

Allocation of Responsibilities for Learning Outcomes to Courses

Learning Outcomes	Courses																				
	Chem 101&102	Chem 223	Chem 323	Chem 201 & 202	Chem 303	Chem 212 & Chem 311	Chem 331 & Chem 332	Chem 479	Chem 471 & chem. 472	Chem 399	Math 101 &102	Phys 101 & 102	ICS 101	Engl 101&102	Engl 214	IAS 212	IAS 322	IAS 101	IAS 201	IAS 301	PE 101
Course Code and Number	Chem 101&102	Chem 223	Chem 323	Chem 201 & 202	Chem 303	Chem 212 & Chem 311	Chem 331 & Chem 332	Chem 479	Chem 471 & chem. 472	Chem 399	Math 101 &102	Phys 101 & 102	ICS 101	Engl 101&102	Engl 214	IAS 212	IAS 322	IAS 101	IAS 201	IAS 301	PE 101
	General Chem	Anal chem	Inst. Analysis	Org. chem	Qual org.chem	Phys. Chem	Inorg. Chem	Chem seminar	Chem Project	Summer training	Calculus	Physics	Computer prog.	English	English	Professional ethics	Human rights in Islam	Practical Grammar	Professional Writing	Oral comm. skills	Physical education
Knowledge	✓	✓	✓	✓	✓	✓	✓	X	X	X	✓	✓	✓	X	X	X	X	X	X	X	X
Facts	✓	✓	✓	✓	✓	✓	✓	X	X	X	✓	✓	✓	X	X	X	X	X	X	X	X
Concepts, theories	✓	✓	✓	✓	✓	✓	✓	X	X	X	✓	✓	✓	X	X	X	X	X	X	X	X
Procedures	✓	✓	✓	✓	✓	✓	✓	X	X	X	✓	✓	✓	X	X	X	X	X	X	X	X
Cognitive Skills	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	X	X	X	X	X	X	X	X
Apply skills when asked	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	X	X	X	X	X	X	X	X
Creative thinking and problem solving	✓	✓	✓	✓	✓	✓	✓	X	✓	✓	✓	✓	✓	X	X	X	X	X	X	X	X
Interpersonal Skills and Responsibility																					
Responsibility for own learning	X	X	X	X	X	X	X	✓	✓	✓	X	X	X	X	X	X	X	X	X	X	✓
Group participation and leadership	X	X	✓	X	✓	✓	✓	✓	✓	✓	X	X	X	X	X	X	X	X	X	X	✓
Act responsibly-personal and professional situations	X	X	✓	✓	✓	✓	✓	X	✓	✓	X	X	X	X	X	X	X	X	X	X	✓
Ethical standards of behavior	X	X	✓	X	✓	X	X	X	✓	✓	X	X	X	X	X	✓	✓	X	X	X	✓
Communication IT and Numerical Skills																					
Oral and written communication	X	X	✓	✓	✓	✓	✓	✓	✓	✓	X	X	X	✓	✓	X	X	✓	✓	✓	X
Use of IT	X	X	✓	X	X	✓	X	X	✓	✓	X	X	✓	X	X	X	X	X	X	X	X
Basic maths and statistics	X	X	✓	X	X	✓	X	X	✓	✓	✓	✓	X	X	X	X	X	X	X	X	X
Psychomotor Skills																					

✓ Major Responsibility x Minor Responsibility