

Appendix 6B: Index of ChemCAL modules used at the University of Sydney & University of Melbourne

Topic area	University of Sydney	University of Melbourne
General Chemistry	Stoichiometry Behaviour of Gases States of Matter Electrochemistry Chemical Energy and Calorimetry	
Properties of Atoms	Atomic And Nuclear Structure Atoms, Electrons and Orbitals Atomic Properties Electronic Structure of Atoms and Ions Quantum Numbers and Atomic Orbitals	
Properties of Molecules	Covalent Bonding Electronegativity and Polar Molecules Molecular Shape and Structure Applying V S E P R Theory Valence Band Model of Covalent Bonding	
Equilibria	Chemical Equilibria Solubility Equilibria	
Acids And Bases	Acids and Bases Weak Acids and Bases Calculations With Weak Acids and Bases Acid/Base Titrations	
Kinetics	Reaction Rates and Chemical Kinetics 1 Reaction Rates and Chemical Kinetics 2 Thermal Energy, Collisions and Reactions Reaction Mechanisms	
Structures of Organic Compounds	Structure and Bonding In Alkanes Conformers, Stereochemistry and Cycloalkanes Alkenes, Benzene and Alkynes Organic Functional Groups	
Reactions of organic compounds	Organic Acids and Bases Nucleophilic Substitution Reactions Elimination and Electrophilic Addition Reactions Neutrophilic Additions to Carbonyl Groups Electrophilic Aromatic Substitution Organic Oxidation and Reduction	