**Course Description:**

Present day healthcare relies on the sharing of health information across clinical information systems, integrated hospital and primary care information systems and regional health information systems. We will look at the collection, use, storage and retention of health data; flow of data and health information across the care continuum; and information governance and the management of health information through its lifecycle. Other aspects of complex health information systems will be explored including security and privacy of health information, change management, adoption of innovation and new technologies, and organizing effective project teams.

Prerequisites: MHI4100F/9100F: Introduction to Health Informatics.

**Course Goal**

To appreciate the complexities involved in transforming data into information and knowledge for decision making. To understand the management of health information through its lifecycle. To look critically at examples of health information systems and analyze the data, data flows, technology, control and management issues involved (including security and privacy controls). To be familiar with principles of project management, change management and effective teams that are involved in implementing and using integrated health information systems. To understand the central role of health information management in quality assurance and performance improvement, planning and management of resources, risk management, disease surveillance, research and education.

**Course Objectives**

Upon the completion of the course, the students should:

1. Understand the principles of good information and data governance.
2. Have a general understanding of records and information management principles and practice.
3. Understand the data to information to knowledge continuum and appreciate the complexity of transforming data into information and knowledge.
4. Appreciate the different venues in which data are collected in Canada (e.g., acute, rehabilitation, cancer care, chronic disease management, primary care, mental health, and community, residential and ambulatory levels of care, continuing, long term).
5. Appreciate the different classification and data abstraction systems in Canada including acute care, rehab, primary care, mental health, and community care (e.g. rehabilitation (FIM-FRGs), mental health (DSM IV TR or V), home care, cancer care (ICD-O), International Classification of Functioning, Disability and Health (ICF), and primary care (ICPC 2).
6. Appreciate the different uses and users of health data and information within the health care system in clinical care, disease surveillance, research, policy, management and decision making and the importance of data quality and data and information standards.
7. Understand current regulations regarding security, privacy and confidentiality of health data.
8. Understand general principles of project and change management, in particular with regard to implementing an integrated clinical or health information system.
9. Understand how teams and teams of leaders can be used effectively to implement change within an organization or across multiple organizations or agencies.

**Evaluation:**

Evaluation will be based on five written assignments, a team project and participation in class and in the Forum on OWL.
Written Assignments:

Assignment #1
Definition of Health Information Management 10%
Explore the definition of health information management (HIM). Discuss the features/knowledge/skills and competencies that distinguish HIM from health informatics and what roles HIM professionals may fill. Assignment due by Monday, Jan 21, 2019 by 5 p.m.

Assignment #2
Information Governance 10%
Define what is meant by “information governance.” Outline the general principles within information governance for a health care organization and what policies, procedures, facilities (people and/or technology) are needed. What barriers may exist to the implementation of a robust governance framework? What are the implications of not having an information governance policy in place? Assignment due by Monday, Feb 4, 2019 by 5 p.m.

Assignment #3
Data Flows Within the Health System 20%
Using the clinical scenario provided, describe the type of data that would be collected at each stage and model the data flow across the encounters and systems described. Discuss what type of technology might be used to facilitate collection and exchange of the data and information across the continuum of care. What considerations must be kept in mind and put in place to facilitate this (e.g. data standards, technology standards, policies on information sharing, privacy, confidentiality, etc.)? Assignment due by Monday, Feb 25, 2019, by 5 p.m.

Assignment #4
Security, Privacy and Confidentiality of Health Data – Policies and Procedures 20%
Provide a definition (with appropriate references) for each of the terms: security, privacy, and confidentiality. In this assignment you are asked to develop the policies and procedures that address the use of, and access to, health data for a group of students working within a health facility. You will need to consider issues related to authorized use and access, necessary training, and security safeguards. Your final written assignment should include your final recommendations for the facility’s policy and procedures. Within the latter you may include any documentation to assist in rolling out these new policies and procedures. Assignment due by Monday, March 18, 2019 by 5 p.m.

Assignment #5
Team Work / Team Project 30%
During the term all members of the class will participate in the development of a project (for example, an HIM blog, a health app, a white paper or professional practice brief) within the field of health information management. Possibilities will be discussed in class and an appropriate assignment determined by January 21. At the end of the term each team will present their final project (as a group effort) and each student should provide a brief summary and overview of what they contributed to the project. (20%) Additional material will be distributed in class that can be used to report on team effectiveness and team building. (10%) Final project due by Monday, April 8, 2019.

Participation 10%
In class participation and forum discussion will be considered in the mark.
Learning Resources:
Course notes are found online in Sakai-OWL and include a list of objectives, notes, suggested readings, and further instructions for your written assignments.

Readings:
There is no required text for the course, but I would recommend that you use the Canadian text “Fundamentals of Health Information Management” (HIM), the second edition was published in 2013, and “The Canadian Health Information Management Lifecycle” published in 2017 through CHIMA. Several other books on health information management and health informatics are available but deal either with the American health care system or approach the subject with a medical informatics emphasis. There are a number of excellent health informatics and HIM journals, many available online, and journal articles that supplement the course notes will be posted to the Sakai-OWL course site for download. A variety of sites related to the field of health information management and health informatics are also listed below.

Fundamentals of Health Information Management, Second Edition
Eds. Kelly Abrams and Candace Gibson
Canadian Health Information Management Association (CHIMA)
CHA Press, 2013
(indicated as HIM in the course outline reading list)
The definitive text on health information management in Canada.

The Canadian Health Information Management Lifecycle
Eds. Kelly J Abrams, Shirley Learmonth and Candace J Gibson
Canadian Health Information Management Association (CHIMA)
(indicated as Lifecycle in the course outline reading list)
Published through Lulu Publishing Services, 2017.

Two American texts that you may find useful and that will be available through the reference desk of the library.

Health Information: Management of a Strategic Resource, Fifth Edition
Eds. Mervat Abdelhak and Mary Alice Hanken
Elsevier, St. Louis, Missouri, 2016
(indicated as HI in course outline reading list)

Health Information Management: Concepts, Principles, and Practice, Fourth Edition
Eds. Kathleen M. LaTour, Shirley Eichenwald Maki, & Pamela K. Oachs
AHIMA, Chicago, Illinois, 2013
(indicated as LaTour in course outline reading list)

Journals
BMC Medical Informatics and Decision Making
(link from UWO library e-journals)

Electronic Healthcare

Health Information Management and Communications Canada
http://www.healthcareimc.com/

JAHIMA (Journal of the American Health Information Management Association)
http://journal.ahima.org/
Canadian Organizations

CHIMA (Canadian Health Information Management Association)
http://www.echima.ca

CIHI (Canadian Institute for Health Information)

Digital Health (formerly COACH - Canada's Health Informatics Association)
https://digitalhealthcanada.com/

InfoWay (Canada Health Infoway)
http://www.infoWay-inforoute.ca/

American Organizations

AHIMA (The American Health Information Management Association)
http://www.ahima.org

AMIA (American Medical Informatics Association)
http://www.amia.org/

HIMSS (Healthcare Information and Management Systems Society)
http://www.himss.org/ASP/index.asp

International Organizations

IFHIMA (The International Federation of Health Information Management Associations)
http://www.ifhima.org/

IMIA (The International Medical Informatics Association)
http://www.imia.org
MHI 4110G/9110G – Health Information Management – Course Outline:
Weekly two-hour lecture – Mondays, 3:30 – 5:30 pm, HSA H410
Course Instructor: Candace Gibson, PhD, CHIM

HIM textbook readings from “Fundamentals of Health Information Management.” Additional pertinent readings will be provided online through OWL or as handouts during class. Class schedule (day and time) will be confirmed at our first meeting.

<table>
<thead>
<tr>
<th>Week</th>
<th>Material Covered</th>
<th>Readings</th>
<th>Web Resources</th>
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<tbody>
<tr>
<td></td>
<td><strong>Health Information Management: Introduction and Overview</strong></td>
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| 1 Jan 7 | **Module 1**  
Health Information Management  
Introduction & Overview  
- HIM – Definition  
- HIM Professionals  
- Health Records and Health Information Management Lifecycle - Overview | **HIM**  
Ch. 2 – The Health Information Management Profession  
Ch. 7 – Health Information Management Lifecycle  
*Lifecycles*  
Overview of Canadian Health Information Management Lifecycle  
**HI**  
Ch. 2 – The Health Informatics and Health Information Management Profession  
LaTour  
Ch. 3 – The Health Information Management Profession | CHIMA – [http://www.echima.ca](http://www.echima.ca)  
Canada Health Infoway - [https://www.infoway-inforoute.ca/](https://www.infoway-inforoute.ca/) |
|      | **Information Governance and HIM Planning** | | |
| 2 Jan 14 | **Module 2**  
Information Governance Framework  
- Information Governance versus Data Governance  
- Enterprise Information Management  
- Planning and evaluation  
- Information sharing agreements | **Lifecycle**  
Overview of Canadian Health Information Management Lifecycle  
Stage 1: Health Information Management Planning & Stage 7: Evaluation  
**HIM**  
Ch. 7 – Health Information Management | CHI - See CHI white paper on “Information Governance” in Readings  
AHIMA Resources on Information Governance - [http://www.ahima.org/topics/infogovernance](http://www.ahima.org/topics/infogovernance)  
CHIMA – [http://www.echima.ca](http://www.echima.ca) |
### Data Collection, Capture and Receipt

<table>
<thead>
<tr>
<th>Date</th>
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<th>Health System Use of Data</th>
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<td>3 Jan 21</td>
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<td>• Review – Uses and Users of Health Data</td>
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<td>Data Flows within Health Care</td>
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<td>• Looking at the ‘continuum of care’</td>
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<td>• Collect once, use many times – what do we need?</td>
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<td>Introduction to Project Management and Teams and Team Work</td>
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<td>Data Assets</td>
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<td>• Types of data; data and information collection formats</td>
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<td>AHIMA – <a href="http://www.ahima.org">http://www.ahima.org</a></td>
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<tr>
<td>Canadian Patient Safety Institute – <a href="http://www.patientsafetyinstitute.ca/English/Pages/default.aspx">http://www.patientsafetyinstitute.ca/English/Pages/default.aspx</a></td>
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<td>CA, CCI and SNOMED-CT (see section under “Standards”; see ICD-10-CA, CCI and SNOMED-CT)</td>
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</table>
| Information & Data Standards | Ch. 7 – Classification Systems, Clinical Vocabularies, and Terminology  
HIM  
Ch. 5 – Clinical Classifications, Terminologies and Nomenclatures  
Ch. 6 – Health Information Standards  
LaTour  
Ch. 8 – Health Informatics Standards  
Ch. 15 – Clinical Classifications and Terminologies |
|--------------------------------|---------------------------------------------------------------------------------------------------------------|
| Access, Use & Disclosure of Health Information | Lifecycle  
Stage 4: Access, Use, and Disclosure  
HIM  
Ch. 15 - Legal Aspects of Health Information Management  
Ch. 16 - Privacy, Confidentiality, Access and Release of Personal Health Information  
Ch. 17 - Ethical Aspects of Health Information Management and Professional Practice  
HI  
Ch. 15 – Privacy and Health Law  
LaTour  
Ch. 12 – Legal Issues in Health Information Management  
Ch. 13 – Ethical Issues in HIM |

| 5 & 6 Feb 4 & 11 | Module 5 & 6 Security, Privacy & Confidentiality of Health Data  
- Technical, legal and ethical aspects of health information management  
- Cybersecurity |

Week of Feb 18 – 22 READING WEEK
### Storage, Maintenance, Retention & Disposal

| 7 Feb 25 | Module 7 Maintenance, Retention, and Protection
| | - Paper Records
| | - Electronic Records
| | - Retention Guidelines

|  | Lifecycle
| | Stage 5: Maintenance, Retention, and Protection
| | Stage 6: Disposition / Destruction
| | HIM
| | Ch. 7 – Health Information Management
| | Ch. 15 – Legal Aspects of Health Information Management

### More on Teams and Team Work

### Evaluation

| 8 March 4 | Module 8 Evaluation of Health Data and Health Information Systems
| | - Evaluation Frameworks
| | - Benchmarks
| | - Re-abstraction Studies

|  | Lifecycle
| | Stage 7: Evaluation
| | HIM
| | Ch 18 – Quality & Utilization Management

|  | HIMSS Analytics - [http://www.himssanalytics.org/](http://www.himssanalytics.org/)
| | (see the EMR Adoption model)


### Putting Integrated Health Information Systems in Place – Change Management, Project Management, Leadership

| 9 & 10 March 11 & 18 | Module 9 Implementation of Integrated Health Information Systems for Health Care
| | - Project management/change management

|  | HIM
| | Ch. 20 – Introduction to Leadership
| | Ch. 21 – An Introduction to Project Management
<table>
<thead>
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<th>11 March 25</th>
<th>Module 10</th>
<th>Teams and Teams of Leaders</th>
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<td>Barriers to implementation</td>
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<td>12 April 1 &amp; 8</td>
<td>Presentation of Team Project(s)</td>
<td><strong>LaTour</strong> Ch. 23 - Managing and Leading During Organization Change Ch. 27 - Project Management Ch. 29 - Strategic Thinking: Strategic Management and Leading Change</td>
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<td><strong>HIM</strong> Ch. 20 - Introduction to Leadership</td>
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<td><strong>Canadian College of Health Leaders</strong> - <a href="http://www.cchl-ccls.ca/default1.asp">http://www.cchl-ccls.ca/default1.asp</a></td>
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