MCM 7120 Clinical Practice—Studies and Applications of Internal Chinese Medicine (5,*,0)

This course enables students to gain practical experience in treating miscellaneous diseases of internal Chinese medicine. Through clinical observation and practice, students will be able to master the pattern of differentiation of syndromes of diagnosis of common diseases, frequently encountered diseases and rare diseases, and hence apply the knowledge learnt in their clinical practice.

MCM 7130 Clinical Acupuncture—Advanced Level (4,3,0) (P)

This course is built upon traditional acupuncture theory, as well as prior knowledge of acupuncture mechanisms and modern diagnostic techniques. It aims to enhance the ability of students in the areas of diagnosis, symptom differentiation and treatment in dealing with conditions commonly seen in acupuncture practice. Specific emphasis will be put on case study and clinical studies of the documentations, so that the strengths and weaknesses of various acupuncture treatment methods can be compared. On completion of this course, students will be able to (1) apply different methods of acupuncture treatment for symptoms of common conditions, and (2) demonstrate a systematical knowledge of the recent advances in acupuncture therapy.

MCM 7140 Physiological Basis and Experimental Studies of Acupuncture and Moxibustion (4,3,0) (P)

On completion of this course, students are expected to be able to demonstrate (1) knowledge of physiological systems related to acupuncture and moxibustion therapies, especially the process of pain sensation, somatoautonomic reflexes, and neuro-endocrine regulation of physiological functions; (2) the ability to explain the therapeutic effects of acupuncture and moxibustion in terms of their influence on the human physiological systems; and (3) knowledge of current research concerning the mechanisms of acupuncture and moxibustion.

MCM 7150 Clincial Practice—Studies and Applications of Acupuncture (5,*,0)

Through the practicum training, students will be able to enhance their ability in applying skills of diagnosis, symptom differentiation and treatment in an organized way for handling diseases commonly treated by acupuncture. After finishing the course, students will be able to determine the treatment of pathogenesis obtained through differentiation of symptoms and treat common diseases skilfully by various methods of acupuncture. At the same time, students will also understand the development and obtain experience of clinical treatment of modern acupuncture.

MCM 7160 Tui Na Therapy of Chinese Medicine (4,3,0) (P)

With instruction and demonstration of Tui Na, students will be able to comprehend the basic theories of Tui Na, and the occurrence and programme of diseases. Students are also expected to master the treatment techniques and functions of Tui Na, as well as treatment methods for various kinds of diseases.

MCM 7170 Orthopaedics and Traumatology Therapy of Chinese Medicine (4,3,0) (P)

With the instruction and demonstration of the basic theories and treatment methods, students will be able to comprehend the etiology, pathogenesis, and the pattern of symptom differentiation of the diseases. Students are also expected to have a thorough mastery of the traditional treatment methods and maneuver principles of Chinese medicine to the diseases. The course covers bone fractures, tendon dislocations and bone diseases.

MCM 7180 Clinical Practice—Studies and Applications of Orthopaedics and Traumatology and Tui Na (5,*,0)

The course provides training opportunities to students in treating diseases and injuries of bone, joints and muscles by applying Chinese medicine theories and clinical skills. Through observation and practice, students will master the pattern of symptom differentiation of common and rare diseases, as well as the maneuvers of Tui Na and bone treatment. Students are expected to apply the knowledge in clinical practice.

MCM 7260 Dissertation (6,*,*)

The aims of this course are (1) to identify an appropriate research or creative topic; (2) to develop and apply methodologies and techniques appropriate to the topic chosen; and (3) to present the results of the research or creative work in the dissertation, which may be a portfolio of compositions.

MCM 7280 Marketing and Management for the Pharmaceutical Industry (2,0,0) (P)

This course is designed to provide students with the essential marketing and management knowledge and skills for the pharmaceutical industry. It examines the principles of marketing and management, with emphasis on marketing concept and consumer behaviour, marketing mix management, marketing planning, strategic planning and development of business plans. It adopts a case study approach to relate students with the real world situation.

MFFM 7010 Topics in Probability Theory and Stochastic Processes (3,3,0) (E)

Topics from conditional expectations, Markov china, Markov processes, Brownian motion, and martingales, and their applications to stochastic calculus.

MFFM 7020 Derivatives I (3,3,0) (E)

An introduction to the theory and practice of pricing and hedging of derivative securities. Coverage of equity and index, foreign currency, commodity, and interest-rate derivatives. Basic mathematical concepts and the institutional structure of derivative markets are discussed.

MFFM 7030 Computational Finance (3,3,0) (E)

Basic numerical methods, (floating-point arithmetic, numerical linear algebra, solutions of non-linear equations, interpolation, curve fitting, splines, differentiation, integration, Monte-Carlo methods, ordinary differential equations) numerical solutions of PDEs (finite-difference methods for parabolic PDEs, stability, convergence, applications to Black-Scholes equations, free-boundary problems, applications to pricing American options) and probabilistic methods (random variables, generation, Monte-Carlo simulation, binomial tree models, stochastic differential equations).

MFFM 7040 Time Series Analysis (3,3,0) (E)

Covers various kinds of time series models, including ARIMA, GARCH, unit roots and co-integration, and vector autoregressive models. Students will gain hands-on experience with all models learned in this course.

MFFM 7050 Mathematical Finance (3,3,0) (E)

Topics from replication of trading strategies, arbitrage, completeness, martingale representation theorem, fundamental theorem of finance, stochastic differential equations, and Black-Scholes formula of option pricing.

MFFM 7060 Derivatives II (3,3,0)

Coverage of exotic options, discrete and continuous pricing models, and pricing techniques. Develops the economic foundations of the theory of derivatives and a mathematical toolkit to analyse standard instruments and "dissect" exotic ones.

MFFM 7070 Data Management and Simulation (3,3,0)

Statistical concepts and simulation methods are introduced. Use statistics and simulation software as a computational aid to carry out the computation. The students will learn how to organize