Construction Science and Management Information Access Policy Clemson University Libraries

Construction Science Librarian:

Written by S. McCleskey Construction Science Librarian November, 2000

I. **Purpose:** To support research and teaching needs of students and faculty in the field of construction science. The Clemson University Department of Construction Science and Management offers programs leading to the following degrees: Bachelor of Science in Construction Science and Management and Master of Construction Science and Management. The Department is accredited by the American Council for Construction Education.

A. Curriculum

- 1. In addition to the University's general education requirements, the student is introduced to the current processes and functions utilized by construction industry practitioners. Theoretic concepts are reinforced and practiced in the laboratory, by site visits and through seminars conducted by industry experts. Topics such as structures, materials and methods, contract documents, estimating, scheduling, safety and project management form the core curriculum of the degree.
- 2. Clemson University's Master of Construction Science and Management program provides students with high levels of skill and understanding in the technical areas of construction project administration and control. The degree focuses on advanced study in the field of business techniques, in new and emerging technologies for construction project delivery systems, and in the administration of construction firms. Qualified students can earn their degree by attending classes full time on the Clemson campus, via the University's Telecampus system or by video-based distance learning.

B. Primary & Secondary Users

1. Primary Users: School of Architecture

Undergraduate CSM majors: 157 Graduate students:29 Faculty: 8

2. Secondary Users:

Other Clemson students, faculty and staff Professional constructors Courtesy patrons involved in building

II. Scope of In-House Collection

Materials are purchased for the construction collection to support academic classes offered by the Department of Construction Science and Management at Clemson University (<u>Appendix</u>). The construction collection is housed in the Gunnin Architectural Library. Materials for the circulating collection (other than government documents) and Reference materials will be evaluated and selected by the Branch Head. The Head of Reference will select some materials for the reference collection.

A. Format Guidelines

1. **Print and Media Sources**

Collection development will focus on purchasing print and media sources, primarily books, slides, and videos.

2. Electronic Sources

A few highly desirable electronic resources will be added each year. These will mainly include CD ROM products.

B. Language Guidelines

The vast majority of materials purchased should be written in the English language.

C. Geographical Guidelines

Efforts will be made to collect materials related to American and European construction. Sources on other geographic areas will be collected sparingly.

D. Chronological Guidelines

Selections will focus on current, up-to-date information. Certain important materials on the history of technology will be selected.

E. **Publication Date Guidelines**

The selector will purchase books published within the last two years. Exceptions: books requested by faculty members or books highly recommended in a review source.

F. Types of Materials Included

- Monographs: Monographs on a single subject will be selected for the general collection as budget allows.
- Bibliographies: Narrow subject scope bibliographies will be selected to supplement the reference collection.
- Collections of essays on relevant topics will be selected as budget allows.
- Career guidance materials: Career guides and job-seeking books for construction students will be purchased for the reference collection.
- Databases: Electronic databases that can be used to locate journal articles and other publications for research in architecture:

Avery Index to Architectural Periodicals ICONDA (International Construction Database) Engineering Index

- Dictionaries: Purchased for the Reference collection. No effort is made to collect dictionaries for the circulating collection.
- Directories: Purchased for the Reference collection. No effort is made to collect directories for the circulating collection.
- Encyclopedias: New editions and new titles will be purchased for the Reference collection.
- Journals: Every effort will be made to preserve the current journal collection and to add new titles as funds allow. Evaluation tools such as faculty surveys and interlibrary loan activity will be used to identify core journals and faculty favorites to ensure they remain in the collection.
- Theses and Dissertations: The library will keep two copies of all theses and dissertations written by Clemson University students: one copy in Gunnin Architectural Library; one copy in Special Collections. The majority of theses and dissertations written at other universities should be obtained through Interlibrary Loan.

G. Types of Materials Excluded

Textbooks: Textbooks that are used in classes taught at Clemson University will not be purchased. Other textbooks may be purchased if they support the construction curriculum.

H. List of Journals

There is no core list of journals for construction science from the American Council for Construction Education or any other body. Some key journals received by Clemson are:

American professional constructor Architects' journal Architectural lighting Brick in architecture Builder Building design and construction Building research and information Carolina contractor Construction digest Construction manager Construction science and management Construction specifier Constructor Dixie contractor Energy and buildings ENR Fine homebuilding Fine woodworking Fire news Form and function ID Independent energy Interiors Lighting design and application Mid-west contractor Modern steel construction NFPA journal Old-house journal Professional builder

III. Collection Analysis by Subject

A. Library of Congress Subject Headings and Call Number Ranges

Call Number	Description	
TH 1-9745	Building construction	
TH 845-895	Architectural engineering. Structural engineering of buildings	

TH 900-915	Construction equipment in building	
TH 1000-1725	Systems of building construction. Including fireproof construction, concrete construction	
TH 2025-3000	Details in building design and construction. Including walls, roofs	
TH 3301-3411	Maintenance and repair	
TH 4021-4977	Buildings: Construction with reference to use. Including public buildings, dwellings	
TH 5011-5701	Construction by phase of the work (Building trades)	
TH 6014-6081	Environmental engineering of buildings. Sanitary engineering of buildings	
TH 6101-6887	Plumbing and pipefitting	
TH 7005-7699	Heating and ventilation. Air conditioning	
ТН 7700-7975	Illumination. Lighting	
TH 8001-8581	Decoration and decorative furnishings	
ТН 9025-9745	Protection of buildings. Including protection from dampness, fire, burglary	

B. Level of Collecting

Approximately 75% of the books ordered for the construction collection should support the undergraduate curriculum. Titles should be reviewed on an individual basis, and the selector should determine which courses the book will support. Since many courses are offered at the both the 300/400 and 600 levels, both undergraduate and graduate students will benefit from books selected for these subjects.

IV. Access to Information not On-Site

A. Interlibrary Loan

The primary access point for books, journals, and other types of publications not owned or accessible by the Libraries will be Interlibrary Loan. This service is free to Clemson University students, faculty, and staff. This service is not available to the general public.

B. Commercial Document Suppliers

Document Delivery via Commercial Document Suppliers (such as CARL UnCover) will be offered free of charge to Clemson University students, faculty, or staff if the needed information is not available from interlibrary loan sources. This service is not available to the general public.

C. Full-text Article Databases

Many of the databases offered through CU Explorer (http://www.clemson.edu/ref) include full-text journal and magazine articles.

D. Web Sites

There are many resources for construction research that can be accessed via the Web. The Branch Head has compiled a list of construction-related sites on the Web: <u>http://www.lib.clemson.edu/gunnin/gconsci.htm</u>

V. Selection Tools

A. Book Review Sources

Choice - Z1035.A1 C5 Library Journal - Z671.L698 Design Book Review - NA2599.9 D47

B. Approval Plans

Approval plans for books and notification slips are arranged with Yankee Book Peddler to ensure arrival/notification of titles that fit the needs of the library's circulating collection. The plan for construction science will be reviewed each year to ensure the plan is efficient.

C. Publisher's Catalogs & Web Pages

A few publishers that offer titles on architecture topics include:

McGraw-Hill Means E & FN Spon Sweet's Group Wiley (<u>http://www.wiley.co.uk/</u>)

D. Faculty requests and recommendations

E. Faculty teaching and research interests:

Francis Eubanks	
David Goodloe	Estimating, Project Management, Scheduling, Capstone, Contracts & Law
Chris Piper	Estimating, Scheduling, Construction Marketing, Project Management
Roger Liska	Safety; Estimating
Shima Clark	
Dennis Bausman	Strategic planning
John Mumford	on leave

F. Weeding Guidelines

The initial phase of weeding of books relating to construction will focus on removing books published prior to 1980 that have not circulated. Because of the need to maintain books for historical research, it is occasionally important to keep copies of older books, even if they have never circulated. They receive some in-house use, and future projects may involve their use.

VI. Evaluation Tools

A. SAS Reports

Circulation records of monographs in the TH call number range.

B. **Books for College Libraries**

VII. Collection Assessment & Planning

A. **Qualitative Measures**

1. Bibliographies

Comparison of the CU Libraries' holdings with standard bibliographies, such as **Books for College Libraries**.

2. Clemson Benchmark Institutions

Auburn Georgia Tech Texas A&M Virginia Tech North Carolina State

3. User Surveys

Surveys should be conducted to determine how construction students and faculty perceive the collection and to determine what they think is weak/strong about the collection. Surveys could also be used to find out what resources/services users would like added and if there are any they could do without.

B. **Quantitative Measures**

1. Interlibrary Loan Statistics

Book, Proceedings, and Public Document requests (98/99):

Faculty: 70 Total: 70

Article requests (98/99):

Graduate Students: 3 Faculty: 27 Total: 30

Subject areas emphasized in Interlibrary Loan requests:

Strategic planning Planning systems Scheduling Strategic management

Journals requested multiple times through Interlibrary Loan:

Journal of Business Strategy Long Range Planning Journal of Management Studies Planning Review Journal of Business Administration Working paper series Policy Sciences

2. Circulation Statistics

Listed below are subjects which books have consistently high levels of circulation (40 or more circs per title) from 1986-1999.

TH 2031	Details in building design-Structural drawings
TH 438	Management of the construction site- General works
TH 7413	Solar heating-General works
TH 845	Architectural engineering-Treatises
TH 145	Building construction-General works- 1850-
TH 425	Building site-Specifications (General)
TH 146	Building construction-General works- Elementary works
TH 4818	Buildings-Houses-Construction in special materials A-Z
TH 7414	Heating and ventilation-Solar houses
TH 4840	Buildings-Special types of houses-Log cabins
TH 2417	Details in building design and construction- Roof framing, roofs and roofing- Suspension roofs
TH 4763	Buildings-Other public buildings- Swimming pools
TH 4812	Houses-General special
TH 1101	Systems of building construction-Wood building construction
TH 151	Building construction-Pocketbooks, tables, etc.
TH 2416	Details in building design and construction- Roof framing, roofs and roofing-Shell roofs-General works
TH 4970	Buildings-Terraces, patios, decks, etc.
TH 5662	Construction by phase of the work- Carpentry and joinery-Finish carpentry-General works

TH 1611	Systems of building construction-Iron and steel building construction-1890-
TH 4811	Houses-General works
TH 4816	Houses-Remodeling-General works
TH 1095	Systems of building construction-Earth movements and building-Earthquakes and building
TH 1461	Systems of building construction-Concrete building construction-General works
TH 153	Building construction-General works- General special

Survey of Art and Architectural History I
Survey of Art and Architectural History II
History and Theory of Architecture I
History and Theory of Architecture II
Art of Architecture
Modern Architectural Movement
Current Directions in Architecture
American Architectural Styles 1650-1950
Architectural History Research
Design Seminar
Field Sketching
Field Studies in Architecture and Related Arts
Architectural Seminar
New Directions Seminar
Product Design
Energy in Architecture
Architectural Color Graphics
Advanced Color Graphics
Computer-Aided Design
Architectural Graphics
Theories and Philosophies of Technology and Architecture
New York Field Study
Health Care Facilities Systems
Health Care Facilities Programming

Appendix: Construction-related Courses offered at Clemson University

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	Techniques
ARCH 490	Directed Studies
ARCH 557	Architecture Studio
CSM 201	Structures I
CSM 202	Structures II
CSM 301	Structures III
CSM 304	Environmental Systems I
DSGN 151	Design Studies I
DSGN 152	Design Studies II
DSGN 153	Design Theory I
DSGN 154	Design Theory II
DSGN 251	Design Studies III
DSGN 252	Design Studies IV
DSGN 253	Design Theory III
DSGN 254	Design Theory IV
DSGN 351	Design Studies V
DSGN 352	Design Studies VI
DSGN 353	Design Theory V
DSGN 354	Design Theory VI
DSGN 451	Design Studies VII
DSGN 452	Design Studies VIII
DSGN 453	Design Theory VII
DSGN 454	Design Theory VIII