

# Program Worksheet: Honours Chemical Biology

<b>First Year</b>	BIOL 112 ____ BIOL 121 ____ BIOL 140 or 180 ____  CHEM 121 or CHEM 120 & 115 ____ CHEM 123 or CHEM 130 & 135 ____  <i>One of:</i> PHYS 101, 106, 107, 117, 131 ____	<i>One of:</i> MATH 100, 102, 104, 110, 120, 180, or 184 ____  <i>One of:</i> MATH 101, 103, 105, or 121 ____  Electives [2cr] _____	<b>Communication Requirement 3cr of</b> WRDS 150; SCIE 113; any of ENGL 100, 110, 111, 112, 120, or 121; SCIE 300 or CHEM 300; APSC 176; LFS 150; Arts One; ASTU 100, 101:  _____ and _____	33cr	
<b>Second Year</b>	BIOL 200 ____  <i>One of:</i> BIOL 201, or 202 or 203 ____  BIOL 233 or 234 ____	<i>One of:</i> BIOL 203 ____ BIOL 204 ____ BIOL 205 ____ BIOL 209 ____ BIOL 210 ____  Electives [2cr] _____	*CHEM 203 or 223/225 ____  CHEM 205 or 304 ____  CHEM 208 ____  CHEM 211 or 210/215 ____	CHEM 213 ____ CHEM 245 ____  33cr	
<b>Third Year</b>	BIOL 230 or 260 ____ BIOL 300 ____ BIOL 336 ____  <b>**BIOL Laboratory Selections</b> <u>Two from list:</u> _____ _____	CHEM 300 ____ CHEM 313 ____  <i>One of:</i> CHEM 315 & 335 or CHEM 325 & 345 _____	CHEM 319 ____ CHEM 329 ____  <i>One of:</i> CHEM 218, 305, 311, 327, or 330 ____	<b>Arts Electives</b> [12cr]  _____ _____ _____ _____  Electives [4cr] _____ _____	33cr
<b>Fourth Year</b>	<b>CHEM and Life Science Electives:</b> CHEM 4xx level or above [6cr] _____  BIOL electives level 3xx and above [6cr] _____  LFSC or CHEM electives [4 to 6cr] _____		BIOL 449 or CHEM 449 ____	33cr	
<b>Minimum Total credits = 132cr</b>					

\* Students with CHEM 235 and a score of 76% of higher in CHEM 233 may apply for admission to this specialization and be allowed to use CHEM 233 and 235 in place of CHEM 203.

**\*\*Biology Laboratory Selections:**

BIOL 341 is recommended. BIOL 306, 326, 331, 337, 340, 341, 342, 351, 352, 363, 402, 403, 404, or 437.

**\*\*\*CHEM and Life Science Electives:** Chosen from 300- and 400-level BIOC, BIOL, CAPS, CHEM, MICB, or MRNE lecture courses, as well as EOSC 470, 472, 474, 475, 478, ENVR 430, GEOB 307, 407, FNH 350, 351, 451, MATH 462, MEDG 410, 419, 420, 421, and PCTH 305. At least 6 credits must be chosen from BIOL lecture courses and at least 6 credits must be chosen from 400-level CHEM lecture courses. Recommended electives include BIOC 302, 303, 402, 410, BIOL 335, 361, 436, 463, CHEM 411, 413, 435 and MICB 325, 405.

**Faculty of Science Elective Requirements** (May be any level if the upper-level requirement of 48 upper-level credits including at least 30 credits from the Faculty of Science is satisfied. Also, up to 18 credits of course work in a faculty other than Science or Arts may be taken for credit.)

- **Arts Electives - 12 credits** from the Faculty of Arts.
- **Electives** – May be from any faculty.