



Organic Chemistry Prerequisites for Schulich Dentistry

Calendar Course Descriptions for Approved Organic Chemistry Prerequisite Courses Offered at Western

The following descriptions are taken from the web version of the [Western Academic Calendar](#) for 2020.

Chemistry 2213 A/B Organic Chemistry for Life Sciences

An introduction to the basic concepts of structure, stereochemistry and reactions in organic chemistry with an emphasis on its connections to the biological, health or medical sciences.

Antirequisite(s): [Chemistry 2273A](#). **Prerequisite(s):** [Chemistry 1301A/B](#) and [Chemistry 1302A/B](#), or the former Chemistry 1100A/B and 1200B, or the former Chemistry 1050.

Extra Information: 3 lecture hours, 1.5 laboratory hours (3 hours every other week) 0.5 course.

Note: The combination of [Chemistry 2213A/B](#) and [Chemistry 2223B](#) provides the equivalent of a full course in Organic Chemistry with a laboratory, which is a prerequisite for some professional programs.

Chemistry 2273A – Organic Chemistry I: Structure and Spectroscopy

Introduction to 3D structure, spectroscopy and chemical reactions of alkanes, alkenes, alkynes, benzene, and alkyl halides. Introduction to reaction mechanisms and the interpretation of IR and NMR spectra.

Laboratory: techniques of experimental organic chemistry; illustrative preparations of organic compounds.

Antirequisite(s): [Chemistry 2213A/B](#). **Prerequisite(s):** [Chemistry 1301A/B](#) and [Chemistry 1302A/B](#) with a minimum average mark of 60%, or the former Chemistry 1100A/B and 1200B with a minimum average mark of 60%, or the former Chemistry 1050 with a minimum mark of 60%.

Extra Information: 3 lecture hours, 1.5 laboratory hours/week (3 hours every other week), 0.5 course.

Chemistry 2003A/B – Organic and Biological Chemistry for Food Science

An overview of the properties and common reactions of selected functional groups and biomolecules, including carbohydrates, proteins, and lipids. Emphasis will be placed on the importance and application of organic chemistry in the food sciences.

Antirequisite(s): [Chemistry 2213A/B](#), [Chemistry 2223B](#), [Chemistry 2273A](#), [Chemistry 2283G](#).

Prerequisite(s): [Chemistry 1301A/B](#) and [Chemistry 1302A/B](#).

Extra Information: 3 lecture hours, 1.5 laboratory hours (3 hours every other week). Enrollment limited to students registered in Foods & Nutrition, Brescia University College, or by special permission of the Department of Chemistry.

Chemistry 2223B – Organic Chemistry of Biological Molecules

An examination of the chemistry of naturally occurring molecules, emphasizing organic compounds of importance in the Biological and Health Sciences.

Prerequisite(s): [Chemistry 2213A/B](#) or [Chemistry 2283G](#).

Extra Information: 3 lecture/tutorial hours, 1.5 laboratory hours (3 hours every other week). Intended primarily for students in Biology, and students interested in the Health or Medical Sciences. Note: The combination of [Chemistry 2213A/B](#) and [Chemistry 2223B](#) provides the equivalent of a full course in Organic Chemistry with a laboratory, which is a prerequisite for some professional programs.

Chemistry 2283G – Organic Chemistry II: Mechanisms and Reactivity

Introduction to structure, spectroscopy and reactions of alcohols and derivatives, aromatic compounds and carbonyl compounds with an emphasis on reaction mechanisms and synthesis. Techniques of experimental organic chemistry will be introduced in the laboratory; illustrative preparations.

Prerequisite(s): [Chemistry 2273A](#), or [Chemistry 2213A/B](#) with a minimum mark of 80%.

Extra Information: 3 lecture hours, 3 laboratory hours.