MODULE SPECIFICATION

Academic Year (student cohort covered by specification)	2021-22
Module Code	DEM205
Module Title	Analysing Survey and Population Data
Module Organiser(s)	Jim Todd and Malebogo Tlhajoane
Faculty	Faculty of Epidemiology & Population Health London School of Hygiene and Tropical Medicine http://www.lshtm.ac.uk/eph/
FHEQ Level	Level 7
Credit Value	**CATS** 15 **ECTS** 7.5
HECoS Code	101408 : 100473
Mode of Delivery	Distance Learning
Mode of Study	Directed self-study, through online materials via the Virtual Learning Environment
Language of Study	English
Pre-Requisites	**Those wishing to study this module must have already studied and passed DEM101 Introduction to Demographic Analysis and completed EPM102 Statistics for Epidemiology prior to studying this module.** Students taking this module are not permitted to register and study both this module and EPM304, due to overlap of the content.
Accreditation by Professional Statutory and Regulatory Body	Not currently accredited by any other body.
Module Cap (Maximum number of students)	There is no cap on the number of students who can register for this distance learning module.
Target Audience	*Analysing Survey & Population Data* is an elective module for all students on the DL PG Diploma/MSc Demography and Health programmes.
Module Description	This module covers advanced methods and techniques that are used for the analysis of Population data, and data from surveys. The module presents these methods in a way that students can use, practice and interpret real data, in order to develop the skills needed to analyse complex data.

Duration	Distance learning module studies begin in early October. Students may start their studies at any time once they gain access to Moodle and therefore the study materials, (made available annually usually in October, depending on date of registration) until completion of their assessment.
Last Revised (e.g. year changes approved)	May 2021

Programme(s) This module is linked to the following programme(s)	**Status**
PGCert/PGDip/MSc Demography & Health (University of London Worldwide)	Recommended

Module Aim and Intended Learning Outcomes

Overall aim of the module
The overall module aim is to: • introduce students to the analysis of large, population-based datasets, including cross-sectional and retrospective household surveys, panel and cohort studies, censuses, sample registration schemes and surveillance data.

Module Intended Learning Outcomes
Upon successful completion of the module a student will be able to: 1. Handle large datasets on a computer, and manipulate such data into the form required for different types of analysis 2. Conduct appropriate analyses of cross-sectional and longitudinal demographic data 3. Design and apply an analysis strategy using a variety of analytical approaches 4. Create a well-annotated and organized Stata .do file which would allow other researchers to understand and replicate your statistical analysis 5. Clearly interpret results and appreciate the use of complex analyses for demographic data 6. Clearly present statistical findings in a report.

Indicative Syllabus

Session Content
The module is expected to cover the following topics: • Session 1 Data sources and structures • Session 2 Cross tabulations, SVY commands: weights and clustering • Session 3: Bivariate analysis: logistic regression in cross-sectional data • Session 4: Generating statistics for sub-groups • Session 5: Monitoring status changes: repeated measures and missing data • Session 6 Multivariate analysis: logistic regression with longitudinal data

Session Content
• Session 7 Birth cohort lifetables: wide and long files • Session 8 Demographic surveillance: merging files on personal ID • Session 9 Adult period life tables: simple STS commands • Session 10 Hazard models: testing validity of assumptions • Session 11 Multivariate analysis for rates

Teaching and Learning

Notional Learning Hours

Type of Learning Time	Number of Hours	Expressed as Percentage (%)
Directed self-study	80	53
Self-directed learning	30	20
Assessment, review and revision	40	27
Total	**150**	**100**

Teaching and Learning Strategy
Learning is self-directed against a detailed set of learning objectives using the materials provided. The key learning methods are: • Reading and reflecting on the CAL (computer-assisted learning) materials which introduce, explain and apply the principles and methods covered in the module. • Reading and reflecting on provided materials which support the learning in the CAL sessions. This may include making use of the LSHTM online library resources. • Accessing academic support which is available from the module tutors through the web-based discussion forums and real-time sessions (using Collaborate Ultra) in which students are encouraged to participate. • Completing formative assignment(s) and reflecting on written feedback from module tutors.

Assessment

Assessment Strategy
The Formative Assignment (FA) allows students to practice their use of the statistical methods and to get feedback on how to improve the techniques. The Assessed Assignment (AA) builds on the FA using data from a real situation, requiring the practical analysis and interpretation of the result. The exam requires understanding and interpretation of analytic methods, with students demonstrating the skills in these techniques learned from this module.

Summative Assessment

Assessment Type	Assessment Length (i.e. Word Count, Length	Weighting (%)	Intended Module Learning Outcomes Tested

	of presentation in minutes)		
Assessed Assignment	One real life data set is provided with specific questions to guide the student through the analysis. The Assessed Assignment is designed to take around 4 hours. This task can be spread over time providing it is submitted before the deadline	30	1, 2, 3, 4, 5, 6

Students who registered for DEM205 prior to 2021-22:
The assessment method prior to 2021-22 comprised 70% unseen written examination and 30% assessed assignment. Where a student has previously registered on the module, but has not yet completed the assessment for these modules:

- A student registered for the module prior to 2021-22 who has not attempted any element of the assessment will be required to complete the assessed assignment only (100% of the module marks).
- A student registered for the module prior to 2021-22 who has completed one element of assessment but not the other (i.e. the unseen written examination or the assessed assignment) must still complete both elements of assessment.
- A student registered for the module prior to 2021-22 who has obtained a GPA of between 1.0 and 1.99 for the module overall, must resit the failed element(s) unless the overall module GPA is compensatable.
- A student registered for the module prior to 2021-22 who has previously obtained a GPA of less than 1.0 on the assessed assignment or the module overall, must resit the failed element(s).

Resitting assessment
Resits will accord with the LSHTM's Resits Policy

Resources

Indicative reading list
There are no specific books or reading linked to this module. Students need to be familiar with different statistical packages and have competencies in all the basic analysis for demographic data. Papers and background materials for the different data and surveys is provided, which are related to the tasks undertaken.

Other resources
The following materials will be provided to students after registration for this module when the online learning site, Moodle, opens in October:

- A brief guide to studying the module.
- The main learning materials (sessions listed above, provided on Moodle).
- A reading list including details of both required and optional reading and links to selected papers.
- A list of useful websites.

The School's Moodle site allows students to access a range of materials, including those listed above; participate in module-specific discussion forums and Collaborate sessions, and access the LSHTM online library resources.

Teaching for Disabilities and Learning Differences

The module-specific site on Moodle provides students with access to the module learning materials and online reading list (containing both essential and recommended readings), and additional resources including supplementary exercises and optional lecture recordings (where appropriate). All materials posted up on Moodle areas, including computer-based sessions, have been made accessible where possible. The LSHTM Moodle has been made accessible to the widest possible audience, using a VLE that allows for up to 300% zoom, permits navigation via keyboard and use of speech recognition software, and that allows listening through a screen reader. All students have access to "SensusAccess" software which allows conversion of files into alternative formats.

For students with special needs, reasonable adjustments and support can be arranged – details and how to request support can be found on the University of London Worldwide website at
https://london.ac.uk/applications/how-it-works/inclusive-practice-access-arrangements