### **COMBINED HONOURS: COMPUTER SCIENCE & BIOLOGY**

#### First & Second Year:

First Year (36 to 38 credits)	☐ BIOL 121	☐ CHEM 121 & 123	CPSC 111	Two of MATH:  100, 102, 104, 120, 180, or 184	ENGL (6 credits of 100 level English)
	∐BIOL 140	☐ Elective (3)	CPSC 121	101, 103, 105, 121	- ENGL 112 recommended
Second Year (35 credits)	☐ BIOL 200	CPSC 211	☐ CHEM 233	<b>■ MATH 200</b>	Arts Elective (3)
	☐ BIOL 201	☐ CPSC 213 ☐ CPSC 221	☐ CHEM 235 ☐ CHEM 205	STAT 200 or BIOL 300	☐ BIOL 240

## Registration Notes for 1<sup>st</sup> & 2<sup>nd</sup> year Biology:

- 1. BIOL 112,121, and 140 are prerequisites to the Major or Honours program options in the Biology Program. Students who have completed Biology 12 may enter into these courses directly. Students with Biology 11 may enter BIOL 112 if they have Chem 12. BIOL 112 is acceptable as the sole prerequisite for BIOL 121. Students without high school biology must take BIOL 111 before registering in BIOL 112,121, and 140.
- 2. One of CHEM 235, CPSC 213, or MATH 200 can be deferred to third year.
- 3. Three credits of first-year English courses may be deferred to second year.
- 4. CHEM 203 and 204 are also acceptable instead of CHEM 233/235.

#### **Third & Fourth Year:**

Third Year (34 credits)	☐ BIOL 334	BIOC 302 or BIOL 336	□CPSC 310	☐ STAT 302	□CPSC 445	CPSC 349 - Required for CPSC
	☐ BIOL 335		CPSC 320	One of CPSC 301, 313, 420, or 421	☐ MICB 405	Arts Elective (3 to 6)
Fourth Year (33 to 36 credits)	Life Science Electives 300 level or higher (6 Credits)	Life Science Electives 300 level or higher (6 Credits)	Bioinformatics Electives 300 level or higher (6 Credits)	CPSC Course 300 level or higher (6 Credits)	BIOL 447 (0 to 3 credits) - Required for BIOL 449  Arts Elective (3 to 6)	BIOL 449 or CPSC 449 (6 credits)

# Registration Notes for 3<sup>rd</sup> & 4<sup>th</sup> year Biology:

- 1. Taken in the 4<sup>th</sup> year; the thesis topic must be related to Bioinformatics. Students intending to take CPSC 449 must take CPSC 349 in their 3<sup>rd</sup> year
- 2. Life Science Electives  $\sim$  12 credits chosen from BIOC 302, 402, BIOL 301, 331, 336, 337, 347, 350, 431, 433, 434, 435, and 447
  - It is possible to replace some of the Life Science Electives with another course(s) not on the list, as long as a Biology Program Advisor approves the replacement.
- 3. Bioinformatics Electives can be any upper level BIOL, BIOC, CPSC, MICB, MATH, or STAT courses numbered 300 or higher
- 4. BIOL 449 Submit BIOL 449 Honours Thesis Applications to the Biology Office.