# PhD Course Codes Before Semester 1 AY2022-2023

## **NOTE**

Not all courses listed in the curriculum will be offered in a semester. Courses offered are subjected to availability of instructors and resources.

#### **Core Courses**

# A9011 Philosophy of Research

This course provides two foci. One focus is the philosophy of scientific research. This includes development of insights into the logical and epistemological foundations of empirical science, specifically the nature of theory and the relationship of theory to research design and method. This focus will be very useful to students who are preparing their own original research ideas and proposals, in order to help them discover, explicate, and theorize important relationships in their own domains of interest.

# **A9012 Communication Theory**

This course focuses on both macro and micro aspects of communication. On the micro level, students will be introduced to the main theoretical approaches in studying individuals' uses of media, as well as socio-psychological effects of media on individuals. Students will be privy to the latest social scientific research on attention, media selection and choice, information processing, persuasion and social/behavioral effects of communication. At a macro level, the course introduces theories and concepts focusing on the interactions between media and societal institutions, where topics include public opinion, political economy of the media, international communication, and the like. Students will discuss current research and public debates about the role of different communication media in a society, including print, broadcast, and online media.

#### **A9013 Conceptual Foundations of Information**

What counts as information? Understanding information disciplines as the product of the desire for universal knowledge and the reality of repetitive information explosions will be a key issue in this course. Students will be exploring epistemology and information science, and Bourdieu's theory of distinction as just some of the various disciplines. At a deeper level, the course will cover how we organize information via technologies of collecting and storing information over time as students delve into the anthropology of classification. Students will be introduced to famous classifiers such as Aristotle, Linnaeus, Otlet, Dewey, in making comparisons to modern technologies of classification. Other topics will include censorship and information privacy through the ages ¬– Who gets access to information and how? – as well as the development of

public information facilities – from traditional print newspapers to the creating encylopedic knowledge on the Internet (and no, not just Wikipedia). Finally students will be exploring the concept of information in the 21st century: what are the key issues today?

#### **Method Courses**

A9014 Advanced Quantitative Research Methods in Communication and Information (Prerequisite: Students must have read or audited an undergraduate statistics course.)

This graduate course introduces students to advanced quantitative research methods most frequently used for dissertations and applied research in the social and behavioural sciences. The course aims to deepen the understanding of quantitative research methods and to develop skills for applying these methods in the broad range of communication and information disciplines. The course covers the development of research ideas, measurement procedures, design, data collection and analysis. Both traditional and new modes of data collection which involve new technologies will be covered in this course. Students will have hands-on experience in the process of conducting empirical investigations, learn the appropriate ways to analyze and interpret data, and present the findings in both oral and written formats

A9015 Advanced Qualitative Research Methods in Communication and Information (Prerequisite: Students must have read or audited an undergraduate research course (such as COM2008 Fundamentals of Research or COM442 Advanced Research Methods) before taking A9015. A9015 would assume that students have foundational knowledge of qualitative research.)

This graduate course is designed to provide a working knowledge of qualitative research methods suitable for application in graduate research. Students will learn the fundamental logic of qualitative research, and understand the appropriate times to use qualitative research methods on its own, or to complement mixed methods research design. The methods covered in this course include qualitative content analysis, document analysis, case study, interviews, ethnography, and grounded theory.

#### **Elective Courses**

## **A9016 Independent Study in Communication**

This course is designed as an independent study for Master's research and PhD students in Communication. The student will explore and critically examine an area of interest relevant to communication studies. Topics include but are not limited to:

- Communication Law & Policy
- International/Intercultural Communication

- Health Communications Theory and Foundations
- Visual Communication
- Communication Technology
- Critical & Cultural Studies
- Marketing Communication & PR
- Political Communication & Public Opinion
- Iournalism
- Interpersonal Communication & Social Psychology

# A9017 Independent Study in Information

This course is designed as an independent study for Master's research and PhD students in Information. The student will explore and critically examine an area of interest relevant to information, knowledge and systems. Topics include but are not limited to:

- Information Systems Theories and Research
- Advanced Human Computer Interaction
- Intelligent Information Retrieval
- Collaborative and Social Computing
- Advanced Knowledge Management
- Effective Knowledge Management in Organisations
- Organisational Analysis and Design
- Sociology of Knowledge
- Advanced Information Studies
- Library Sociology
- Infometrics & Scientometrics
- Information Policy

## **A9112 Health Communications Theory & Foundations**

The interdisciplinary field of health communication merges the theoretical with the applied, in which case all areas of health and medicine will serve as communication contexts for this course. These areas include provider-patient relations, health promotion campaigns, health policy, and manager-provider relations. Emerging frontiers such as new technologies in health and medical information, health inequalities, genetic testing, and evidence-based medicine will be studied from a communication perspective. In addition, the ethical component of each area studied will be discussed in the course.

## **A9122 Intelligent Information Retrieval**

The concept of 'intelligent' information retrieval was first proposed in the late 1970s, but lost standing within its community by the early 1990s. Yet with the rising popularity of 'intelligent agents', it appears that the idea of intelligent information retrieval is back in general vogue. What, then, is true intelligence in information retrieval? Where can intelligence be manifested in an information retrieval system? Students will learn the fundamental and advanced issues in information retrieval, and analyze the approaches to adopt and/or revise for intelligent information retrieval systems.

## **A9101 New Media and Society**

This course addresses selected traditional and "frontier" issues confronting communication theorists in the context of converging new media environments. Core thematic issues will reflect contemporary efforts to understand how new media/communication technologies, society, and people interact with one another and what difference this makes for communication theory and research. As a period of massive transformation affecting change in the very definition of "new media", for course purposes, "new media" encompass Internet and/or technology-based forms including mobile phones, computer games, blogs, and social networking websites. Although all perspectives are encouraged, the primary focus will be on behavioral and social psychological approaches to new media and communication technologies.

## A9102 Human Information Behaviour

Information behavior refers to the range of user behaviour in relation to information and information systems, which include information need generation, creation, giving, assessment, management, use and impact. These will be studied in the context of different kinds of tasks (work, every day, play) and social/organizational environments. The course will hence focus on applying the concepts, theories and models of information behaviour to information science research.

Additionally, topics covered include: types and models of information behavior, including the information search process, and interactive information retrieval; fundamental concepts of information need, serendipity, relevance, tasks, etc.; user browsing and searching; collaborative information behavior; application to the design of information systems, services and policies; user evaluation; information world of specific populations; and research methods.

#### A9103 Mind and Media

Advanced survey of socio-psychological consequences of human interaction with media and computers. Key themes are 1) how mind has evolved to interact with media and computers in certain ways, 2) how media form and content influence mind, 3) how mind socially responds to computers, 4) how media and computers create sense of "being there" and/or "being together with someone," and 5) how properties (e.g., emotion, arousal, attention, memory, attitude) of human cognition and affection are affected by the form, content, and use of media and computers. Although all perspectives are encouraged, the primary focus will be on behavioral and social psychological approaches to mind and media.

# A9104 Network Analysis: Theory and Methods

This course introduces the core concepts of network theory and methods and discusses theoretical and analytic issues associated with network analysis. It consists of

three major parts: the theoretical foundations of network analysis, the review of seminal and recent works on social and communication networks, and applications of network theory to real-world problems. The course focuses on (but not limited to) the following topics: homophily and community structure, tie strength and structural holes, diffusion and network effects, small-world phenomena, random graph model, large-scale empirical networks, and computational approaches to network analysis. Students will learn and use programming languages for data collection and analysis. All the programming skills necessary for the course will be taught in a step-by-step manner. Prior knowledge of linear algebra and calculus will be helpful, but is not required.

# **A9105 Bayesian Statistics**

This course introduces the core concepts in Bayesian statistics and discusses various issues with data analysis and scientific research with the emphasis on statistical theory. Most importantly, it will offer a critical review of the Fisherian approach to hypothesis testing and statistical inferences and ritualized practices in social scientific research. The course consists of three parts: (1) the theoretical foundations of statistical analysis, (2) the logic behind Bayesian inferences and its applications (e.g., generative hierarchical models, MCMC sampling, machine learning, and computational methods), and (3) data collection and analysis with computational programming languages. Students are expected to be competent in O-level calculus (differentiation and integration), which will not be covered in the course.

#### **A9106 Communication Neuroscience**

This course introduces students to the exciting area of communication neuroscience, which using techniques for brain imaging in order to answer questions in the field of communication. It first introduces the premier technology associated with this area, namely functional magnetic resonance imaging (fMRI), with a focus on providing a conceptual understanding of how the technique operates and how the data are analyzed, rather than a detailed technical description. Then, it builds upon this background by focusing on recent papers from the communication literature that have used a variety of fMRI analysis techniques to demonstrate how communication researchers are actively answering communication questions using this approach

# A9107 Advanced Quantitative Analysis for Communication and Information Research

This course introduces students to structural equation modeling. After reviewing fundamental statistical analyses, students will learn the process of conducting structural equation modelling.

The course content is divided into three thematic groups:

• Theme 1 – Analytical and statistical fundamentals: This theme involves class discussions, activities, and assignments about several common statistical analyses.

- Theme 2 Conducting structural equation modeling: This theme introduces key concepts and the process of conducting structural equation modeling.
- Theme 3 Special topics: This theme focuses on special uses of structural equation modeling, which researchers can use to answer many different research questions.

#### A9108 Media Influence and Persuasion

This course provides an introduction to classic and influential theories and research on media influence and persuasion. The readings and class meetings will be guided by the major theoretical approaches to understanding how and why media messages have intended and unintended effects on individuals and society across a variety of contexts (e.g., media violence, health, political, entertainment media, news media, etc.). Within the context of these theories, students will review empirical applications of the theories and develop skills in operationalizing theoretical concepts for empirical testing.

Specific objectives of the course include classic media effects theories such as Social Cognitive Theory, Cultivation Theory, Agenda-Setting, Elaboration Likelihood Model and Social Judgement Theory. It will also cover key concepts in persuasion research such as Attention, Selection, Perception, Priming, Desensitization, Framing, Emotions and Resistance.

## A9109 Advertising Theory & Consumer Psychology

This course introduces students to the essential theories and research on media influence and persuasion and equip students with skills needed to test those theories in empirical studies.

After reviewing the philosophical and structural foundations for theory construction with specific models and topics, with focus on the concepts, theoretical issues, theoretical soundness, and methodological choices made by the authors of the articles used in class, each student is expected to develop a research paper/proposal by the end of the semester.

The paper/proposal should consist of a literature review, hypotheses and/or research questions, and methods. The goal is for each student to have the experience of writing a critical review of the literature and develop a new model/theory of their own.

## **Communication Course**

A901 Speaking Academia

The focus of this course is on storytelling in an academic context. Storytelling and performance skills are vital to presentation of your scholarly work. The course

implements advanced principles for speaking and listening by use of sound and reasonable argument. Speech is less about speaking and more about thinking and being.

In this course, you will be empowered to build a practical speaking methodology of your own and gather personal confidence through rehearsal and critique. The course moves you toward excellence in spoken presentation with the power and knowledge for best practice in displaying your work in the strongest light.