## 109 M.S. Program for the Faculty of Medicinal and Applied Chemistry

Type of		Courses	Credits	1 <sup>st</sup> Y	1 <sup>st</sup> Y	2 <sup>nd</sup> Y	2 <sup>nd</sup> Y	Faculty	note
Course				1 <sup>st</sup> S	$2^{nd}$ S	1 <sup>st</sup> S	$2^{nd}$ S		
		Behavior	4	1	1	1	1		F 1' 1
Required courses		Seminar (Medicinal)	4	1	I	1	1	Chai-Lin Kao	English
		Seminar (Medicinal)	4	1	1	1	1	Po-Yu Chen	English
		Seminar (Applied)	4	1	1	1	1	Chih-Kuang Wang	English
		The Principle Core Techniques and Ethics in Life Science	2	2				Bao-Sen Shieh	
		Special Lecture	0	0	0	0	0	Genin Gary Huang	
		Professional Practice in Chemistry	0	0	0	0	0	1 <sup>st</sup> Chien-Hung Li 2 <sup>nd</sup> Chia-Hsiang Chen	English
		Thesis	6						
	*	Special Topics in Organic Chemistry (I)	2	2				Yeh-Long Chen	English
	*	Special Topics in Organic Chemistry (II)	2		2			Chai-Lin Kao	English
	*	Special Topics in Inorganic Chemistry (I)	2	2				Sodio C. N. Hsu	English
	*	Special Topics in Inorganic Chemistry (II)	2		2			Sodio C. N. Hsu	English
	*	Special Topics in Physical Chemistry (I)	2	2				Li-Fang Wang	English
	*	Special Topics in Physical Chemistry (II)	2		2			Li-Fang Wang	English
	*	Special Topics in Instrumental Analysis (I)	2	2				Tsai-Hui Duh	English
	*	Special Topics in Instrumental Analysis (II)	2		2			Po-Yu Chen	English
		Special topics in Materials Chemistry (I)	2	2				Chih-Kuang Wang	
		Special topics in Materials Chemistry (II)	2		2			Chih-Kuang Wang	
		Special Topics in Medicinal Chemistry (I)	2	2				Chai-Lin Kao	English
		Special Topics in Medicinal Chemistry (II)	2		2			Chai-Lin Kao	English
		Special Topics in Biochemisty (I)	2	2				Tzu-Pin Wang	
		Special Topics in Biochemisty (II)	2		2			Tzu-Pin Wang	
Elective		Special Topics in Biomaterials	2		2			Li-Fang Wang	
courses		Special Topics in Spectroscopy (I)	2	2				Yeh-Long Chen	
		Special Topics in Spectroscopy (II)	2		2			Yeh-Long Chen	
		Special Topics in Heterocyclochemistry (I)	2	2				Long-Chin Hwang	English
		Special Topics in Heterocyclochemistry (II)	2		2			Long-Chin Hwang	English
		Special Topics in Bioorganic Chemistry (I)	2	2				Jeh-Jeng Wang	
		Special Topics in Bioorganic Chemistry (II)	2		2			Jeh-Jeng Wang	
		Special Topics in Drug Synthesis	2	2				Yeh-Long Chen	
		Special Topics in Organometallic Chemistry	2	2				Hsuan-Ying Chen	
		Special Topic in Supramolecular Chemistry	2		2			Sodio C. N. Hsu	
		Special Topics in Bioinorganic Chemistry	2	2				Sodio C. N. Hsu	English
		Special Topics in Electrochemistry	2	2				Po-Yu Chen	
		Special Topics in Mass Spectrometry	2		2			Po-Jui Huang	
	F	Special Topics in Biocatalytical Chemistry(I)	2	2				Tzu-Pin Wang	
		Special Topics in Biocatalytical Chemistry(II)	2		2			Tzu-Pin Wang	
		Special Topics in Pharmaceutical Analysis	2		2			Tsai-Hui Duh	

-	Special Topics in frontier areas of chemistry (I)	2	2				Wei-Yu Lin	English
	Special Topics in frontier areas of chemistry (II)	2		2			Wei-Yu Lin	English
	Special Topics in Organometallic Catalysts	2		2			Hsuan-Ying Chen	
	Introduction to Computational Chemistry	2	2				Hsing-Yin Chen	
Academia Sinica Elective Course	Special Topics in Academic Writing in Chemistry	2				2	James R. Carey	English
	Introduction to SCST (I)	3	3				Sodio C. N. Hsu	
							Ito Chao	
	Introduction to SCST (II)	3		3			Tzu-Pin Wang	
							Ito Chao	
	Advanced Organic Chemistry	3		3			Hui-Fen Chen	
							Wen-Shan Li	
							Steve Sheng-Fa Yu	
	Advanced Chemistry of Materials	3		3			Hui-Fen Chen	
							Chin-Ti Chen	
	Modern Experimental Techniques-Chemistry	2	2				Genin Gary Huang	
							Chen-Hsiung Hung	
	Cryo-Electron Microscopy: theory and practice (I)	2	2				Genin Gary Huang	
							Wei-Hau Chang	
	Cryo-Electron Microscopy: theory and practice (II)	2			2		Genin Gary Huang	
							Wei-Hau Chang	

## [Note]

- 1. Master's students are required to take a minimum of 30 credits, including 12 credits from required courses and 18 credits from elective courses. The required courses should include 6 credits of "Dissertation of Master degree".
- 2. The 18 credits' worth of elective courses should include at least 3 courses marked with an \*.
- 3. Master's students shall take no more than 15 credits hours of elective courses per semester.
- 4. Students can also take courses from other departments or PhD courses in our department according to our department's application process (Please refer to the download form section on our website).
- 5. Master's students need to submit at least one of the following English proficiency test results prior to their Master's dissertation exam:
  - Test of English as a Foreign Language (TOEFL): TOEFL Institutional Testing Program (ITP)-500 points (or above) or TOEFL Computer-Based Test (CBT)- 193 points (or above) or TOEFL Internet-Based Test (iBT)- 68 points (or above) required.
  - ii. General English Proficiency Test (GEPT): High-Intermediate level (First Stage or above) required.
  - iii. Test of English for International Communication (TOEIC): 600 points (or above) required.
  - iv. International English Language Testing System (IELTS): 5.5 points (or above) required.
    \* If the students fail to pass any of the aforementioned English proficiency test, they are required to enroll in English courses and pass the exam in KMU's Center for Languages and Culture.
- 6. Every student should pass the exam held by the "Center for Taiwan Academic Research" prior to their Master's dissertation exam.

 $(Y \rightarrow Year, S \rightarrow Semester)$