

UNIVERSITI TEKNOLOGI MARA

**THE INCORPORATION OF COMPUTER-AIDED
LEARNING(CAL) MATERIAL FOR MEDICINAL CHEMISTRY
TEACHING IN PERIPHERAL NERVOUS SYSTEM COURSES**

(PHC 452)

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ABSTRACT

In pharmacy education, Medicinal Chemistry is unique subject, vital knowledge and critical-thinking skill which make pharmacist as chemical expert among health care provider. Since the Medicinal Chemistry focusing on drug molecules and its therapeutic application in clinical, it is important for student to visualize as three-dimension objects. However, lecture based learning or tradition teaching method unable student to visualized drug molecular and offer better understanding. Thus, increase burden to educator to finds other teaching method to deliver Medicinal Chemistry more efficient and attractive.

From the result, 88.61% of respondents think CAL can help understanding each chapter in Medicinal Chemistry and 89.7% of respondents stated that incorporation of CAL material with lecture-based will help student batter understanding.

The incorporation of computer-aided learning in teaching medicinal chemistry provide alternative teaching method and adjunct to lecture which is important tool to increase student understanding in medicinal chemistry.

CHAPTER 1

INTRODUCTION

1.0 Course information

Medicinal Chemistry is a one knowledge discipline that is necessary for students in series of pharmacotherapeutic courses such as Peripheral Nervous System and Pharmacotherapeutic (PHC 452) in Bachelor Of Pharmacy (PH 210) program at Universiti Teknologi MARA (UiTM). This three credit course consisting Medicinal Chemistry scope which contain drug molecules and therapeutic application. The objective of this study is to develop Computer Aided Learning (CAL) material that can be incorporated with Lecture Based Learning (LBL) which could help pharmacy students in understanding the basic chemical concept of drugs, its molecular structure, Structure Activity Relationship (SAR), structure derivative component and mechanism of action (MOA) of each drug that have been teaching in Medicinal Chemistry of Peripheral Nervous System (PHC 452).

1.1 Background of study

Medicinal Chemistry is one of important discipline in pharmaceutical sciences, it is concerning on the discovery, development, identification, the