

Program Worksheet: Honours Cell and Developmental Biology

First Year	BIOL 112 ____ BIOL 140 ____ BIOL 121 ____ CHEM 111/121 ____ CHEM 113/123 ____	One of: PHYS 101, 107, 117 ____ One of: CPSC 100, 103, 110 ____	One of: MATH 100, 102, 104, 120, 180, or 184 ____ One of: MATH 101, 103, 105, or 121 ____	Communication Requirement 6cr of 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 _____ Electives [3cr]: _____	31cr
Second Year	*Biology Fundamentals Courses: BIOL 200 ____ BIOL 201 ____ BIOL 230 ____ BIOL 260 ____ BIOL 233 ____ Or BIOL 234 ____	*Organismal Courses: Two from BIOL 203 ____ BIOL 204 ____ BIOL 205 ____ BIOL 209 ____ BIOL 210 ____ MICB 201 ____	CHEM 233 ____ CHEM 235 ____ or CHEM 203 ____ CHEM 205 ____		30cr
Third Year	BIOL 300 ____ BIOL 347 ____ BIOL 340 ____ BIOL 341 ____		BIOC 302 or 303 ____ BIOL 335 ____ BIOL 336 ____ *** Cell and Developmental Biology Selections [12cr]: _____ _____ _____	Arts Electives [12cr]: _____ _____ _____	
Fourth Year	BIOL 447 ____ BIOL 449 ____	** Life Science Selections [9cr]: _____ _____ _____	Cell and Developmental Biology Selections [12cr]: _____ _____ _____ _____	Electives [3-6cr]: _____ _____	70cr
Minimum Total credits = 132					

* One **Organismal** and/or one of **BIOL 201, 230, 233, 234, 260** can be deferred to third year. **Note:** It is recommended that BIOL 201 be taken in second year; it is prerequisite for a number of Cell and Developmental Biology Selections.

*****Life Science Selection:**

Life Science selections that count towards the Science credit requirement: Any third- or fourth-year course in BIOC, BIOL, CAPS, MICB, MRNE, or PHYL that is open to Life Science majors plus: EOSC 470, 471, 474, 475, 476, 478, GEOB 307, 407, FNH 350, 351, 451, MATH 462, MEDG 410, 419, 420, 421, PCTH 305, 325. Life Science selections that do not count towards the Science credit requirement: APBI 311, 312, 314, 315, 318, 342, 401, 411, 418, 419, 444, CONS 330, 440, 486, FRST 302, 310, 385, 386, 395, 399, 420, 444, 485, 495.

BIOL 448 – Directed Studies: A maximum of 3 credits BIOL 448 can count toward life science selections.

*****Cell and Developmental Biology Selections (6cr of 12cr MUST be 4xx level):**

BIOL 331- Developmental Biology
BIOL 337 – Introductory Genetics Laboratory
BIOL 338 - Introduction to Genomics
BIOL 351 – Plant Physiology I
BIOL 352 – Plant Physiology II: Plant Development
BIOL 361 – Physiology of Sensory, Nervous & Muscular Systems
BIOL 362 – Cellular Physiology
BIOL 423 - Plant Stress Ecophysiology
BIOL 430 - Genome Evolution
BIOL 431 – Evolutionary Cell Biology
BIOL 432 – Research Strategies and Techniques in Cell Biology
BIOL 433 – Plant Genetics
BIOL 436 – Integrated Functional Genomics
BIOL 437 – Laboratory in Animal Cell Molecular Biology
BIOL 440 – Plant Genomics
BIOL 441 - Animal Cell Biology
BIOL 450 - Molecular Adaptation of Animals to the Environment
BIOL 455- Comparative Neurobiology
BIOL 456 - Comparative and Molecular Endocrinology
BIOL 458 - Developmental Neurobiology
BIOL 463 - Gene Regulation in Development
BIOL 464 - Animal Developmental Genetics

Faculty of Science Elective Requirements:

(May be any level as long as 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.