Course Title/Code:	**Laboratory Animal Handling and Surgical Techniques (MMPH6138)**

Department: Surgery

Objective:

- To introduce the various approaches in the generation and applications of various animal models for medical research
- To introduce the safety/ethics legislation in the use of animal for medical research
- To introduce surgical techniques for small and big animals

Content:

- Animal models for human diseases
- Animal surgical techniques: Demonstration of laparoscopic surgery
- Audio-visual instruction on animal handling techniques
- Cancer models
- Common laboratory animal species in the Laboratory Animal Unit
- Drug/radiation induced animal disease models
- Ethics in using laboratory animals
- Genetically modified (GM) animal disease models
- Transplantation immunology
- Transplantation models
- University & Government regulations governing the use of animals for experimental purposes

Learning outcomes: On completion of the course, students are expected to:

- grasp basic knowledge in the generation of various animal models.
- understand the application of various animal models in different medical research.
- understand the safety, ethical regulation and legislation in the use of animals for medical research.
- gain practical experience in the handling of small rodent.

Prerequisite: Students are expected to have hand-on experience on small animal handlings and surgical procedures in practical sessions. Those with allergy to animals are NOT advised for enrolment

Duration: 24 contact hours

Continuous assessment/ examination ratio: Final examination (100%)

Class size: Maximum 15 MPhil/PhD/MRes(Med) students