

BMC2 2026 2nd semester Chemistry

Week	Date	Lecture
1	Jan5	No lecture
	Jan8	Measurements (McMurry pp.39-56). Physical and chemical properties (McMurry pp.72).
2	Jan12	Matter: Elements (McMurry pp.68-74). Mixtures and compounds. Chemical formulas. Naming chemical compounds (McMurry pp. 91-102, 163-164)
	Jan15	The atomic theory. Structure of the atom, nuclear arithmetic. Atomic, molecular and molar mass relationships. (McMurry pp.75-88)
3	Jan19	Percent composition and empirical/molecular formulas. Chemical equations, stoichiometry (McMurry pp.118-136)
	Jan22	The electromagnetic spectrum. Atomic spectra. The Bohr model of hydrogen atom. The quantum mechanical model of atom (McMurry pp.196-218)
4	Jan26	Electron configurations and the periodic table. Classification of the elements. Periodic trends. (McMurry pp.218-228, 243-254)
	Jan29	Summary of general chemistry 1
5	Feb2	Chemical bonds: metallic, ionic, and covalent bonds. Electron-dot structures (McMurry pp.927-928, 234-240, 251-277)
	Feb5	VSEPR and valence bond theory (McMurry pp.290-306)
6	Feb9	Intermolecular forces (McMurry pp.306-318)
	Feb12	The gaseous state (McMurry pp.387-411)
7	Feb16	Liquid and solid state, phase changes. The chemistry of water (McMurry pp.439-450, 146-152, 154-155)
	Feb19	Summary of general chemistry 2
8	Feb23	Solutions. Electrolytes and non-electrolytes (McMurry pp.140-145, 155-156, 476-489)
	Feb26	Chemical equilibrium (McMurry pp.582-612)
9	Mar2	Acids and bases 1 (McMurry pp.632-648)
	Mar5	Acids and bases 2 (McMurry pp.649-663)
10	Mar9	Thermochemistry: internal energy and state functions. Enthalpy. Hess's law (McMurry pp.340-363)
	Mar12	Redox reactions. Activity series of the elements. Galvanic cells (McMurry pp.158-166, 785-794, 797-801)
11	Mar16	Summary of general and inorganic chemistry 3
	Mar19	The main group elements. s-, p-, d-block metals and hydrogen.
12	Mar23	Nonmetals : halogens and noble gases, oxygen and sulfur, nitrogen, phosphorus and carbon
	Mar26	Covalent bonding in organic compounds. Classification of organic compounds.
13	Mar29	Stereochemistry.
	Apr2	Alkanes: nomenclature and isomerism. Reactions of alkanes. Cycloalkanes
14	Apr6	NO LECTURE-EASTER
	Apr9	Unsaturated hydrocarbons
	Apr13	Summary of organic and inorganic chemistry 1.

15	Apr16	Aromatic compounds 1: aromaticity, classification and nomenclature, reactions
16	Apr20	Aromatic compounds 2:
	Apr23	Organic halogen compounds
17	Apr27	Alcohols and phenols
	Apr30	Ethers. Organic sulphur compounds
18	May4	Aldehydes, ketones and quinones
	May7	Summary of organic chemistry 2
19	May11	Nitrogen containing organic compounds: aliphatic amines
	May14	Nitrogen containing organic compounds: heterocyclic amines. Amines with biological importance
20	May18	Carboxylic acids I.
	May21	Carboxylic acids II. Substituted carboxylic acids.
21	May25	NO LECTURE-PENTECOST
	May28	Carboxylic acid derivatives 1: halides and anhydrides; salts and detergents
22	Jun1	Carboxylic acid derivatives 2: esters and amides.
	Jun4	Summary of organic chemistry 3
23	Jun8	Summary of organic chemistry
	Jun11	SCT6