

Semester Progression Map for **BSc in Bioinformatics at Langara College**

Year 1		Year 2		Year 3		8 month Coop Work Term (COOP 2301 & COOP 2501)	Year 4	
Term1 (14/15 creds)	Term 2 (14/15 creds)	Term 3 (16 creds)	Term 4 (15 creds)	Term 5 (16 creds)	Term 6 (16 creds)		Term 7 (15 creds)	Term 8 (15 creds)
BIOL 1115 (4) General Biology I	BIOL 1215 (4) General Biology II	BIOL 2415 (3) Cell Biology	BIOL 2315 (3) Biochemistry	BIOL 3315 (4) Evolution and Phylogenetics	BIOL 3430 (4) Molecular Genetics		BIOL 4315 (4) Genomics, Metagenomics and Transcriptomics	BIOL 4415 (4) Proteomics and Metabolomics
CHEM 1120 (4) General Chemistry I	CHEM 1220 (4) General Chemistry II	CHEM 2216 (4) Organic Chemistry for Life Sciences	BIOL 2330 (3) Introduction to Genetics	CPSC 3280 (4) Cloud and Parallel Computing	CPSC 3260 (4) Data Transformations		CHEM 3216 (4) Molecular Modelling	BINF 4290 (4) Bioinformatics
CPSC 1150 (3) Program Design OR CPSC 1155 (3) Program Design for Engineers	CPSC 1160 (3) Algorithms and Data Structures I	CPSC 1181 (3) Object-oriented Computing	CPSC 2221 (3) Database Systems	CPSC 2150 (3) Algorithms and Data Structures II	Non-Science Elective (3)		CPSC 4160 (4) Data Mining and Machine Learning	CPSC 4260 (4) Data Visualization
MATH 1171 (3) Calculus I OR MATH 1175 (3) Calculus I with application to life sciences OR MATH 1173 and MATH 1183 (4) Calculus I with Computer Explorations	MATH 1271 (3) Calculus II OR MATH 1275 (3) Calculus II with application to life sciences OR MATH 1273 and MATH 1283 (4) Calculus II with Computer Explorations	MATH 1252 (3) Linear Systems OR MATH 2362 and MATH 2382 Linear Algebra. w/lab	STAT 1181 (3) Descriptive and Elementary Inferential Statistics	STAT 3225 (4) Statistical Methods for Biological and Health Sciences	STAT 2281 (3) Probability and Elementary Mathematical Statistics		BINF 4125 (3) Capstone I	BINF 4225 (3) Capstone II
		UT ENGL (3)	UT ENGL (3)	EXPE 2300 (3) Employment Strategies for Current Labour Market				
	BINF 1100 (0) Industry Topics		BINF 2100 (0) Industry Topics		BINF 3100 (0) Industry Topics			BINF 4100 (0) Industry Topics