# Concordia

#### CHEMISTRY MAJOR

## Science Profile (120 extended credit programs, i.e. non-CEGEP entry, only)

Chemistry: CHEM 205 & 206 (General Chemistry I & II)

Biology: BIOL 201 (General Biology)

Math: MATH 201 (Elementary Functions), MATH 202 (College Algebra, required for Mature

Students only), MATH 203 (Calculus I), MATH 205 (Calculus II)

Physics: PHYS 204/224 (Mechanics and associated lab course), PHYS 205/225 (Electricity &

Magnetism and associated lab course), PHYS 206/226 (Waves and Modern Physics &

associated lab course)

#### **Chemistry Major = core program only (45 credits = 15 courses)**

Analytical Chemistry: CHEM 217 (Introductory Analytical Chemistry I, offered Fall only)

CHEM 218 (Introductory Analytical Chemistry II, offered Winter only)

CHEM 312 (Intermediate Analytical Chemistry, offered Fall and even-year Summers)

Exemptions for 217 AND 218 PLUS THE LAB PORTION OF 312 possible for students entering

from Dawson's Laboratory Technology – Analytical Chemistry program

Organic Chemistry: CHEM 221 (Introductory Organic Chemistry I, offered Fall, Winter and alternating Summers)

CHEM 222 (Introductory Organic Chemistry II, offered Fall and Winter)

CHEM 324 (Organic Reactions, offered Fall only)

CHEM 325 (Organic Structure and Stereochemistry, offered Winter and odd-year Summers)

Exemptions for CHEM 221 and CHEM 222 possible for CEGEP students

Physical Chemistry: CHEM 234 (thermodynamics, offered Fall and Winter)

CHEM 235 (kinetics, offered Fall and Winter)

CHEM 333 (quantum chemistry, offered Winter only)

Inorganic Chemistry: CHEM 241 (Introduction to Periodicity and Valence Theory, offered Fall and Winter)

CHEM 242 (Chemistry of the Main Group Elements, offered Winter only)

CHEM 341 (Transition metals, offered Fall only)

Biochemistry: CHEM 271 (Biochemistry I, offered Fall, Winter and alternating Summers)

Spectroscopy: CHEM 293 (Organic Spectroscopy, offered every term)

# Course numbering system

First digit gives level 200 = introductory 300 = intermediate 400 = advanced

Middle digit 1 = analytical, 2 = organic, 3 = physical, 4 = inorganic, 5 = multidisciplinary,

denotes discipline 7 = biochemistry, 9 = spectroscopy/spectrometry

Last digit gives sequence

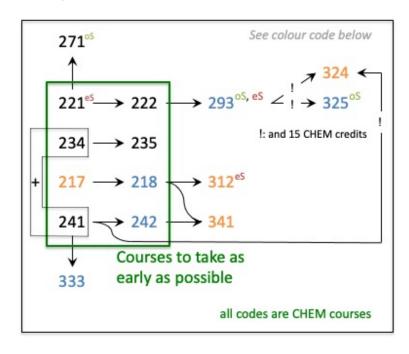


# **Typical Chemistry Major Sequence\***

	Fall	Winter
Year 1	CHEM 217	CHEM 218
	CHEM 221	CHEM 222
	CHEM 234	CHEM 235
	elective	elective
	elective	elective
Year 2	CHEM 241	CHEM 242
	CHEM 312	CHEM 293
	elective	CHEM 333
	elective	elective
	elective	elective
Year 3	CHEM 324	CHEM 325
	CHEM 341	CHEM 271
	elective	elective
	elective	elective
	elective	elective

<sup>\*</sup> All courses are 3 credits except where noted. There are forty five (45) credits of electives that must include six credits of general education courses and fifteen credits of out of program electives. The remainder may be freely chosen (chemistry, other science or non-science). Note: some courses can be taken in Summer or online.

## **Chemistry Major Course Flowchart**



Legend: 221 

is a prerequisite for:

→ 222

#### Summer course offerings:

oS	alternating with	eS
ODD year	rs	<b>EVEN</b> years
271		221
293		293
375		375
325	<b>«</b>	> 312
Tentative Schedule		

## Terms when courses are traditionally offered:

Fall & Winter
 Fall only
 Winter only
 and sometimes on:

 oS: Summer ODD years

 ES: Summer EVEN years