MMPH6208 Measurement in Health (Term 1)

Coordinators: Dr M Ni

Course Description:
The majority of public health and clinical research involves surveying patients or the public and measuring aspects of health status. This course provides students to an introduction to survey research methods, including sampling approaches, the design of questionnaires, selection of data collection modalities, and evaluation of psychometric properties of measurement scales.

The course will also cover reliability and validity analyses of an existing health measurement instrument, and the process of developing an instrument where a suitable one does not already exist are considered. The utility of a number of screening tools, clinician rating scales and self-report health indicators among others are critically evaluated. The course project will also provide an opportunity to design and develop your own survey questionnaire.

Prerequisite: None

Term 1 (Wednesday) **Contact person: TBC**

Date	Time	Lecture Topic	Lecturer	Venue
16 Sept 2020	6:30 – 9:30 pm	1a. Introduction and study design 1b. Research paradigms (qualitative vs. quantitative; observational vs. experimental) & theory of data	Dr M Ni	Online
23 Sept 2020	6:30 – 9:30 pm	2a. Data collection methods 2b. Sources of error: in data collection (**how**), in **what** is studied, in **how** data are collected (concepts of bias, validity, reliability), in generalizing from study to population.	Dr M Ni	Online
07 Oct 2020	6:30 – 9:30 pm	3a. Survey modalities, Response rates 3b. Sampling methods	Dr M Ni	Online
14 Oct 2020	6:30 – 9:30 pm	4. Designing questions & response scales (1) – Phrasing clear questions	Dr M Ni	Online
21 Oct 2020	6:30 – 9:30 pm	5a. Designing questions & response scales (2) – Coding and data entry 5b. Overview of existing measurement scales & assessing their quality	Dr M Ni	Online
28 Oct 2020	6:30 – 9:30 pm	6. Class presentations and Discussion	Dr M Ni	Online
04 Nov 2020	6:30 – 9:30 pm	7. Techniques for assessing measurement validity	Dr M Ni	Online
11 Nov 2020	6:30 – 9:30 pm	8a. Reliability 8b. Introduction to item response theory	Dr M Ni	Online
18 Nov 2020	6:30 – 9:30 pm	9. Computer lab: Psychometric analyses of existing scales	Dr M Ni	Online
25 Nov 2020	6:30 – 9:30 pm	10a. Scaling methods 10b. Translation and adaptation of questionnaires	Dr M Ni	Online
09 Dec 2020	6:30 – 8:30 pm	Examination	-	Online

Course Assessment: Assignments: 60%
Examination: 40%

Recommended Textbooks: Recommended: Streiner DL, Norman GR. Health measurement scales: a practical guide to their devleopment and use. Oxford University Press, New York. Fourth edition, 2008

Optional resource: McDowell I. Measuring health: a gudie to rating scales and questionnaires. Oxford University Press, New York. Third edition, 2006.

Course Webpage: http://www.med.uottawa.ca/courses/CMED6203/