# The University of Hong Kong Faculty of Education

# Master of Science in Library and Information Management (MSc[LIM])

The degree of Master of Science in Library Information Management (MSc[LIM]) is a postgraduate degree awarded for the satisfactory completion of a prescribed programme in one of the following specialist strands:

- 1. Librarianship
- 2. Information management
- 3. Knowledge management
- 4. Data science

Candidates are required to complete a total of 60 credits which comprise:

- 18 credits core courses (6 credits each)
- either
  - MLIM6322. Independent project (6 credits), 18 credits from a specialist strand and 18 credits elective courses; or
  - MLIM6810. Dissertation (18 credits), 18 credits from a specialist strand and a 6-credit elective course "Research seminars and workshops".

#### **CORE COURSES**

All candidates are required to complete 18 credits core courses.

# MLIM6025. Methods of research and enquiry (6 credits)

This course introduces students to research methods, emphasising critical appraisal and understanding multiple approaches to conducting research. The course also examines the conceptualization, planning and conduct of small-scale research in the integration of information technology in library and information management settings.

Assessment: 100% coursework.

# MLIM6206. Leading and managing in the workplace (6 credits)

This course uses a case method approach to explore a range of established and emerging management and leadership concepts. Adopting an organisational behaviour approach, participants will be challenged to compare the suitability of their own management styles in a range of different situations. Experiential learning exercises engage the participants in managerial activities such as team building and decision-making.

Assessment: 100% coursework.

## **MLIM6314.** Library and information science foundation (6 credits)

This course introduces the history, development and potential of information professionals in libraries and other workplaces. The nature of information and the roles of library and information professionals are examined through the analysis of a range of information process and related models. Critical contemporary social, legal and ethical issues in the evolving information society are also explored. Assessment: 100% coursework.

#### SPECIALIST COURSES

Candidates are required to complete 18 credits from the list of specialist courses for their chosen specialist strand.

# A. Librarianship

- MLIM6201. Information resources and services (6 credits)
- MLIM6202. Literature for young people in a digital age (6 credits)
- MLIM6203. Digital collection (6 credits)
- MLIM6209. Teacher librarianship (6 credits)
- MLIM6210. Preservation of information in a digital age (6 credits)
- MLIM6315. Collection management (6 credits)
- MLIM6316. Organising information (6 credits)
- MLIM6317. Information retrieval theory and practice (6 credits)
- MLIM6319. Information behaviour (6 credits)
- MLIM6338. Digital literacies (6 credits)
- MLIM6339. Internship in library and information management (6 credits)
- MLIM7347. Project management (6 credits)

# B. Information management

- MLIM6201. Information resources and services (6 credits)
- MLIM6204. Records management (6 credits)
- MLIM6210. Preservation of information in a digital age (6 credits)
- MLIM6316. Organising information (6 credits)
- MLIM6317. Information retrieval theory and practice (6 credits)
- MLIM6319. Information behaviour (6 credits)
- MLIM6338. Digital literacies (6 credits)
- MLIM6339. Internship in library and information management (6 credits)
- MLIM7344. Management information systems (6 credits)
- MLIM7347. Project management (6 credits)

#### C. Knowledge management

- MLIM6212. Knowledge management (6 credits)
- MLIM6311. E-learning strategies and management (6 credits)
- MLIM6328. Organisational learning (6 credits)
- MLIM6339. Internship in library and information management (6 credits)
- MLIM7344. Management information systems (6 credits)
- MLIM7347. Project management (6 credits)

## D. Data science

- MLIM7349. Data science and learning analytics (6 credits)
- MLIM7350. Data curation (6 credits)
- MLIM7351. Information system analysis and development (6 credits)

# **DISSERTATION AND PROJECT (A capstone requirement)**

All candidates are required to complete either MLIM6810. Dissertation (18 credits) or MLIM6322. Independent project (6 credits).

## MLIM6810. Dissertation (18 credits)

The dissertation is of 15,000 to 18,000 words on an approved topic from a field of study. Candidates who opt to take the dissertation option may be required to participate in a series of dissertation seminars, and are required to present their work at a dissertation/project seminar.

The dissertation is an approved independent research/development project carried out under the supervision of one or more staff members. In normal cases it should include an empirical element. The dissertation should provide a thorough and critical analysis of the topic undertaken by the student. Each candidate shall submit the title of the dissertation and present the completed dissertation by dates specified by the Board of Examiners.

Co-requisite: MLIM6340. Research seminars and workshops

Assessment: 100% coursework.

### MLIM6322. Independent project (6 credits)

The independent project of 4,000 to 5,000 words provides students with an opportunity to apply and extend their knowledge and skills developed through the programme and more specifically within their chosen area of specialism. The independent project enables students to extend what they have learnt in the programme to professional practices outside the University.

Assessment: 100% coursework.

#### **ELECTIVE COURSES**

Candidates opted for the project mode are required to complete 18 credits elective courses whereas candidates opted for the dissertation mode are required to complete a 6-credit elective course "Research seminars and workshops" which have/has not yet been taken previously from the following list. Candidates may, as an alternative, take course(s) from another master degree curriculum offered by the Faculty of Education under the advice and approval of the Programme Director. Not all elective courses will necessarily be offered every year.

# MLIM6201. Information resources and services (6 credits)

This course introduces the global information environment and examines how libraries and information agencies facilitate access to a range of print and online information sources through identifying and locating information. Students will gain knowledge and expertise in analysing the information needs of customers, formulating research strategies, and identifying relevant resources. Reference materials in a variety of formats and the technical and mediation skills needed to proficiently accomplish this essential information service are discussed.

Assessment: 100% coursework.

#### MLIM6202. Literature for young people in a digital age (6 credits)

This course provides an overview of the history of children's literature with a discussion of major authors and contributors and an emphasis on contemporary literature for children and young adults. The

impact of new technologies on the publication and use of children's fiction and non-fiction are discussed. Interactive multimedia, online reading and digital libraries for children are evaluated. Assessment: 100% coursework.

## MLIM6203. Digital collection (6 credits)

This course introduces the motivation for digital collection development and evolution of digital collections and services they provide. Various issues of digital collection development like document types and formats, access strategies and interfaces, metadata and interoperability, economic and social policies, and collection management and system evaluation are examined.

Assessment: 100% coursework.

# MLIM6204. Records management (6 credits)

This course explores the philosophy of records management and presents the basic techniques and standards for managing records in organizations. The emphasis is on activities and methods relevant to storage, filing, retrieval, retention, preservation, and disposition of physical and electronic records, with legal and ethical considerations. The course also examines techniques and strategies to establish organization-wide records management programs for building information and knowledge repositories. Assessment: 100% coursework.

## MLIM6209. Teacher librarianship (6 credits)

This course analyses the curricular and information leadership roles of the teacher librarian. Attention will be given to discussion of the role the teacher librarian with respect to the development of a whole school approach to information literacy. Collaborative Planning and Teaching (CPT) will be evaluated as the bridge between the teacher librarian, information services, inquiry based learning, and the adoption of an information literacy culture. The importance of the principal-teacher librarian relationship as a force for information leadership will be considered in light of the research evidence. Assessment: 100% coursework.

# MLIM6210. Preservation of information in a digital age (6 credits)

This course examines the physical nature of materials and the causes of deterioration. Techniques for promoting longevity; environmental control; storage and handling practices including data warehousing; and reformatting are explored and valuated. Preservation planning, disaster planning and recovery is addressed. Students are introduced to the conservation and preservation of archive materials in an online age, digitization program management and digitization technologies. Assessment: 100% coursework.

# MLIM6212. Knowledge management (6 credits)

This course provides an overview of the concepts, theories, and practices of knowledge management (KM) in organizations and communities. Basic issues and approaches about knowledge creation, storage, retrieval, sharing and application are examined. Techniques and tools for building a knowledge sharing culture and system are introduced, including taxonomy tools in knowledge mapping and modeling. A special focus will be placed on KM programs development in practical situations. Assessment: 100% coursework.

#### MLIM6311. E-learning strategies and management (6 credits)

In recent years, we have witnessed an explosive growth in the use of e-learning. But how do we actually design e-learning courses that can engage learners? This course will explore important issues relevant to the design and management of e-learning in both school and organizational learning contexts. Participants will be introduced to six specific types of learning: (a) factual knowledge, (b) conceptual knowledge, (c) critical thinking ability, (d) problem solving, (e) procedural learning, and (f) attitude change. This course will investigate the various instructional strategies that can promote the mastery of each aforementioned six types of learning. Strategies to motivate students in e-learning contexts will also be discussed.

Assessment: 100% coursework.

## **MLIM6315.** Collection management (6 credits)

This course examines the methods used to build and evaluate library collections in a variety of media in all types of libraries with an emphasis on the selection process and the relationship to stakeholders' information needs. Relationships between libraries and the publishing industry are discussed. Collection policy development is explored, linking collection policies to broader information policy issues such as designing digital and virtual libraries, building collaborative teaching resource databases of learning objects, and records management in electronic information environments.

Assessment: 100% coursework.

## **MLIM6316. Organising information** (6 credits)

This course introduces the theory, principles, standards and applications of information organization. Approaches to describing and representing information in textual and non-textual formats are covered as well as the evolution of standards including conceptual modeling, cataloguing and indexing standards, classification, content analysis and controlled vocabulary, metadata element and design, semantic representation. The focus is placed on how to represent and organize information using appropriate standards and techniques for effective information retrieval and content management.

Assessment: 100% coursework

# MLIM6317. Information retrieval theory and practice (6 credits)

This course examines the information retrieval process from a theoretical and practical framework focusing on conceptual issues. The effective provision of access to information will be covered in the context of database structure and interface design, language issues, database selection, search strategies, evaluation of search results, information seeking behaviour and needs. The role of the information professional in information mediation is explored. Strategic searching, competitive intelligence and selected online systems are also explored.

Assessment: 100% coursework.

# MLIM6319. Information behaviour (6 credits)

This course examines the theory associated with information-seeking behaviour. The information seeking process is analysed and models explored that attempt to explain information behaviour. The concept of information literacy will be examined and analysed with particular attention to cognitive and affective issues.

Assessment: 100% coursework.

# MLIM6328. Organisational learning (6 credits)

This course explores the concept and processes of organisational learning and the learning organisation. It examines the strategies and tools employed to create and manage a learning and innovative organisation. Topics include managing chaos and complexity; organisation culture and change, scenario planning, storytelling, professional development, training and learning (especially e-learning), performance and evaluation of learning, and others.

Assessment: 100% coursework.

## MLIM6338. Digital literacies (6 credits)

Digital Literacies comprise of information literacy, ICT literacy and media literacy. They are some of the core 21st century workplace skills. Students as well as knowledge workers need to equip with such skills so that they will be able to define and solve a problem or challenge at hand, and analyze suitable electronic and print information resources, manage resources efficiently and use the sources ethically. The course will also introduce the effective applications of social media for enhancing communication among different groups of an organization.

Assessment: 100% coursework.

### MLIM6339. Internship in library and information management (6 credits)

The internship of field experience provides an important learning experience for the student. It has a significant hands-on learning component. Through discussion with key personnel in the organization and working under workplace supervisors, the student gains hands-on experience in the library and information management environment.

Assessment: 100% coursework.

# MLIM6340. Research seminars and workshops (6 credits)

This course focus on the development of specific research skills, including both qualitative and quantitative skills, and help students develop high quality research proposals for dissertations or independent projects. The topics of the workshop include not limited to introduction and basics of SPSS, basics of quantitative analysis, survey design, qualitative data analysis, and seminars on how to develop projects and dissertations.

Assessment: 100% coursework.

# MLIM7344. Management information systems (6 credits)

This course examines key business processes in organizations and how information systems support the execution and management of these processes, covering both managerial and technical aspects of contemporary information systems. Topics include information technologies in business, types of management information systems, information systems development process and design, social and managerial issues of information systems and emerging topics such as information systems integration and outsourcing.

Assessment: 100% coursework.

# MLIM7347. Project management (6 credits)

This course explores the project life cycle and Project Management (PM) techniques for managing and planning successful projects in organizations. Conceptual foundations from the PMBOK and their

application are stressed, and applied using PM software. This course will run in project based, experiential learning mode (PBL) with participants completing a project ideally for an external client. Assessment: 100% coursework.

# MLIM7349. Data science and learning analytics (6 credits)

This course provides a broad overview of the key concepts, skills, technologies and applications in data science, with an emphasis on learning analytics and educational data mining. Learners will explore principles, methods and application cases in data pre-processing and storage, inferential and predictive analytics, supervised and unsupervised machine learning, association rule mining, text analytics, network analysis, data visualization, as well as data ethics and privacy. Example cases will be discussed to illustrate how learning analytics needs to be connected to the targeted learning outcomes and pedagogical design considerations. Students will conduct labs, tutorials and group project to gain hands-on experience on using industry-standard data mining and/or learning analytics packages to solve practical data-driven problems. It is strongly recommended that students have basic knowledge of statistics (equivalent to undergraduate level of introductory course on statistics) and are comfortable of using new IT tools.

Assessment: 100% coursework.

## MLIM7350. Data curation (6 credits)

This module discusses all aspects of data curation principles and best practices. The goal is to prepare students in data planning, management, documentation, preservation and sharing in all organizations with complex digital environments. This module is complementary to courses in data analysis and database management. Topics covered in this module include: overview of data management, data management life cycles; data management plans in the context of sponsored projects, risk and sustainability; standards and tools for data storage, access and security; metadata standards and design in context; data sharing and reuse; legal and ethical considerations.

Assessment: 100% coursework.

# MLIM7351. Information system analysis and development (6 credits)

The student should after the course have a basic knowledge of models, methods and tools to be able to independently apply the principles for selection and evaluation of systems development methods.. Assessment: 100% coursework.

# MLIM7352. Information technology and intellectual property law in education (6 credits)

This course explores the legal issues and ethical challenges related to information technology (IT) and intellectual property (IP) law which is often involved in education. It investigates the introductory legal and ethical knowledge in relation to the design and implementation of educational technology and digital learning environment in both schools and organizational learning contexts. This course offers opportunities to students with non-legal background to consider IT policies and strategies from legal perspectives, and equips them with a sound understanding of legal principles in using IT to support the innovation in IP through leadership roles at institutional level. Legal and ethical issues in IT and IP such as digital ownership, cyber-speech, cyberbullying in social networks, cybercrimes, copyright infringement and software, copyright in the digital environment, fair use of copyrighted work, the database right, privacy and data protection, and law enforcement in the information society as well as other emerging issues will be examined.

Assessment: 100% coursework.