

# BIOLOGY PROGRAM WORKSHEET 2009-10

## COMBINED HONOURS: COMPUTER SCIENCE & BIOLOGY

### First & Second Year:

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

### 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 any of these courses directly. Students with Biology 11 may enter BIOL 112 if they have Chemistry 12; BIOL 112 is acceptable as 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)	<input type="checkbox"/> BIOL 334	<input type="checkbox"/> BIOC 302 or BIOL 336	<input type="checkbox"/> CPSC 310	<input type="checkbox"/> STAT 302	<input type="checkbox"/> CPSC 445	<input type="checkbox"/> CPSC 349 (0 to 3 credits) - If planning to take CPSC 449
	<input type="checkbox"/> BIOL 335		<input type="checkbox"/> CPSC 320	<input type="checkbox"/> One of CPSC 304, 313, 420, or 421	<input type="checkbox"/> MICB 405	<input type="checkbox"/> Arts Elective (3)
Fourth Year (33 to 36 credits)	<input type="checkbox"/> Life Science Electives 300 level or higher (6 Credits)	<input type="checkbox"/> Life Science Electives 300 level or higher (6 Credits)	<input type="checkbox"/> Bioinformatics Electives 300 level or higher (6 Credits)	<input type="checkbox"/> CPSC Course 300 level or higher (6 Credits)	<input type="checkbox"/> BIOL 447 (0 to 3 credits) - If taking BIOL 449	<input type="checkbox"/> BIOL 449 or CPSC 449 (6 credits)
					<input type="checkbox"/> Arts Elective (6)	

### 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 ~ 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.