

	161	161L	162	162L	272	272L	273	273L	274	274L	351	352	352L	372	422	425	425L	445	445L
Quant. and qual. description of atoms, ions, molecules and their mixtures	I		D						D		A								
Quant and qualitative description of reactions of atoms, ions and molecules	I		D										D, A						
Reactivity & energetics: equilibrium, thermodynamics and kinetics	I		D						D		D		A	D					
Electronic configuration of atoms and molecules: quantum mechanics			I		D		D				D	D	A						
Fundamentals of carbon chemistry					I		D									D	A	D	A
Stereochemistry as a foundation of structure and reactivity					I	D								D				D	A
Mechanistic reasoning for prediction and analysis of reactivity					I		D							D	D	D		D	A
Design and execution of synthetic schemes							I	I								D/A	A	D, A	A
Molecular structures from spectroscopic data							I	D				D	D, A				D		D, A
Make measurements & write laboratory reports		I		D		D		D		D			A				A		A
Data analysis for production of analytically valid data									I	D		D	D				D, A		D, A
Documentation and interpretation of experimental results		I		D		D		D		D			A				A		A
Fundamentals of coordination and organometallic chemistry															I		A		