

INFO 6630 / MGMT 5004 USER EXPERIENCE

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Instructor: Dr. Ryan Deschamps

Email: rddescha@dal.ca

Office Hours: Please send me an email to schedule a meeting via Microsoft Teams or Zoom. If you prefer another platform, please let me know and I will do my best to accommodate your preference.

A one-hour weekly, optional asynchronous session will be made available for students who would like additional help or discussion from 6pm-7:30pm AST Wednesdays.

Course Website: Brightspace through My.Dal or https://dal.brightspace.com/d2l/login

COURSE DESCRIPTION

Understanding theories and practices of human-computer interaction is a key determinant of organizational success. This course explores how technology affects human use and the process (from conception of an idea to design and evaluation) – with a particular emphasis on webbased activities. The course discusses individual and group information-seeking behaviours in public and private contexts, and the theories and models of information-seeking behaviour that contribute to a nuanced understanding of the user experience.

COURSE PRE-REQUISITES

None

COURSE OVERVIEW

This course will explore practical consideration in designing user experiences. While the focus and projects will involve the design of mobile application interfaces, we will explore a range of perspectives on the user interface design. The course will be primarily asynchronous, with a few exercises provided during optional synchronous meetings provided throughout the term.

The main deliverables for this course will require you to interact with small teams. In an ideal world, User Experience is performed and understood in groups because individual perceptions of users are often mistaken due to personal or other biases.

The delivery of the course will occur as follows:

- Weekly announcements will provide basic pathfinders to the available readings, required discussion provocations, lectures, slides and activities for the week.
- For the first five weeks will explore user experience and the human influences of that experience.
- The next five weeks will cover user experience research and testing.
- The final two weeks will cover basic system requirements in preparation for building the application.

LEARNING OBJECTIVES AND COMPETENCIES

Upon completion of the course, students are expected to have gained basic knowledge or proficiency in the following areas, divided according to the core competencies of the MIM program (see Appendix):

LEARNING OBJECTIVE	RELEVANT MIM CORE COMPETENCIES
1. Describe the design process from both user-	prmation Management Leadership
centric and system analysis perspectives.	Competencies 1.1; 1.3; 1.4; 1.5; 1.6
2. Explain human and technological factors that	prmation Management Leadership
influence user experience.	> Competencies 1.1; 1.2; 1.4; 1.5; 1.6
	erprise Architecture
	Competencies 2.1
	k Management
	➤ Competencies 3.1; 3.6; 3.7
3. Evaluate the user experience of a prototype	prmation Management Leadership
mobile application.	➤ Competencies 1.2; 1.4; 1.6
	erprise Architecture
	Competencies 2.1
	k Management
	➤ Competencies 3.1; 3.6; 3.7
	prmation Security
	Competencies 4.1
4. Create a mobile prototype using rapid	prmation Management Leadership
prototyping techniques.	➤ Competencies 1.3; 1.5
5. Create common systems diagrams to support	prmation Management Leadership
future development of a mobile application.	Competencies 1.3
	erprise Architecture
	Competencies 2.1; 2.3

TECHNOLOGY USED

Brightspace online platform (course documents, discussion board and Live Class) will be used for all interactions. All classes will be video-recorded and slides available for review following each Live Class.

INSTRUCTIONAL METHODS

Instruction will include recorded lectures (typically 1.5-2-hours in length per week), group and individual work. Online materials will be frequently consulted.

LEARNING MATERIALS

Required textbook:

There is no required textbook for this course.

Suggested textbook readings:

The following textbooks are classics in their field and are worth owning for those interested in User Experience as a profession.

Helen Sharp, Jenny Preece and Yvonne Rogers (2019) *Interaction design: beyond human-computer interaction*, 5th edition (Indianapolis: Wiley)

Johnson, J. (2022). Designing with the Mind in Mind: Simple Guide to Understanding User Interface Design Guidelines (3rd Ed). Morgan Kaufmann: Burlington, MA. ISBN 978-0-12-407914-4.

Additional required readings listed below, available online via Brightspace or Dalhousie Libraries.

METHOD OF EVALUATION

Grades will be assigned in accordance with the SIM Grading Policy, available here: http://www.dal.ca/faculty/management/school-of-information-management/current-students-site/sim-grading-policy.html

ASSIGNMENT #1 PARTICIPATION (10%) | WEEKLY

Students will be provided with discussion provocations once every two weeks, with some supporting formative evaluations (quizzes and exercises) in the off weeks.

CRITERIA	WEIGHTING	INDICATORS
Preparation	40%	The student demonstrates consistent preparation for class/online discussion; readings are always completed, and the student can relate readings to each other and to other course material (discussions, presentations, etc.)
Completion of Assessments	40%	The student has completed all formative assessments for preparation of discussion.
Frequency of participation	20%	The student is actively always engaged in the class and/or discussions.

ASSIGNMENT #2 RAPID MOBILE APPLICATION DESIGN PROJECT (25%)

In groups of 2, students must conceive of and describe an effective 'MVP' (Minimum Viable Product) interface prototype that is responsive to a particular user group with compelling evidence that the design process has been applied and sufficient level of description to ensure that developers can begin development using Agile approaches. The final product will consist of the following items:

A low-fi sketch of the original conception. (Scanned into the document from a paper sketch.)

1-2 profiles that describe target users.

A digitized "test ready" medium-fi draft Wireframe.

A collection of objectives to support effective testing.

Two elements from the following list of UML/Systems Architecture documents:

- Use case diagram
- Use case description
- Domain class diagram
- State machine diagram
- Communication diagram
- Technical architecture description
- Activity Diagram
- Information Architecture Diagram

ASSIGNMENT #3 USER EXPERIENCE PROTOTYPE TESTING (30%)

Using the prototype from another group, students will plan and perform usability tests to evaluate the user experience of the product. This evaluation will include a heuristic evaluation, cognitive walkthrough and prototype test run using two subjects (NOTE: Prototype test is pending on successful ethics review of the project. The instructor will advise on the requirements for ethics for the project, but it will require the collection and retention of a consent form for one (1) year.)

The intention of this project is not to assess the prototype itself, but instead to *evaluate the user experience* based on the evidence collected and provide pragmatic solutions to help the application meet its stated objectives. Worded more succinctly, your job is to help improve the product, not to give the project a letter grade based on its quality from your perspective.

ASSIGNMENT #4 USER EXPERIENCE MAJOR RESEARCH PAPER OR MOBILE APPLICATION STORY BOARD (25%)

OPTION 1

Using the experience of past assignments, students will take a deep dive on a topic related to user experience in a research paper of 2000-4000 words excluding bibliography or appendices. The research topic can be of personal or organizational interest but should cover a novel area or problem in UX design. I encourage you to book an appointment (any time) with me to discuss your paper and/or to submit a paper proposal. I will aim to provide feedback on paper proposals within 48 hours of receiving them if I can. More details on Brightspace about paper proposals and the major research paper.

Some suggested topics are:

- A particular research or evaluation method used in UX design.
- Any aspect of diversity, equity, and inclusion in relation to UX
- The political economy of UX design
- User experience considerations of specific groups, geographies, or societies [children, older adults, cultural groups, religious groups, Indigenous nations, racialized communities, Global South countries, urban communities, disabled communities, queer, trans* and/or non-binary communities; etc.].
- An in-depth look at a specific research method (including those covered in the course) for engaging users and groups, including a description of what the method is, how it is used, and its ethical and epistemological aspects
- Advanced or emerging methods for conducting UX tests
- The challenges and opportunities of accessible practices in UX design.
- The challenges and opportunities of participatory UX design.
- The differences and similarities between accessible, universal, and inclusive design
- The relevance or implications of Artificial Intelligence, Machine Learning, Internet of Things (IoT), Quantum Computing or other emerging technologies on User Experience
- A close examination of an adverse event caused by poor user experience design
- The relevance of UX in data management and cybersecurity
- Adverse incentives and other constraints on positive UX
- Other topics in consultation with the instructor

OPTION 2

As an alternative to the major research paper, you may continue the interaction design of your prototype by building your application interface into a prototype application using Android Studio, XCode, Thunkable, MIT App Inventory, Appy Pie or another App storyboarding tool. A few demonstrations of these products will be provided, but you should consider this option to require significant comfort and curiosity with technology in User Interface work. You may request tutorial sessions with the instructor via office hours if you encounter problems with your system.

To qualify for this project, you only need to include User Interface elements such as a storyboard or information architecture. No formal code is required.

CLASS POLICIES

Please contact me if you need to be absent from class for extended periods of time due to emergencies or illness.

Citation Style

SIM courses use APA as the default standard citation style. Unless the instructor provides alternative written instructions, please use the APA citation style in your assignments to briefly identify (cite) other people's ideas and information and to indicate the sources of these citations in the References list at the end of the assignment. For more information on APA style, consult Dalhousie Library website at https://libraries.dal.ca/help/style-guides.html or the APA's Frequently Asked Questions about APA

Late penalties for assignments

A penalty for late assignments will be assessed, unless prior permission has been given by the instructor to submit an assignment late, which normally will be for extended illness, medical, or family emergencies only (see above). Late submissions will be assessed a penalty of five percent per day, including weekends. Assignments will not normally be accepted seven days or more after the due date; in such cases the student will receive a grade of zero.

SIM GRADING POLICY

A+	90-100	Demonstrates original work of distinction.
Α	85-89	Demonstrates high-level command of the subject matter and an ability for critical analysis.
Α-	80-84	Demonstrates above-average command of the subject matter.
B+	77-79	Demonstrates average command of the subject matter.
В	73-76	Demonstrates acceptable command of the subject matter.
B-	70-72	Demonstrates minimally acceptable command of the subject matter.
F	<70	Unacceptable for credit towards a Master's degree.

ACCOMMODATION AND SUPPORT FOR STUDENTS WITH DISABILITIES

Students of all abilities are welcome in my course. I will work with you to make modifications to any aspect of the course to support your participation and learning. It is helpful to have requests for accommodation via email (rddescha@da.ca). The sooner you let me know what is needed, the more thoroughly we can work together to design modifications. Please note you will not be required at any point to disclose your diagnosis to me.

You will find useful information about Accessibility Services at Dal U at this link: https://www.dal.ca/campus_life/academic-support/accessibility.html

The Student Accessibility Centre is responsible for administering the university-wide Student Accommodation Policy working across all programs and faculties. Centre staff are available to:

- Facilitate access to academic courses and programs, facilities, services, and activities
- Identify classroom, exam, and other accommodations (e.g., co-op) to reduce barriers to your learning
- Advocate on behalf of, and alongside you to ensure reasonable accommodations are available and implemented
- Assist you in accessing funding for students with disabilities
- Connect you with on- and off-campus resources to enhance your success

If there are aspects of the design, instruction, and/or experiences within this course that result in barriers to your inclusion, please contact the Student Accessibility Centre.

ACCOMMODATION AND SUPPORT FOR STUDENTS WITH TECHNICAL BARRIERS

This course requires your active participation in discussions, via Brightspace. This requires a strong enough bandwidth to access online platforms, download large files, and livestream, as well as access to the Microsoft Teams platform.

RECORDING LECTURES

Audio or video recording, digital or otherwise, of lectures or any other teaching environment by students is NOT allowed except with the prior written consent of the instructor or as a part of an approved accommodation plan. Student or instructor content, digital or otherwise, created and/or used within the context of the course is to be used solely for personal study, and is not to be used or distributed for any other purpose without prior written consent from the content author(s).

ACADEMIC INTEGRITY

The commitment of the Faculty of Management is to graduate future leaders of business, government and civil society who manage with integrity and get things done. This is non-negotiable in our community, and it starts with your first class at Dalhousie University. So, when you submit any work for evaluation in this course or any other, please ensure that you are familiar with your obligations under the Faculty of Management's Academic Integrity Policies and that you understand where to go for help and advice in living up to our standards. You should be familiar with the Faculty of Management Professor and Student Contract on Academic Integrity, and it is your responsibility to ask questions if there is anything you do not understand.

Dalhousie offers many ways to learn about academic writing and presentations so that all members of the University community may acknowledge the intellectual property of others. Knowing how to find, evaluate, select, synthesize, and cite information for use in assignments is called being "information literate." Information literacy is taught by Dalhousie University Librarians in classes and through Dalhousie Libraries' online Citing & Writing tutorials. Do not plagiarize any materials for this course. For further guidance on what constitutes plagiarism, how to avoid it, and proper methods for attributing sources, please consult the University Secretariat's Academic Integrity page.

Please note that Dalhousie subscribes to plagiarism detection software that checks for originality in submitted papers. Any paper submitted by a student at Dalhousie University may be checked for originality to confirm that the student has not plagiarized from other sources. Plagiarism is considered a very serious academic offence that may lead to loss of credit, suspension, or expulsion from the University, or even the revocation of a degree. It is essential

that there be correct attribution of authorities from which facts and opinions have been derived. At Dalhousie, there are University Regulations which deal with plagiarism and, prior to submitting any paper in a course; students should read the Policy on <u>Intellectual Honesty</u> contained in the Calendar.

Furthermore, the University's Senate has affirmed the right of any instructor to require that student assignments be submitted in both written and computer readable format, e.g.: a text file or as an email attachment, and to submit any paper to a check such as that performed by the plagiarism detection software. As a student in this class, you are to keep an electronic copy of any paper you submit, and the course instructor may require you to submit that electronic copy on demand. Use of third-party originality checking software does not preclude instructor use of alternate means to identify lapses in originality and attribution. The result of such assessment may be used as evidence in any disciplinary action taken by the Senate.

FACULTY OF MANAGEMENT CLARIFICATION ON PLAGIARISM VERSUS COLLABORATION:

There are many forms of plagiarism, for instance, copying on exams and assignments. There is a clear line between group work on assignments when explicitly authorised by the professor and copying solutions from others. It is permissible to work on assignments with your friends but only when the professor gives you permission in the specific context of the assignment. University rules clearly stipulate that all assignments should be undertaken individually unless specifically authorised.

Specific examples of plagiarism include, but are not limited to, the following:

- Copying a computer file from another student, and using it as a template for your own solution
- Copying text written by another student
- Submitting the work of someone else, including that of a tutor as your own.

An example of acceptable collaboration includes the following:

When authorised by the professor, discussing the issues and underlying factors of a case with fellow students, and then each of the students writing up their submissions individually, from start to finish.

UNIVERSITY STATEMENTS

ACCESSIBILITY

The Advising and Access Centre serves as Dalhousie's Centre for expertise on student accessibility and accommodation. Our work is governed by Dalhousie's Student Accommodation Policy, to best support the needs of Dalhousie students. Our teams work with students who request accommodation because of disability, religious obligation, an experienced barrier related to any other characteristic protected under Canadian Human Rights legislation.

STUDENT CODE OF CONDUCT

Everyone at Dalhousie is expected to treat others with dignity and respect. The Code of Student Conduct allows Dalhousie to take disciplinary action if students do not follow this community expectation. When appropriate, violations of the code can be resolved in a reasonable and informal manner—perhaps through a restorative justice process. If an informal resolution cannot be reached, or would be inappropriate, procedures exist for formal dispute resolution.

DIVERSITY AND INCLUSION

Every person at Dalhousie has a right to be respected and safe. We believe inclusiveness is fundamental to education. We stand for equality. Dalhousie is strengthened in our diversity. We are a respectful and inclusive community. We are committed to being a place where everyone feels welcome and supported, which is why our Strategic Direction prioritizes fostering a culture of diversity and inclusiveness (Strategic Priority 5.2).

RECOGNITION OF MI'KMAQ TERRITORY

Dalhousie University would like to acknowledge that the University is on Traditional Mi'kmaq Territory. The Elders in Residence program provides students with access to First Nations elders for guidance, counsel, and support. Visit the office in the McCain Building (room 3037) or contact the programs at elders@dal.ca or 902-494-6803 (leave a message).

COURSE SCHEDULE

Class 1 | Week of May 6th | Introduction to UX Design

Required Readings:

- M.G. Luchs (2016) "A brief introduction to design thinking," in *Design thinking: new product development essentials from the PDMA*, Chapter 1, p.1-11
- Chapter 1 "Introduction to User Experience" in Baxter, K., Courage, C., & Caine, K. (2015) Understanding Your Users: A Practical Guide to User Research Methods, p.1-20
- Ellen Bravo (2017) "The hazards of leaving out the user," in Schuler and Namioka, eds., Participatory design: principles and practices, p.3-12

Class 2 | Week of May 13 | Introduction Design Thinking and Design Patterns

Required Readings:

- Watch: NNgroup (May 7, 2021) 3 Principles of Design Thinking: https://www.youtube.com/watch?v=bS9xhDrVBME&list=RDCMUC2oCugzU6W8-h95W7eBTUEg&index=25 [2.5min]
- Buley. (2008). How to be a user experience team of one. Bulletin of the American Society for Information Science and Technology, 34(6), 26–.
- Van Rijn, H., Sleeswijk Visser, F., Stappers, P. J., & Özakar, A. D. (2011). Achieving empathy with users: the effects of different sources of information. CoDesign, 7(2), 65-77.

Class 3 | Week of May 20 | Systems Analysis and Requirements

Required Readings:

- https://www.interaction-design.org/literature/article/map-the-stakeholders
- Embracing Agile Product Development. (2022). NASA Tech Briefs, 46(5), 18–20.
- The Agile Manifesto: http://agilemanifesto.org/
- Vij, Ravi. 2023. Creating Stunning Flow Diagrams with Mermaid.js. https://www.linkedin.com/pulse/creating-stunning-flow-diagrams-mermaidjs-ravi-vij/

Class 4 | Week of May 27 | UX Design Prototyping

Required Readings:

- L. Busche (Oct 6, 2014) The skeptic's guide to low-fidelity prototyping. *Smashing Magazine* https://www.smashingmagazine.com/2014/10/the-skeptics-guide-to-low-fidelity-prototyping/?
- Explore the usability.gov website. Read the "Prototyping" page, particularly.
- B. Buxton (2009)" The anatomy of sketching," in *Sketching User Experiences* (San Francisco, CA: Morgan Kaufmann Publishers), p.105-114

Class 5 | Week of June 3rd | UX Patterns and Cognition Part One

Required Readings:

- Watch: NNgroup (Aug 13, 2021) *Using Fitts's Law to Make Links and Buttons Easier to Click*: https://www.nngroup.com/videos/fittss-law-links-buttons/ [2m]
- Kate Meyer (Mar 20, 2016) How chunking helps content processing. NNgroup, https://www.nngroup.com/articles/chunking
- Nilsson, Erik G. (2009). Design Patterns for user interface for mobile applications. Advances in Engineering Software 40 (12): 1318-1328.

Class 6 | Week of June 10 | UX Anti-Patterns and Dark Patterns

Rapid Mobile Application Prototype Assignment Due June 14th.

Required Readings:

- Cara, C. (2019). Dark patterns in the media: A systematic review. *Network Intelligence Studies*, 7(14), 105-113.
- Di Geronimo, L., Braz, L., Fregnan, E., Palomba, F., & Bacchelli, A. (2020, April). Ul dark patterns and where to find them: a study on mobile applications and user perception. In *Proceedings of the 2020 CHI conference on human factors in computing systems* (pp. 1-14).
- Kelly Widdicks, Daniel Pargman, and Staffan Björk. 2020. Backfiring and favouring: how design
 processes in HCl lead to anti-patterns and repentant designers. In Proceedings of the 11th Nordic
 Conference on Human-Computer Interaction: Shaping Experiences, Shaping Society (NordiCHI
 '20), October 25–29, 2020, Tallinn, Estonia. ACM, New York.

Class 7 | Week of June 17th : Summer Study Break

Class 7 | Week of June 24th | User Experience Research Planning

Required Readings:

 Watch: NNgroup (May 7, 2021) Comparing Qualitative and Quantitative UX Research, https://www.youtube.com/watch?v=qvpitkHclGk&list=RDCMUC2oCugzU6W8-h95W7eBTUEg&index=19 [2:30m]

- J. Cresswell (2014) "Chapter 1: The selection of a research approach," in *Research design:* qualitative, quantitative, and mixed methods approaches, 4th edition (Sage Publications), p.3-24
- Usability and User Experience Surveys:
 http://edutechwiki.unige.ch/en/Usability and user experience surveys#User Interface
 Usability Evaluation with Web-Based Questionnaires

Class 8 | Week of July 1st | User Experience Research Methods Required Readings:

- Explore the usability.gov website -- in particular, read the "User Research Basics" page, http://www.usability.gov/what-and-why/user-research.html as well as the "Personas" and "Scenarios" pages that link from that page + explore the User-Centered Design Process Map at https://www.usability.gov/how-to-and-tools/resources/ucd-map.html
- Chapter 5 "Surveys" + Chapter 8 "Interviews and focus groups" + Chapter 9
 "Ethnography" in Lazar et al. (2017) Research Methods in Human-Computer Interaction,
 p.105-134 + 187-228 + 229-262
 http://ezproxy.library.dal.ca/login?url=https://ebookcentral.proquest.com/lib/DAL/detail.action?docID=4851896
- Chapter 11 "Analyzing qualitative data" in Lazar et al. (2017) Research Methods in Human-Computer Interaction, p.299-328
 http://ezproxy.library.dal.ca/login?url=https://ebookcentral.proquest.com/lib/dal/reader.action?docID=4851896&ppg=326

Class 9 | Week of July 8th | User Experience Ethics

Required Readings:

- Sarah Switzer (2020) "People give and take a lot in order to participate in things": youth talk back making a case for non-participation. *Curriculum Inquiry* 50(2):168-193
- http://ezproxy.library.dal.ca/login?url=http://dx.doi.org/10.1080/03626784.2020.1766341
- Daniel Rosner (2018) "The intellectual foundations of the dominant design paradigm," in Critical fabulations: reworking the methods and margins of design (Cambridge, MA: The MIT Press), p.23-40 (Killam Library Reserves (T 342 R67 2018)
- Equity meets design, Empathy interview guide template, https://docs.google.com/document/d/1yWNCTt75MGbEUj-WYB6q57pOG3UnPImLGrw8isaLP08/edit
- Vilaza, GN and Baekgaard. 2022. Teaching User Experience Design Ethics to Engineering Students: Lessons Learned. Frontiers in Computer Science 4 (793879). Doi: 10.3389/fcomp.2022.793879.

Class 10 | Week of July 15 | Analysis and Research of Artificial Intelligence and Data Systems

User Experience Prototype Testing Assignment Due July 19th, 2022.

Required Readings:

• Chapter 14, "Evaluation methods," in Baxter et al. (2015) *Understanding Your Users: A Practical Guide to User Research Methods*, p.430-446

https://ebookcentral.proquest.com/lib/dal/reader.action?docID=2055755&ppg=465

Class 11 | Week of July 22nd | UX Systems and Evaluation Revisited

Required Readings:

- Lilly Irani (2018) 'Design thinking': defending Silicon Valley at the apex of global labor hierarchies. Catalyst 4(1):1-19 http://ezproxy.library.dal.ca/login?url=http://dx.doi.org/10.28968/cftt.v4i1.29638
- Arvola, M., Blomkvist J. and Wahlman, F. (2017). Lifelogging in User Experience Research: Supporting Recall and Improving Data Richness. *Design for Next EAD12-ROME Conference*. *DOI:* 10.1080/14606925.2017.1352898

Class 12 | Week of July 29th | Class Wrap-up

Final research paper due. Aug 2nd, 2022.

Required Readings:

 Chapter 15 "Conclusion," in Baxter et al. (2015) Understanding Your Users: A Practical Guide to User Research Methods, p.448-472

https://ebookcentral.proquest.com/lib/dal/reader.action?docID=2055755&ppg=483

Intensive | AUGUST | Part 2: MGMT 5104

Syllabus will be provided for the intensive mid-June/July. It will include a presentation of your research paper / prototype and a group user experience exercise.

APPENDIX I - MIM COMPETENCIES FRAMEWORK

DEFINITIONS OF KEY AREAS

1. INFORMATION & KNOWLEDGE MANAGEMENT LEADERSHIP

Information & knowledge management (I&KM (Information & knowledge management)) leaders focus on the strategic importance of information as a resource within their organization. Effective information & knowledge management leaders establish appropriate information management goals and processes and lead the process of organizational change.

A graduate of the Master of Information Management program should understand how to:

- 1.1 Identify, develop, articulate, and promote I&KM strategies and policies that will facilitate the achievement of organizational objectives.
- 1.2 Ensure that I&KM strategies and policies are embedded within corporate governance, projects, and business processes.
- 1.3 Foster a knowledge and information rich culture, ensuring that Knowledge and Information Management skills are recognised as core competencies needed to develop individual and organizational capacities.
- 1.4 Engage their organization to encourage collaboration and information sharing with internal business units, and externally, to other strategic partners.
- 1.5 Act as an advocate and facilitator for I&KM strategies, and bridge the continuum between senior management and employees
- 1.6 Continually review and assess the impact of I&KM strategies and policies, enhancing and revising them as needed.

2. ENTERPRISE ARCHITECTURE

Information managers identify, analyze, and evaluate methods, tools, concepts, and best practices to articulate how processes and technology can be used to manage information resources in accordance with legislation, as well as relevant internal policies, procedures, and guidelines.

A graduate of the Master of Information Management should understand how to:

- 2.1 Monitor and evaluate current and emerging best practices in IM and information technology (IT) relative to the organization's strategic plan and current practices.
- 2.2 Assess and evaluate IM requirements and identify potential IT-based solutions.
- 2.3 Identify and design shared solutions among partners and external organizations, leveraging process and technology investments.

- 2.4 Employ the organization's IT investment strategy to compare, contrast, and evaluate potential acquisitions.
- 2.5 Develop metrics, key performance indicators, and critical success factors to monitor, assess, and report on technology project results.

3. RISK MANAGEMENT

Information managers identify, analyze, evaluate, and mitigate risks associated with the information resources, throughout their life cycle.

A graduate of the Master of Information Management should understand how to:

- 3.1 Identify and value information assets
- 3.2 Conduct risk assessments
- 3.3 Develop and evaluate policies to manage information risk
- 3.4 Advocate risk management at strategic and operational levels
- 3.5 Build a risk-aware culture within the organization, including appropriate education and training
- 3.6 Develop risk response processes, including contingency and business continuity programs
- 3.7 Ensure compliance with relevant legal or regulatory requirements

4. INFORMATION SECURITY

Information managers identify, analyze, and evaluate processes ensuring the confidentiality, integrity, and availability of their information resources.

A graduate of the Master of Information Management should understand how to:

- 4.1 Develop and evaluate policies relating to information security
- 4.2 Define and enforce appropriate access levels to confidential information
- 4.3 Protect data from modification or deletion by unauthorized parties
- 4.4 Ensure the availability of information resources via appropriate systems, access channels, and authentication mechanisms
- 4.5 Implement access controls
- 4.6 Perform security audits