

**COURSE OBJECTIVES: WHAT YOU WILL LEARN**

This course covers records management concepts and methods that apply to electronic records and to the conversion of paper records to electronic formats and their storage as digital documents in image or character-coded formats. At the end of this course you should understand:

- The principal issues and concerns that relate to the management of electronic records produced by computer, video, and audio technologies
  - The characteristics, advantages, and limitations of specific types of storage media for electronic recordkeeping
  - The characteristics of file formats for storage and retention of electronic records
  - Legal and operational considerations related to retention of electronic records
  - Methods for identifying and protecting vital electronic records
  - Factors that affect the stability, care, and handling of electronic records
  - The characteristics, advantages, and limitations of digital document imaging and document/content management technology
  - The characteristics, advantages, and limitations of records management application (RMA) software
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**TOPICS TO BE COVERED**

**PART I: BASIC CONCEPTS**

Introduction to electronic records

Definitions of essential terms

Importance of electronic records as business information resources

Special problems posed by electronic records

Components of a systematic program to manage electronic records

Storage media for electronic recordkeeping

Computer media

Video media

Audio media

File formats for electronic recordkeeping

Definitions

Common computer file formats

Video and audio recording formats

**PART II: MANAGING ELECTRONIC RECORDS**

Retention concepts for electronic records

Purpose of systematic retention for electronic records

Inventorying electronic records

- Making retention decisions about electronic records
  - Legal considerations for retention of electronic records
    - Legally-mandated recordkeeping requirements
    - Admissibility of electronic records as evidence
    - Legal status of electronic records as official copies
  - Operational considerations for retention of electronic records
  - Special retention situations: e-mail, fileshares, web pages, social media
  - E-discovery issues
  - Data migration concepts and methods
- Stability, care, and handling of electronic records
  - Stability of magnetic and optical media: lifetime estimates and limiting factors
  - Care and handling guidelines for magnetic and optical media:
    - Storage conditions and other considerations
- Vital electronic records
  - Definitions
  - Identifying vital electronic records
  - Protection methods
- Organizing electronic records
  - Basic principles
  - Records management application (RMA) software

### PART III: DIGITAL DOCUMENT TECHNOLOGIES AND APPLICATIONS

- Definitions and concepts
  - Document imaging
    - Work steps and components in typical imaging implementations
    - Features and functions of document imaging software
    - Comparison with paper and micrographics for records management
    - Characteristics of imaging system components
      - Document scanners and scanning methods
      - Image storage options
      - Image-capable displays
      - Related technologies and special products
    - Document imaging and records retention
    - Legal status of digital document images
    - Imaging costs and justification
    - RFP preparation and other procurement issues
  - Document / content management
    - Definitions
    - Relationship to other document storage and retrieval technologies
    - Selecting document / content management applications
    - Features and functions of available products
    - Document conversion and other implementation issues
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## ASSIGNED READING

The textbooks for this class are William Saffady, *Managing Electronic Records*, Fourth Edition (ARMA International, 2009) and William Saffady, *Digital Document Management* (ARMA International, 2007).

The assigned reading is as follows:

- Week 1 – *Managing Electronic Records*, Ch. 1
- Week 2 – *Managing Electronic Records*, Ch. 2
- Week 3 – *Managing Electronic Records*, Ch. 3
- Week 4 – *Managing Electronic Records*, Ch. 4
- Week 5 – *Managing Electronic Records*, Ch. 4 and 5
- Week 6 – *Managing Electronic Records*, Ch. 5
- Week 7 – *Managing Electronic Records*, Ch. 6
- Week 8 – *Managing Electronic Records*, Ch. 7  
*Digital Document Management*, Ch. 1
- Week 9 – *Digital Document Management*, Ch. 2
- Week 10 -- *Digital Document Management*, Ch. 3
- Week 11 -- *Digital Document Management*, Ch. 4
- Week 12 -- *Digital Document Management*, Ch. 5
- Week 13 -- *Digital Document Management*, Ch. 6
- Week 14 -- *Digital Document Management*, Ch. 6 and Appendixes

It is recommended that you read the assigned chapters after each class session as a way of reviewing the material presented in class. At each class session, you will also receive lengthy handouts that present the topic for that class in an organized outline format plus some additional supplemental materials not contained in the textbooks. You will be expected to review these handouts and your notes at the end of each session.

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## WRITTEN ASSIGNMENTS

Your grade in this course will be determined by two factors: (1) a take-home final examination, which will be described later in the course, and (2) completion of written assignments described below. The purpose of the assignments is to allow you to examine specific topics in greater depth than can be covered in class.

Your grade will depend on the number of written assignments you choose to complete. To qualify for the grade of "A" you must complete 8 of the assignments described below. To qualify for a grade of "B" you must complete 6 of the assignments. On average, each assignment will require approximately 12 to 15 hours to complete. You may complete these assignments at your own pace, but you should work on them steadily throughout the

semester. For a grade of A, you should complete 1 assignment per 12 days on average. For a grade of B, you should complete 1 assignment on average per 16 days on average.

Each written assignment involves the preparation of a report or other document. The due date and submission method for assignments will be announced in class. No assignments will be returned. Make a copy for yourself prior to submitting your assignments.

You must select from the following assignments. Substitutions are not permitted, but the assignments can be narrowed, where appropriate, to suit individual interests.

1. Professional Organizations and Electronic Records. A number of professional associations and similar organizations address issues related to electronic records, electronic document imaging, and other topics covered in this course. Select two organizations from the following list and describe their involvement with electronic records:

- ARMA International
- AIIM International
- TAWPI—The Association for Work Process Improvement
- Xplor International
- Workflow and Reengineering International Association (WARIA)
- International Records Management Trust (IRMT)
- National Association of Government Archives and Records Administrators (NAGARA)
- Society of American Archivists (SAA)
- International Council on Archives
- Council on Library and Information Resources

In particular, your report should consider the organization's activities, educational programs, publications, and other member services that relate to electronic records. This assignment is required of all students.

2. Electronic Records in Government. Describe electronic records initiatives in a government agency. Your report can cover a federal government agency, such as the National Archives and Records Administration, which has authority over all federal agencies, or a specific agency, such as the Environmental Protection Agency, the Department of Agriculture, or the Department of Defense, which have their own records management policies and procedures based on NARA guidelines. State and local government records are usually subject to the authority of state archival agencies. Your report should discuss the types of electronic records initiatives the agency has undertaken and any policies, guidelines, publications, or other products that the initiatives have produced. This assignment can be submitted for two different government agencies and will count as two assignments completed.

3. Retention of E-Mail. Using the Internet or other sources, locate 5 examples of policies that deal with the retention of e-mail. The policies may be developed by government

agencies, corporations, academic institutions, or other organizations. For each policy, write a summary of its retention provisions. Then, compare and contrast the policies you selected. Be sure that the source of each policy is clearly identified.

4. Document Management / Document Imaging Software. Describe the products and services of a company that develops electronic document management / imaging software. Examples of such companies include but are not limited to, the following: Filemark, Filenet (now IBM), Feith Systems, OnBase, Open Text, Cimage/Novasoft, Laserfiche, EMC, and Oracle (formerly Stellent). Your report should include brief background information about the company plus a discussion of the company's document management/imaging product line. If possible, indicate the types of customers that are using the product. This assignment can be submitted for two different vendors and will count as two assignments completed.

5. Text Retrieval Software. Describe the products and services of a company that develops text retrieval software. Examples of such companies include but are not limited to, the following: askSam, Dataflight (LexisNexis), dtSearch, Google, Inmagic, Executive Technologies, ISYS Search Software, Thunderstone, and ZyLab. Your report should include brief background information about the company plus a discussion of the company's product line. If possible, indicate the types of customers that are using the product. This assignment can be submitted for two different vendors and will count as two assignments completed.

6. Email Archiving Software. Describe the products and services of a company that develops email archiving software. Examples of such software include, but are not limited to the following: Symantec Enterprise Vault, Barracuda Email Archiver, GFI Mail Archiver, Sherpa Mail Attender, Mimosa NearPoint, ProofPoint Archive, C2C Archive One, and MailStore Server. Your report should include brief background information about the company plus a discussion of the company's product line. If possible, indicate the types of customers that are using the product. This assignment can be submitted for two different vendors and will count as two assignments completed.

7. DoD 5015.2 Standard. The U.S. Department of Defense has developed a standard for records management application (RMA) software. Because the standard has been endorsed by the National Archives and Records Administration, it has had a significant impact on electronic recordkeeping initiatives in federal government agencies. Write a report that describes and discusses the standard. Your report should consider the purpose of the standard, its most important provisions, procedures for identifying compliant products, the types of products that have been determined to be compliant, and sources of information about the standard.

8. Electronic Signatures. Prepare an annotated bibliography of articles or other publications that deal with electronic signatures. You can read about any aspect of the topic: electronic signature technology, legal status of electronic signatures, etc. Articles relating to archives and libraries are acceptable. Your bibliography should contain at least 15 articles representing a total of 100 pages of reading. Your annotations should include a

complete bibliographic citation and a brief summary (approximately one paragraph) for each publication.

9. Electronic Records and Archives. Prepare an annotated bibliography of articles, books, and other publications dealing with the electronic records and archives. The cited items can deal with any facet of the relationship: similarities and differences in records management and archival practice relating to electronic records, special problems that electronic records pose for archives, issues related to digital preservation, etc. Your bibliography should contain at least 15 articles representing a total of 100 pages of reading. Your annotations should include a complete bibliographic citation and a brief summary (approximately one paragraph) for each publication.

10. Electronic Records and Computer Forensics. Identify three companies that provide computer forensic services for discovery of electronic records (e-discovery), recovery of deleted records, preservation of evidence, analysis of user activity, or other purposes. For each company describe the types of services they offer and the types of situations in which the services are required of useful.

11. Uniform Laws. Uniform laws are developed by the National Conference of Commissioners on Uniform State Laws (NCCUSL) to promote consistency of legal statutes and procedures among the states. Some uniform laws are important for records management. Obtain copies of the following uniform laws, read each law, and discuss its provisions as they relate to records management in general and electronic recordkeeping in particular:

- Uniform Photographic Copies of Business and Public Records as Evidence Act
- Uniform Electronic Transaction Act
- Uniform Rules Relating to Discovery of Electronically Stored Information
- Uniform Preservation of Private Business Records Act
- Uniform Business Records as Evidence Act

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### **OUT-OF-CLASS WORKLOAD**

The out-of-class workload for this course is a composite of textbook reading, review of in-class notes, preparation of assignments, and the take-home final exam. The estimated out-of-class workload is 131 to 149 hours for the B grade and 155 to 179 hours for the A grade. The estimated out-of-class workload is calculated as follows:

- The anticipated out-of-class workload for textbook reading and review of in-class notes is 4 hours per week for a total of 56 hours for the semester.
- The anticipated out-of-class workload for the B grade is approximately 72 to 90 hours. The anticipated workload for the A grade is 96 to 120 hours.

- The anticipated out-of-class workload for the take-home final exam is 3 hours.