LIS 9319 Science, Technology, and Medical Information
Graduate School of Library and Information Science
Faculty of Information and Media Studies
Western University

Instructor: Stephen Coulstring
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Office hour: Wednesdays 4:50-5:50 p.m.
Class meets Wednesdays 6:00-8:50 p.m.

Course Description

This course surveys the nature, presence, and communication of science, technology, and medical information. Students will gain an awareness of the information needs belonging to communities of practice in select disciplines. As well, students will consider the roles of information professionals in supporting students, researchers, and other participants in science, technology, and medicine.

Enrollment in this course is restricted to graduate students in the Master of Library and Information Science Program, as well as any student that has obtained special permission to enroll in this course from the course instructor as well as the Graduate Chair (or equivalent) from the student's home program.
PREREQUISITE(S): LIS 9003

Goal

Ultimately, this course intends to prepare information professionals for the provision of science, technology, and medical information in a variety of contexts.

Objectives

1. To investigate the information requirements of practitioners in science, technology, and medicine.
2. To develop the skills and knowledge to provide library and information services to users of science, technology, and medical information.
3. To develop familiarity with information formats, conventions, sources, and methodologies attached to user communities.
4. To demonstrate an awareness of professional values and standards.
5. To draw valid conclusions based upon sound analysis of reliable data.

Relationship to the Goals and Objectives of the MLIS Program

Students who complete this course will be able to:

1. Investigate the information requirements and practices of users of scientific, technological, and medical knowledge and develop the skills and knowledge to provide library and information services to them (PLLO 2, 8, 9);
2. Demonstrate basic knowledge of information formats, conventions, sources in science, technology and medicine (PLLO 2, 4);
3. Exhibit a critical awareness of professional values and standards related to information work in science, technology and medicine fields (PLLO 3, 5).

Pedagogical Approaches

Pedagogical approaches for course instruction include lectures, database labs, online forum topics, and at least one guest visit. Assigned readings are drawn from academic, technical, and conference publications.

Course Materials

Recommended course readings are open access or available from Western Library subscribed content.

Methods of Evaluation

Students are expected to attend class and participate. The course assignments are:

Assignment Name	Weight	Date Assigned	Date Due
Definitions	15%	May 8	May 26
Business Case	25%	May 15	June 2
Topic Report	25%	May 22	July 7
Topic Presentation*	20%	June 20	Jul and Aug (various dates)
Technology Presentation**	15%	May 15	Late May and June (various dates)

*This fifteen-minute solo presentation shares findings from the Science Topic Report with the class.
** This ten-minute presentation shares brief research and findings on a selected technology.

Course Participation

Assignments are due according to the instructions; submit them to the OWL course site in MS Word format or PDF. Extenuating circumstances for late assignments include emergencies or illnesses. Grades for assignments received late without prior permission are subject to a penalty of half a mark per day. For example, an assignment that is late ten days loses five marks from a total grade of 100. Six grace days are available to all students in the course for use with any assignment(s) (except presentations). To use one or more days for a pending assignment, notify the instructor by email. You do not need to ask permission to use your grace days. Grace days are not applicable for scheduled presentations.

Topics Covered

Class 1 a. Introductions b. Science Definitions assignment c. History of Science d. History of Science Libraries e. *Web of Science* lab
Class 2 a. Business Case assignment b. What is Science? c. What is Technology? d. *Scopus* lab
Class 3 a. Science Literacy b. Scientometrics c. Literature search c. Wikipedia
Class 4 a. Technology Presentations b. Technology Presentations c. *Springer* lab
Class 5 a. Technology Presentations b. *Medline* lab c. *ScienceDirect* lab
Class 6 a. Technology Presentations b. Western Science Resources c. *CINAHL* Lab
Class 7 a. Standards and Technical Information b. Patent Information c. Patent lab
Class 8 a. Evidence Based Medicine b. Science Publishers c. Predatory Publishing and Open Access models
Class 9 a. Government Science Librarianship b. Public Health Librarianship c. *AMED* lab
Class 10 a. Student Presentations b. Science information in the legal context c. Science information in the business context
Class 11 a. Student Presentations b. Student presentations c. Foreign Science Research
Class 12 a. Student Presentations b. Student presentations c. Emerging Trends d. Professional Development
Class 13 a. Student Presentations b. Careers in Science Information

Instructor Information

Stephen Coulstring (BSc, BA, BEd, MA, MLIS) is a lecturer with the Faculty of Information and Media Studies. He has over twenty years of experience with reference service, bibliographic instruction, and collection management in a special government library context (Canada Revenue Agency). His research background and interests include business, legal, government, science, and public records information. He has taught the following LIS courses:

LIS 9323 Business and Industry Information
LIS 9318 Legal Information
LIS 9316 Government Information
LIS 9319 Science, Technology, and Medical Information

Course Policies

Writing

Professional, grammatically correct writing is expected. This means that spelling, punctuation, and grammar are part of assignment evaluation. If you need assistance with writing, find someone whose writing skills you trust to review your written work or visit the Writing Support Centre (http://www.sdc.uwo.ca/writing/).

Academic Offences

Scholastic offences are taken seriously and students are directed to read the appropriate policy, specifically, the definition of what constitutes a Scholastic Offence, at the following site:
(http://www.uwo.ca/univsec/pdf/academic_policies/appeals/scholastic_discipline_grad.pdf).

Attendance

Attendance is expected for classes.

Communication

The instructor plans to respond within 24 hours to all relevant course email that is sent to the instructor's attention.

Assignments

Assignments should have single-spaced lines. Assignments have due dates and instructions posted to the course site on OWL. Assignments are due unless other arrangements apply. Late assignments without prior arrangement or accommodation for illness are subject to a penalty of ½ a grade per day.

Grace Days

Six grace days are available for use. Notify the instructor by email that you are using grace days in advance. If you advise using three grace days and you only use two grace days, then the unused day remains for use with future assignments in the course. The grace days may not be used with the synchronous presentation assignment.

Grading

Grading will conform to the guidelines published in the MLIS Graduate Student Handbook (http://intra.fims.uwo.ca/students/handbooks/mlis/mlis-handbook-04.htm#P269_25111).

Accommodation for Illness

Documentation for an illness will not be required unless it is requested by the instructor. Upon such a request, the student should submit documentation to the FIMS Dean's office.

Accessible Education Western (AEW)

Western is committed to achieving barrier-free accessibility for all its members, including graduate students. As part of this commitment, Western provides a variety of services devoted to promoting, advocating, and accommodating persons with disabilities in their respective graduate program.

Graduate students with disabilities (for example, chronic illnesses, mental health conditions, mobility impairments) are strongly encouraged to register with Accessible Education Western (AEW), a confidential service designed to support graduate and undergraduate students through their academic program. With the appropriate documentation, the student will work with both AEW and their graduate programs (normally their Graduate Chair and/or Course instructor) to ensure that appropriate academic accommodations to program requirements are arranged. These accommodations include individual counselling, alternative formatted literature, accessible campus transportation, learning strategy instruction, writing exams and assistive technology instruction.

Support Services

Students are directed to support services that are provided by the University of Western Ontario. These support services include the following:

Office of the Registrar (http://www.registrar.uwo.ca)

USC services such as peer support, food support, inclusivity programming, transportation, and health services (http://westernusc.ca/services/)

Student Development Centre (http://sdc.uwo.ca/)

Health/Wellness Services

Students who are in emotional/mental distress should refer to Mental Health@Western https://www.uwo.ca/health/psych/index.html for a complete list of options about how to obtain help.