## **National Cheng Kung University**

## **Graduate Institute of Clinical Pharmacy and Pharmaceutical Technology**

## Medicinal Chemistry Division (Group C) Graduate Program Study Guidelines

(Applicable to students enrolled from Academic Year 2021)

### **Total Requirements:**

- Required: 12 credits

- Electives: to reach a total of 24 credits (Master's thesis: 6 credits in addition)

#### Section 1 Core Courses (Required)

- Clinical Pharmacokinetics (3 credits)
- Advanced Topics in Pharmaceutical Sciences (3 credits)
- Journal Club in Pharmacokinetics (I) (II) (III) (IV) (4 credits)
- Advanced Physical Pharmacy (2 credits)
- Drug Bio-transport (2 credits)
- Experimental Design in Pharmaceutics (1 credit)

#### Section 2 Elective Courses

- Pharmacotherapy (4 credits)
- Biostatistics (2 credits)
- Epidemiology (College of Medicine integrated course) (2 credits)
- Therapeutic Drug Monitoring (1 credit)
- Introduction to Pharmacokinetics Software Applications (1 credit)
- Pharmacogenomics (1 credit)
- Advanced Topics in Pharmacogenomics (1 credit)
- Clinical Drug Trial Research (2 credits)
- Analysis and Application of Pharmacogenomic Databases (I) (2 credits)
- Analysis and Application of Pharmacogenomic Databases (II) (2 credits)
- Dosage Form Design (1 credit)
- Advanced Medicinal Chemistry and Drug Discovery (3 credits)

- Advanced Organic Spectroscopy (3 credits)
- Introduction to/Advanced Topics in Heterocyclic Chemistry (1 + 2 credits)

# **Appendix 1 Curriculum Table**

Year	Semester	Credits	Required	Required-Elective	Elective
1st Year	Fall	(3+1)=6	Journal Club in Pharmacokinetics (I) Advanced Physical Pharmacy		
1st Year	Spring	1	Journal Club in Pharmacokinetics (II) Drug Bio-transport		
2nd Year	Fall	1	Journal Club in Pharmacokinetics (III)		
2nd Year	Spring	0	Journal Club in Pharmacokinetics (IV)* Research Project (0)		

Notes: (1) Pharmacotherapy is an elective but required for non-NCKU Pharmacy graduates. (2) Research Project is 0 credits but mandatory. (3) Courses marked \* require presentation in English.