codes, heat exchanger technology, systems for air distribution, refrigeration, air conditioning and related control installations, estimating and design problems. 3

Electronic Technology: AC and DC circuits, electronic circuits and devices, industrial wiring, power distribution, rotating machines, electrical safety, advanced networks, active linear circuits, network analysis, active filters, automatic control, electronic communications, mini- and micro-computer technology and programming, video technology, and maintenance of computer peripheral machines. 3

Manufacturing Processes: Equipment and processes for fabrication of industrial products: turning, casting, milling, cutting, forming, machining, finishing, tool design, electronic assembly techniques, production analysis, industrial numerical control, tool and manufacturing engineering. 3

(continued)

(ENGINEERING TECHNOLOGY, continued)

Mechanical Technology: Engineering drawing, descriptive geometry, statics, dynamics, mechanisms, mechanical systems, industrial hydraulics, pneumatics, thermodynamics, fluid mechanics, instrumentation, industrial engines, machine design, and fluid power systems. 3

Welding Technology: Welding equipment and fixtures, welding processes, metallurgy of welds for various metals, metallography techniques, structure of metals and their mechanical properties, weldability of dissimilar metals, welding and cutting processes in manufacturing and industry, micro-bonding, mechanical, nondestructive testing, and welder qualification technology. 3

ENGLISH LANGUAGE AND LITERATURE

GENERAL PURPOSE: To support undergraduate study leading to the Bachelor of Arts degree in English with emphasis in American, British, and European literature, and Teaching English as a Second Language. Secondary emphasis is on language study and linguistics. To support graduate study leading to the Master of Arts degree, specializing in literature, critical analysis, and linguistics.

LANGUAGES: English is the primary language of the collection. Works in other languages are usually purchased in translation, or in the original language as use or demand indicates.

GEOGRAPHICAL AREAS: Emphasis is on North and South America, Great Britain and Western Europe.

TYPES OF MATERIALS COLLECTED: Biographies, interpretive analyses, fiction, novels and collections of short stories are purchased selectively. Popular treatments and introductory textbooks such as those used in classes are not normally purchased. Audiovisual materials related to language and literature are also purchased.

CHRONOLOGICAL LIMITATIONS: None.

SPECIFIC SUBJECTS AND COLLECTING LEVELS: Literary works, including reading and critical analysis of drama, poetry, and novels within the following areas: classical period to medieval (including Chaucer), medieval to Elizabethan (including Shakespeare), and Elizabethan to modern (including Afro-American and Latin American authors). Linguistics: this area includes the study of contemporary language, both grammar and composition, and the teaching of English as a second language.

Literary Works:

Classical period to medieval	3
Medieval to Elizabethan	3
Elizabethan to modern	3
British	3
American	3
European	4
Latin American	4
Afro-American	3
Other world literature (selected)	4
<u>Film as Literature</u>	4
<u>Children's Literature</u>	4
<u>Linguistics</u>	3
<u>Rhetoric and Composition</u>	3
<u>English as a Second Language</u>	3

ENVIRONMENTAL ENGINEERING

GENERAL PURPOSE: To support an undergraduate program leading to a Bachelor of Science degree in Environmental Engineering; and to support a graduate program leading to a Master of Engineering degree with a concentration in Environmental Engineering. Both programs emphasize air conditioning and refrigeration, air pollution control, water pollution-waste management, and new environmentally related technologies.

LANGUAGES: English is the primary language of the collection. Works in other languages are purchased in translation only.

GEOGRAPHICAL AREAS: Geographical considerations are not emphasized.

TYPES OF MATERIALS COLLECTED: Society publications, proceedings and journals of divisions are purchased extensively. Other transactions and proceedings are purchased selectively. Popular treatments and introductory texts are not ordinarily purchased. Government publications are of importance.

CHRONOLOGICAL LIMITATIONS: Current information is desired.

SPECIFIC SUBJECTS AND COLLECTING LEVELS:

<u>Air and Water Pollution</u>	2
<u>Industrial Hygiene</u>	3
<u>Air Conditioning</u>	3
<u>Heating</u>	3
<u>Ventilation</u>	3
<u>Refrigeration</u>	3
<u>Solar Energy</u>	2

SUBJECT PROFILE

DATE: May 24, 1979

FOOD SCIENCE

GENERAL PURPOSE: To support, undergraduate study leading to a Bachelor of Science degree in Food Science. Also, to support research in the field of processing and preservation of fruits, vegetables, meat products and other food items.

LANGUAGES: English.

GEOGRAPHICAL AREAS: North America and Europe.

TYPES OF MATERIALS COLLECTED: Society publications, trade periodicals, transactions and proceedings of food processing organizations.

CHRONOLOGICAL LIMITATIONS: Emphasis is on the most recent works, but older material is also collected.

SPECIFIC SUBJECTS AND COLLECTING LEVELS:

<u>Meat Processing:</u> Sausage manufacturing, dried meats, fermented meats, cured meats, nitrites in meats, canned meats.	2
<u>Meat By-products</u>	3
<u>Meat Retailing</u>	3
<u>Wines and Fermented Foods</u>	2
<u>Dehydration:</u> Equipment, methods, research, products.	2
<u>Garlic and Onion Chemistry:</u> Flavor, processing.	2
<u>Food Processing Equipment:</u> Manufacturing firms.	3
<u>Fish and Fish By-products:</u> Processing, chemistry, flavor.	2
<u>Food gums, Thickeners, Stabilizers used in Food Industry.</u>	3
<u>Product Development</u>	3
<u>Thermally Processed and Preserved Foods</u>	3
<u>Frozen Foods</u>	3
<u>Grain, Starch Processing and By-products</u>	3

FOREIGN LANGUAGES

GENERAL PURPOSE: To support undergraduate study leading to a basic understanding of foreign languages such as French, German, and Spanish.

LANGUAGES: Not applicable.

GEOGRAPHICAL AREAS: Not applicable for French and German. In Spanish emphasis is given to works that have to do with the Mexican heritage of the United States. The latter also includes Latin American and Spanish works.

TYPES OF MATERIALS COLLECTED: Mainly monographs on language, grammar, poetry, essays, novels and plays in these three languages. Also included in this collection are periodicals related to the culture and literature covered by these languages.

CHRONOLOGICAL LIMITATIONS: Not applicable.

SPECIFIC SUBJECTS AND COLLECTING LEVELS:

French: Elementary practice in pronunciation, sentence structure, reading, writing, basic conversation, intermediate grammar, and practice in writing and oral expression. 4

French Conversation: Current idiomatic usage with emphasis on contemporary culture. 4

Significant Writers in French: Representative writers in literary periods, critical analysis and oral discussion of poetry, essays, novels and plays. 3

German: Elementary practice in pronunciation, sentence structure, reading, writing, and basic conversation. Intermediate grammar and practice, oral expression based on social and cultural values. 4

German Conversation: Current idiomatic usage with emphasis on contemporary culture. 4

German Scientific Intensive Grammar: Emphasis on reading scientific German materials and texts. 3

Significant Writers in German: Representative writers of literary periods. 3

Spanish: Elementary and intensive practice in pronunciation, sentence structure, reading, writing, and basic conversation. 4

Intermediate Spanish: Review of Spanish grammar, practice in writing, and oral expression based on social cultural values. 4

Spanish Conversation: Current idiomatic usage with emphasis on contemporary culture. 4

Significant Writers in Spanish 3

GRAPHIC COMMUNICATIONS

GENERAL PURPOSE: To support undergraduate study leading to a Bachelor of Science degree in Graphic Communications. Along with a general core of printing technology courses, the program is designed to provide specific curricular options which allow students to specialize in one of four areas: Computer Graphic Communications, Design Reproduction, Printing Management, and Packaging.

LANGUAGES: English is the primary language of the collection. Works in other languages are purchased in translation only.

GEOGRAPHICAL AREAS: Emphasis is on North America and Europe with some consideration given to Australia and New Zealand.

TYPES OF MATERIALS COLLECTED: Society publications, transactions and proceedings are purchased when available. Materials published by professional and industrial organizations are purchased extensively. Great emphasis is placed on the purchase of technical materials, reports, lab tests, equipment tests and bulletins. Popular and low technical level materials are not ordinarily purchased. Technical journals, trade journals, and serial publications are heavily used due to the accelerated and highly changing technology of the field.

CHRONOLOGICAL LIMITATIONS: Current information is most desired.

SPECIFIC SUBJECTS AND COLLECTING LEVELS:

Binding and Finishing

3

Camera Processes: Includes all camera processes, image assembly, platemaking, and pre-separated art for camera.

2

Composition: Includes composition systems, advanced composition systems, and composing machines.

2

Copy Preparation: Includes line and half tone media.

2

Estimating: Includes pricing, costing and package estimating.

2

Lithographic Processes: Includes image assembly, platemaking, theory of lithography, and offset lithographic press work.

2

Management: Includes production management, quality control, personnel management, procedures, collective bargaining and labor, plant organization and layout, newspaper, and publications management.

2

Packaging: Includes package estimating, consumer packaging, packaging processes, and package substrates.

2

Press Operations: Includes letterpress, lithographic press work, gravure, relief printing specialties, web printing, and flexography.

2

Printing Equipment Management

3

(continued)

(GRAPHIC COMMUNICATIONS, continued)

- Sales: Includes sales management, forecasting and marketing. 3
- Screen Processes: Includes all screen processes on various surfaces and industrial applications. 3
- Substrates and Ink: Includes packaging substrates, paper and ink. 2
- Typography: Type design, composition, layout, design, commercial typography, and graphic design for reproduction. 2

HISTORY

GENERAL PURPOSE: To support undergraduate work leading to a Bachelor of Arts degree in History, and a teaching credential. The subject emphasis is in the following areas: American, European, Russian, African, East Asian, Latin American, Middle East, and Ancient.

LANGUAGES: English is the primary language of the collection. Limited collections in other languages, i.e. German and Spanish.

GEOGRAPHICAL AREAS: North America, Europe, East Asia, Asia, Middle East, Africa, South America, and Central America.

TYPES OF MATERIALS COLLECTED: Monographs, biographies, autobiographies, diaries, journals, subject bibliographies, proceedings of historical societies, collections of essays, collections of letters, documents, speeches, writings, and dissertations. Selected audiovisual materials are also collected. Popular treatments, textbooks, and work of any variety on the Indian sub-continent are not collected.

CHRONOLOGICAL LIMITATIONS: None

SPECIFIC SUBJECTS AND COLLECTING LEVELS:

American: Political, economic, social, cultural, intellectual, technological, 2
diplomatic, agricultural, and military.

European: Political, economic, social, cultural, intellectual, diplomatic, 3
and military.

Russian: Political, economic, social, cultural, intellectual, diplomatic, 4
and military.

African: Political, economic, social, cultural, intellectual, diplomatic, 4
and military.

East Asian: Political, economic, social, cultural, intellectual, diplomatic, 4
and military.

Latin American: Political, economic, social, cultural, intellectual, 4
diplomatic, and military.

Middle East: Political, economic, social, cultural, intellectual, 4
diplomatic, and military.

Ancient: Political, economic, social, cultural, intellectual, diplomatic, 4
and military.

Afro-American: Political, economic, social, cultural, and intellectual. 3

Chicano: Political, economic, social, cultural, and intellectual. 3

HOME ECONOMICS

GENERAL PURPOSE: To support undergraduate study leading to a Bachelor of Science degree in Dietetic/Food Administration and Home Economics with emphasis in merchandising, textiles, fashion, interior design, consumer education, and food science. To support graduate study leading to a Master of Science degree in Home Economics with specialization in nutrition and the general field of Home Economics.

LANGUAGES: English and translations into English primarily.

GEOGRAPHICAL AREAS: United States for all subject areas. Also, Europe (including U.S.S.R.), England, and Canada for nutrition; England, France and Italy for interior design; and England and Canada for textiles.

TYPES OF MATERIALS COLLECTED: Theses and microforms of theses from other universities are collected. Purchases of popular treatments are limited. International conferences and United Nations publications are purchased, especially in nutrition. Cookbooks and popular domestic craft materials are collected at a minimal level. Slides and filmstrips are ordered selectively.

CHRONOLOGICAL LIMITATIONS: None.

SPECIFIC SUBJECTS AND COLLECTING LEVELS:

Clothing: Including merchandising.

3

Consumer Education

3

Foods

3

Interior Design: Including housing.

3

Nutrition

2

Textiles

2

INDUSTRIAL ENGINEERING

GENERAL PURPOSE: To support undergraduate study leading to a Bachelor of Science degree in Industrial Engineering with a curricular concentration in either manufacturing or systems; and to support graduate study leading to the Master of Engineering degree with a primary field of study in Industrial Engineering.

LANGUAGES: English is the primary language of the collection. Generally, works in other languages are acquired in translations only. Some limited foreign language works are acquired on request if equivalent information or point-of-view is not available in English.

GEOGRAPHICAL AREAS: Topic not limited by geographic considerations.

TYPES OF MATERIALS COLLECTED: All the journals of the American Institute of Industrial Engineers (AIIE) are collected. Special studies and reports of the AIIE as well as any symposium or conference reports or other books and monographs published by the AIIE are collected. Other society publications, transactions, symposiums and conference proceedings are collected selectively. Individual theses, dissertations, and microform materials are purchased selectively or upon request. There are selected collections of standards published through the American National Standards Institute and by trade and professional organizations such as the Electronic Industries Association.

CHRONOLOGICAL LIMITATIONS: The latest, most up-to-date, information is emphasized. Material more than five years old generally will not be collected.

SPECIFIC SUBJECT AND COLLECTING LEVELS:

Manufacturing Control: Safety, production control, plant layout, shop practices, quality control, engineering testing, product development, work methods, and cost estimating. 2

Manufacturing Equipment: Tools, manual machines, semi-automatic and automatic machines, computer-aided machines, and microprocessors. 3

Manufacturing Management: Management practice and cost controls. 2

Systems Applications: Statistics, mathematical modeling and simulation, optimization techniques, flow charting, and computer applications. 2

System Components: Data processing, work design, human factors, cybernetics, and engineering economy. 2

Operations Research: Simulation and games, decision strategy, queuing, linear and non-linear programming, and Markov chains. 3

INDUSTRIAL TECHNOLOGY

GENERAL PURPOSE: To support undergraduate study leading to the Bachelor of Science degree in Industrial Technology or the Bachelor of Arts degree in Industrial Arts; and to support graduate study leading to the Master of Arts degree in Industrial Arts.

LANGUAGES: English is the primary language of the collection. Generally, works in other languages are acquired in translation only. Some limited foreign language works are acquired on request if equivalent information or point-of-view is not available in English.

GEOGRAPHICAL AREAS: Generally, the topic is not limited by geographic considerations.

TYPES OF MATERIALS COLLECTED: The publications of societies related to industrial management and education as well as transactions and proceedings of conferences on these topics are purchased selectively. Individual theses, dissertations, microfilm and audiovisual materials are purchased selectively, or upon request. There are extensive collections of standards published by the American National Standards Institute, the Society of Automotive Engineers and other related trade and professional organizations.

CHRONOLOGICAL LIMITATIONS: The latest, most up-to-date, information is emphasized. Material more than five years old generally is not collected.

SPECIFIC SUBJECTS AND COLLECTING LEVELS:

Industrial Materials: Applications and limitations of materials including plastics, glass, ceramics, rubber, abrasives, adhesives, wood, fuels, lubricants, metals, character and application of industrial finishes. 3

Industrial Equipment: Power sources both traditional and alternative, power transmissions, industrial electrical systems, electronic control systems, mechanical systems, including steam refrigeration, hydraulic and pneumatic equipment, lubricants, packaging machinery, and construction equipment.

Industrial Processes Management: Industrial design, industrial product development, quality control, product evaluation, value engineering, production, mass production, plant maintenance management, customer relations, industrial marketing, cost control, industrial packaging, technical management problems, electronic computer applications, and numerical control of machine tools. 3

Industrial Education: Drafting, technical drawing and sketching, teaching applications of drafting principles, history and philosophy of industrial education, facility planning in industrial education, organization, administration and financing of industrial education, curriculum planning, and methods of industrial education. 3

Metal Technology: Use of hand and machine tools, machine shop and bench metal processes, metal production processes, assembly line methods and equipment, metal fabrication processes, and industrial education projects with metals. 3

(INDUSTRIAL TECHNOLOGY, continued)

Wood Technology: Processes and materials in lumbering, mill-cabinet work, general construction, furniture manufacturing, homebuilding, mass production, assembly line methods and equipment, and industrial education projects. 3

Electronics Technology: Construction, testing, trouble-shooting, repair of electrical and electronic equipment, teaching applications of electronic equipment, planning and equipping of secondary school electronics laboratories, and programs and experiments for secondary teaching of electronics. 3

Plastics Technology: Plastics machinery and fabrication equipment, plastics fabrication processes, plastics properties, characteristics and processing behavior, process analysis, control, and evaluation. 3

Automotive Technology: Theory and operation of automotive and other transportation power sources, theory, application and service of automotive systems and equipment, including fuel, electrical, lubrication, cooling, chassis, and power trains, engine overhaul, maintenance, theory, construction, consumer information, economics of selection and preventive maintenance. 3

JOURNALISM

GENERAL PURPOSE: To support intellectual growth and curiosity of undergraduate students working on a Bachelor of Science degree in Journalism and students in undergraduate journalism courses.

LANGUAGES: Primarily English. Also, selected translations of works in French, German, Spanish, Italian, Russian and Chinese.

GEOGRAPHICAL AREAS: Worldwide.

TYPES OF MATERIALS COLLECTED: Books and periodicals (including newspapers) directly related to journalism. Selected audiovisual materials.

CHRONOLOGICAL LIMITATIONS: Emphasis on current materials.

SPECIFIC SUBJECTS AND COLLECTING LEVELS:

Mass Media

3

Mass Communications

3

Human Communications

3

Advertising

3

Newspaper, radio, television, and magazine propaganda

3

Journalism Practice

3

Journalism Law

4

Economics of Journalism

3

History of Journalism

4

Relation of Journalism to Society

4

Psychology of Journalism

4

Philosophy of Journalism

4

LANDSCAPE ARCHITECTURE

GENERAL PURPOSE: To support the Bachelor of Science degree in Landscape Architecture, with emphasis on the design and functional organization of open space, and on the conservation and revitalization of both natural and man-made landscapes (ranging in scale from domestic units to systems of urban, rural and regional land use).

LANGUAGES: English is the primary language of the collection.

GEOGRAPHICAL AREAS: Worldwide with special emphasis on North America, Europe and the Orient.

TYPES OF MATERIALS COLLECTED: Materials specific to landscape architecture and the associated professions and arts, such as architecture, planning, engineering, etc.

CHRONOLOGICAL LIMITATIONS: None

SPECIFIC SUBJECTS AND COLLECTING LEVELS:

Design: Includes all aspects of the design of the exterior environment with an emphasis on design methodology and specific and general design principles. 2

Practice: A collection of material covering all aspects of construction methods, techniques and materials. 2

Theory: A collection of material covering design theory of both a specific and general nature. 3

History: A collection covering all aspects of world history of design on the land and man's interaction with outdoor space. 3

Professional Practice: A collection of material related to office organization, contract documents and specifications, ethics, and problems and practices in the profession. 3

Plant Composition: A collection of material covering the functional and aesthetic use of plant materials. 3

Regional Planning: A collection of material related to larger scale landscape design with particular emphasis on inventory and analysis issues as well as visual assessment. 2

Urban Design: A collection of material on the subject with particular emphasis on physical design emphasis in urban areas. 2

Site Analysis and Planning: Energy conservation, site planning criteria, cost effective site planning, aerial photo interpretation, land surveying, man's role in changing the natural landscape, land reclamation, and environmental assessment. 2

Presentation and Graphic Techniques: Photography and reproduction methods, graphic skills and model making, basic design methods, problem-solving and three-dimensional design methods. 2

MANAGEMENT

GENERAL PURPOSE: To support undergraduate study leading to a Bachelor of Science degree in Business Administration with emphasis on the study of management; and, to support graduate study leading to the Master of Business Administration (M.B.A.). The four curricular concentrations are Industrial Relations, International Business Management, Management, and Management Information Systems.

LANGUAGES: English.

GEOGRAPHICAL AREAS: The emphasis is on North America, but the management literature of other countries, particularly in Europe and the Far East, is of interest.

TYPES OF MATERIALS COLLECTED: Professional publications, transactions and proceedings of conferences are selectively purchased. Theses, dissertations, audiovisual, and microform materials are purchased in limited numbers.

CHRONOLOGICAL LIMITATIONS: Not applicable.

SPECIFIC SUBJECT AND COLLECTING LEVELS:

Business Organization and Administration: Includes theory of the firm, corporations, and personnel administration. 3

Production: Includes production theory, cost analysis, quality control, research and development. 3

Information Technology: Includes the use of information for decision making purposes of management. 3

Organization Theory and Behavior: Includes organizational relationships. 3

Operations Research: Includes systems analysis, linear programming, queuing theory, and simulation. 3

Industrial Relations: Includes labor management relations, collective bargaining, and compensation. 3

International Management 3

MATHEMATICS

GENERAL PURPOSE: To support undergraduate study leading to a Bachelor of Science degree in Mathematics with emphasis in Applied Mathematics, Finite Mathematics, or Mathematics Education. To support graduate study leading to the Master of Science degree in Mathematics, and to support service courses for students in Agriculture, Architecture, Business, Engineering, and Science.

LANGUAGES: Primarily English. Works in other languages purchased as requested.

GEOGRAPHICAL AREAS: Emphasis on North America and Europe.

TYPES OF MATERIALS COLLECTED: National Council of Teachers of Mathematics, American Mathematical Society, Mathematical Association of America, and Society for Industrial and Applied Mathematics publications. Selected upper division textbooks and monographs.

CHRONOLOGICAL LIMITATIONS: Emphasis is on recent publications.

SPECIFIC SUBJECTS AND COLLECTING LEVELS:

<u>History</u>	3
<u>Mathematics Education</u>	2
<u>Mathematical Logic and Foundations</u>	3
<u>Set Theory</u>	4
<u>Combinatorics</u>	4
<u>Number Theory</u>	4
<u>Algebraic Structures</u>	2
<u>Linear Algebra</u>	3
<u>Geometry</u>	4
<u>Topology</u>	3
<u>Calculus</u>	3
<u>Differential Equations</u>	2
<u>Complex Analysis</u>	4
<u>Functional Analysis</u>	2
<u>Numerical Analysis</u>	3
<u>Calculus of Variations and Control Theory</u>	2
<u>Probability and Statistics (see Statistics profile)</u>	
<u>Applied Mathematics: Including Physics, Engineering, Economics, Biology, and Operations Research.</u>	3

MECHANICAL ENGINEERING

GENERAL PURPOSE: To support undergraduate study leading to a Bachelor of Science degree in Mechanical Engineering; and to support graduate study leading to the Master of Engineering degree with a concentration in Mechanical Engineering.

LANGUAGES: English is the primary language of the collection. Generally, works in other languages are acquired in translation only. A limited number of foreign language works are acquired on request, if equivalent information or point-of-view is not available in English.

GEOGRAPHIC AREAS: Topic not limited by geographic considerations.

TYPES OF MATERIAL COLLECTED: Most of the journals of the American Society of Mechanical Engineers (ASME) are collected. Most of the symposium and conference reports and other books and monographs published by the ASME are actively collected. Other society publications and the transactions and proceedings of conferences are purchased selectively. Individual theses, dissertations and microfilm materials are purchased selectively or upon request. There are extensive collections of standards published by the American National Standards Institute, and by trade and professional organizations, such as the American Society of Mechanical Engineers.

CHRONOLOGICAL LIMITATIONS: The latest, most up-to-date information is emphasized. Material more than five years old, generally, is not collected.

SPECIFIC SUBJECTS AND COLLECTING LEVELS:

Applied Mechanics: Statics, dynamics, kinematics, engineering mechanics, mechanical vibrations, stress analysis, Lagrangian mechanics, and dynamics of ground vehicles. 3

Mechanical Design: Design of machine parts, design techniques industrial design practice, analytical modeling, mechanical control systems, hydraulic and fluid systems, analog and digital simulation techniques, fluid power systems, testing, and instrumentation. 3

Power: Energy conversion from fuels and other resources, energy storage systems, internal combustion engines, and turbomachinery. 3

Thermal Science: Thermal systems, thermodynamics, convective heat, fluid mechanics, laminar and turbulent flow, mass transfer, heat exchangers, and compressible flow. 3

Petroleum Engineering: Reservoir mechanics, recovery techniques, oil-well planning; drilling and completion, and deep water drilling systems. 4

Nuclear Reactor Engineering: Reactor physics, power plant design and operation, reactor thermal and hydraulic design, and thermal and fast type nuclear power plants. 4

METALLURGICAL ENGINEERING

GENERAL PURPOSE: To support undergraduate study leading to a Bachelor of Science degree in Metallurgical Engineering.

LANGUAGES: English is the primary language for the collection. Generally, works in other languages are acquired in translation only.

GEOGRAPHICAL AREAS: Topic not limited by geographic considerations.

TYPES OF MATERIALS COLLECTED: Most of the publications of the American Society for Metals (ASM) and the American Welding Society (AWS) are collected. Most of the symposium and conference reports published by the ASM are actively collected. Other professional association and society publications and the transactions and proceedings of conferences are purchased selectively. Individual theses and microfilm materials are purchased selectively or upon request. There are extensive collections of standards published by the American National Standards Institute, and by trade and professional organizations such as the American Society of Mechanical Engineers and the American Welding Society.

CHRONOLOGICAL LIMITATIONS: The latest, most up-to-date information is emphasized. Material more than five years old generally is not collected.

SPECIFIC SUBJECTS AND COLLECTING LEVELS:

Metallurgical Engineering: Metal working, metal joining and metal production processes, physical and mechanical properties of metals, heat treatment, extractive metallurgy, mill and foundry theory, metal failure, metallography, electron microscopy, fracture mechanics, fatigue, corrosion control, and mechanical test methods. 3

Materials Engineering: Theory of materials, metallurgical thermodynamics, structure, microstructure, physical and mechanical properties, behaviors of metals, alloys, ceramics, insulating materials, semi-conductors and polymers, stress loading and deformation, phase relations, and processing. 3

Welding Engineering: Metallurgical aspects of welding design, material and process selection, procedure and fabrication, weldability of various metals, especially aluminum, copper, steel, titanium, their alloys, and cost estimating. 3

Welding Technology: Macro and micro metallurgy of welds, structures of welds, weld geometry, mechanical properties, power sources, welder qualification tests, specialized welding equipment, and fixtures. 3

Industrial Welding: Manufacturing applications of brazing, soldering, cutting and various electric, gas and electron welding processes, mechanical testing, and non-destructive examination for quality control. 3

MUSIC

GENERAL PURPOSE: To support undergraduate study leading to a basic understanding of music, its principles, history, educational methods and its applications in various forms such as voice and musical instruments.

LANGUAGES: The basic language of the collection is English. While the field of music is international, emphasis is placed on materials in Italian and German.

GEOGRAPHICAL AREAS: There is no limitation in regards to the geographical areas as long as the material is suitable to the curriculum of the department.

TYPES OF MATERIALS COLLECTED: Monographs, manuals, dictionaries, encyclopedias, directories, and sound recordings.

CHRONOLOGICAL LIMITATIONS: N/A

SPECIFIC SUBJECTS AND COLLECTING LEVELS:

Theory: Elements of music theory, the structure of tonality in Western civilizations, the dominant seventh chord, nondominant seventh chord, modulation, etc. 3

Ear Training and Sight Singing: Systematic development of skills in reading musical notation. 3

Piano: Beginning piano for students with no background in keyboard instruments and for those students playing simple minuets. 3

Intermediate level piano technique with emphasis on style, interpretation, sight reading, etc.

Emphasis on general knowledge of piano literature, interpretation, style, and performance practices.

Guitar: Fundamentals of guitar technique and performance, including elements of both classical and folk guitar. 4

Symphony Orchestra: Standard repertory, rarely performed works, and opportunities to perform chamber music in addition to standard repertory, etc. 3

Instrumental Ensembles: Rehearsal and public performances in trios, quartets and quintets. 4

Vocal Groups 4

History of Music: Intensive study of a selected topic in music history each quarter through the use of readings, recordings and scores. 3

Music for Children 4

SUBJECT PROFILE

DATE: May 2, 1979

NATURAL RESOURCES MANAGEMENT

GENERAL PURPOSE: To facilitate undergraduate education leading to a Bachelor of Science degree in Natural Resources Management with emphasis areas in Fish and Wildlife, Forestry, Parks and Recreation, and Environmental Services. Secondary emphasis in support of a graduate program leading to a Master of Science specializing in Agriculture.

LANGUAGES: English is the primary language of the collection.

GEOGRAPHICAL AREAS: World wide.

TYPES OF MATERIALS COLLECTED: Texts, society publications, transactions, and proceedings of conferences are of primary value. Especially valuable are government publications and documents dealing with natural resources.

CHRONOLOGICAL LIMITATIONS: Emphasis is on the most recent works, but older material is also collected.

SPECIFIC SUBJECTS AND COLLECTING LEVELS:

Fish and Wildlife: All aspects, life histories, management, status, etc. 2

Forestry: All aspects, especially culture, protection harvest, and management. 2

Parks and Recreation: All aspects dealing with resources based outdoor recreation (policies, management, etc.). 2

Environmental Services: General Topics such as pollution, environmental law, and environmental monitoring. 3

Conservation: All aspects as related to natural resources or their management. 3

SUBJECT PROFILE

DATE: May 2, 1979

ORNAMENTAL HORTICULTURE

GENERAL PURPOSE: To support undergraduate study leading to a certificate for the technical program and a Bachelor of Science degree in Ornamental Horticulture with emphasis in the Landscape Industry, Nursery Production, Floriculture, and Floral Design. To support graduate study leading to a Master of Science in Agriculture.

LANGUAGES: English is the primary language of the collection. Works in other languages are purchased in translation only.

GEOGRAPHICAL AREAS: Worldwide with emphasis on North America.

TYPES OF MATERIALS COLLECTED: Books, reference materials, society publications, abstracts and indexes, government documents, trade journals, and selected audiovisual material. Theses, dissertations and microform materials are purchased in limited numbers. Popular treatments (with few exceptions) and juvenile materials are not ordinarily purchased.

CHRONOLOGICAL LIMITATIONS: Emphasis is on the most recent works, but older material is also collected.

SPECIFIC SUBJECTS AND COLLECTING LEVELS:

Arboriculture

Botany: California, Mediterranean and similar types of geography.

Floral Design

Floriculture

Greenhouse Plants

Greenhouses

Grounds Maintenance

Horticulture Business

Landscape Contracting

Landscape Design

Landscape Gardening

Ornamental Horticulture

Ornamental Plants: Herbaceous and woody.

Parks: Design, Maintenance, and Management.

Pest Controls on Ornamental Plants

Plant Tissue Culture

Turf Culture

Urban Forestry

Weeds

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PHILOSOPHY

GENERAL PURPOSE: To support undergraduate study of philosophy in order to satisfy general education requirements, specific requirements of other departments and individual interest in philosophical topics and the history of philosophy. There is no philosophy major. Traditionally the philosophy department has also staffed courses in religious studies, but not in the philosophy of religion.

LANGUAGES: English is the primary language of the collection. Works in other languages are usually purchased in translation; occasionally they are purchased in the original language.

GEOGRAPHICAL AREAS: Emphasis is on western philosophy (European, British and American) as opposed to Oriental philosophy.

TYPES OF MATERIALS COLLECTED: Major journals, bibliographic works, and reference works are purchased routinely, including journals on microfilm. Popular treatments of philosophy and inspirational works are rarely purchased. Introductory texts and other works suitable for introductory courses are purchased selectively.

CHRONOLOGICAL LIMITATIONS: None applicable.

SPECIFIC SUBJECTS AND COLLECTING LEVELS:

General Philosophy: Limited collection of standard classic and contemporary works. 4

Aesthetics and Value Theory: Limited collection of standard classic and contemporary works and their commentaries. 4

Epistemology and Metaphysics: Selective collection of standard classic and contemporary works and their commentaries. 3

Ethics and Political Philosophy: Includes writing on social and economic justice, human rights, political theory as it affects ethics, and the philosophy of law. Special topics such as business and professional ethics, medical ethics, etc. 3

History of Western Philosophy: Philosophical works of important Western philosophers, standard commentaries, and standard expositions of the history of Western philosophy. 3

History of Eastern Philosophy: Very limited collection. 5

Logic and Philosophy of Logic: Limited, includes standard expositions of traditional logic, modern symbolic logic, modal logic, inductive logic, and the philosophy of logic, and commentaries. 4

Philosophy of Language: Limited collection of standard classic, contemporary works, and commentaries. 4

Philosophy of Mind and Philosophical Psychology: Limited collection of standard classic, contemporary works, and commentaries. 4

(continued)

(PHILOSOPHY, continued).

Philosophy of Religion: Limited collection of standard classic, contemporary works, and commentaries.

4

Philosophy of Science: Limited collection of standard classic, contemporary works, and commentaries.

4

Religious Studies: (Not to be confused with the philosophy of religion.) Limited collection of classic, contemporary works, and commentaries, including works in sociology of religion.

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PHYSICAL EDUCATION

GENERAL PURPOSE: To support undergraduate study leading to a Bachelor of Science degree in Physical Education, Health Education and Recreation; and to support graduate courses leading to the Master of Science degree in Physical Education.

LANGUAGES: English is the primary language of the collection.

GEOGRAPHICAL AREAS: Emphasis on the United States with some foreign countries.

TYPES OF MATERIALS COLLECTED: Society publications, journals and abstracts. Theses and dissertations are ordered only on request. Popular treatments are purchased selectively.

CHRONOLOGICAL LIMITATIONS: Not applicable.

SPECIFIC SUBJECTS AND COLLECTING LEVELS:

<u>Team Sports, Individual Sports, Self-Test Activities</u>	4
<u>Childhood Games and Activities</u>	4
<u>Aquatics</u>	4
<u>Dance and Rhythmic Activities</u>	3
<u>Adaptives</u>	3
<u>Organization and Administration of Athletics</u>	3
<u>Research Methods in Physical Education</u>	3
<u>Curriculum Construction and Methodology in Physical Education</u>	3
<u>Health Education</u>	3
<u>Athletic Training and Sports Medicine</u>	3
<u>Recreation</u>	3
<u>Recreation Administration</u>	3
<u>Exercise Physiology</u>	3
<u>Kinesiology</u>	3
<u>Motor Learning</u>	3
<u>Biomechanics</u>	3

PHYSICS

GENERAL PURPOSE: To support undergraduate study leading to Bachelor of Science degrees in Physics and in Physical Science.

LANGUAGES: English. Works in other languages should be purchased in translation only.

GEOGRAPHICAL AREAS: Worldwide, but with special attention to California in Geophysics and Geology.

TYPES OF MATERIALS COLLECTED: Books which review recent developments in a particular subject area are important. Selected general interest books should also be collected. Society publications and the transactions and proceedings of conferences are purchased selectively. Theses, dissertations, microfilm, audiovisual materials, and selected upper-division text books are purchased only when requested.

CHRONOLOGICAL LIMITATIONS: Only current materials are purchased except for special requests or to complete files of important journals.

SPECIFIC SUBJECTS AND COLLECTING LEVELS:

Acoustics: Including the physics of music. 3

Astronomy: Planetary and stellar. 4

Atomic and Molecular Physics 4

Biophysics 3

Computers and Microprocessors: Applied to teaching undergraduate physics. 3

Electronics: Particularly digital electronics and microprocessors. 3

Elementary Particle Physics 3

Energy: Solar, geothermal, wind, wave, tide, fission, fusion, etc. 2

Energy Crisis and Energy Planning: Production, consumption, and conservation of energy. 2

Environmental Effects of Energy Production and Use 2

Geophysics and Geology: Including paleomagnetism and earthquakes with special emphasis on completeness for California. 3

History of Physics 4

Instrumentation 4

Mathematical Physics: Including classical mechanics, quantum mechanics, relativity, gravitation, statistical mechanics, and thermodynamics. 3

Meteorology: Including cloud physics. 3

(continued)

(PHYSICS, continued)

Nuclear Physics

3

Nuclear Reactor Safety

3

Oceanography: Including marine optics.

3

Optics and Quantum Optics: Including laser physics.

3

Solid State Physics

3

Physics and Physical Science Education

3

SUBJECT PROFILE

DATE: December 27, 1979

POLITICAL SCIENCE

GENERAL PURPOSE: To support undergraduate study leading to a Bachelor of Arts degree in Political Science with various subconcentrations in Public Administration, Public Policy, International Relations, Urban Politics and Pre-law. Also, to support general education requirements for all students taught by the department of Political Science.

LANGUAGES: Primarily English

GEOGRAPHICAL AREAS: Primarily the United States at all government levels. Africa, Latin America, Middle East, Europe, the Soviet Union and China on the national and international level.

TYPES OF MATERIALS COLLECTED: Major works in all areas of political science, U.S. government documents, California state and municipal documents, and United Nations documents.

CHRONOLOGICAL LIMITATIONS: None

SPECIFIC SUBJECTS AND COLLECTING LEVELS:

General Political Science: General collection in all areas of politics. 3

Political Theory: Classical and modern political thought. 3

Public Administration 3

Urban Politics 3

Comparative Politics: Area studies collection of all types. 3

International Politics: General collection. 3

Public Policy: General collection including public law and constitutional law with emphasis on U.S. case studies. 3

Technology and Politics: Collection in science, technology and politics, and public policy including energy. 3

SUBJECT PROFILE

DATE: June 1, 1979

POULTRY INDUSTRY

GENERAL PURPOSE: To support undergraduate study leading to a Bachelor of Science degree in Poultry Industry; and, to support study for the two-year technical certificate.

LANGUAGES: English.

GEOGRAPHICAL AREAS: The emphasis is on the United States, but all areas are included.

TYPES OF MATERIALS COLLECTED: Selective purchase of upper-division textbooks and proceedings of symposia and conferences.

CHRONOLOGICAL LIMITATIONS: Emphasis on most recent publications.

SPECIFIC SUBJECTS AND COLLECTING LEVELS:

Poultry Feeding and Nutrition

3

Breeding

3

Poultry Industry

3

Selection and Egg Production

3

Incubation

3

Poultry Production, Processing and Marketing

3

Anatomy and Physiology of Poultry

3

Hatchery Business

3

Poultry Diseases and Hygiene

3

Poultry Products and Merchandising

3

PSYCHOLOGY

GENERAL PURPOSE: To support the general education program, supplement various majors, and serve as a source of electives for increased self-awareness and development. The application of psychological principles to existing personal, social, and technological problems is emphasized. The department also supports graduate study leading to the Master's degree specializing in Guidance and Counseling.

LANGUAGES: English is the primary language of the collection.

GEOGRAPHICAL AREAS: Emphasis is on North America and Europe.

TYPES OF MATERIALS COLLECTED: Most materials acquired will be in the form of books and periodicals. In addition, reference works such as encyclopedias and dictionaries of psychology, abstracts, indexes, and handbooks will be included. Proceedings or reports of conferences, symposia, government publications, samples of standardized tests, theses, and dissertations will be very selectively purchased.

CHRONOLOGICAL LIMITATIONS: Primary emphasis is on current publications.

SPECIFIC SUBJECTS AND COLLECTING LEVELS:

General Psychology

3

Personal Development: To include approaches to self-exploration and self-modification, conceptions of human potential, and adjustment to college and effective study methods.

3

Organizational/Industrial Psychology

3

Human Sexuality: To include sexual development, attitudes, role awareness, homosexuality, and sexual dysfunctioning.

4

Comparative and Physiological Psychology

4

Abnormal Psychology

3

Behavioral Disorders in Children

3

Clinical Psychology/Psychotherapy

4

Drugs and Alcohol: To include effects of drugs and alcohol on motivation, emotion, perception, and learning. Also, research concerning theoretical and treatment models.

3

Human Factors and Environmental Psychology

3

Psychological Testing: To include achievement, aptitude, interest inventories, and personality inventories. Special emphasis for individual intelligence testing, testing exceptional children, and assessment of learning disabilities.

3

Learning and Motivation

3

(continued)

(PSYCHOLOGY, continued)

Personality

Psychology of Consciousness: To include characteristics of selected, qualitatively unique patterns of consciousness such as hypnosis, meditation, dreaming, drug experience, and parapsychological phenomena, with a particular emphasis on adaptive and maladaptive expression of these states of consciousness.

Psychological Aspects of Inequality: To include the evaluation of the psychological aspects of minority groups' inequality in American society.

Psychology of Death: To include perceptions of death: cultural, religious, familial, personality factors, suicide, the psychology of the funeral process, and bereavement.

Consumer Psychology: Special emphasis on the psychological effects of advertising.

Community Psychology

Biofeedback

Cross-Cultural Psychology

SOCIAL SCIENCES

GENERAL PURPOSE: To support research and instruction leading to a Bachelor of Science degree in Social Sciences. The department offers a broad array of lower and upper-division course work in Anthropology, Geography, and Sociology. Degree concentrations offered include Criminal Justice, Community Studies, Cross-cultural Studies, Social Sciences (secondary teaching), and Social Services. Additional concentrations open to Social Sciences majors in other departments include Industrial Relations and Management (Business Administration), International Trade and Development, and Urban Studies (political Science), and Industrial Relations (Economics).

LANGUAGES: English is the primary language of the collection. Occasionally a foreign language work may be requested by individual faculty members.

GEOGRAPHICAL AREAS: All regions and all peoples of the world, with special emphasis on North America (including Mexico), the West, and California.

TYPES OF MATERIALS COLLECTED: Monographs, treatises, compendiums, periodicals, serials, basic reference works such as atlases, gazetteers, maps, dictionaries, and bibliographies, government documents, proceedings or reports of conferences, and symposia, selected dissertations and theses, audiovisual materials, and microtexts of published and unpublished materials (upon specific request).

CHRONOLOGICAL LIMITATIONS: None

SPECIFIC SUBJECTS AND COLLECTING LEVELS:

Anthropology: All subdisciplines, with special emphasis on cultural anthropology, including applied anthropology, cultural ecology, ethnology, folklore, linguistics, and socio-linguistics, physical anthropology, including paleoanthropology and primatology, archaeology, and prehistory. 3

Geography: All subdisciplines. 3

Sociology: All subdisciplines. 3

SOIL SCIENCE

GENERAL PURPOSE: To support undergraduate study leading to a Bachelor of Science degree in Soil Science. To support graduate study leading to the Master of Science degree in Agriculture. To support independent study in the field of Soil Science, to support programs in other areas of the School of Agriculture, and to a limited extent to support special research projects in the area of Soil Science.

LANGUAGES: English is the primary language of the collection. Generally, works in other languages are purchased in translation only. Occasionally works from the western hemisphere in Spanish are applicable.

GEOGRAPHICAL AREAS: Worldwide coverage is important. All works from Canada, Great Britain, the Netherlands, Israel, Australia, Japan and New Zealand are essential.

TYPES OF MATERIALS COLLECTED: Society publications (journals, books and monographs) and the transactions and proceedings of conferences should be purchased. Theses, dissertations, and microform materials are purchased in limited numbers. Trade periodicals of the fertilizer industry are important.

CHRONOLOGICAL LIMITATIONS: Emphasis is on the most recent works, but older material is also collected.

SPECIFIC SUBJECTS AND COLLECTING LEVELS:

Chemistry of Soil: Soil analysis, plant analysis, heavy metals, pollution, weathering of rocks. 2

Soil Mineralogy: Clay minerals. 2

Soil-Plant Relationships: Soil fertility, plant nutrition, soil testing, nutrient cycling in ecosystems, modeling of soil and plant systems. 2

Fertilizer Technology and Use 3

Soil Physics: Irrigation, moisture, leaching, drainage, water quality, salinity, microclimatology. 3

Soil Engineering 4

Soil Microbiology and Biochemistry: Microbial ecology, enzymes, micro-organisms, micro-arthropods, mycorrhizae, nitrogen fixation. 2

Pesticides: Insecticides, herbicides, fungicides, nematocides. 3

Organic Matter: Roots, manure, sewage sludge. 3

Crop Management: Tillage. 3

Soil Conservation: Erosion, conserving natural resources, sedimentation, watershed management, reclamation of mined and disturbed soils. 2

(Continued)

SOIL SCIENCE continued

Forest Soils, Rangeland Soils, Tropical Soils

3

Soil Genesis, Morphology and Classification; Structure, pedology, landscape processes, geology of soils, soil surveys, soil geomorphology.

2

Land Use Planning: Public policy related to soil and water use, remote sensing, aerial photogrammetry.

3

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SUBJECT PROFILE

DATE: June 12, 1979

SPEECH COMMUNICATION

GENERAL PURPOSE: To support the curriculum in Speech Communication and Drama leading to a Bachelor of Arts degree. Emphasis is on materials which enable students to fulfill requirements in general education, prepare for communication-centered careers, and/or enhance both cultural awareness and individual potentials.

LANGUAGES: English is the primary language of the collection. Works in other languages are purchased in translation.

GEOGRAPHICAL AREAS: Worldwide in scope.

TYPES OF MATERIALS COLLECTED: Monographs, society publications and the transactions and proceedings of conferences. Theses, dissertations, microform and audiovisual materials are also purchased.

CHRONOLOGICAL LIMITATIONS: Emphasis should be on current materials related to information processing, including computer application and scientific management to provide relevant and timely collections. There is also a need for the historic perspective to support courses such as rhetoric, the history of public address, and literature of the theatre.

SPECIFIC SUBJECTS AND COLLECTING LEVELS:

Argumentation, Discussion and Debate: Includes debate, argumentation, and forensic activity. 3

Business and Professional Management Communication: Includes organizational communication, industrial and professional speech. 3

Communication Development in Children: Includes psycholinguistic disabilities, organizing and teaching speech communication, development of speech and language, and communicative disorders. 2

Communicative Theory: Includes communicative research, communication theory, and cross-cultural communication. 3

Oral Interpretation: Includes the selection, preparation and presentation of material for oral reading. 3

Rhetoric and Public Address: Includes the history of rhetoric, principles of speech, persuasion, and American Public Address. 3

Theatre: Includes acting, directing, stagecraft, theatrical history, literature, children's drama, and puppetry. 4

Voice and Phonetics: Includes physiological and anatomical basis of normal voice production. 4

STATISTICS

GENERAL PURPOSE: To support undergraduate study leading to a Bachelor of Science degree in Statistics. To support graduate study for students taking applied statistics courses and to provide reference and research materials for faculty.

LANGUAGES: English.

GEOGRAPHICAL AREAS: North America, Europe, India, Australia.

TYPES OF MATERIALS COLLECTED: Books, periodicals, proceedings of conferences, and society publications.

CHRONOLOGICAL LIMITATIONS: Not applicable.

SPECIFIC SUBJECTS AND COLLECTING LEVELS:

Applied Statistics: To include applications in fields such as Biology, Engineering, Psychology, Education, Agriculture, Business, and the Health Sciences. 3

Sampling: To include all aspects of sampling. 3

Non-Parametrics: To include all aspects of non-parametric statistics. 3

Multivariate: To include all aspects of multivariate statistics. 3

Experimental Design: To include all aspects of analysis of variance, regression. 3

Time Series: Limited collection supporting technical aspects of applied time series. 4

Statistical Theory: Limited collection supporting theoretical aspects of statistics. 4

SUBJECT PROFILE

DATE: June 1, 1979

VETERINARY SCIENCE

GENERAL PURPOSE: To support study in basic veterinary science courses which supplement work in the animal science and dairy science majors.

LANGUAGES: English.

GEOGRAPHICAL AREAS: Not applicable.

TYPES OF MATERIALS COLLECTED: Highly specialized medical texts are excluded.

CHRONOLOGICAL LIMITATIONS: Emphasis is on the most current material.

SPECIFIC SUBJECTS AND COLLECTING LEVELS:

Treatment of Small Animals

4

Treatment of Large Animals: Including horses, cows, pigs, poultry, etc.

4

Physiology and Anatomy

3

Reproduction: (see Animal Science and Poultry Industry profiles)

Animal Disease

3