

Course Title/Code:	Research Methodologies in Obstetrics and Gynaecology (MMPH6186)
Department:	Obstetrics and Gynaecology
Objective:	To provide students with a basic understanding of the various methodologies used with emphasis on those involved in researches on obstetrics and gynaecology.
Content:	<p>General research methodologies: protein and mRNA analysis, cell culture, genomics, proteomics, flowcytometry and clinical trial.</p> <p>Specialized research methodologies for oncology research: Identification of cancer markers, cancer cytogenetics, mutation and SNP, in vitro and in vivo models, epigenetic analysis</p> <p>Specialized research methodologies for reproduction research: Transgenesis, embryology (embryo culture, micromanipulation and surgical techniques), andrology (semen analysis and sperm function tests), glycomics, Stem cells (isolation, derivation and culture of embryonic and endometrial stem cells).</p>
Learning outcomes:	<p>On completion of the course, the students are expected to</p> <ul style="list-style-type: none"> • describe the methodologies used in obstetrics and gynaecological research • explain the principles of the described methodologies • select the appropriate methods for use in research on gynaecological oncology reproduction
Prerequisite:	None
Duration:	1 Semester; 2 hours/week, 24 contact hours
Coursework / Examination ratio:	One essay of 1500 words on a designated topic (40%)
Examination method and duration:	Written examination / 3 hours (60%)