要求學生初步掌握科研思路、設計和方法,熟悉應用各種所需的 儀器設備,開展實驗工作;在實習老師的指導下,能運用本實習 的基礎理論、基本技能和所學的知識,借助查閱各種文獻,設計 出實驗研究方案;並能對所得結果進行歸納、分析、比較,對實 研結果作出客觀的評價,寫出實習報告。

This Honours Project will focus on the following 4 research fields: (1) Identification of crude drugs and Chinese Patent drugs; taxonomy of medicinal plants; (2) Natural products chemistry and quality assessment of Chinese Materia Medica; (3) Research and development of new products from Chinese medicines; Pharmaceutics of Chinese Medicines; (4) Pharmacology and toxicology of Chinese medicines; and (5) Intellectual property and administration of proprietary Chinese medicines.

Under the supervision of a teaching staff (Principal Supervisor or Co-supervisor) of the School of Chinese Medicine, each final year student will carry out an independent research topic belonging to one of the above fields. During the period of the Honours Project, the students will conduct literature searching and review, lab procedure design, experimental operation and handling, data analysis and interpretation, and summarization of the research results. At the end of the projects, the students are required to deliver an oral presentation and write a thesis.

## PCM 3620 藥事管理學 (3,3,0) (P) Management of Pharmaceutical Affairs

學習藥事組織、內地及香港的藥事法、藥品質量管理、藥學經 濟、藥品生產經營企業管理、藥房管理、藥學實踐中的行為科 學、藥學情報評價和管理等內容,藉此指導學生認識中藥藥事管 理的運行及其規則。

This course aims to provide students with the knowledge of management and operation of pharmaceutical affairs through the study of basic concepts in the management of pharmaceutical affairs, the legislation of drug administration in Hong Kong and the Mainland of China, the management of drug identifiers and drug advertisement, the management of drug distribution, international drug administration policies, the management of pharmacist, pharmacy, pharmaceutical products, special control drugs and Chinese medicine in Hong Kong, and pharmaceutical industry in Hong Kong. This course will teach students to analyze and distinguish various pharmaceutical phenomena and problems through social investigation.

## PCMD 1016 藥用植物學實驗 (1,0,3) Medicinal Botany Laboratory

學習藥用動植物形態學、解剖學和分類學以及藥用植物資源調查 等內容。此課程為生藥學課程奠定基礎,指導學生正確識別藥用 基源。

This course aims to (1) teach students the theory and knowledge of Medicinal Botany; (2) identify different types of plant organs; and (3) train students' skills for the basic microscopic observation and master anatomical techniques about cells/ tissues/ organs of plants.

#### **PCMD 1025 Supervised Practicum I** (1,\*,\*) 為配合課堂的學習及加強學生對藥用植物學的認識,於第一學 年的暑假將安排為期兩周的實習。學生會被安排到不同的藥園, 進行對藥用植物的辨認及記錄。

The 15 weeks subject is divided in three parts: Supervised Practicum I (PCMD1025: 2 weeks); Supervised Practicum II (PCMD4005: 12 weeks); Supervised Practicum III (PCMD4025: 4 site visits). Supervised Practicum I will be carried out in the summer after the first academic year, Supervised Practicum II in the summer after the third academic year, and Supervised Practicum III in the fourth academic year. It aims to have the students, under tutorial guidance, review and practice the knowledge obtained from the precious studies, and further establish professional skills for future work. The subject covers the knowledge of pharmaceutical botany, authentication and processing of Chinese materia medica, and quality control

and assurance of pharmaceutics of Chinese materia medica. The practicum will be conducted in the formats of hands-on work and site visits. It will be arranged at a botanical garden, pharmaceutical companies, hospitals and clinics of Chinese medicines, and institutions of Chinese medicines. This subject is an important social practice for the students before working in their position; it is also an important part in training of Chinese medicines professionals. The subject provides training for the students in their logical thinking, working independence and scientific research ability.

# PCMD 1026 Medicinal Botany I (2,2,0) (P)

This course aims to (1) teach students the theory and knowledge of Medicinal Botany; (2) introduce students the basic macroscopic and microscopic observation theory; and (3) anatomical structures about cells/ tissues/ organs of plants.

## PCMD 1027 Medicinal Botany II (2,2,0) (P)

This course aims to (1) teach students the theory and knowledge of Medicinal Botany; (2) introduce the classical botanical classifications; and (3) get familiar with main characteristics of 42 families and their commonly found Chinese medicinal herbs.

PCMD1035Pharmaceutical Latin(2,2,0) (P)Latin is a tool language used for academic terminology in<br/>medicine and biology. Setup of this course aims in helping the<br/>students with Chinese medicine specialty to control the basic<br/>pronunciation and phrasing of Latin, the rules of nomenclature<br/>in medicaments, plants, animals, crude drugs and the structure of<br/>the prescription etc.

**PCMD 1036** Chemistry for Pharmaceutical Sciences (4,4,0) This course aims to strengthen the knowledge of basic chemistry learned from the first semester, and further extend the chemistry knowledge to life science chemistry so as to build up a foundation of chemistry especially organic chemistry principles relevant to the study of some subjects in pharmaceutical and biomedical sciences.

#### PCMD 1037 Chemistry for Pharmaceutical Sciences (1,0,3) Laboratory

This course aims to provide selected experiments on organic chemistry which is relevant to pharmaceutical and biomedical studies and to illustrate organic chemistry laboratory techniques. It also aims to provide clear illustrations of the chemical principles of organic reactions discussed in the lecture subject.

## PCMD 2005 方劑學

(3,3,0) (P)

(4,4,0) (P)

**Chinese Medicinal Formulae** Chinese Medicinal Formula is one of the basic courses in Chinese medicine studies. It offers knowledge about treatments, formula combinations and clinical applications. The course builds on foundation courses including Chinese medicine theories and Chinese medicine studies to further elaborate on the relation between treatment and formulas. Medicine types and dosages are chosen according to combination principles to create an appropriate and effective formula. The aim of this course is to offer students understanding of the characteristics of Chinese medicine therapeutics, to understand the relation between treatment and formula, recognize the distinction and linkage between medicine and formula, comprehend the significance of sovereign, minister, assistant and courier in formula creation, and to grasp the use of formula through actual combination practices. It aims to provide a solid foundation for students to proceed to various clinical subjects. As a professional pharmacy course in Chinese medicine, this course also provides information relevant to profession developments including dosages and preparation forms.

#### PCMD 2006 中藥化學 Phytochemistry

先修科目: CHEM 1006 Chemistry for Life Sciences 學習中草藥中各類化學成分的概念、化學結構、理化性質、生物 合成以及它們的提取、分離和結構解析的基本理論和方法。 Prerequisite: CHEM 1006 Chemistry for Life Sciences

Teaching of this subject will be undertaken on the basis of medicinal botany, biochemistry and organic chemistry along with the teaching biological activities of the chemical components of CMM and resource utilization. Students are required to grasp the basic theories and skills for studying the chemical types, physicochemical properties, extraction, isolation and analysis of the active components of CMM; to understand the systematic detection of single herb and the methods for structural identification of the active components. These will lay foundation for CMM formulation, quality control and new drug development.

# PCMD 2007 中藥化學實驗 (1,0,3) Phytochemistry—Laboratory #修科目: PCMD 2006 中藥化學

指導學生對中藥有效成分進行提取、分離、檢識,為從事中藥劑 型改革、質量控制和研究新藥等奠定必要的基礎。實驗內容主要 包括中藥有效成分的提取、分離、檢識。

Co-requisite: PCMD 2006 Phytochemistry

Teaching of this subject will be undertaken on the basis of medicinal botany, biochemistry and organic chemistry along with the teaching biological activities of the chemical components of CMM and resource utilization. Students are required to grasp the basic theories and skills for studying the chemical types, physicochemical properties, extraction, isolation and analysis of the active components of CMM; to understand the systematic detection of single herb and the methods for structural identification of the active components. These will lay foundation for CMM formulation, quality control and new drug development.

#### PCMD 2036 中藥市場與國際貿易 (3,3,0) (P) Marketing of Chinese Medicines and Legal Aspects of International Business

本科目旨在使學生了解中藥市場與國際貿易常識,以利在未來參 與香港中藥貿易方面發揮作用。有關國際投資常識、有關政策、 進出口法規、知識產權等在此科目中將予以介紹。

The course will provide students with an understanding of the market of Chinese medicines in the Chinese Mainland, and therefore they can contribute in the international trade of Chinese medicine in Hong Kong in future. The knowledge of regulations of international investment, inward and outward foreign investment, import and export law and intellectual property etc. will be introduced in this subject.

## PCMD 2037 中藥資源學 (3,3,0) (P) Resources of Chinese Medicinal Plants

本課程的開設旨在使中藥專業的學生掌握我國中藥資源的分佈 概況、道地藥材資源以及相關的中藥材規範化生產、中藥資源的 開發利用、中藥資源的保護與可持續發展、中藥資源的調查研究 方法等方面的專業知識。

The setup of this course aims at helping students with Chinese medicine specialty to study and control the distribution of traditional Chinese herbs, geo-herbal drugs and knowledge about Good Agriculture Practice (GAP), available exploitation and utilization of Chinese Medicinal Materials (CMM) resources, protection and sustainable utilization of CMM resources, etc.

#### PCMD 3005 中醫臨床導論 (3,3,0) (P) Introduction to Chinese Medicine Practice

This subject aims to introduce to students the basic philosophy and fundamental knowledge in clinical practice of traditional Chinese medicine (TCM). On completion of this subject, students would be able to: (1) Learn the knowledge of principles and methods of CM therapy in clinical practice; (2) Understand the principles and methods of diagnosis and treatment based on the theories of differentiation of symptoms and signs; (3) Master the knowledge of therapeutics common diseases including internal medicine, dermatology and pediatrics of CM.

## PCMD 3006 藥理學與毒理學 (4,4,0) Pharmacology and Toxicology

介紹藥物作用原理與概念以及臨床用藥的科學根據,培養學生正確合理的用藥方法的原則,並介紹中藥、西藥的不同範疇,讓學

## 生了解並掌握中藥、西藥相互作用的利弊。

This course aims to provide students with fundamental knowledge on the use of xenobiotics as orthodox Western drugs in the treatment of human diseases or as toxic agents to cause systemic disorders. In the beginning of the course, the important principles of pharmacology and toxicology will be introduced. This is followed by a series of topics on the therapeutic approach in tackling various body dysfunctions of the biological systems and in pratical chemotherapy. Students have the opportunity to participate in group presentation on approved topics relevant to pharmacology and toxicology. By the end of the course, students are expected to acquire essential knowledge on the classes and clinical uses of different conventional drugs currently used in Hong Kong plus a general idea about toxicology.

#### PCMD 3007 中藥藥劑學 (5,5,0) (P) Pharmaceutics in Chinese Materia Medica

先修科目: CMED 2006 中藥學及 PCMD 2006 中藥化學 學習中藥藥劑的基本理論和知識,訓練中藥藥劑的基本技能,介 紹現代製藥工程學中的有關內容。

Prerequisite: CMED 2006 Chinese Materia Medica and PCMD 2006 Phytochemistry

This course aims to (1) teach students for the theory and be aware of ledge of pharmaceutics of Chinese Materia Medica, (2) train students for the basic pharmaceutical techniques in Chinese Materia Medica, and (3) introduce the modern technology of pharmaceutical engineering.

## PCMD 3015 中藥藥劑學實驗 (1,0,3) Pharmaceutics in Chinese Materia Medica—Laboratory

兼修科目: PCMD 3007 中藥藥劑學 中藥藥劑學實驗課旨在提供中藥藥劑的製備與相關的實驗技能 的培訓。實驗內容主要包括中藥各種劑型的製備及其質量檢查、 藥劑的穩定性試驗、藥物溶出度的測定。

Co-requisite: PCMD 3007 Pharmaceutics of Chinese Materia Medica

It provides the training in preparation of different dosage forms of Chinese medicines and the quality control, testing of stability, and determination of dissolution of drugs.

## PCMD 3016 中藥鑑定學 (4,4,0) (P) Authentication of Chinese Materia Medica

學習常用生藥的歷史、基源、原植(動)物形態、採製、產銷、 活性成分、鑑定特徵、品質標誌、藥理作用和功效等內容。

To study the history, origin, morphology, collection, processing, production and marketing, active principles, characteristics for identification, quality, pharmacological action and efficiency of common crude drugs. Students will learn the skills to discriminate genuine and quality of crude drugs, thus to ensure clinical safety and efficiency.

#### PCMD 3017 中藥鑑定學實驗 (1,0,3) Authentication of Chinese Materia Medica—Laboratory

中藥鑑定實驗課旨在提供鑑定中藥真偽優劣的實驗培訓,培養學 生基源鑑定、性狀鑑定、顯微鑑定、理化鑑定的技能,從事相關 的實驗。實驗內容主要包括中藥標本及有關原植物標本的觀察、 顯微鑑定及理化鑑定。

To provide the training of identification of discrimination of Chinese Materia Medica between genuine and counterfeit, good and bad qualities through experiments from the aspects of source, morphology, microscopy and by means of physical and chemical authentication. It includes the observation of specimens of Chinese Materia Medica and their original plant sources, identification through microscopy and by means of physics and chemistry.

### PCMD 3025 生物藥劑學 (3,3,0) (P) Biopharmaceutics

指導學生學習藥物在體內的吸收、分佈、代謝、排泄等規律及其與其劑型的關係、藥物相互作用及藥物代謝動力學原理,以研究