Department: CHEMISTRY Program: CHEMISTRY - GRADUATE

Skill Set	Professional Application	Delivery of Skill Set Courses, extracurricular activities, etc. in which the skill set is introduced (I), reinforced (R), or mastered (M)
Core Skill: Communication and	Communication scientific content orally, reading	CHEM 5305 (M)
Critical Thinking	and understanding professional reports	CHEM 5306 (M)
	Assessing content of professional documents	CHEM 5365 (M)
	Quality insurance	CHEM 5412 (M)
		CHEM 5130 (M)
		CHEM 5327 (M)
Core Skill:	Set up experiments based on scientific laws.	CHEM 5305 (M)
Empirical and Quantitative Skills	Formulation of working hypotheses. Select	CHEM 5306 (M)
	analytical methods. Uses statistics and	CHEM 5365 (M)
	mathematical-physical laws to solve problems	CHEM 5412 (M)
		CHEM 5308 (M)
Core Skill:	Conscious use of personal protection and safety	CHEM 5305 (M)
Personal Responsibility	precaution, knowledge of hazardous materials and	CHEM 5306 (M)
Social Responsibility	waste management. Educate community and risk	CHEM 5365 (M)
	management.	CHEM 5412 (M)
Core Skill:	Working in research and development team	CHEM 5305 (M)
Team work and Leadership Skills	Role model, team leader, and laboratory manager.	CHEM 5306 (M)
	Training employee procedures	CHEM 5365 (M)
		CHEM 5412 (M)
Discipline-related Skills:	Operating, maintaining, and troubleshooting of	CHEM 5305 (M)
Technical Skills	laboratory equipment.	CHEM 5306 (M)
	Set up experiments according to technical	CHEM 5365 (M)
	procedures.	CHEM 5412 (M)
	Use of science data bases	CHEM 5301 (M)
	Seeking technical data	
	Application information technology	
Discipline-related Skills:	Understanding of causes and ability to apply	CHEM 5351 (M)
Problem solving	scientific knowledge	CHEM 5341 (M)
Decision making	Judge situation and uses scientific data to provide	CHEM 5342 (M)
	solution and formulate recommendation	CHEM 5343 (M)