Course Title/Code: Current Therapeutic Strategies for Metabolic Diseases (MMPH6205)

Department: Medicine

Objective: Due to sedentary lifestyle and over-nutrition, obesity is reaching epidemic

proportions worldwide and has become a major public healthcare burden. Obesity is a major risk factor for a cluster of chronic diseases, including type 2 diabetes, dyslipidemia, hypertension, cardiovascular disease, neurodegenerative diseases and cancers. This course provides a comprehensive and in-depth overview on the links between metabolic abnormalities and major chronic diseases, and discusses the current and future therapeutic strategies, and challenges and opportunities in drug

discovery for major metabolic diseases.

Content: Topics include:

(1) Current drugs for obesity, diabetes, diabetic complications and lipid

disorders;

(2) Functional food, nutraceuticals and traditional herbals for treatment of

metabolic disorders;

(3) Life style modifications (calorie restriction and exercise) in the

prevention of metabolic disorders;

(4) Drug discovery for metabolic disease: from bench to bed.

Learning Outcomes:

On completion of the module, the students are expected to:

• Explain how altered energy homeostasis causes obesity, diabetes and

diabetic complication

• Appreciate the molecular links between obesity and major human

diseases

• Recognize the importance of life style modifications in the prevention

of metabolic diseases

• Develop skills and critical thinking for metabolic-related basic and

clinical research

Prerequisite: None

Duration: 2 hours/week; 24 contact hours

Continuous assessment/ examination ratio:

60% / 40%

Examination method/

Written examination / 2 hours

duration: