

**UNIVERSITY OF SANTO TOMAS**  
**GRADUATE SCHOOL**  
**Center for Continuing Professional Education**  
**and Development**  
*in collaboration with the*  
**FACULTY OF PHARMACY**

**UST CERTIFICATE COURSE IN PHARMACOTHERAPY**

***Tentative Dates: April 01 – June 10, 2017***

Every Saturday / 8:00am – 5:00pm

***Venue:*** Thomas Aquinas Research Complex

***Rationale:***

The **UST CERTIFICATE COURSE IN PHARMACOTHERAPY (CCPh)** is a key initiative of the UST Graduate School - Center for Continuing Professional Education & Development (CCPED), and the UST Faculty of Pharmacy intended to provide continuing professional education to pharmacists.

Pharmacotherapy is that area of pharmacy practice that ensures the safe, appropriate, and economical use of medications. To function in this capacity requires specialized education and training in the clinical sciences.

The **Certified Pharmacist (CPh)** possesses unique professional knowledge and skills gained through advanced training in the biomedical, pharmaceutical, and clinical sciences, as well as through practice experiences. The CPh is skilled in the use of sound judgment in the collection, interpretation, and application of patient-specific data that are used to assist with the design, implementation, and monitoring of therapeutic regimens. Their knowledge and skills may be acquired through primary academic curricula, postgraduate residency or fellowship training, or innovative and extensive pharmacy practice experiences.

The skills of the CPh, when applied across the entire continuum of the health care system, benefit individual patients, health care organizations, and society in general. The CPh is recognized by the pharmacy, medical, allied health professions, and by society in general as an expert in the area of applied pharmaco-therapeutics and as an integral member of the health care team. Regardless of whether he/she practices in acute or ambulatory care, the CPh meets the guidelines outlined in this document by the routine performance of the activities described in the assessment of factors as part of daily pharmacy practice responsibilities.

The CPh Course is a 72-hour certificate program that focuses on the link of advanced pharmacological knowledge with the current treatment guidelines or protocols. The course includes pharmaco-therapeutic applications of drug kinetics in disease states. The course modules' emphases are on therapy of the most common diseases in neuro-psychiatry, cardiovascular, endocrinology & metabolism, immunology, gastroenterology, oncology, respiratory & infectious diseases including pain management, clinical pharmacokinetics and critical care including pharmacotherapy of special populations (elderly, children, and patients with liver and renal failure). This course shall focus as well in enhancing pharmaceutical leadership in the management of a Clinical Pharmacy Service.

The certificate program includes 8 course modules on principles and hands-on work experience on pharmaco-therapeutic practices. It is competency and outcome-based and will incorporate team-based focused group discussions, classroom instructions with laboratory or field experience. Participants in groups at the onset shall propose a feasible clinical pharmacy service model which they will defend at the end of the course.

Examination is given at the end of each course module. Upon completion of the 8 course modules, an online comprehensive examination is also given to complete the certificate program.

Upon completion of the certificate program and upon enrollment to a major subject related to the course in the Master of Science in Pharmacy program of the UST Graduate School, the participant may earn 3 cognate units.

***Course Objectives:***

At the end of the course, the participants will be able to:

- Develop knowledge on the principles of pharmacotherapy as applied in disease states.
- Apply the principles and practices in implementing therapeutic plans in collaboration with other health care professionals.
- Acquire the training and competency to practice as a specialist in pharmacotherapy.
- Develop leadership in Clinical Pharmacy Practice.
- Propose a Clinical Pharmacy Service on areas of interest and institutional need.

***Program Curriculum & Schedule:***

Classes are conducted once a week, every Saturday from 8:00am to 5:00pm. The entire certificate program will be 10 sessions (including the review and comprehensive examination). Activities are administered by session faculty lecturers and faculty preceptors (APEPS) facilitating experiential learning at the practice site.

**Course Module 1**

**1-a. Principles of Pharmacotherapy and Evidence-Based Medicine**

**1-b. Clinical Pharmacy Leadership and Documentation**

**1-c. Patient Medication Assessment & Clinical Pharmacokinetics**

***April 01, 2017***

At the end of this 8-hour course participants will become familiar with the overview of pharmacotherapy and science-based medicine. Participants will review Applied Bio-pharmaceutics and apply the principles of Clinical Pharmacokinetics in therapeutics. Pharmacokinetics of special populations shall be emphasized.

**Course Module 2 – Gastro-Intestinal Pharmacotherapy**

***April 08, 2017***

After participation in this 8-hour course participants will gain knowledge and understanding on the patho-physiology and pharmacotherapy of the following GI diseases: Diarrhea, constipation, acid related diseases, inflammatory bowel diseases, liver failure, pancreatic and biliary diseases.

**Course Module 3 – Pharmacotherapy of Oncologic Diseases**

***April 22, 2017***

Upon completion of this module participants will be able to comprehend the current treatment guidelines and protocols for common cancers of the breast, colon, lung, the leukemias and ovarian cancer. Emphasis of discussions is on the neo-adjuvant approaches to treatment as well as prevention and monitoring of side effects of cancer chemotherapy.

**Course Module 4 – Pain Management**

***April 29, 2017***

At the end of this 8-hour module the participants will be able to define the goals for pain management in a patient with chronic non-malignant pain, and will acquire competence in the development of pain management plan.

**Course Module 5 – Pharmacotherapy of Infectious Diseases**

***May 06, 2017***

Upon completion of this 8-hour module the participants will be introduced to the treatment and management of infectious diseases. The focus will be on common infections seen in community and hospital settings, principles of microbiology and infectious diseases, antimicrobial use, and antimicrobial stewardship.

**Course Module 6 - Pharmacotherapy of Cardiovascular Diseases and Critical Care**  
**May 13, 2017**

After active participation in this 8-hour course the participants will be able to identify and comprehend the factors and risks, pathogenesis and symptomatology of hypertension, ischemic heart disease, cardiac arrhythmias and heart failure; and develop competence in instituting a plan for its pharmacotherapy including thrombolysis and anticoagulation based on current landmark treatment guidelines. Management of critically ill patients and the specific role of the pharmacist shall be emphasized.

**Course Module 7 - Pharmacotherapy of Endocrinologic Disorders**  
**May 20, 2017**

At the conclusion of this 8-hour module the participants will acquire knowledge of the pharmacotherapy of common disorders like diabetes mellitus, hyperthyroidism, hypothyroidism, Cushing's syndrome; and develop competence in planning for their appropriate therapy including advise on non-pharmacologic approaches to therapy.

**Course Module 8 - Pharmacotherapy of Neuro- Psychiatric Disorders**  
**May 27, 2017**

Upon completion of this 8-hour course the participants will be able to comprehend the pharmacotherapy of neurologic diseases like Alzheimer's disease, Parkinsonism, seizures, including ischemic and hemorrhagic strokes. This will encourage pharmacists to actualize their role in reversing catastrophic neurologic complications.

**Panel Defense, Certification Review & Mock Examination**  
**June 03, 2017**

**Final Comprehensive Examination**  
**June 10, 2017**

To measure the participant's understanding of the topics being discussed, the Program participants are required to take and successfully pass each End-of-Module examination and the Final Comprehensive examination. The passing rate for the End-of-Module Examination and Final Comprehensive Exam is **70%**.

**Graduation and Closing Ceremonies**  
**June 17, 2017 (Tentative)**

**Target Participants:**

- Professional Pharmacists
- Professors of Pharmacy
- Pharmacy Department Heads/Chairs
- Graduate Students in Pharmacy

**Registration Fee & Reservation:**

**Early tiger rate of Php25,000.00** per participant for those who will reserve and pay on or before **February 24, 2017**. Regular rate of Php35,000.00 after the early tiger period shall be applied. This fee is inclusive of certificate of attendance, seminar kit, 8GB USB, and meals.

Registration may be made by **depositing Php 15,000.00 as course reservation fee at any BPI branch to UST Savings Bank Account No. 0151-0000-45**. After depositing, please email a copy of deposit slip together with the accomplished reservation form to [ust\\_ccped@yahoo.com](mailto:ust_ccped@yahoo.com). You may deposit the remaining balance on or before March 24, 2017. Official receipts will be issued on the first day of the course.

Cancellation fee of Php 10,000 will be charged for those participants who cancel their reservation one week before the start of the certificate program date.

**\*\*We discourage walk-in participants\*\***  
**\*\*Only 30 participants will be accommodated\*\***

**Reservation Form:**

YES, I will attend the UST Certificate Course in Pharmacotherapy on April 01 to June 10, 2017 at the UST Graduate School.

Name: \_\_\_\_\_

*First Name*                    *M.I.*                    *Surname*

Position: \_\_\_\_\_

Company/Organization: \_\_\_\_\_

Address: \_\_\_\_\_

Office Tel. No. \_\_\_\_\_

Fax No. \_\_\_\_\_

Cell phone No. \_\_\_\_\_

Email Address: \_\_\_\_\_

Signature: \_\_\_\_\_

*This form maybe reproduced for additional participants.*

**UST:S009-00-FO01**



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