BIOCHEMISTRY 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)

Biochemistry 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) *Exemptions for both courses 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 and Winter) *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)
Inorganic Chemistry:	CHEM 241 (Introduction to Periodicity and Valence Theory, offered Fall and Winter)
Biochemistry:	CHEM 271 (Biochemistry I, offered Fall, Winter and alternating Summers) CHEM 375 (Biochemistry II, offered Fall, Winter and Summer)
Spectroscopy:	CHEM 293 (Organic Spectroscopy, offered Winter and Summer)
Biology:	BIOL 261 (Molecular and General genetics), BIOL 266 (Cell Biology), BIOL 364 (Cell Physiology), BIOL 368 (Genetics and Cell Biology Lab); all offered Fall and Winter

Course numbering system

First digit gives level	200 = introductory 300 = intermediate 400 = advanced
Middle number denotes discipline	1 = analytical, 2 = organic, 3 = physical, 4 = inorganic, 5 = multidisciplinary, 7 = biochemistry, 9 = spectroscopy/spectrometry
Last digit gives sequence	

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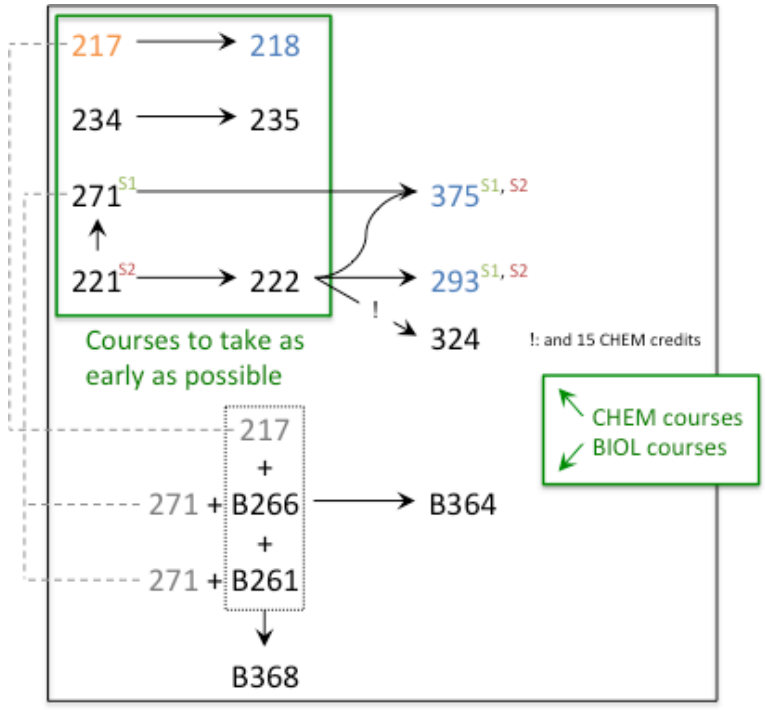
Typical Biochemistry Major Sequence*

	Fall	Winter
Year 1	CHEM 217	CHEM 218
	CHEM 221	CHEM 222
	CHEM 234 or BIOL 261	CHEM 271
	elective	elective
	elective	elective
Year 2	CHEM 234 or BIOL 261	CHEM 235
	CHEM 241	CHEM 293
	BIOL 266	CHEM 375
	elective	elective
	elective	elective
Year 3	CHEM 324	BIOL 368
	BIOL 364	elective
	elective	elective
	elective	elective
	elective	elective

* 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.

Biochemistry Major Course Flowchart



Legend: 221 —(is a prerequisite for:)→ 222

Additional courses:

- CHEM 241
- Organic replacement(s) if exempt from 221 &/or 222

Terms when courses are traditionally offered:

- Fall & Winter
- Fall only
- Winter only

and sometimes on:

- Summer 1 (ODD years)
- Summer 2 (EVEN years)

Summer course offerings:

Summer 1 (ODD years)	alternating with	Summer 2 (EVEN years)
206		206
293		293
375		375
271	⟷	221
325	⟷	312

Up-to-date information on Calendar website and postings