**Department:** Faculty of Chinese Medicine

Course Name Modern Biotechnology

Hours per week 3

**Number of Credits** 3

**Course Description** 

This course aims to deliver the theories and practical skills of modern biotechnology to graduated students. The course will be divided into basic and advance levels. For basic topics, students will acquire basic modern biotechnology concepts and experimental protocols, including the techniques of nucleotide and protein isolation and separation, biosynthesis & functions of macromolecules and protein trafficking, and Polymerase Chain Reaction (PCR), cloning and sequencing techniques. For advance topics, students would acquire knowledge of advanced levels biotechnology techniques for conducting future research projects, including functional genomics, imaging techniques, animal models and stem cell application.