#### **REGULATIONS FOR THE DEGREE OF MASTER OF SOCIAL SCIENCES** (MSocSc)

(See also General Regulations and Regulations for Taught Postgraduate Curricula)

These regulations apply to candidates admitted to the Master of Social Sciences in the academic year 2025-26 and thereafter.

Any publication based on work approved for a higher degree should contain a reference to the effect that the work was submitted to the University of Hong Kong for the award of the degree.

The degree of Master of Social Sciences (MSocSc) is a postgraduate degree awarded for the satisfactory completion of a prescribed course of study in one of the following fields: Behavioral Health; Clinical Psychology; Counselling; Criminology; Educational Psychology; Gerontology; Media, Culture and Creative Cities; Mental Health; Nonprofit Management; Population and Policy Analysis; Psychology; Social Data Analytics; Social Service Management; and Sustainability Leadership and Governance. These fields of study will not necessarily be offered every year.

#### **Admission requirements**

MSS 1. To be eligible for admission to the courses leading to the degree of Master of Social Sciences, candidates

- (a) shall comply with the General Regulations and the Regulations for Taught Postgraduate Curricula;
- (b) shall hold
  - (i) a Bachelor's degree of this University; or
  - (ii) another qualification of equivalent standard from this University or from another University or comparable institution accepted for this purpose;
- (c) for a candidate who is seeking admission on the basis of a qualification from a university or comparable institution outside Hong Kong of which the language of teaching and/or examination is not English, shall satisfy the University English language requirement applicable to higher degrees as prescribed under General Regulation G2(b);
- (d) shall satisfy any other admission requirements which may be specified for individual fields of study in the regulations below; and
- (e) shall satisfy the examiners in a qualifying examination if required.

MSS 1.1 To be eligible for admission to the courses leading to the degree of Master of Social Sciences in the fields of Behavioral Health, Counselling, Gerontology, Mental Health, and Social Service Management, candidates shall preferably have had a minimum of two years of post-qualification experience in the relevant fields, in addition to the requirements set out in Regulation MSS 1.

MSS 1.2 To be eligible for admission to the courses leading to the degree of Master of Social Sciences in the field of Clinical Psychology, candidates

- (a) shall hold a Bachelor's degree with a major in Psychology, or a recognized equivalent qualification;
- (b) shall have demonstrated empirical research experience in the form of a dissertation completed in the Bachelor's degree programme or another equivalent programme in psychology, or first-authorship in published journal article;
- (c) shall be eligible for the Graduate Membership of the Hong Kong Psychological Society; and
- (d) shall preferably have relevant working experience,

in addition to the requirements set out in Regulation MSS 1.

MSS 1.3 To be eligible for admission to the courses leading to the degree of Master of Social Sciences

in the field of Criminology, candidates

- (a) shall hold a Bachelor's degree preferably with a major in the social sciences or humanities discipline; or
- (b) shall preferably have working experience in the criminal justice system, social welfare agencies, or in other work with offenders,

in addition to the requirements set out in Regulation MSS 1.

MSS 1.4 To be eligible for admission to the courses leading to the degree of Master of Social Sciences in the field of Educational Psychology, candidates

- (a) shall hold a Bachelor's degree with a major in Psychology, or a recognized equivalent qualification;
- (b) shall be eligible for the Graduate Membership of the Hong Kong Psychological Society; and

(c) shall preferably have relevant working experience in educational or related settings,

in addition to the requirements set out in Regulation MSS 1.

MSS 1.5 To be eligible for admission to the courses leading to the degree of Master of Social Sciences in the field of Nonprofit Management, candidates shall preferably have three years of relevant working experience, in addition to the requirements set out in Regulation MSS 1.

MSS 1.6 To be eligible for admission to the courses leading to the degree of Master of Social Sciences in the field of Psychology, candidates

- (a) shall preferably have more than one year of work experience; and
- (b) shall satisfy the examiners in a qualifying examination and interview if shortlisted,

in addition to the requirements set out in Regulation MSS 1.

MSS 1.7 To be eligible for admission to the courses leading to the degree of Master of Social Sciences in the field of Social Data Analytics, candidates

- (a) shall preferably have a Bachelor's degree in one of the fields of social sciences: Anthropology, Cognitive Science, Communication, Economics, Education Studies, Ethnic Studies, Linguistics, Political Science, Psychology, Sociology, Urban Studies and Planning, or a closely related field; or a Bachelor's degree in Mathematics, Computer Science, or a related field with an additional major/minor or substantial advanced coursework in one or more social sciences domains; and
- (b) shall preferably have pre-existing training in statistics and/or formal logic or prior experience with one or more technical domains, including programming, statistics, formal logic, calculus, linear algebra, etc.

in addition to the requirements set out in Regulation MSS 1.

MSS 1.8 To be eligible for admission to the courses leading to the degree of Master of Social Sciences in the field of Population and Policy Analysis, candidates

- (a) shall preferably have a Bachelor's degree in one of the fields of social sciences: Anthropology, Cognitive Science, Communication, Economics, Education Studies, Ethnic Studies, Linguistics, Political Science, Psychology, Sociology, Urban Studies and Planning, or a closely related field; and
- (b) shall preferably have prior experience with applied statistics, mathematics, programming, and/or one or more technical domains (e.g. demographic methods); and
- (c) with a background in statistics, mathematics, computer science, or a related field may be considered if they have a minor or have completed substantial advanced coursework in one or more social sciences domains before admission; or if they commit to pursuing additional domain-specific study upon admission

in addition to the requirements set out in Regulation MSS 1.

MSS 2. An application for exemption from the above requirements shall be considered on a case by case basis.

# **Qualifying examination**

MSS 3.

- (a) A qualifying examination may be set to test the candidates' formal academic ability or their ability to follow the courses of study prescribed. It shall consist of one or more written papers or their equivalent and may include a project report.
- (b) Candidates who are required to satisfy the examiners in a qualifying examination shall not be permitted to register until they have satisfied the examiners in the examination.

## Award of degree

MSS 4. To be eligible for the award of the degree of Master of Social Sciences, candidates

- (a) shall comply with the General Regulations and the Regulations for Taught Postgraduate Curricula; and
- (b) shall complete the programme as prescribed in the syllabuses and satisfy the examiners in accordance with the regulations set out below.

# Period of study

MSS 5. The curriculum shall normally extend over one academic year of full-time study; or two academic years of part-time study, with a maximum period of registration of two academic years of full-time study or three academic years of part-time study, unless otherwise specified for individual fields of study in the regulations below.

MSS 5.1 In the field of Clinical Psychology, the programme shall normally extend over two academic years of full-time study, with a maximum period of registration of four academic years of full-time study.

MSS 5.2 In the field of Counselling, the programme shall normally extend over two or three academic years of part-time study, with a maximum period of registration of three academic years for the two-year part-time study or four academic years for the three-year part-time study.

MSS 5.3 In the field of Criminology, the programme shall normally extend over one academic year of full-time study or two academic years of part-time study, with a maximum period of registration of two academic years of full-time study or four academic years of part-time study.

MSS 5.4 In the field of Educational Psychology, the programme shall normally extend over two academic years of full-time study or three academic years of part-time study, with a maximum period of registration of four academic years for both full-time and part-time study.

MSS 5.5 In the fields of Media, Culture and Creative Cities, the programme shall normally extend over one academic year of full-time study or two academic years of part-time study, with a maximum period of registration of two academic years of full-time study or four academic years of part-time study.

MSS 5.6 In the field of Nonprofit Management, the programme shall normally extend over one academic year (three semesters) of full-time study or two academic years of part-time study, with a maximum period of registration of two academic years of full-time study or three academic years of part-time study.

MSS 5.7 In the fields of Mental Health and Social Service Management, the programme shall normally extend over two academic years of part-time study, with a maximum period of registration of three academic years of part-time study.

MSS 5.8 In the field of Population and Policy Analysis, the programme shall normally extend over one academic year of full-time study, with a maximum period of registration of two academic years of full-time study.

MSS 6. Candidates shall not be permitted to extend their studies beyond the maximum period of registration specified in the above regulations, unless otherwise permitted or required by the Board of the Faculty.

# **Advanced Standing**

MSS 7. Advanced Standing may be granted to candidates in recognition of studies completed successfully before admission to the curriculum. Candidates who are awarded Advanced Standing will not be granted any further credit transfer for those studies for which Advanced Standing has been granted. The amount of credits to be granted for Advanced Standing shall be determined by the Board of the Faculty, in accordance with the following principles:

- (a) a candidate may be granted a total of not more than 20% of the total credits normally required under a curriculum for Advanced Standing unless otherwise approved by the Senate; and
- (b) credits granted for Advanced Standing shall not normally be included in the calculation of the GPA unless permitted by the Board of the Faculty but will be recorded on the transcript of the candidate.

# Exemption

MSS 8. Candidates may be exempted, with or without special conditions attached, from the requirement prescribed in the regulations and syllabuses governing the curriculum with the approval of the Board of the Faculty, except in the case of a capstone experience. Approval for exemption of a capstone experience may be granted only by the Senate with good reasons. Candidates who are so exempted must replace the number of exempted credits with courses of the same credit value.

## **Progression in curriculum**

MSS 9. Candidates may, with the approval of the Board of the Faculty, transfer credits for courses completed at other institutions during their candidature. The number of transferred credits may be recorded in the transcript of the candidate, but the results of courses completed at other institutions shall not be included in the calculation of the GPA. The combined total number of credits to be granted for Advanced Standing and credit transfer shall not exceed half of the total credits normally required under the curricula of the candidates during their candidature at the University.

## **Completion of curriculum**

MSS 10. To complete the curriculum, candidates

- (a) shall satisfy the requirements prescribed in TPG 6 of the Regulations for Taught Postgraduate Curricula;
- (b) shall follow courses of instruction and complete satisfactorily all prescribed written work and field work;
- (c) shall complete and present a satisfactory dissertation or capstone project as prescribed in the syllabuses; and
- (d) shall satisfy the examiners in all prescribed courses and in any prescribed form of examination.

# **Dissertation and Capstone project**

MSS 11. Subject to the provisions of Regulation MSS 10(c), the title of the dissertation or capstone project shall be submitted for approval by not later than March 31 of the final academic year in which the teaching programme ends and the dissertation or capstone project shall be presented by a date as prescribed in the syllabuses for each field of study; candidates shall submit a statement that the dissertation or capstone project represents their own work (or in the case of conjoint work, a statement countersigned by their co-worker(s), which show their share of the work) undertaken after registration as candidates for the degree.

# Assessment

MSS 12. Candidates shall be assessed for each of the courses for which they have registered, and assessment may be conducted in any combination of continuous assessment of coursework, written examinations and/or any other assessable activities. Only passed courses will earn credits.

## MSS 13.

- (a) Where so prescribed in the syllabuses, coursework or a dissertation or a capstone project shall constitute part or whole of the examination for one or more courses.
- (b) An assessment of the candidates' coursework during their studies, including completion of written assignments and participation in field work or laboratory work, as the case may be, may be taken into account in determining the candidates' result in each written examination paper; or, where so prescribed in the syllabuses, may constitute the examination of one or more courses.

MSS 14. Candidates shall not be permitted to repeat a course for which they have received a passing grade for the purpose of upgrading.

MSS 15. Candidates who have failed to satisfy the examiners at their first attempt in not more than half of the number of courses to be examined, whether by means of written examination papers or coursework assessment, during any of the academic years of study, may be permitted to make up for the failed course(s) in the following manner:

- (a) undergoing re-assessment/re-examination in the failed course; or
- (b) re-submitting failed coursework, without having to repeat the same course of instruction; or
- (c) repeating the failed course by undergoing instruction and satisfying the assessments; or
- (d) for elective courses, taking another course in lieu and satisfying the assessment requirements.

MSS 16. Subject to the provision of Regulation MSS 10(c), candidates who have failed to present a satisfactory dissertation or capstone project may be permitted to submit a new or revised dissertation or capstone project within a specified period.

MSS 17. Candidates who have failed to satisfy the examiners in any prescribed field work/practical work/internship may be permitted to present themselves for re-examination in field work/practical work/internship within a specified period.

MSS 18. Candidates who are unable because of their illness to be present at the written examination of any course may apply for permission to present themselves at a supplementary examination of the same course to be held before the beginning of the following academic year. Any such application shall be made on the form prescribed within seven calendar days of the first day of the candidate's absence from any examination. Any supplementary examination shall be part of that academic year's examinations, and the provision made in the regulations for failure at the first attempt shall apply accordingly.

MSS 19. There shall be no appeal against the results of examinations and all other forms of assessment.

#### MSS 20. Candidates who

- (a) are not permitted to present themselves for re-assessment/re-examination in any failed course(s) or to repeat the failed course(s) or take another course in lieu under Regulation MSS 15; or
- (b) have failed to satisfy the examiners in any course(s) at a second attempt; or
- (c) are not permitted to submit a new or revised dissertation or capstone project under Regulation MSS 16; or
- (d) have failed to submit a satisfactory new or revised dissertation or capstone project under Regulation MSS 16; or
- (e) have exceeded the maximum period of registration.

may be required to discontinue their studies.

MSS 20.1 In the field of Clinical Psychology, candidates who have failed two external placements or the second attempt of either the external placement or internal practicum may be required to discontinue their studies.

MSS 20.2 In the field of Educational Psychology, candidates who have failed any two practicum courses may be required to discontinue their studies.

#### Grading systems

MSS 21. Individual courses shall be graded according to the one of the following grading systems:

(a) Letter grades, their standards and the grade points for assessment as follows:

Grade		Standard	Grade Point
A+			4.3
А	>	Excellent	4.0
A-			3.7
B+		Good	3.3
В	>		3.0
B-	J		2.7
C+		Satisfactory	2.3
С	>		2.0
C-	J		1.7
D+	$\overline{\ }$	Pass	1.3
D	حر		1.0
F	-	Fail	0

or

(b) 'Pass' or 'Fail'.

Courses graded according to (b) above shall not be included in the calculation of the GPA.

# **Classification of awards**

MSS 22. On successful completion of the curriculum, candidates who have shown exceptional merit may be awarded a mark of distinction, and this mark shall be recorded in the candidates' degree diploma.

# SYLLABUSES FOR THE DEGREE OF MASTER OF SOCIAL SCIENCES

## POPULATION AND POLICY ANALYSIS

The Faculty of Social Sciences offers a postgraduate programme leading to the degree of Master of Social Sciences in the field of Population and Policy Analysis. The programme shall extend over not less than one and not more than two academic years of full-time study.

# ASSESSMENTS

To complete the programme, candidates shall satisfy the examiners in the assessment of courses as prescribed in the programme. Assessments of the courses may be conducted either by course assignments, by presentations, or by written tests, or a combination of both methods. The grading system follows the standard practice in the Faculty of Social Sciences.

# **CURRICULUM**

To complete the Master of Social Sciences in the field of Population and Policy Analysis programme, candidates must complete 8 courses (6 credits each) and a capstone project (12 credits), with a total of 60 credits. The compulsory courses provide candidates with a broad, integrated understanding of the social sciences approach to demography, population and policy analysis. The elective courses, building upon that foundation, introduce the candidates to a variety of developments in population and related social policy issues.

## **Compulsory Courses**

Candidates shall complete all compulsory courses of the following list:

MPOP7001. Demographic theory (6 credits)

MPOP7002. Demographic methods (6 credits)

MPOP7003. Population policy (6 credits)

MPOP7004. Methods for policy evaluation (6 credits)

MPOP7005. Statistical computing for social science (6 credits)

## Elective Courses

Candidates shall complete at least two elective courses from the followig list:

MPOP7101. Fertility and family structures (6 credits)

MPOP7102. Mortality and health (6 credits)

MPOP7103. Migration and urbanisation (6 credits)

MPOP7104. Spatial population analysis (6 credits)

MPOP7105. Demography of Greater China (6 credits)

SOWK6207. Social policy and ageing (6 credits)

Candidate shall complete not more than one elective course from the following list:

MSDA7101. Big data solutions to social problems (6 credits)

MSDA7102. Simulating human behaviors with agent-based models (6 credits)

MSDA7103. Text as data: Natural language processing and social research

MSDA7104. Social network analysis

POLI7003. Public policy: issues and approaches (6 credits)

POLI8009. Policy design and analysis (6 credits)

SOWK6193. Social gerontology (6 credits)

SOWK6201. Mental health problems in old age (6 credits)

SOWK6259. Contemporary perspectives on death, dying and bereavement (6 credits) SOWK6292. Ageing and health (6 credits)

## Capstone Experience Course

Candidates shall complete the following capstone experience course: MPOP8001. Capstone project (12 credits)

Not all elective courses will necessarily be offered in a given year. While we try to ensure as broad a course offering to students as possible, courses offered each year do vary based on availability of teaching staff, departmental resources and student demand. In exceptional instances, it may be necessary to cancel a course at short notice because of insufficient student enrolment or other resource issues.

# **Course Descriptions**

**Compulsory** Courses

# MPOP7001. Demographic theory (6 credits)

Demographic theories have produced some of the best-documented generalisations in social sciences. This module offers a comprehensive exploration of demographic theories, building upon the foundational concepts of cohort versus period analysis. The course will first focus on the predominant demographic theory of demographic transition, as well as the associated explanation of the outcome of demographic change such as demographic dividend and metabolism. We will then extend our focus to encompass theories on the transition in changes in fertility, mortality and migration that have played key roles in the demographic characteristics such as age, sex, education, and location. Finally, we will discuss various approaches to forecasting future population sizes and structures, complemented by illustrative scenarios at regional, national, and global levels, and discuss their possibilities and limitations in projection future population levels and structures in the short, medium, and long range. Through a series of lectures, discussions, and practical applications, participants will gain insights into the power of demographic theories and examine their implications for past and future population and development.

Assessment: 50% coursework; 50% examination

# MPOP7002. Demographic methods (6 credits)

Demography as a scientific discipline began over 350 years ago when statistical patterns for births and deaths were first systematically analysed. The extensive development and widespread application of technical methods have been at the core of demography ever since. This module introduces key demographic concepts and methods, to allow students to define, interpret, and analyse population change. Students will engage with key concepts such as the stable population and demographic accounting, laying the groundwork for a nuanced understanding of population dynamics. Through a combination of theoretical understanding and practical skills development, participants will be empowered to critically interpret demographic measures, engage in population analysis, and contribute to demographic research. Throughout the course, we will use the R statistical software to carry out calculations and visualise our results.

The course will begin by discussing common types of demographic data, such as censuses, surveys, and administrative sources. Emphasising hands-on experience and practical application, the course covers techniques for measuring and comparing changes in population size, composition, and growth. We then focus on a range of topics on demographic rates and measures, direct and indirect standardisations, the

Lexis diagram, life tables and decomposition analysis, before concentrating on methods for analysing the components of population change (fertility, mortality, and migration). Finally, we will turn our attention to the fundamental concepts of cohort component population projections including Leslie matrices to model future age structures in population growth, and methods for forecasting population sizes with uncertainty and developing scenario-based projections often used by policymakers in studying the potential impact of demographic changes in the future.

Pre-requisite: MPOP7005. Statistical computing for social science

Assessment: 100% coursework

## MPOP7003. Population policy (6 credits)

Policymakers have tried to influence the size and structure of their populations for centuries. This course explores the dynamic field of population policies, focusing on their impact on demography, societal structures and economic development, and addressing challenges such as rapid population growth, ageing societies, low fertility, depopulation, economic migration, forced migration, climate change, and sustainable development. Emphasising historical and contemporary approaches, the course analyses case studies worldwide. Through interactive discussions, policy simulations, and critical analyses, students gain insights into the complexities of designing effective population policies amidst diverse demographic and socio-economic challenges.

Assessment: 100% coursework

## MPOP7004. Methods for policy evaluation (6 credits)

This module offers a deep dive into the intricate world of evaluating population policies, employing cutting-edge quantitative causal inference methods with both experimental and non-experimental data. Participants will grapple with fundamental questions: How can we rigorously assess the impact of policies or events? How do we discern causal relationships within observational data? The course extensively employs real-world examples to elucidate various statistical methods for causal inference, encompassing Rubin's Causal Model, regression fundamentals, standard error calculations, analysing naturally occurring "quasi-experiments,", instrumental variable estimation, difference-in-differences estimation, and regression discontinuity design. Participants will gain hands-on experience, mastering these techniques to conduct robust and insightful evaluations of population policies and programs. Throughout the course we will use the R statistical software to carry out calculations and visualise our results.

Pre-requisite: MPOP7005. Statistical computing for social science Assessment: 100% coursework

## MPOP7005. Statistical computing for social science (6 credits)

The volume of data produced by society continues to grow at an exponential pace. Tools that harness the increasing amounts of data are providing new insights into ongoing changes in our societies. This course introduces statistical data analysis using R; a popular open-source statistical programming language used for data mining, modelling, and visualisation. The course begins with an introduction to the R and RStudio working environments, providing an outline of common core functions for data analysis and getting help using R. Next, common data structures, variables, and data types will be demonstrated. Students will then learn how to write code scripts to utilise the popular tidyverse set of R packages for data manipulation and visualisation. Finally, we will learn how to carry out a range of statistical regression analyses in R, to summarise relationships, account for hierarchies in data sets and effectively assess and communicate our model results.

Assessment: 100% coursework

## MPOP7101. Fertility and family structures (6 credits)

In recent years, the number of children in the world began to decline for the first time in centuries. Combined with increasing life expectancies, the size and structures of families are undergoing unprecedented changes. This course delves into the intricate dynamics of fertility and family structures, introducing fundamental concepts and measures essential for a comprehensive demographic study. We explore key theories and empirical observations to illuminate fertility changes and family formation patterns by key demographic variables such as gender, age and education. Topics covered include reproductive health, family planning, changing family patterns, intergenerational relationships, and the impact of demographic and socio-economic factors on fertility decisions. We will pay particular attention to the cause and impact of fertility changes in the East Asian context, where levels are among the lowest in the world. Through a blend of theoretical discussions, empirical research, and case studies, students will gain a nuanced understanding of the complex relationships between fertility choices, family dynamics, and broader societal trends. The course also equips students with the ability to analyse fertility and family differences across countries and regions, considering various stages of the demographic transition.

Assessment: 50% coursework; 50% examination

## MPOP7102. Mortality and health (6 credits)

As the global living standards continue to rise, understanding the intricate relationship between increased longevity and public health challenges has become an essential policy issue. This course comprehensively explores mortality patterns and health dynamics, focusing on their interdependence across time and space. Students will delve into the micro-level drivers and macro-level consequences of the mortality transition, understanding its linkage to better public health policies, increasing life expectancies and ageing populations. Participants will explore various measures for mortality, health and population age structures and analyse relevant data sources to gain practical insights into current trends. Using a demographic perspective, we will study past and emerging issues in public health, such as chronic diseases, obesity, environmental health and infectious diseases. The course will conclude with critical reflections on strategies to overcome challenges in public health and demographic ageing in both low- and high-income countries, including in the East Asian context, home to some of the eldest populations in the world..

Assessment: 50% coursework; 50% examination

## MPOP7103. Migration and urbanisation (6 credits)

Migration is becoming the prominent driver of population change in many regions and countries, as fertility and mortality rates decline to low levels. This course provides an in-depth exploration of migration and urbanisation, offering a holistic perspective on these dynamic phenomena. Participants will gain a comprehensive understanding of migration concepts, migration and urbanisation theories, and the main past and current migration trends globally and in Asia. The course demonstrates how and where migration is becoming a pivotal force in demographic change, impacting population size, distribution, and characteristics, as well as the socio-economic characteristics of both origin and destination. Moreover, we will delve into the complexities of measuring and defining migration and urban areas, highlighting how these factors can make cross-country comparisons more challenging than other demographic processes such as fertility and mortality. Finally, we will discuss the evolution of migration policies, their effectiveness, and their impact on development in both the sending and receiving areas. The course will facilitate learning about key migration measures and data sources, fostering the ability to comprehend common myths on the scale of migration and its impact. Assessment: 50% coursework; 50% examination

## MPOP7104. Spatial population analysis (6 credits)

To understand changes occurring in populations and societies, one needs to examine the space in which people are interacting. This course examines local populations and their relation to demographic factors by exploring the theory, tools and analytical frameworks for dealing with spatial population and public health data. We will investigate some key spatial issues for population analyses, including the Modifiable Area Unit Problem, whereby the variation in administrative areas can greatly influence our analysis outcomes. Throughout the course, students will learn the theoretical foundations, tools, and analytical frameworks essential for handling spatial data using packages in the R statistical software. We will explore how to visualise spatial data, and how to create "good" maps that are easy to interpret spatial data without bias. Further, we will examine common sources of geospatial demographic data, as well as methods for managing, mapping and modelling spatial data in R using the sf, terra and spgwr packages. These R package environments implement many functions of Geographic Information Systems (GIS) including methods for describing, analysing, and modelling spatial data, including geographically weighted regression.

Pre-requisite: MPOP7005. Statistical computing for social science Assessment: 100% coursework

# MPOP7105. Demography of Greater China (6 credits)

This module provides a focused exploration of the demographic landscape in Greater China, encompassing mainland China, Taiwan, Hong Kong, and Macau. Participants will delve into the unique demographic patterns, trends, and challenges shaping this dynamic region. The course begins with an exploration of past and current key demographic indicators, including fertility rates, mortality trends, and migration patterns, providing a comprehensive overview of population dynamics. Participants will examine the impact of historical political and cultural factors on demographic changes and explore the implications for social and economic development in Greater China. We will also reflect on expected future challenges for society and policymakers, including low fertility rates, changing household structures, ageing populations and population decline. Through case studies, discussions, and practical applications, participants will gain a nuanced understanding of the complex interplay between current demographic shifts and the emerging challenges in Greater China.

## SOWK6207. Social policy and ageing (6 credits)

The course is designed to examine the concepts of social policy and ageing, and the various models available for the analysis of social policy. By analyzing local and foreign services and policy regarding the elderly people, students will become familiar with the roles of government and non-government organizations in implementing public policies. This should further the understanding of the development of social services to meet the needs of the elderly in the context of economic and social change. Basic concepts of social planning, problem identification and programme implementation will be examined.

Assessment: 100% coursework

## MSDA7101. Big data solutions to social problems (6 credits)

Do Google and Facebook understand us better than we do ourselves? Are we becoming lab rats every time we go online? Is the impartially designed algorithm for predicting the probability of recidivism truly fair for sentencing individuals? What are the ethical issues underpinning big data science? When

big data analytics are routinely applied in our daily lives, the ability to audit the adopted algorithms becomes crucial. This course aims to build students' big data literacy through three major areas of focus: (1) Defining what big data is; (2) Providing an overview of existing big data analytical techniques; and (3) Discussing opportunities and challenges of big data analytics in tackling social problems.

The course will focus on elaborating the core principles of a variety of techniques adopted when predicting future phenomena through the lens of big data. We will use a case study approach to provide an in-depth understanding of various big data analytics, with the goal inspiring the students to think creatively and critically about how big data analytics can be used to making scientific discoveries and do social good.

Assessment: 100% coursework

# MSDA7102. Simulating human behaviours with agent-based models (6 credits)

Despite its contributions to scientific development, traditional positivist, quantitative approaches (e.g., traditional variable-based statistical equations) have often been criticised for their over-simplification and decontextualisation of real-world phenomena in analysis. In contrast, systems science aims to understand complex relationships and their adaptive interactions among various elements within varying environments and systems. Systems science has been instrumental in breaking new scientific ground in diverse fields, including but not limited to engineering, decision analysis, transportation, public health, and urban sciences.

This course will pursue a solid understanding of systems science by exploring the latest advances in agent-based modelling (ABM) and the related analysis methods. ABM, a class of systems science, is an in-silico modelling to examine and predict 'what-if' conditions by simulating social behaviours and interactions among individual entities embedded in social structures.

This course is designed to introduce students to basic tools of theory building and data analysis in ABM to apply those tools to better understand social problems in human populations. Students will learn to use agent-based modelling on standard (free) software, paying attention to feedback processes, multilevel interactions, and the phenomenon of emergence. You will enrich your understanding of the problems people have when they share and cooperate, and examine essential models that can support you in your future career in social sciences and beyond.

This course is designed for anyone interested in understanding human behaviours, especially when sharing and cooperation are involved. It will be particularly useful for professionals dealing with challenges related to

public goods, common resources, and cooperation. If you are studying social sciences and are curious about how a computational approach works, this course will be particularly helpful. Assessment: 100% coursework

# MSDA7103. Text as data: Natural language processing and social research (6 credits)

From historical archive to social media discourse, text data are among the most widely available format of social data. Natural Language Processing (NLP) tools help social analysts to use large volume of text to understand social phenomena. This course gives an overview of NLP methods from social sciences' perspective. It discusses how to use NLP tools to discover interesting patterns, create reliable measurement, and make robust inference. It also introduces state-of-the-art generative language models and discusses their promises, limitations, and threats for social data analytics. Assessment: 100% coursework

The basic premise of this course is that the social world is relational. We can not ignore that we are influenced by people we know, have met and respect; ideas and allegiances are formed and maintained in social settings and organisations; not all people have equal opportunities when it comes to finding a job; we communicate over networks, be they online or offline; etc. In this course we aim to produce a detailed understanding of the web of social contacts that structure our daily life and society. We will consider the network both as an object that is interesting in its own right and as something that creates co-dependencies between social units in terms of outcomes and properties of these social units themselves.

The overarching goal of the course is to provide us with tools that bridge theories on the one hand, and what we can actually observe in observational and archival empirics on the other. Put another way, we aim to avail ourselves of approaches that permits us to test if our theoretical ideas about social interaction are supported by what people, organisations and countries actually do. The course is structured around a collection of themes based on such theoretical concepts such as cohesion, embeddedness, homophily, transitivity, the Mathew effect, structural holes, influence, selection. We will examine these both from the perspective of how they structure the network and how these network effects structure behaviour, opinions and beliefs.

For the purposes of getting some practical understanding of the approaches presented, we will also explore analytic methods using block models, stochastic actor-oriented models, exponential random graph models, network autocorrelation and network effects models. It is not expected that the students become expert users in any of these methods but to appreciate the common goal across these models, namely to model and take into account the interdependencies. Data will mostly be handled in R but orientation to other analysis packages will be given.

Assessment: 100% coursework

## POLI7003. Public policy: issues and approaches (6 credits)

This course introduces students to the key concepts and theoretical approaches in the study of public policy process. The course is organised into three parts. Part one examines the basic concepts used in analysing the policy process and the political and institutional contexts of policy making. Part two discusses the major theoretical approaches to the study of policy making and policy implementation and assesses their strengths and limitations. Part three analyses the politics of policy making in Hong Kong and discusses the applicability of the concepts and theories in public policy studies to the real world. Selected policy issues will also be examined to illustrate the dynamics of the policy process in Hong Kong and other areas.

Assessment: 60% coursework, 40% examination

## POLI8009. Policy design and analysis (6 credits)

This course focuses on conceptual and analytical skills and techniques required for understanding, and suggesting solutions to, policy problems. It examines major components of public policy analysis – problem definition, policy design, and policy assessment. Assessment: 100% coursework

## SOWK6193. Social gerontology (6 credits)

This course provides a comprehensive, holistic view of ageing that considers the implications for an older person's interactions with their social and physical environments, including the immediate environment of family, friends, and home, as well as the larger social structure of community, organizations, and society. It also aims to impart knowledge to students about the most important social

theories on ageing and the time dimension in the ageing process and its relation to the evolution of larger society.

Assessment: 100% coursework

## SOWK6201. Mental health problems in old age (6 credits)

This course explores the types of mental illnesses among the elderly in Hong Kong. Attention will be put towards the understanding of the causes and treatments of mental illness in the elderly population. A critical review of medical, psychological and social services for the elderly with mental illness will be conducted.

Assessment: 100% coursework

## SOWK6259. Contemporary perspectives on death, dying and bereavement (6 credits)

Death is an inevitable life experience for everyone. Death-related problem is one of the commonest issues that clients brought to counseling, but is also rated as the most uncomfortable scenario by beginning counselors. This course offers a basic orientation to the knowledge and intervention approaches in working with death-related situations, including end of life care and bereavement counseling. Major theories and models related to death, dying and bereavement would be introduced. Corresponding clinical implications and practical work approaches would also be highlighted. Apart from the knowledge and skills, the course also emphasizes on personal exploration and review on one's attitudes toward life and death issues. It is hoped that students are better equipped with knowledge competence, practice competence as well as self competence in working with death, dying and bereavement.

Assessment: 100% coursework

## SOWK6292. Ageing and health (6 credits)

According to the WHO, health is a "complete state of physical, mental, and social well-being, and not merely the absence of disease or infirmity." As people age, they are increasingly facing challenges in their physical and mental health and in their social wellbeing. A better integrated health and social care system will help older people to better adjust to their aging processes and to minimize the negative impacts of aging to their wellbeing. This course is designed to help students from diverse academic backgrounds to understand the core values, conceptual models, intervention strategies, and service delivery systems of the integrated health and social care model. Building on the foundation values and knowledge of their own disciplines, students will learn how to effectively develop and implement a multi-disciplinary team in geriatric care settings.

Assessment: 100% coursework

# Capstone Experience Course (Compulsory)

## MPOP8001. Capstone project (12 credits)

This course aims to teach students how to integrate and apply the knowledge and skills they acquired through the programme. Students will articulate their research objectives, conduct a relevant literature review and develop indicative methodology. The course provides students with the opportunity to undertake a major piece of supported independent research. It is an opportunity to apply skills and techniques learned during the taught component of this programme to develop substantive original research of interest to the student. Projects will be supervised by academic staff affiliated with the Population and Policy Analysis programme.

Individual projects and research questions are chosen and formulated by students, and supported during the research process by one-to-one or small group meetings with a nominated member of academic staff, and student-led group meetings to seek peer support. The project may address a methodological or practical issue using desk-based research and secondary data sources or may involve primary data collection. It may also be carried out in conjunction with an external organisation (such as a local government, a charitable association or a commercial organisation) to address a relevant research or practical issue of interest to them (such as assessing potential impacts of policy changes) and make use of their data or other inputs. Regardless of the nature of the project itself, all projects must have a clearly defined aim and set of specific objectives that are novel or original and which relate to this programme of study. All projects should be written up as an academic piece of work, using the guidance provided during the module.

Assessment: 100% coursework