

Whither the Web?

Preservation strategies for the new millenium



Garron Wells

University of Toronto Archives and Records
Management Services

April 25, 2001

Outline

Part I

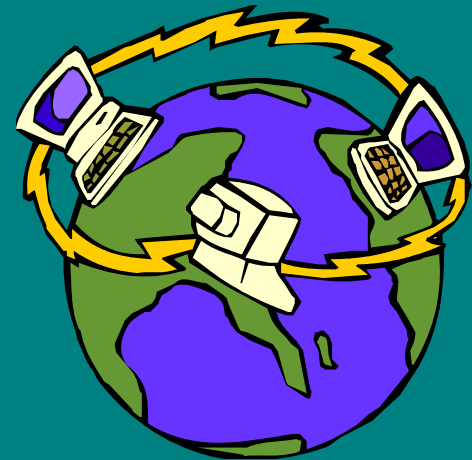
Preservation strategies for web-based records
on the national and international scene

Part II

Preservation strategies for University of
Toronto World Wide Web

Part I

- Electronic Records Issues
- InterPARES
- United States
- Canada
- Australia

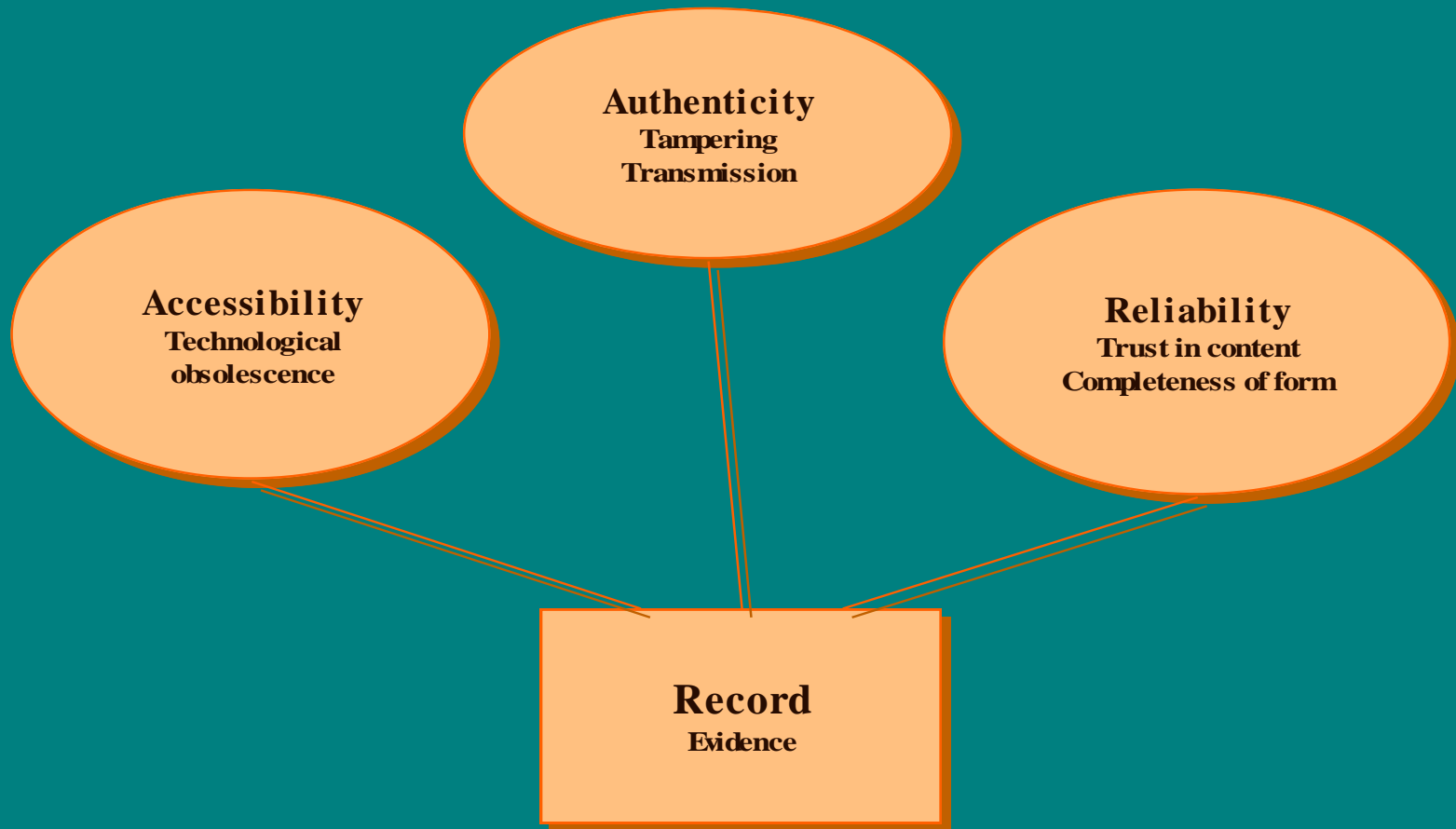


Electronic Records Issues

Accountability: the ability to reconstruct an accurate picture of the past through records that can be used as evidence



Electronic Records Issues

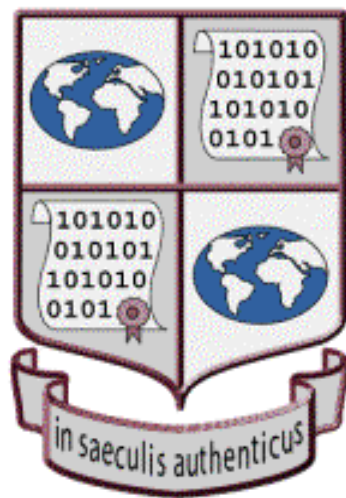




InterPARES Project

International Research on Permanent Authentic Records in Electronic Systems

The InterPARES Project is a major international research initiative in which archival scholars, computer engineering scholars, national archival institutions and private industry representatives are collaborating to develop the theoretical and methodological knowledge required for the permanent preservation of authentic records created in electronic systems. The InterPARES Project is based in the School of Library, Archival and Information Studies at the University of British Columbia.



InterPARES

- Founded 1999
- Aim: to formulate principles and criteria for the development of international, national and organizational policies, strategies and standards for long-term preservation of authentic electronic records
- 4 Research areas or “Domains”

InterPARES

Domain I: preserving authenticity of records

Domain II: appraisal of electronic records

Domain III: rules, procedures, methods and responsibilities of preservation of electronic records

Domain IV: setting standards for preservation on national, international and organizational levels

Preservation Strategies

United States

Analysis and Development of model quality guidelines for electronic records management on state and federal websites. By Charles McClure and J. Timothy Sprehe. January 1998.



Preservation Strategies

Features of McClure and Sprehe study:

- identified confusion in terms ‘record’ and ‘publication’ when applied to websites
- proposed guidelines for managing information on websites based on records management theory
- developed risk model to analyze an organization’s accountability exposure

Preservation Strategies

Accountability Exposure Model

- High, Moderate or Low risk
- Historical Log to document changes in web site information
- Roles of webmaster, content master and records officer



Information Management Forum

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Français

Welcome to the Home of the Information Management Forum

We are managers in the Government of Canada who share common interests in the management of information as a resource in support of the delivery of government programs and services. If you share a similar interest or want to find out more about who we are, what we are doing, and how this site might be able to help you in your own information management initiatives, click on the buttons at the top of this page or go to the Site Map for a complete view of the site. If you would like to contribute to our efforts or find out even more about us, please e-mail us at info@imforumgi.gc.ca.

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Canada 

IM Forum

Publications:

An approach to managing internet and intranet information for long-term access and accountability (1999)

Managing internet and intranet information for long-term access and accountability. (1999)

IM Forum

Features:

- applied McClure/Sprehe model to Canadian government and its agencies
- added feature: Local Site repository
- separated responsibility for preservation of website information between National Archives and the National Library

Risk Analysis

Accountability exposure: refers to an appraisal of the extent to which the office is or is not fulfilling its legal and other responsibilities as defined by law or other obligations

Low Risk

Accountability Exposure

- office has single web site containing only copies of documents (publications and/or official records)
- office controls who may post to website
- documents are static

Recordkeeping response

- little accountability exposure risk
- office keeps adequate records documenting its information systems, procedures for its website, etc.

Low Risk (cont'd)

Accountability Exposure

- all records are integrated with U. of T. File Plan or approved records schedule
- there is little or no adverse reaction to posted documents

Recordkeeping response

- records and publications are destroyed or transferred to UTARMS or storage according to established procedures and applicable records retention schedules

Moderate Risk

Accountability Exposure

- office websites grow in number and complexity
- control of quantity and quality of website postings decreases as more websites are posted

Recordkeeping Response

- office must take some additional measures to ensure ability to reconstruct past website contents
- historical log is created

Moderate Risk (Cont'd)

Accountability

Exposure

- increasing potential that some posted documents may generate adverse reactions
- types of website uses multiply; both purpose-prepared and interactive real-time materials occur

Recordkeeping

Response

- historical log itself is official record and subject to retention schedule; copy of log is posted to website to answer queries about past web site documents

Historical Log

- Is an official record and is subject to a retention schedule
- Contains the following data elements:
 - Title or name of posting
 - Version number of posting
 - Originating author/office name, address, contact info. This is the Content Manager, the person or office responsible for content creation
 - Hyperlinks in this posting
 - Date of Initial posting
 - Date of last modification
 - Date of replacement or withdrawal
 - Disposition of posting after replacement or withdrawal ²⁰

Moderate Risk (Cont'd)

Accountability Exposure

- some records and publications appear that are not captured elsewhere in record keeping systems

Recordkeeping Response

- official records are disposed of according to U. of T. File Plan and/or approved records retention schedules

High Risk

Accountability Exposure

- office websites grow numerous and complex and posting controls show evidence of breaking down.

Recordkeeping Response

- assess adequacy of existing corporate recordkeeping system and rebuild processes where necessary to integrate this system with the web.

High Risk (Cont'd)

Accountability Exposure

- contents include 'bulletin board' postings, and many records and official publications not captured elsewhere in recordkeeping systems.

Recordkeeping Response

- periodic 'snapshots' of entire website; office is capable of reproducing entire site contents exactly as appear.

High Risk (Cont'd)

Accountability Exposure

- faculty, staff and students and general public usage escalates in frequency.
- websites are under intense public scrutiny and posted materials are beginning to generate negative reaction.

Recordkeeping Response

- office develops and maintains a *Local Site Repository* as temporary means of managing disposition process for records and published materials.

Local Site Repository

- electronic repository, established under the control of an office for the purposes of *temporarily* managing dormant copies of that office's electronically recorded information until the corporate recordkeeping system is adequate for the task
- replicates at time of posting all pages posted to an active website in a separate storage device

Local Site Repository (Cont'd)

- **Features:**
 - is a means of reconstructing the information *content* of an active site;
 - facilitates the organized disposition of recorded information through:
 - » controlled deletion
 - » transfer of archival records to UTARMS (both publications and official records)



FEATURES



The National Archives promotes good government recordkeeping and encourages community awareness and use of valuable Commonwealth records in its care. We have offices and reading rooms in Canberra, each State capital and Darwin.

Phone (02) 6212 3600 | Fax (02) 6212 3699 | Email archives@naa.gov.au

WHAT'S NEW

EXPLORE

[Media Releases](#) | [Annual Report](#) | [Cabinet Records](#) | [RecordSearch](#) | [PhotoSearch](#)

National Archives of Australia

Web policy and guidelines cover:

- public websites
- virtual private networks (VPNs)
- extranets
- intranets; and
- individual web-based resources (services and publications)

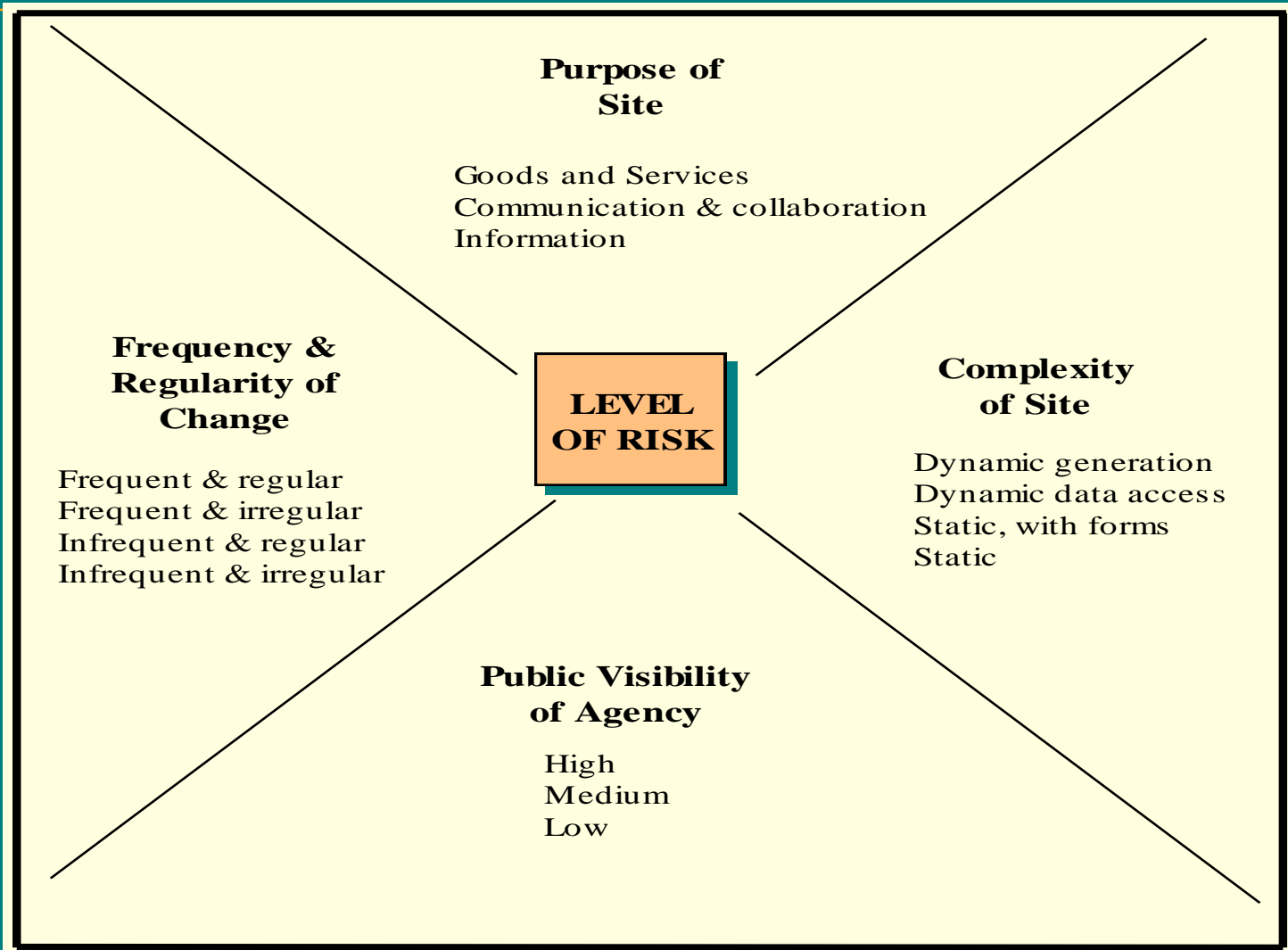


National Archives of Australia

Features:

- builds on McClure/Sprehe and IM Forum work
- simplifies risk assessment model
- provides practical strategies for storage and preservation of web-based resources for long term accessibility

National Archives of Australia



Bibliography

IM Forum Internet and Intranet Working Group. *Managing internet and intranet information for long term access and accountability - implementation guide.* **Sept. 24, 1999**

[Http://www.imforumgi.gc.ca/consult/inter-intra/implement2_e.pdf](http://www.imforumgi.gc.ca/consult/inter-intra/implement2_e.pdf)

InterPARES Project: [Http://www.interpares.org](http://www.interpares.org)

McClure, Charles and J. Timothy Sprehe, *Analysis and development of model quality guidelines for electronic records management on state and federal websites.* **January, 1998.**

[Http://istweb.syr.edu/~mcclure/nhprc/nhprc_title.html](http://istweb syr.edu/~mcclure/nhprc/nhprc_title.html)

National Archives of Australia. *Archiving web resources - policy* (revised January, 2001) www.naa.gov.au/recordkeeping/er/web_records/policy

Archiving web resources - guidelines (March 2001)

www.naa.gov.au/recordkeeping/er/web_records/guide

Part II

Preservation strategies for University
of Toronto World Wide Web

U of T WELCOME TO THE UNIVERSITY OF TORONTO



About U of T
Attending U of T
Working at U of T

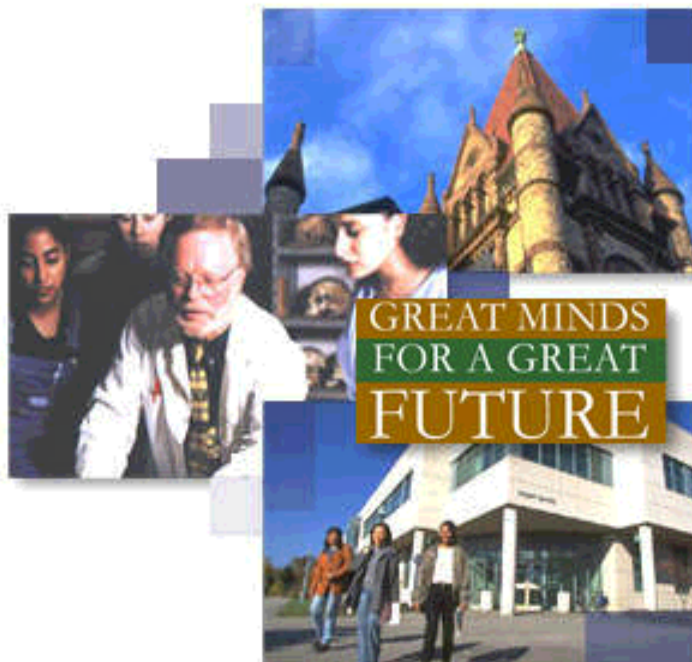
Academic & Research Links
Alumni & Friends Links
Student Links

News & Events
Directories & Internet Help

my.utoronto.ca

U of T at Mississauga
U of T at Scarborough

...Home of this year's CIAU women's hockey champions: congratulations, Blues.



Q & A

News and Events investing in a child's education guarantees lasting rewards? ([more...](#))



News Headlines

- Super hearing in flies may improve hearing aid technology
- Business Board approves higher tuition fees
- University releases senior salary disclosure list

[\(more headlines...\)](#)

Did You Know?

Want to know which faculty employment positions are currently available? The university's new

U. of T. Strategy

University of Toronto World Wide Web:

“provides information about the University and its mission; its programs, services, and events; and its students, faculty, staff and alumni. In addition it also provides access to scholarly resources, informational tools, and navigational aids”.

U. of T. Strategy

U. of T. Web Publishing Guidelines

- www.library.utoronto.ca/webguide.htm

Guidelines for Archiving Web Sites

- www.library.utoronto.ca/utarms/preservation

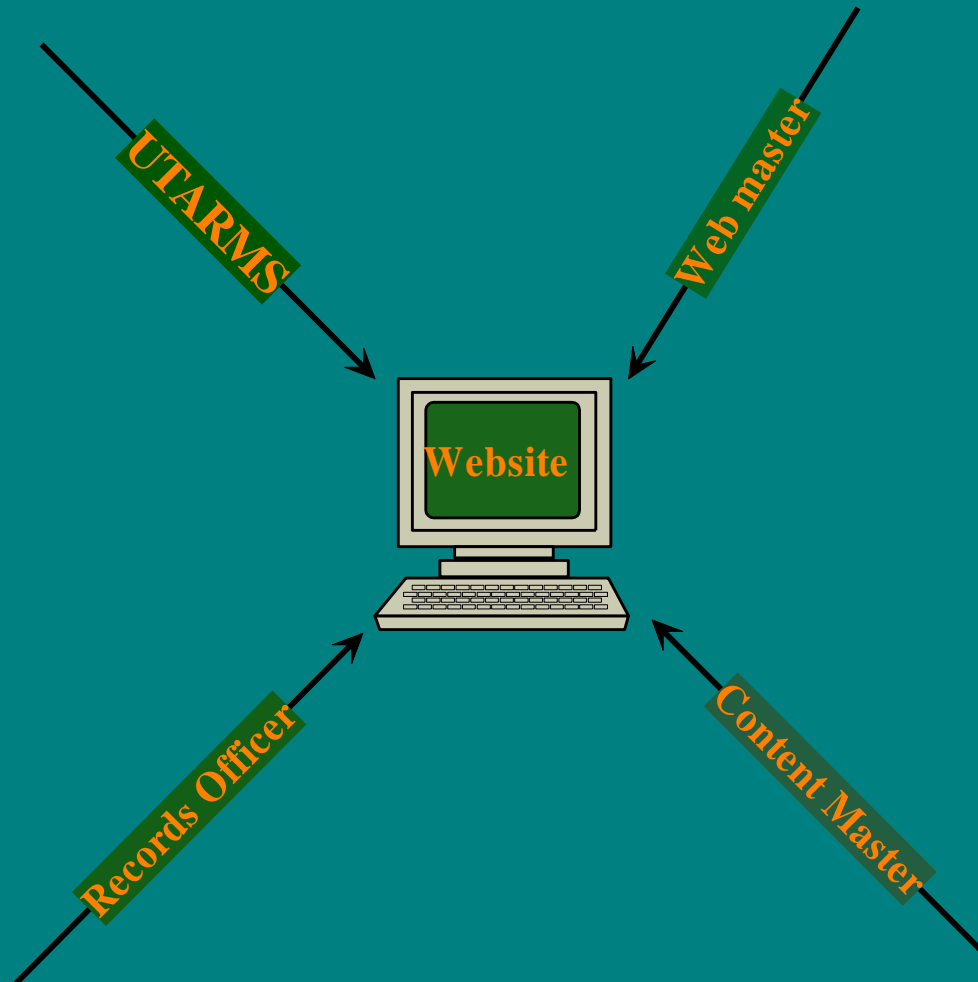
U. of T. Strategy

Strategies:

- assessing risk - records management strategies:
 - Accountability: Low, Moderate and High Risk Sites
 - Historical Log
 - Local Site Repository

U. of T. Strategy

Partners in Preservation





UNIVERSITY OF TORONTO Faculty of Arts & Science

- Information, News & Events
- Departments & Programs
- Colleges & Residences
- Current Students
- Scholarships & Financial Aid
- Prospective Students
- Study Elsewhere
- Information for Instructors
- Alumni
- Campaign
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U of T - Arts Science - links at bottom

[A&S Ad Campaign](#) | [Tell Us What You Think](#) | [Site Info](#) |
[Office of Student Affairs](#) | [Calendar](#) | [Course Timetable](#) | [Exam Schedule](#)
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UNIVERSITY OF TORONTO Faculty of Arts & Science

Current Students




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Information for Current Students - Registrar's Office

Home

Notices

- The April/May exam dates listed in the *Revised Course List* are incorrect. April/May exams run from April 23 to May 11, 2001.
- [Greetings from the Faculty Registrar](#)
- [Calendar](#)
- Registration & Timetables
 - [2001 Summer Session](#)
 - [2001-2002 Fall/Winter Sessions](#)
- [Research Opportunity Program \(299Y1\)](#)
- [2001/2002 First-Year Seminars \(199Y1\)](#)
- [First Year Handbook \(PDF\)](#)
-  To view a PDF you need [Adobe Acrobat Reader](#).
- [Course Syllabi](#)
- [Examinations](#)



Back



Forward



Reload



Home



Search



Netscape



Print



Security



Stop



- [Subject POST \(Program\) Enrolment](#)
- [Petitions](#)
- Campus Transfers:
 - [Mississauga to St. George](#)
 - [St. George to Mississauga](#)
 - Commerce Students (will be available July 6, 2001)
- Transcripts:
 - [Registrations after September 1978](#)
 - [Registrations before September 1978](#)
- [Student Web Service](#)
- [Sessional Dates](#)
- [Letters of Permission & Transfer Credit](#)
- [Tuition & Fees](#)

- [ASSU: The Arts and Science Students' Union](#)
- [Quick reference: student services](#)
- [Information & Advice on Writing at University](#)
- Preparing for Professional Programs:
 - [Dentistry](#)
 - [Law](#)
 - [Medicine](#)
 - [Nursing](#)
 - [Occupational Therapy](#)



2001/2002 Registration Handbook & Timetable

ARTS & SCIENCE REGISTRAR'S OFFICE | UNIVERSITY OF TORONTO

[Letter from the Faculty Registrar](#)

Selecting & Enrolling in Courses

- [Important Dates 2001](#) | [Important Dates 2002](#)
- [How to Enrol in a Subject POST](#)
 - [Instructions for Commerce Subject POSTs](#)
 - [Instructions for Computer Science Subject POSTs](#)
- [Subject POST Codes & Contacts](#)
- [Select Courses](#) ([Enrolment Indicators](#); [Enrolment Controls](#))
- [Enrol in Courses](#) ([First Round of Enrolment](#); [Second Round of Enrolment](#))
- [Pay Fees](#)

Course Listings

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- [Course listings](#)
- [Courses Not Offered Listing](#)
- [First Year Seminars](#)

- [Codes Used in the Timetable Listings](#)
- [Course listings](#)
- [Courses Not Offered Listing](#)
- [First Year Seminars](#)

Forms

- [STS/SWS Worksheet](#) (PDF)
- [Weekly Schedule Worksheet](#) (PDF)
- [Student Medical Certificate](#) (PDF)



To view a PDF you need [Acrobat Reader](#).

[Instructions for Using the Student Telephone Service \(STS\)](#)

[Instructions for Using the Student Web Service \(SWS\)](#)

[Where to Go for Information](#)

[Instructions for Graduating Students](#)

[Timetable Home](#) ~ [Registrar's Office Home](#) ~ [Arts and Science Home](#)

Last updated 04.06.01

Enquiries and comments: e-mail ask@artsci.utoronto.ca

Faculty of Arts and Science

Factors

Risk Level

Recordkeeping Response

Public Visibility

- All pages viewable by general public and U. of T. Community
- Little adverse criticism about content

High

Low

- Continue to monitor reactions to content

Faculty of Arts and Science

Factors

Purpose

- Disseminating (publishing) and sharing information
- Soliciting responses and feedback (via email)
- Provide some online services (POSt)

Risk Level

Moderate - High

Recordkeeping Response

- Level of risk increases if records and publications are only disseminated on web
- Ensure close integration with office's record keeping system

Faculty of Arts and Science

Factors

Risk Level

Recordkeeping Response

Complexity

- Predominately static documents
- PDF forms
- Document-centred (low interactivity) POST
- Access to ROSI

Low - Moderate

Low - Moderate

- Increase in dynamic and interactive documents will increase level of risk
- Assess adequacy of record keeping system and integrate web records

Faculty of Arts and Science

Factors

Frequency & Regularity of Change

- Irregular (i.e. as required)
- Infrequent (i.e. longer than 3 months between changes)

Risk Level

Moderate - High

Recordkeeping Response

- Historical log
- Records retention and disposition
- Local site repository
- Transfers to UTARMS



WELCOME TO THE HUMAN RESOURCES DEPARTMENT AT THE UNIVERSITY OF TORONTO

See Latest News for the *



[LATEST NEWS](#)

Welcome to the Human Resources Department's website. Our website is in the process of being revamped to provide you with more information in an easy-to-access format. One of the new features is our [Frequently Asked Questions](#) page. Our goal is to continue developing new features to help you find the information you are seeking quickly. The [Our Mission](#) and [HR Contacts Directory](#) pages will provide you with information about how we operate and who we are and help you readily contact us.



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[SERVICES & RESOURCES](#)

 [Collective Agreements](#)

 [FAQs](#)

UofT UNIVERSITY OF TORONTO HUMAN RESOURCES DEPARTMENT SERVICES AND RESOURCES

SERVICES

The following areas make up the central Human Resources Department:

[Compensation](#)

[HR Reporting](#)

[Labour Relations](#)

[Payroll](#)

[Pensions & Benefits](#)

[Staff Development](#)



For questions about the terms and conditions of your employment with the University, information on and/ or interpretation of University policies or collective agreements or related legislation, services and programs available to staff within the University, please check with your supervisor or contact your local decentralized HR Office. The [HR Offices Contacts Directory](#) provides a complete list of the eleven HR Offices across the University's three campuses. Not sure which

office to contact? Please see our [listing of offices](#) by University department.

RESOURCES

[Employee Assistance Program](#)

[Forms & Templates](#)

[Job Opportunities](#)

[Management Resources](#)

[Publications & Other Information of Interest](#)

[Statistics & Reporting](#)

[Workplace Support](#)

The [central Human Resources Department](#) supports the decentralized HR Offices in their delivery of front-line services, as well as providing certain front-line services to staff, for example, staff training, as well as being involved in activities such as collective agreement negotiations, policy development, reports, development of guidelines and tools to facilitate working with the University's policies and procedures.

[Links to selected HR-related Websites](#)

of America collective agreement include a Hiring Rate that represents the normal hiring rate for the position. Salary increases are based on annual step progression to the maximum amount that is also indicated on the job posting.

University of Toronto students interested in career or employment information should contact the University of Toronto [Career Centre's](#) home page.

[How To Apply](#)

Who May Apply

- IF you are accessing the Internet via a University of Toronto computer, you may see:

[All Administrative Positions \(Union and Non-Union\) Currently Available](#)

'Internal' University of Toronto applicants are given first consideration. Please see [General Information](#) for more information concerning eligibility to apply.

- IF you are accessing the Internet via a computer external to the University, you may only see:

[Positions Currently Available to External Candidates](#)

Please see [General Information](#) for more information concerning eligibility to apply.

General Information



**UNIVERSITY OF TORONTO
HUMAN RESOURCES DEPARTMENT
Forms & Templates**

- [Benefits Premium Calculator](#)
- [Liberty Health Dental Claim Form](#)
- [Liberty Health Employee Dependent Enrolment/Change Form](#)
- [Liberty Health Extended Health Claim Form](#)
- [Liberty Health Vision Care Claim Form](#)

[UofT Home](#) | [Human Resources Home](#) | [Services and Resources](#)

This page last updated: February 2, 2001

Human Resources

Factors

Public Visibility

- Some pages not viewable by general public (e.g. Job Opportunities)
- Intended primarily for employees
- No adverse reactions to content

Risk Level

Low - Moderate

Recordkeeping Response

- Continue to monitor reactions to content

Human Resources

Factors

Purpose

- Disseminating (publishing) and sharing information
- Soliciting responses and feedback (via email)

Risk Level

Low - High

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Human Resources

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- Records retention and disposition
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- Transfers to UTARMS

Contact Us

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University Archives and Records Management
Services
www.library.utoronto.ca/utarms