### INF 384C (24535)  
**ORGANIZING AND PROVIDING ACCESS TO INFORMATION**  
**COURSE SYLLABUS AND SCHEDULE (Fall 2003)**  
(27 August 2003)

<table>
<thead>
<tr>
<th>Date</th>
<th>Blocks</th>
<th>Modules, Topics, &amp; Readings</th>
<th>Activities</th>
</tr>
</thead>
</table>
| Aug 27 | BLOCK 0: Introduction to the course | Welcome to the course.  
What the course covers & what it does not cover.  
Formation of teams.  
**Reading:** Block 0 Introduction | |

**Topics:**  
1. Knowledge and Information; Information access.  
2. The range of environments involving Information Organization and Access, e.g., organizing the contents of a single information entity (IE), organizing information entities (IEs) into a system.  
3. Motivations for information organization and access  
4. Traditions of practice in organizing and providing access to IEs, including kinds of IEs central to each tradition, basic foci, users and uses served, and the products yielded by such endeavors:  
   - Bibliography  
   - Library cataloging  
   - Indexing and abstracting  
   - Documentation/Info. storage & retrieval  
   - Archival enterprise  
   - Records management  
   - Museum information work  
5. Basic elements of organizing and providing access to information:  
   - Identifying and acquiring (or linking to) IEs in the form of a collection.  
   - Representing IEs with data and metadata in databases.  
   - Where Database systems and Information architecture fit in.  
   - Systems for organizing information entities.  
   - Uses and users of information organization systems  
6. Design issues related to IE retrieval. | |
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<tbody>
<tr>
<td></td>
<td><strong>Textbook Readings:</strong></td>
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<tr>
<td></td>
<td>• Taylor, chapters 1-3.</td>
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<tr>
<td></td>
<td>• Svenonius, chapter 1.</td>
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<tr>
<td></td>
<td><strong>Other Readings:</strong></td>
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<tr>
<td></td>
<td>• Buckland, M. (1991) <em>Information and Information Systems.</em> (New York: Praeger) —Ch. 1: “Information” (pp. 3-13)</td>
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<tr>
<td></td>
<td>• Miksa, &quot;Introduction to Information Access—Modern Aspirations.&quot;</td>
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<td>• Miksa, &quot;Traditions of Practice.&quot;</td>
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<td>• Miksa, &quot;What Does the Phrase ‘Access to Information’ Mean?&quot;</td>
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<td>• Miksa, &quot;Controlling Information Entities and the Idea of information Retrieval&quot;</td>
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<td></td>
<td>• Miksa, &quot;Information Organization Overview--Additional Notes&quot;</td>
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<tr>
<th>Sept 3</th>
<th><strong>BLOCK I. Information Organization, Information Systems, &amp; Information Users (cont’d)</strong></th>
<th><strong>Module B: Information Organization Systems; Information Use and Users.</strong></th>
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<tbody>
<tr>
<td></td>
<td><strong>Topics:</strong></td>
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<tr>
<td></td>
<td>1. Information Organization Systems</td>
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<tr>
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<td>a. Basic Model</td>
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<td>b. Elements</td>
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<tr>
<td></td>
<td>▪ Identification</td>
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<td></td>
<td>▪ Information organization systems (incl. Item files &amp; Surrogate files)</td>
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<td>▪ Retrieval</td>
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<td>c. Search Objectives</td>
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<td>d. Design issues</td>
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<td></td>
<td>2. Information Use and Users</td>
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<td></td>
<td>a. Categorizing information uses and users</td>
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<td></td>
<td>b. The idea of an information use environment.</td>
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<td>c. Cultural aspects of information organization and use</td>
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<td></td>
<td>d. Robert Taylor’s model of a system, its users, and a “negotiating space.”</td>
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<td><strong>Textbook Readings:</strong></td>
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<tr>
<td></td>
<td>• Svenonius, Chapter 2.</td>
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<td></td>
<td><strong>Other Readings:</strong></td>
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<tr>
<td></td>
<td>• Miksa, &quot;A General Outline of Information Entity Access Control.&quot;</td>
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<td></td>
<td>• Miksa, &quot;How are Information Entities Used in Relation to Information Needy Situations? —Ideas from Fritz Machlup&quot;</td>
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<tr>
<td></td>
<td>• Belkin, N. &quot;Helping People Find What they Don't Know&quot;</td>
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</table>

| Activity: Personal information sources and uses (Will be explained in class on Aug. 27—No grade will be given. It will be used as a basis for group discussion) |
Module A: General Issues Related to Information Entities

1. Definition of an IE and the universe of such entities.
2. Kinds of IEs
   - In terms of individual and reprographic considerations
   - In terms of medium
   - In terms of primary and secondary uses
3. Collections, groups, and sets of information entities
4. Views of the life cycle of information entities
5. Issues in the permanence and degradation of information entities
6. Viewing information entities as artifacts valuable for their physical and artistic properties.

Textbook readings: (none)

Other Readings
- Miksa, "The Universe of Information Entities."
- Miksa, “Information Entitles—Additional Notes” (Applicable sections)

Assignment 1
IEs at Home
(Due date: Sept. 10)
### Module B: Information Entity Attributes
#### Topics:
1. Observing/examining information entities:
   - How does the nature of entity attributes influence how they would be described and accessed?
   - How does the potential use of information entities influence how they would be described and accessed?
2. What constitutes a single information entity for description and access purposes (How traditions of practice differ).
3. Container and content attributes of information entities.
4. Attributes related to relationships.
5. The twin ideas of "document" and "work." (see Svenonius).
6. Distinguishing between a work and a "super-work." (see Svenonius)

#### Textbook readings:
- Svenonius, Chapter 3

#### Other Readings:
- Miksa, "Information Entity Attributes."
- Miksa, "Information Entities--Additional Notes" (Applicable sections)

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### Module C: Data & Databases; Metadata & Metadata Formats
#### Topics:
1. Data and databases in information organization.
   a. Definitions & DBMS approaches
   b. Kinds of data
   c. Database structures for IE organization systems
2. Metadata
   a. Definition and roles
   b. Metadata coding systems (e.g., MARC)
   c. Metadata markup languages (SGML, HTML, XML)
3. The MARC family of metadata formats (U.S. MARC, other MARCs, UNIMARC)
4. Markup formats
   a. Text Encoding Initiative (TEI)
      - Document type Definition (DTD)
      - Role of the Header
   b. Dublin Core (DC)
   c. Encoded Archival Description (EAD)
   d. Resource Description Framework (RDF)

#### Textbook readings:
- Taylor, Chapter 4

#### Other Readings:
- Miksa, "Information Entities--Additional Notes" (Applicable sections)
Mark-up
  http://hotwired.lycos.com/webmonkey/02/42/index4a.html
  http://www.acm.org/crossroads/xrds6-2/future.html

Metadata
- Getty Research Institute. Introduction to Metadata: Pathways to Digital Information
  http://www.getty.edu/research/institute/standards/intrometadata/index.html
  [Read the following parts of this source]
  - “Introduction”
  - “Setting the Stage” (A. Gilliland-Swetland),
  - “Metadata and the World Wide Web” (T. Gill)
  - “Crosswalks: the Path to Universal Access?” (M. Woodley)
  - See also "Crosswalks," "Glossary," "Acronyms & URLs," and "Contributors" at same site.

Databases and Data Modeling
What follows is a group of Web sources on the idea of a database and on database design (including especially relational database design and Object-oriented databases). You don’t have to read all of them, nor even all of any one of them. The main thing is to become familiar with the idea of databases and, especially, the idea of a relational database. Be sure to follow through the various parts of each item where multiple parts or pages are indicated.
- Daytona Beach Community College. “What is a Database?”
  http://www.dbcc.cc.fl.us/fipse_sh/database1.htm#Single%20and%20Multi-File%20Databases
- A Primer on Databases and Catalogs [from a library point of view]
  http://www.usg.edu/galileo/skills/unit04/index.phtml
- Databases from Scratch…
  http://www.geekgirls.com/databases_from_scratch_1.htm#emergence%20of%20databases
- Data Modeling and the Relational Model
  http://www.utexas.edu/its/windows/database/datamodeling/index.html
- Introduction to Relational Database Design
  http://www.edm2.com/0612/msql7.html
- Object-Oriented Database Systems
  http://is.twi.tudelft.nl/~szivan/oodbs/tit.html

Data Formats  (see in special inserted section below)
DATA FORMATS

USMARC (i.e., MARC 21)
- U.S. MARC (i.e., MARC 21):  http://lcweb.loc.gov/marc/bibliographic/ecbdhome.html  (This is the “Concise” format—that is, with categories and codes shown, but not examples and any extended explanations)  This concise format can also be found on the site of “The Library Company”  http://www.tlcdelivers.com/tlc/crs/bib0001.htm  but there it is augmented with some additional explanatory files.
- The full US MARC format can be found in the “Cataloger’s Desktop,” a CD with cataloger’s source materials published by the Library of Congress.  If available, you must open the Infobase list in that system and go to the gray bar that says “MARC Formats”, and after clicking on that, go to the line that says “MARC 21 Format for Bibliographic Data.”
- A general though very simplified explanation of the MARC format can be found under the title “Understanding MARC Bibliographic:  Machine-Readable Cataloging” at http://www.loc.gov/marc/umb/  This is actually the electronic version of a booklet originally published by the Follett Software Company, but now co-authored by them and LC.
- Another form of the full US MARC 21 can be found in the form of the publication “Bibliographic Formats and Standards,” the manual containing MARC and full explanations published by OCLC for the users of its system.  It differs in how it goes about explaining the fixed length MARC fields and in adding information that is specific to the use of the OCLC system.  But, other than that, it is a worthwhile explanation.  It can be found at:  http://www.oclc.org/bibformats/en/

DUBLIN CORE
- Basic Site for the Dublin Core:  http://dublincore.org/  Many other documents besides the ones listed below can be found here.  Simply explore the links found in the top right corner of the site that are entitled “Documents,” “Resources,” and, especially, “Tools and Software.”
- Dublin Core Metadata Element Set, Version 1.1: Reference Description:  This is the basic description of the elements of the DC.  http://dublincore.org/documents/dces/
- Besides having links to the items listed below, this basic home page for the DC Metadata Initiative, has many other links to useful documents.  For example, one can learn about the DC organization, and one can also look at the some of the workshops and conferences related to it and for some view the presentations made at them.

TEXT ENCODING INITIATIVE (TEI)
- The basic web site for TEI is at  http://www.tei-c.org/  
- The home page for the TEI Guidelines is  http://www.tei-c.org/Guidelines2/index.html  although the actual guidelines are at:  http://www.tei-c.org/P4X/  
Useful explanations or introductions to TEI can be found at:
- TEI Lite: An Introduction to Text Encoding for Interchange  Lou BurnardC. M. Sperberg-McQueen  (June 1995, revised May 2002)  http://www.tei-c.org/Lite/  
- The Electronic Text Center Introduction to TEI and Guide to Document Preparation, David Seaman, Electronic Text Center, University of Virginia  http://etext.lib.virginia.edu/tei/uvatei.html
TEXT ENCODING INITIATIVE (TEI)—Cont’d

  http://xml.coverpages.org/acadapps.html#tei (Contains some explanation and a large number of web resources.)

  This is the basic TEI document. In the list of topics on this page, you will find the following parts very useful:
  Part 1: Introduction—Chapter 1 Provides basic principles and a section on “intended use; Chapter 2 provides an introduction to SGML; and Chapter 3 provides an explanation of the TEI idea of a DTD—a “document type definition.”
  Part 2: Core Tags and General Rules, containing 4 chapters (4, 5, 6 & 7) of which the most important for you will be chapter 5 entitled “The TEI Header.”

  http://xml.coverpages.org/acadapps.html#tei (Contains some explanation and a large number of web resources.)

  This is the basic TEI document. In the list of topics on this page, you will find the following parts very useful:
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  Part 2: Core Tags and General Rules, containing 4 chapters (4, 5, 6 & 7) of which the most important for you will be chapter 5 entitled “The TEI Header.”

ENCODED ARCHIVAL DESCRIPTION (EAD)

- Basic URL:: http://www.loc.gov/ead/ead.html The url here is the website of the EAD initiative.

  Of the various links provided at the site, the following are especially important:
  - Development of the EAD (Encoded Archival Description) DTD (Document Type Definition) http://www.loc.gov/ead/eaddev.html
  - Design Principles for Enhancements to EAD http://www.loc.gov/ead/eaddesgn.html
  - EAD Sites on the World Wide Web (i.e., EAD Sites Annotated) http://jefferson.village.virginia.edu/ead/sitesann.html Many of the sites listed here have special pages to go to that explain aspects of their use of the EAD or that provide examples of its use.
RESOURCE DESCRIPTION FRAMEWORK (RDF)
- Basic URL: http://www.w3.org/RDF/ The basic URL is the main source, but other sources found either as links under it or elsewhere include:
- RDF-W3C on "Metadata and Resource Description"---http://www.w3.org/Metadata/
- UKOLN: (The UK Office for Library and Information Networking) resources on RDF http://www.ukoln.ac.uk/metadata/resources/rdf/
- Heery, Rachel. "What is . . . RDF?"---http://www.ariadne.ac.uk/issue14/what-is/

Two other Metadata Format Initiatives:

GLOBAL INFORMATION LOCATOR SERVICE//GOVERNMENT INFORMATION LOCATOR SERVICE (GILS)
- Basic URL: http://www.gils.net/>
- This URL has an enormous amount of information, all that will be needed for the report, if one looks for it. However, among various links, some of the most useful are:
  - GILS and Other Initiatives---http://www.gils.net/initiatives.html
  - GILS-Version 2---http://www.gils.net/prof_v2.html
  - GILS-FAQ---http://www.gils.net/faq.html#basics
  - GILS-Original OMB request for development (1994)
  - ---http://sites.defenselink.mil/omb95-01.html
  - GILS-Government order extending development and use of GILS (1998)
  - ---http://sites.defenselink.mil/omb98-05.html

FEDERAL GEOGRAPHIC DATA COMMITTEE--Content Standard (FGDC-CS)
- Basic URL for the Committee: http://www.fgdc.gov/
- Basic URL for the Standard itself (HTML version):--http://www.fgdc.gov/metadata/csdgm/
- Basic URL for the Standard itself (PDF version):
- Other useful sources include:
  - FGDC-About the CONTENT STANDARD FOR DIGITAL GEOSPATIAL METADATA (CSDGM) http://www.fgdc.gov/metadata/contstan.html
  - CONTENT STANDARD FOR DIGITAL GEOSPATIAL METADATA: Thematic Supplement for Geospatially Referenced Cultural and Demographic Data Metadata--http://www.fgdc.gov/standards/status/sub2_5.html
### Module A. Describing IEs—General Issues

**Topics:**
1. The relationship of description to identification
2. What does it take to describe an information entity adequately?

**Reading:** The basic readings for the entire Block and all four of its modules are the three listed here. However, some additional sources are also then listed for separate modules.

**Textbook readings:**
- Taylor, chapter 5
- Svenonius, Chapters 4, 5 and 7.

**Other Readings:**
- Miksa, “Representing IEs—Additional Notes.”

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### Module B. Describing IEs in Bibliography and Library Cataloging.

**Topics:**
1. Bibliography and Description
   a. Enumerative Bibliography (National, Local, Subject, Special forms, etc.)
   b. Analytical Bibliography
   c. Bibliography of Citations--Patterns
   - Whole publications
   - Publications inside of publications
   - Items other than print publications

**Readings:**
- “Using American Psychological Association (APA) Format (Updated to 5th Edition)” found at: [http://owl.english.purdue.edu/handouts/research/r_apa.html#Handling%20Quotes%20In%20Your%20Text](http://owl.english.purdue.edu/handouts/research/r_apa.html#Handling%20Quotes%20In%20Your%20Text)

2. Library Cataloging and Description
   a. Standards, Rules and Data Formats
   b. International Standard Bibliographic Description-General (ISBD-G)
   c. Anglo-American Cataloguing Rules, 2d ed, 2002 Revision (AACR2r)
   d. The AACR2r entry system

**Readings:**
<table>
<thead>
<tr>
<th>Oct 22</th>
<th><strong>BLOCK III. Representing IEs—Description (Cont’d)</strong></th>
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</thead>
<tbody>
<tr>
<td></td>
<td><strong>Module C: Describing IEs in Archives, Records Management Agencies &amp; Museums.</strong></td>
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<tr>
<td></td>
<td><strong>1. Archives</strong></td>
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<tr>
<td></td>
<td>a. Definition of archival &quot;records,&quot; incl. idea of &quot;respect des fonds&quot;</td>
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<td>b. Meaning of &quot;collection&quot;</td>
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<td>c. Role of archival agencies</td>
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<td>d. The idea of a creator in archival records</td>
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<td>e. How archival records are organized</td>
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<td>• Principles, incl. idea of &quot;provenance&quot; (original order)</td>
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<td>• Ordering patterns</td>
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<td>• Role &amp; definition of the &quot;Finding Aid.&quot;</td>
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<td><strong>Readings:</strong></td>
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<td></td>
<td><strong>2. Records Management and IE Description</strong></td>
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<tr>
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<td>a. Idea of current records</td>
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<td>b. Activities and the Life of the Organization</td>
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<td>c. Life cycle of information/records</td>
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<td>d. Methods of organizing</td>
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<td></td>
<td>e. Effects of electronic storage and/or generation of records</td>
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<td><strong>Readings:</strong></td>
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<td>- Gracy, D. B., II (1996) &quot;Doing it Right in the First Life: Records Management in the Control of Records&quot; (8 p.)</td>
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<td><strong>3. Museum description</strong></td>
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<td>a. Museums--Definition and kinds</td>
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<td>b. Museum information--kinds</td>
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<td><strong>Readings:</strong></td>
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<td>For further information, also see:</td>
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<td>- Museum Information Standards <a href="http://www.cidoc.icom.org/stand0.htm">http://www.cidoc.icom.org/stand0.htm</a></td>
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</table>
### BLOCK III. Representing IEs—Description (Cont’d)

**Module D: Describing IEs in Indexing & Abstracting; and in Documentation-Information Storage & Retrieval**

1. Indexing & Abstracting
   - Back of the Book Indexing
   - Multiple item Indexing
2. Documentation/ Information Storage & Retrieval

**Readings:**

| Assignment 4 |
| Describing IEs |
| (Due date: Oct. 29) |

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### BLOCK IV. Representing IEs—Access Points

**Reading:** Block IV Introduction

**Module A: The Vocabulary of Access**

**Topics:**

1. Approaches to Vocabulary
   - Natural language vocabulary
   - Controlled vocabulary
2. Names and titles as access points
   - Kinds of Names (personal, corporate, geographic); Problems
   - Kinds of Titles (direct, collective, uniform); Problems
   - Content attributes as searchable terms
   - References and other Navigational Features
3. Authority control

**Textbook readings: (none)**
- Taylor, chapter 6, chapter 7 (pp. 140-171).
- Svenonius, chapter 6

**Other Readings**
- Miksa, "IE Access Points and Vocabulary"

| Assignment 5 |
| Content Analysis |
| (Due Date: Nov. 12) |

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### BLOCK IV. Representing IEs—Access Points (cont’d)

**Module B: Content Representation**

**Topics:**

1. Introduction
   - Content analysis vs. Use of content access systems
   - Kinds of content: subjects, forms, genres, audiences, etc.
   - Indexing languages (Vocabulary, Semantics, Syntax, Pragmatics)
2. Content Analysis & its Procedures

**Textbook readings:**
- Taylor, chapter 7 (pp. 137-140).

**Other Readings**
- Miksa, “Content Access and Analysis”
<table>
<thead>
<tr>
<th>Nov. 19, Dec. 3</th>
<th><strong>BLOCK IV Representing IEs—Access Points (Cont’d)</strong></th>
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<tbody>
<tr>
<td></td>
<td><strong>Module C: Content Access</strong></td>
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<tr>
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<td><strong>Topics:</strong></td>
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<tr>
<td></td>
<td>1. Content structure</td>
</tr>
<tr>
<td></td>
<td>a. Using structure to provide access to content (General)</td>
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<td>b. The Purposes and Problems of Structure</td>
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<td></td>
<td>c. Structure for item access and content access compared</td>
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<td>2. Structural relationships</td>
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<td>a. Equivalence relationships</td>
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<td>b. Inclusion relationships (Superordinate, Coordinate, Subordinate—Chains &amp; Arrays)</td>
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<tr>
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<td>3. Alphabetical approaches to content access</td>
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<tr>
<td></td>
<td>a. Thesaurus construction</td>
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<td>b. Subject heading lists</td>
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<td>4. Systematic-Classified approaches to content access</td>
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<tr>
<td></td>
<td>a. Alphabetico-classed structures</td>
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<td></td>
<td>b. Systematically classed structures</td>
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<tr>
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<td><strong>Textbook readings:</strong> <em>(none)</em></td>
</tr>
<tr>
<td></td>
<td>- Taylor, Chapters 7-8</td>
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<td>- Svenonius, Chapters 8-10</td>
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<td><strong>Other Readings</strong></td>
</tr>
<tr>
<td></td>
<td>- Miksa, &quot;Content Access and Analysis&quot;</td>
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<td>- Miksa, &quot;Categorization and Information Organization&quot;</td>
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| Dec. 10 | **Essay Test 2 on Blocks III-IV** |

<table>
<thead>
<tr>
<th>Assignment 6 Structuring Content Access Points</th>
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<tbody>
<tr>
<td><em>(Due Date: Dec. 5, Friday, by 5 p.m. in Dr. Miksa’s ISchool Mailbox)</em></td>
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