

**HIS9241/LIS9841 Interdisciplinary Issues in Health Information Science
DRAFT Syllabus - Fall 2013**

PROFESSOR:

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Course website: SharePoint - http://faculty.fims.uwo.ca/wathen/HIS9241_LIS9841/default.aspx

CLASS LOCATION:

All classes will be held in **Middlesex College, Room 16b (to be confirmed)**.

OVERVIEW & OBJECTIVES:

This course will provide an overview of issues in the creation, provision and retrieval of information in the health care system. A focus will be on describing the 'actors' in the health area, their information behaviour, and consideration of how services provided by various information sources meet, or do not meet, these needs. We will also consider, taking a critical approach, emerging issues in health care generally and health information specifically, and how these influence and are influenced by broader ethical, social, political, legal and economic considerations.

At the end of this course, students should:

- have a basic understanding the Canadian health care system, including the provision of health information at various levels.
- be able to describe the information seeking behaviours of the major stakeholders in the health system, including health professionals, policy makers, and the public.
- for each stakeholder group, understand the resources and services that would best meet their information needs.
- have basic experience with searching online health-related databases (e.g., MEDLINE) and accessing health-related resources from a variety of sources.
- understand trends and issues in evidence-based health care, health informatics, health privacy legislation, knowledge translation, and health literacy.
- be able to critically evaluate and engage with not only health information policies, practices, and sources, but also some of the fundamental assumptions and ideas that underpin these.

Course Policies

Attendance: Students are reminded that attendance at and timely arrival to all classes is required. Students needing to negotiate legitimate absences need to inform the instructor in advance in order to arrange for make-up work. **This may not be possible in the case of assignments designated for completion during class time.** In cases of emergency absences, students must contact the instructor as soon as possible afterwards.

Academic Offences and Plagiarism: 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 Web site:

http://www.uwo.ca/univsec/handbook/appeals/scholastic_discipline_grad.pdf

Plagiarism is a major academic offence and students are reminded of the University's plagiarism policy, which instructors are required to note on course outlines: *"Students must write their assignments and essays in their own words. Whenever students take an idea or a passage of text from another author they must acknowledge their debt both by using quotation marks where appropriate and by proper referencing such as footnotes or citations. All required papers may be subject to submission for textual similarity review to the commercial plagiarism-detection software under license to the University for the detection of plagiarism. All papers submitted for such checking will be included as source documents in the reference database for the purpose of detecting plagiarism of papers subsequently submitted to the system. Use of the service is subject to the licensing agreement, currently between Western University and Turnitin.com (<http://www.turnitin.com>)."*

Email policy: Student emails will be read and responded to within 48 hours of receipt, from Monday to Friday. Do not expect that emails will be answered at night or on weekends. Do not submit assignments by email, or to the course website, unless specifically indicated.

Readings & Online Discussions: A significant amount of class time will be spent discussing issues in health care of relevance to information professionals and researchers. Each week, a list of selected readings will be provided – some required and some suggested – that address the topic(s) to be covered the following week. The list will be posted to the course website with, where possible, a copy (for personal use only) of the reading, and/or a link to a website, and/or a call number or other instructions for obtaining the reading.

As we address new topics and students begin to select readings for their Critical Commentaries, they may wish to share particularly interesting or useful resources with their classmates. The [threaded discussion area on the course website](#) is ideal for this kind of exchange, and students are encouraged to make appropriate use of this feature.

Appropriate/acceptable use of the course website includes:

- posting new discussion topic areas of relevance to the course
- linking classmates to specific relevant materials or requesting that the instructor post specific relevant resources

Unacceptable use includes:

- discussions or responses not relevant to the course
- disrespectful or otherwise inappropriate postings

Class Outline

(NOTE: this outline may be revised as class and student needs and preferences, and guest speakers, are identified)

Class 1: September 9, 2013 - Overview

- Introductions; Course overview and requirements
- The Canadian Health Care System

Class 2:– September 16, 2013 ‘Evidence’ 1: what is it and how is it produced?

- Evidence-based health care; research methods refresher

Class 3 September 23, 2013 – ‘Evidence’ 2: how do we find it? [NOTE: class in NCB Lab B - TBC]

- Introduction to MEDLINE & PubMed; overview of other databases and grey literature
- Searching practicum (instructions provided)
- Discuss panel, finalize groups and topics

Class 4: September 30, 2013 - Legal issues in health information practice & policy; Health information users and uses 1 (DUE: CC1)

- Privacy, intellectual property and other legislation re: health information:
GUEST – Margaret Ann Wilkinson, UWO Law Professor & HIS faculty member
- Information needs of clinicians/health service providers

Class 5: October 7, 2013 - Health information users and uses 2 & 3

- Information needs and uses of patients, the public and policy makers
- GUEST – Kelly Gillis, Senior Director, South West Local Health Integration Network (LHIN)

NO CLASS OCTOBER 14, 2013 – THANKSGIVING

Class 6: October 21, 2013 - Health information in health services policy and delivery

- Review and discussion of *The Canadian Health Care Debate: A Survey and Assessment of Key Studies*

Class 7: October 28, 2013 - Knowledge Management in Health Care (CC2 DUE)

- GUEST: TBD
- Time for panel preparation

Classes 8, 9, 10: November 4, 11 & 18, 2013 Emerging issues panel discussions (CC3 DUE class 10)

- Class 10 – form discussion groups for Class 11

Class 11: November 25, 2013 Knowledge translation

- Knowledge translation primer - Mobilizing evidence into policy and practice
- Small group KT case studies – discussion and report-back

Class 12: December 2, 2013 Telling health stories: the roles of media and journalists

- GUEST: Meredith Levine (Journalism)

Class 13: December 9, 2013 Course wrap-up (major report DUE)

- Wrap-up and Discussion: Where are we going? How will we get there? What skills will we need?; Course evaluations

Evaluation & Assignments - Details

Policies & Procedures

Grading Policy

Thesis-based Graduate Programs submit grades as numerical marks according to the following scale set forth by the UWO School of Graduate and postgraduate Studies:

- 80% and above (A)
- 70-79% inclusive (B)
- 60-69% inclusive (C)
- Less than 60% - Fail (F)

The same grade scale will be used for all students, however MLIS students enrolled in the course should note that pass/fail cut-offs may differ. These students should refer to the MLIS Guidelines to the Grade Range in the MLIS Graduate Student Handbook or at:

http://intra.fims.uwo.ca/students/handbooks/mlis/mlis-handbook-04.htm#P261_23959

Submission of Assignments

All assignments are to be submitted at the beginning of class on the due date. Late assignments will be deducted at a rate of 10% for every day that they are late.

Submit assignments on 8 ½ x 11” paper, printed from a word processor; use 11 or 12-point font and one-inch margins. Double space the main text (not references or footnotes), unless otherwise indicated.

Do not submit your assignment by email, or on the course website, unless you have received permission from the instructor.

Citation style

All sources used in assignments should be cited in the text and listed at the end of the assignment on a separate page, following the citation style recommended in the International Committee of Medical Journal Editors Uniform Requirements for Manuscripts Submitted to Biomedical Journals. See: <http://www.icmje.org/> for the requirements (also available in pdf on the course website), and, for sample references: http://www.nlm.nih.gov/bsd/uniform_requirements.html. American Psychological Association style may also be used.

Assignment Overview

| Assignment | Due (Class #) | Worth (% of final) |
|-----------------------------|--|---------------------------|
| Class participation | all classes | 15% |
| Critical commentary reports | Report 1: Sept 30 (4) Report 2: Oct 28 (7) Report 3: Nov 18 (10) | 30% (10% each) |
| Panel Presentation | Nov 4, 11 or 18 (8, 9 or 10) | 15% |
| Major Report | Final report: Dec 9 (13) | 40% |

Grading and Assignment Descriptions

Class participation including evidence of having read and engaged with assigned readings and participating in discussions and debates (15%)

What students get out of the course depends in large part on the quality of discussion in the classroom. The instructor, guest speakers and students should all benefit and be stimulated by the discussion in which we engage in each class. Students should participate as much as possible in all sessions. Thus, the designated readings for each week must be completed before class. A reading list will be provided with some identified as "required" and some as "supplemental" to serve as a guide to related literature on the topic. Your grade for class participation will be assessed on the basis of these contributions, including your participation as an audience member during the panel discussions (see below), small group discussions, and evidence of your general preparation for class, including familiarity with required readings, contributions to seminar discussions, and demonstration of respect for the ideas, opinions and feelings of other class members.

Critical commentaries (each of the 3 assignments is worth 10%, due Classes 4, 7, 10) (30%)

During the course students will submit three brief reports, each of which will provide critical commentaries on two articles they have read related to the course. (Reviews of six articles will be submitted in total; two per report.) One of the commentaries in each report will be on a required or optional reading from the reading list (or a related reading, with permission of the instructor); the second will be about a very recent (within the last month) journal, newspaper or magazine (online or print) article selected by the student that relates to the topic in the required reading reviewed in the report. Topics should be generally related to those covered in the preceding weeks of class (1-3 for report #1, 4-6 for report #2, 7-9 for report #3).

Commentaries are to be about 500 words per article (i.e., ~1000 words per report). This is an exercise in writing concisely and with insight about theory, research and/or practice. Students will scan current (online or print) newspapers, magazines, or health-related publications (e.g., from NGOs, professional associations, etc.), in addition to required readings, to underscore the extent to which health and health care issues are a focus of public discourse as reflected in the press and in advocacy. This exercise also aims to help you develop the skills needed to communicate complex ideas clearly and in plain-language for diverse audiences – a key principle for effective knowledge translation.

If you prefer, you can synthesize your discussion of both articles into one paper of ~1000 words, however you must ensure that each is dealt with as described below, and the ideas from each, and from you, are correctly attributed using proper referencing.

Include the following when writing up your commentaries:

- **CITATION DATA:** List authors(s), Title of the source, Publication data and where you found it and how (i.e., what databases did you search to find the articles, and what search terms did you use?). [NOT INCLUDED IN WORD LIMIT]
- **INFORMATION SOURCES:** Identify, where possible, the type of sources used by the author(s). For example, for a journal article, the author might have searched previous literature and/or conducted original research using study subjects; a journalist might have conducted

interviews or commented on a major report that has been released. Comment on the degree to which you feel the author(s) accurately and objectively reflected their source materials.

- **THEME & KEY IDEAS:** What is the overall theme and what are the key ideas in the articles? There will often be many possible themes and key ideas. For you, from your perspective, what stands out as significant?
- **ANALYSIS & ARGUMENTS:** Which arguments and what analysis on the theme / key ideas did you find fit in most with your own beliefs or ideas? Why? Did you disagree with any of the ideas presented? Why?

Please note: You do not have to address all the points above in a single summary. Indeed there will be cases where only one perspective will be appropriate. Don't bury yourself in details or dwell on any one point. Reflect on what you have read, note down the important points you want to make, and revise your writing to keep it concise. There are no right or wrong answers. This is to provide experience in communicating your ideas with precision and clarity, getting to "the bottom line".

Assignments that merely summarize the readings are not appropriate – you need to provide some critical synthesis.

Evaluation Criteria: Commentaries will be graded on the appropriateness of the articles selected (do they fit with one another?), the clarity and conciseness of your analysis and argument and evidence that you've thought about the issue enough to pull out key messages that have relevance. Marks will be lost if sources are not identified or cited in the correct format, or if reports significantly exceed the word limits outlined above.

Panel Presentation (15%)

Classes 8, 9 and 10 will be devoted to presentations and debates on a current issue in health, related to the course content. Each 'panel' will include 2 students, who will present an issue, as 'experts', to the rest of the class, which will act as a decision-making group. Topics will be refined by class consensus during week 3 (suggested topics are below, but students may propose another topic, with approval of the instructor).

Format: each student pair will have 60-75 minutes for the entire presentation and group discussion. They will work together to prepare and present a 10-15 minute "neutral" introduction/background to the topic, including why it is an important HIS issue, then each student will present, for 5-7 minutes, support for one "side" of the question or issue, or one aspect of the problem – they are the "experts" on the topic. The instructor will be the moderator, and the rest of the class will act as a group trying to make a decision, and will be able to question and engage in discussion with the "experts" to help them decide.

Readings: For each topic, background readings will be **provided by the students leading the panel** and augmented by the instructor. These will be posted on the course website at least 5 days before class (i.e., by the Wednesday of the previous week.

Evaluation Criteria: The presentation will be graded for content, format and presentation style. Both presenters should contribute equally in the development and presentation of the material. Criteria for evaluation are: demonstrating that the students have considered how best to present the issue, taking into account the decision-making needs of the audience in their selected

scenario, and including, in a respectful way, differing perspectives and opinions; that the reading(s) have been judiciously selected to prepare the rest of the class for the discussion; and that the conduct of the panel flows in such a way as to ensure that the class can engage meaningfully with the issue.

Suggested Panel Topics/Scenarios (one per student pair):

1) Primary health care (PHC) indicators in local health care teams

Scenario/Question for deliberation: Family Health Teams (interdisciplinary teams of health care providers that provide primary health care in communities - see <http://www.afhto.ca/>) are being asked by government to collect clinical data regarding their services and their patient outcomes that align with newly recommended PHC indicators. A group of leaders representing local FHTs has asked two experts in the area to tell them the pros and cons of agreeing to collect this information – how is it collected? Are new resources, tools or technologies required? Will there be benefit to them and their patients in collecting PHC indicators? If so, which ones? What is the best current evidence on this issue?

Background presentation should include an overview of “health indicators” (in general) – what are they, how are they collected (by and from whom), and how are they used in different parts of the health system? What, specifically, are “primary health care (PHC)” indicators? What are they used for and why? Who collects them and how? [HINT: the Canadian Institutes for Health Information (CIHI) has a lot of good background material on indicators in general, and PHC Indicators specifically – e.g.,

<http://www.cihi.ca/CIHI-ext-portal/internet/EN/TabbedContent/types+of+care/primary+health/cihi006583>

Approach: After a 10-15 minute background primer (co-presented by the students), each student will argue one “side” of the issue – one taking the position that it is important to collect PHC indicators, telling us why and how to do it; the other pointing out the potential costs or other considerations that might demand caution. Both should provide existing evidence (or lack of evidence) for meaningful impacts (at the system, organization or individual patient level) of collecting and using these data. Keep in mind who your audience is, and what they want to know.

2) Implementing an electronic medical record (EMR) in a hospital

Scenario/Question for deliberation: a local hospital is considering implementing an EMR purchased from a vendor. Two experts have been asked to present an overview of EMRs and their pros and cons to the hospital Board of Directors. They want to know how EMRs could improve clinical care processes, and ultimately, patient outcomes. They are also interested in cost reduction, so knowing how much it costs to purchase, implement and sustain a new system is important. The bottom line, though, is whether EMRs are “worth it” – do they improve patient care and patient health outcomes?

Background presentation should include an overview and definition of EMRs, what they do and why they are deemed to be important; distinguish EMRs from other kinds of patient records (e.g., personal or patient health records, non-electronic charting), how they relate to other systems, like CPOE or CDSS. This is a big topic, so you will just have to highlight key issues specific to the decision-making scenario. Rely on background readings for more detail.

Approach: after providing the 10-15 minute background primer (co-presented by the students), each student will present one “side” of the issue – one supporting the purchase and implementation of the EMR system, the other suggesting caution and to defer the decision. Bring

recent best evidence to bear in your arguments – have EMRs been shown to improve outcomes? Which kinds of outcomes (costs, administrative processes, research, teaching, patient health, etc.)? Keep in mind who your audience is, and what they want to know.

3) Patient decision aids for shared decision-making regarding cancer screening

Scenario/Question for deliberation: Shared decision-making between patients and health care providers has been promoted as a key aspect of patient-centred care, and as way to improve patient acceptance of health interventions, including improving treatment compliance. One method to improve shared decision-making is the use of specific tools, often called patient decision aids (see <http://decisionaid.ohri.ca/>). The board of directors of a regional advocacy group for cancer prevention is deciding whether to promote the use of decision aids – by funding their dissemination to area clinical practices, health units and related websites – related to helping people (both men and women) make decisions about screening for various kinds of cancers. Background presentation should include an overview of shared decision-making and patient decision aids – what are they? What formats do they take (web and non-web; interactive vs “on your own”)? How have they been used?

Approach: after providing the 10-15 minute background primer (co-presented by the students), each student will present one “side” of the issue – one supporting the dissemination and implementation of cancer screening patient decision aids, the other suggesting caution and to defer the decision. Bring recent best evidence to bear in your arguments – have decision aids been shown to improve patient outcomes (what kinds of outcomes)? What do patients think of them? Are they appropriate for all patients or types of encounters? What do health care providers think of them? Do we know anything about their cost-effectiveness? Keep in mind who your audience is, and what they want to know.

4) Health information terminologies and classifications in electronic health record systems

Scenario/Question for deliberation: As part of the provincial e-health strategy, a group of policy analysts at the provincial ministry of health are trying to develop data coding standards for health records. They need to understand the difference between clinical terminologies and medical classification systems. Two experts have been asked to brief them on the various formats and systems used to describe health information in standardized health records systems.

Background presentation should include an overview of the different nomenclatures and formal coding systems used to describe different kinds of information collected in health settings and systems. This will include terminologies for capturing clinical information about individual patients as well as classification systems to identify diseases and other health conditions and events. What are the different systems used for? How do they work?

Approach: after providing the 10-15 minute background primer (co-presented by the students), one student will discuss clinical terminology coding systems (hint: use SNOMED-CT as the main example), while the other will discuss a classification system (hint: ICD-9 and/or ICD-10). What is each system used for? How are data coded in each? Can they be cross-referenced / mapped in EMRs? What factors should the policy analysts consider in deciding which one to embed in the proposed standard EMR, or should both be used? What are the costs of this? Note that this is less a ‘debate’ than presenting clear information on two different approaches to health information management. Keep in mind who your audience is, and what they want to know.

5) Citizen engagement for public health planning

Scenario/Question for deliberation: The local public health unit is planning its strategy for combating West Nile virus, which it plans to implement in about 6 months. While they have approaches to gathering and synthesizing best evidence regarding approaches to prevent the disease, they are concerned that most prevention efforts rely on how the general public understands the issue, and whether they take preventive measures – they would like to understand how the public views this issue, and how they can be encouraged to take it seriously. The medical officer of health and her senior staff have invited two experts to speak about various approaches to citizen engagement to get input from members of the public on their West Nile planning.

Background presentation should include an overview of the concept of public/citizen engagement in health planning (e.g., see

<http://www.chsrf.ca/PublicationsAndResources/ResearchReports/CommissionedResearch/11-03-09/3b6b5648-d03f-4d7d-aed6-8df557e600ca.aspx>) – what different approaches exist? When and why is it used, and what does it yield? Has it been used in public health planning (or in anything like the current case?).

Approach: after providing the 10-15 minute background primer (co-presented by the students), each student will present one “side” of the issue – one supporting the use of citizen engagement (and suggesting a specific approach or approaches for this issue), the other suggesting not to use this technique. Bring recent best evidence to bear in your arguments – has citizen engagement been shown to improve health behaviours or outcomes, or to make for more effective plans or policies? What do people think of them? Are they appropriate for any health issue? Do we know anything about their cost-effectiveness? Keep in mind who your audience is, and what they want to know.

6) Health literacy programming for Northern Aboriginal communities

Scenario/Question for deliberation: Senior leaders from the Public Health Agency of Canada have invited two experts to advise them on whether to implement health literacy (HL) programming for Aboriginal citizens living in rural/remote/Northern communities, and/or on Reserves.

Background presentation should include an overview of health literacy, including what it means, how it relates to other forms of literacy, and what kinds of programs typically are used for different settings, audiences and purposes (e.g., see <http://www.cpha.ca/en/portals/h-l/resources.aspx>).

Approach: after providing the 10-15 minute background primer (co-presented by the students), each student will present one “side” of the issue – one supporting the implementation of health literacy programming (and recommending a specific approach, if appropriate), and the other not supporting this, for reasons to be provided. Bring appropriate evidence (or lack of it) to bear – have HL programs been rigorously tested? Using what outcomes? Have specific approaches (online or other) been tried for the kinds of settings/communities of concern to this group? What special considerations are there for these groups and settings? Keep in mind who your audience is, and what they want to know.

Students may suggest other scenarios, and use those, with the approval of the instructor, e.g.:

- Peer Educators/Lay Health Educators/Patient Navigators
- Other health IT (incl consumer health informatics) applications in specific settings
- Clinical information services/libraries/librarians
- Other?

Major Report (40%) DUE: December 10 (Class 13)

The major report will allow students to explore an issue of interest to them in a 15-20 page (double-spaced, plus references) paper. Students are encouraged to discuss their topic with the instructor for feedback regarding scope and approach. Report topics can focus on practical issues in health information provision and use (e.g., developing information literacy workshops for clinicians, new consumer health informatics applications, etc.), or on exploration of emerging issues in the field of health information broadly (e.g., health information privacy legislation; open access publishing models in the medical literature, etc.); or combinations of these.

Evaluation Criteria: The paper should:

- introduce the topic;
- provide definitions of the key concepts employed (with appropriate citations);
- describe why this is an important topic, what particular aspect you plan to explore, and why;
- demonstrate that you have conducted a reasonable search of relevant literature (this need not be exhaustive);
- demonstrate critical thought into the topic including consideration of potential implications for theory, research and/or practice in specific areas of relevance to the course content, or to the field of health information science more broadly.

Suggested Structure

(this is a guideline only; it is not essential that you follow the structure exactly as outlined below, but these are the elements that you should include in your paper)

Abstract – a 250 word summary of your paper, including objectives, methods, main findings and conclusions

Introduction - Provide a context or background for the topic and its significance. Define and describe key concepts. State the purpose of the paper. Give only pertinent references and do not include data or conclusions from the work being reported. Make sure to appropriately cite all sources.

Literature search method (very brief) - what sources were searched, how and (briefly) why

Results of Review: Describe the main points arising from your review, compare and contrast your findings with other relevant studies on the topic. Emphasize the new and important aspects of your work and the conclusions that follow from them.

Discussion - Explore the implications of the literature findings for theory, research and/or practice in specific areas of relevance to the course content, or to the field of health information science more broadly. Emphasize or summarize only the most important observations. Don't repeat in detail data or other material given in the Introduction or the Results section. Make sure to appropriately cite all sources.

Conclusions and Recommendations - If relevant, state any conclusions or recommendations that you feel arise from your interpretation of your findings.

References – list of sources cited (using an appropriate referencing style, see above)

Source: [Modified from] Uniform Requirements for Manuscripts Submitted to Biomedical Journals: Writing and Editing for Biomedical Publication Updated October 2005.