

332 Chem Chemical kinetics

Topics		
Introduction <ul style="list-style-type: none"> ✓ Basic Kinetic Concepts ✓ Types of Chemical reactions ✓ Types of Systems ✓ Rate of Chemical reactions ✓ Factors affecting chemical reaction rates 	Quiz (1)	Mid-term Exam (1)
Rate of reactions and Rate Laws <ul style="list-style-type: none"> ✓ Effect of Concentration on the reaction rate ✓ Order of a Reaction ✓ Rate Law ✓ Reaction Rate Constant ✓ Reaction Mechanism ✓ Order and Molecularity ✓ Effect of Temperature on the Reaction Rate ✓ Arrhenius Relation ✓ Energy of Activation 		
Kinetics of Simple Reactions <ul style="list-style-type: none"> ✓ Zero Order Reaction ✓ First Order Reaction ✓ Second Order Reaction ✓ Third Order Reaction ✓ Pseudo Order Reaction ✓ nth Order Reaction ✓ Half -life of a Reaction 	Quiz (2)	
Experimental Methods and Data Analysis <ul style="list-style-type: none"> ✓ <i>Chemical Methods</i> ✓ <i>Physical Methods</i> ✓ Differential Method ✓ Integral Method ✓ Half-life Method ✓ Isolation Method 	Quiz (3)	Mid-term exam (2)
Kinetics of Complex Reactions <ul style="list-style-type: none"> ✓ Reversible Reaction ✓ Parallel Reaction ✓ Consecutive Reaction ✓ Chain Reaction ✓ Steady-State Approximation 	Quiz (4)	
Theories of Elementary reactions <ul style="list-style-type: none"> ✓ Collision Theory ✓ Transition State Theory 		