MMPH6188 Measuring the spatial built environment for public health

Coordinator: Dr Chinmoy Sarkar

Course Description:
Built environment, the communities they support and human health are intrinsically interlinked. This course will introduce the science and practice of Healthy Cities through a holistic overview of the linkages between urban built environment and public health and introduce objective GIS-based methodologies to spatially measure the built environment to study their impacts on health.

Prerequisite: none

Term 3 (Friday) **TA(s)/ Tutor(s): TBC**

Date	Time	Lecture Topic	Lecturer	Venue
03 May 2019	6:30 – 9:30 pm	1. Introduction	Dr Chinmoy Sarkar	KB205
17 May 2019	6:30 – 9:30 pm	2. Holistic models of disease causation – Proximate, intermediate, distal factors	Dr Chinmoy Sarkar	KB205
24 May 2019	6:30 – 9:30 pm	3. Scientific evidence linking built environment (BE) to health	Dr Chinmoy Sarkar	KB205
31 May 2019	6:30 – 9:30 pm	4. Introduction to health GIS	Dr Chinmoy Sarkar	KB205
14 Jun 2019	6:30 – 9:30 pm	5. Disease mapping and clustering	Dr Chinmoy Sarkar	KB205
21 Jun 2019	6:30 – 9:30 pm	6. Measuring spatial density-I	Dr Chinmoy Sarkar	KB205
28 Jun 2019	6:30 – 9:30 pm	7. Measuring spatial density-II	Dr Chinmoy Sarkar	KB205
05 July 2019	6:30 – 9:30 pm	8. Measuring spatial proximity	Dr Chinmoy Sarkar	KB205
12 July 2019	6:30 – 9:30 pm	9. Measuring green exposures	Dr Chinmoy Sarkar	KB205
19 July 2019	6:30 – 9:30 pm	10. Big data in spatial epidemiology (data types, sources, linkage, model typologies and challenges)	Dr Chinmoy Sarkar	KB205
26 July 2019	6:30 – 9:30 pm	Examination	-	KB205

Course Assessment:

20% Essay
30% Exam
40% Group assessment project
10% In-class interactions and discussion

Recommended Textbooks:

Barton, H. & Tsurou, C. 2000. Healthy urban planning: A WHO guide to planning for people, London, Spon Press.
Frank, L. D., Engelke, P. O., Schmid, T. L. 2003. Health and community design: The impact of the built environment on physical activity. Washington, Island Press.
Frunkin, H., Frank, L. D. & Jackson, R. 2004. The public health impacts of sprawl. Washington (DC), Island Press.
Gatrell, A., Loytonen, M. (1998) GIS and Health. Taylor & Francis, London.
Hall, P. 2002. Cities of Tomorrow: An Intellectual History of Urban Planning and Design in the Twentieth Century. Wiley-Blackwell.
Rydin Y, Bleahu A, Davies M, et al. Shaping cities for health: complexity and the planning of urban environments in the 21st century. The Lancet. 2012; 379(9831):2079-2108.
Sarkar C, Webster C, Gallacher J. Healthy Cities: Public Health through Urban Planning. Cheltenham, UK: Edward Elgar Publishing; 2014.
WHO (2017) Urban green space interventions and health: A review of impacts and effectiveness. Full report. http://www.euro.who.int/en/health-topics/environment-and-health/urban-health/publications/2017/urban-green-space-interventions-and-health-a-review-of-impacts-and-effectiveness.-full-report-2017.

KB205: Room KB205, 2/F, Knowles Building, Pokfulam, HK.