

#### Certificate in Digital Information Management: A Cross-Disciplinary Functional Approach

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## **Design Phase**

- Preliminary Justification and Conceptual Design 2004-2005
  - UA School of Info Resources and Library Science + Arizona State Library, Archives and Public Records
- Detail Design 2005-2006
  - UA Office of Continuing Education and Academic Outreach, eCollege
  - IMLS Grant Application Fall 2005
  - UA Graduate College Certificate Proposal Process Fall 2005 through Spring 2006



Concept

- Introduce students to the theoretical knowledge, conceptual framework and practical skills required to create, maintain and curate collections of digital information.
- Provide a foundation in digital records, digital archives, digital libraries, and other kinds of digital collections.
- Integrate the disciplinary knowledge of the communities of practice and their underlying technological foundations within a digital collection context.
- Deliver it through a 100% online virtual model of instruction.



#### **Functional Approach**

- Today's digital information specialists must apply a variety of organizational approaches and emerging technologies to create, maintain, manage and curate digital information.
- Traditional divisions, or silos, defining the professions in libraries, archives and records are changing and in some cases breaking down as technology transforms the way people work.
- Functional cross-disciplinary approach underscores understanding of both knowledge and skills of librarians, archivists, records managers *and technologists*.



#### Intended Audience

- Entry point for MLS candidates, esp. with degrees in other disciplines, and career interests in digital collections
- Post MLS or PhD certificate of specialty or area of concentration, PhD minor, dual master's
- Graduate study for communities of practice where the MLS is not a required credential
- Professional development for current practitioners



## Reasons for a Certificate\*

- providing a more flexible response to an emerging need for specialized training
- providing an easier path to graduate education, especially for persons who have been out of school for some time
- providing a recruitment path for students who pursue degree programs following acquisition of a certificate
- providing an opportunity for a discipline or interdisciplinary group to take their first steps in offering graduate level programming
- providing an opportunity for students to develop an expertise which may help in advancing their careers, or in changing careers
- providing a new revenue stream for the university.
- \*Syverson, Peter and Welch, Stephen, "Post-Baccalaureate Certificates: A First Look At Graduate Certificate Programs Offered By CGS Member Institutions," CGS Communicator, Council of Graduate Schools, 30 No. 9 (November 1997)



# Funding and Sustainability

- Properly planned and managed, certificates are selfsustained primarily through program or course fees.
  - Don't underestimate admin and staff support requirements.
- Certificates must be marketable and address areas of need.
  - Reduced options for scholarships and support funding means more of the cost is born by the student.
- There are economies of scale for multiple certificate programs.
- Factors include time to completion, staffing (academic and support), facilities.
- Cohort model simplifies planning and forecasting.



#### Administration and Management

- Partnership with Office of Continuing Education and Academic Outreach:
- Existing infrastructure for virtual delivery and outreach.
- Revenue share for administrative costs registration, course setup, billing (vs. traditional models).
- Leveraging business relationships with learning content management systems vendors and suppliers.
- Technical support, student support.



## Pedagogical Model

Course content is based on a pedagogical model that incorporates disciplinary theory, a conceptual framework, and practical application skills.

Theory	Knowledge of the disciplines, history of the profession, core comprehension. "How can one appraise records for acquisition?"	Readings, textbooks
Conceptual Framework	Strategic knowledge of the disciplines. "Are these records of sufficient value to acquire?"	Lectures, discussion
Practical Application Skills	The discipline in practice, tools and methods. "What techniques will allow me to acquire these records for the collection?"	Projects, homework, internships, digital portfolios, authentic learning experiences

Hands-on projects will be emphasized, and students will be required to acquire and maintain a variety of technologies in the creation of portfolios and authentic work projects such as working web servers, databases and operating system configuration and maintenance.

# **A** Curriculum – Concept Map

- Alignment of learner and constituent objectives:
  - Who are the learners and what is their profile?
  - Who are the constituents (beneficiaries) and what are their goals and objectives?
- Development of a context for learning that addresses the learner and a multitude of constituencies, some with conflicting goals and agendas.
- Clearly articulated inputs, outputs and outcomes (outcome-based planning and evaluation).

#### Concept Map

Caution – analysis to paralysis alert: don't make this process a dogwagger. It's clearly a tail.



### **Curriculum Development**

Think global, act local:

- Course content is developed by subject matter experts and practitioners.
- Curriculum (the big picture) requires and is informed by oversight from a broad cross-section of subject matter experts.
- Course content must align with curricular objectives.
  - National panel of experts advising and providing feedback and "sanity checks."
  - Local working group
  - Designated Professor of Practice



#### **Modeling Success**

The effective graduate will model success in several ways. The student will:

- acquire and demonstrate the skills and knowledge necessary to continue as lifelong learner, not only mastering the issues and technologies of today but also the issues and technologies not yet apparent or developed.
- model information literacy throughout the course of study and in professional positions that follow.
- possess the fundamental knowledge of the core theoretical background underlying digital information studies.
- acquire or further develop and abide by an understanding of the mission of the librarian or other information professional and the codes of ethics of the professions including respect for privacy, intellectual property and intellectual freedom.
- acquire or further develop the ability to understand the information needs of the community being served.
- model successful communication skills across a broad range of technical and nontechnical perspectives among communities of information consumers
- possess the confidence needed to excel across a broad range of professional dimensions including teaching and learning, leading and administering, and managing digital information.



#### **Functional Description**

The DigIn Certificate consists of six required threecredit graduate courses:

- IRLS 671 Introduction to Digital Collections
- IRLS 672 Introduction to Applied Technology (includes two week mandatory orientation module prior to the official start of class)
- IRLS 673 Managing the Digital Information Environment
- IRLS 674 Preservation of Digital Collections
- IRLS 675 Advanced Digital Collections
- IRLS 676 Capstone



#### Schedule

Year	Summer	Fall	Spring
2007-2008	Pre-session orientation module ILRS 672 Introduction to Applied Technology	IRLS 671 Introduction to Digital Collections IRLS 673 Managing the Digital Information Environment	IRLS 674 Preservation of Digital Collections IRLS 675 Advanced Digital Collections
2008-2009	Pre-session orientation module IRLS 672 Introduction to Applied Technology IRLS 676 Capstone	IRLS 671 Introduction to Digital Collections IRLS 673 Managing the Digital Information Environment	IRLS 674 Preservation of Digital Collections IRLS 675 Advanced Digital Collections
2009-2010	Pre-session orientation module IRLS 672 Introduction to Applied Technology ILRS 676 Capstone	IRLS 671 Introduction to Digital Collections IRLS 673 Managing the Digital Information Environment	IRLS 674 Preservation of Digital Collections IRLS 675 Advanced Digital Collections



#### Schedule Description

- Two courses are offered each summer: the first course, IRLS 672, Introduction to Applied Technology, and the capstone course, ILRS 676. Other required courses are offered in the fall and spring. Students typically complete the certificate program in four or seven consecutive semesters by electing to take one course each in the fall and spring semesters over two years, or two courses concurrently in the fall and spring over one year.
- All coursework for the Certificate in Digital Information Management must be completed within three years. Students must take at least one class each fall and spring until the certificate is completed or request a temporary leave in order to preserve matriculated status.



#### Implementation Phase -Current Status

- Cohort 1 (summer 2007) under review:
  - 21 applicants, short notice, significant interest.
  - Cohort profile confirms assumptions of diversity of applicants.
- Professor of Practice decision imminent
  - Will teach Into to Digital Collections and other courses TBA.
  - Will assume program management including program development, recruitment, grant administration and reporting.



#### **Future Direction**

- Continued input from advisors and mentors.
- Ongoing initiatives in digital management and curation
  - DigCCurr
  - Other initiatives
- Certificate acceptance and validation



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#### Questions?

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