Course Title/Code: Basic and Applied Toxicology (MMPH6129)

**Department:** Pharmacology and Pharmacy

**Objective:** To equip students with an in-depth understanding of the basic principles of

toxicological science and to enable them to apply this knowledge appropriately and effectively in determining and evaluating potential

health hazards and risks.

**Content:** Topics include:

principles of toxicologymechanisms of toxicity

toxicokinetics

- chemical carcinogenesis, genetic and developmental toxicology and target organ toxicities

- occupational and environmental toxicants

- risk assessment and toxicogenomics

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

• illustrate the fundamental toxicological principles

• evaluate methodologies in toxicological testing

• explain molecular mechanisms of chemically induced toxicities

• assess the social benefits/risks of the consequence of human exposure to

toxicants

**Prerequisite:** Students with biological background preferred

**Duration:** 1 semester; 2.5 hours/week; 24 contact hours

Continuous assessment/ examination ratio:

30% / 70%

Examination method/duration:

Written examination / 3 hours