

<b>Course Title/Code:</b>	<b>Environmental and Occupational Epidemiology (MMPH6190)</b>
<b>Department:</b>	Community Medicine
<b>Objective:</b>	<p>The primary objective is to provide the students with a comprehensive overview of environmental and occupational epidemiology (EOE).</p> <ol style="list-style-type: none"> <li>1. The students will learn the basic principles, strengths and limitations of various study designs and risk measures used in EOE, illustrated by published studies.</li> <li>2. After completing the course, the students will be able to design EOE investigations, perform data analysis, interpret results and prepare study reports.</li> <li>3. The students will be able to read and evaluate published papers critically.</li> <li>4. The course will prepare students to function effectively as EOE investigators.</li> </ol>
<b>Content:</b>	<ol style="list-style-type: none"> <li>1. Introduction: historical development and landmark studies of EOE.</li> <li>2. Study designs commonly used in EOE (ecological studies, cross-sectional surveys, population-based and nested case-control studies, and historical and prospective cohort studies).</li> <li>3. Data sources and data collection (surveillance programs, registries, data linkage, follow-up, interviews and questionnaires).</li> <li>4. Assessment and adjustment of biases or confounding factors.</li> <li>5. Exposure assessment, surrogate measures and exposure indices.</li> <li>6. Analytical techniques (stratified analysis, multivariate models, exposure-response, trend analysis), risk measures (RR, OR, SMR, PMR, PCMR, MOR), and statistical power analysis.</li> <li>7. Critical appraisals of published studies of environmental/occupational hazards.</li> </ol> <p>The course consists of lectures supplemented with directed in-class discussions of selected examples of EOE investigations.</p>
<b>Prerequisite:</b>	MMPH6002 –Introduction to Biostatistics (or equivalent)
<b>Duration:</b>	1 semester; 24 contact hours
<b>Coursework Examination ratio:</b>	50% Course Work 50% Examination
<b>Remarks:</b>	Also offered to RPg from other Faculties at HKU. Prior approval from the Department of Community Medicine must be sought for enrolment.