

BSc BIOLOGICAL SCIENCES BSc & BSc HONOURS PROGRAMS

FACULTY OF SCIENCE

UPDATED FEBRUARY 2012

This Academic Planning Guide highlights major points only regarding admission and transfer. Students are advised to read the university and RDC calendars, and the Alberta Transfer Guide for other necessary information. Some courses listed may have prerequisites; see [Course Descriptions](#). **Access this guide online:** www.rdc.ab.ca/academic_advising.

The UofC Faculty of Science offers BSc and BSc Honours programs in Biochemistry, Biological Sciences, Botany; Cell, Molecular and Microbiology (CMMB), Ecology, and Zoology. Within each specialty program, student can further specialize in specific areas. A BSc and BSc Honours program is offered in Ecology Cooperative Education and there are also 5-year combined degrees with the Department of Biological Sciences and Department of Computer Science and the Department of Biological Sciences and the Faculty of Arts. For detailed information about BSc Biological Sciences, see [Undergraduate Degree Syllabus](#).

Specialty programs in Biochemistry, Biological Sciences, CMMB, and Zoology are the most popular programs to prepare for entrance into human or animal health professional programs (i.e. Medicine, Veterinary Medicine). See appropriate preprofessional academic planning guide if you will also work towards admission to a preprofessional program.

NOTE: Students wishing to complete PHYS 205/226 at RDC must have Physics 30 as it is the prerequisite to PHYS 205.

SUGGESTED COURSE SEQUENCE

YEAR 1 FALL	YEAR 1 WINTER
MATH 202 or 203 (3) ^{1, 3}	MATH 221 ² or MATH 204 (3) ³
BIOL 218 (3) ^{3, 4}	BIOL 217 (3) ^{3, 4}
CHEM 211 (3) ³	CHEM 212 (3) ³
PHYS 205 ⁵ or OPTION (3) ¹⁰	PHYS 226 ⁵ or OPTION (3) ¹⁰
NON-SCIENCE OPTION (3) ⁹	CHEM 351 ⁶ or NON-SCIENCE OPTION(3) ⁹

YEAR 2 FALL	YEAR 2 WINTER
BIOL 317 (3) ³	BIOL 301 (3) ³
BIOL 318 (3) ³	BIOC 393 (3) ⁷
CHEM 351(3) ⁶ or NON-SCIENCE OPTION (3) ⁹	CHEM 352 (3) ⁶
MICR 365 (3) ⁸ or NON-SCIENCE OPTION (3) ⁹	ZOOL 325 (3) ⁸ or NON-SCIENCE OPTION (3) ⁹
NON-SCIENCE OPTION (3) ⁹	NON-SCIENCE OPTION (3) ⁹

NOTES:

- Students with a grade of 70% or higher in Math 31 are advised to take MATH 203 instead of MATH 202.
- The Biological Sciences Department recommends MATH 221 for students majoring in **Ecology or Zoology**.
- All transfer applicants are required to present BIOL 217/218, CHEM 211/212, MATH 202 (or 203), and MATH 221 or MATH 204 with a grade of C- or better in each.

Transfer applicants to majors in **Biochemistry** and **CMMB** require the above *plus* BIOL 301 and 317 with a grade of C- or better in each.

Transfer applicants to majors in **Botany**, **Ecology**, and **Zoology** require the above *plus* BIOL 301, 317, and 318 with a grade of C- or better in each.

- UofC replaced their BIOL 231/233 with BIOL 241/243 for 2011/12. The Biological Sciences Department in the Faculty of Science states *as a receiving institution, UofC will continue to accept the equivalent of BIOL 231/233 [i.e. BIOL 217/218] to satisfy our junior biology requirement (i.e. students transferring to UofC with both courses will not have to take BIOL 241/243). In short, [UofC] does not anticipate any changes from the current transfer agreement at UofC's end.* UofC will add this information to the Alberta Transfer Guide at a later date. (Students who transfer with one of BIOL 217 or BIOL 218 will take BIOL 241 at UofC to fulfill requirements for BIOL 241/243.)
- All BSc Biological Sciences students must take *6 (6 credits) in one of Physics, Geology, or Computer Science to fulfill graduation requirements. PHYS 205/226 fulfills the physics coursework. RDC does not offer courses that fulfill the geology or computer science coursework. Students wishing to fulfill *6 in Geology or Computer Science will take *6 Options at RDC and take GLGY 201/203 or CPSC 231/233 once at UofC. Students planning to major in **Biochemistry** must take *6 Physics (PHYS 205/226). Students planning to major in **Zoology** may choose between *6 in physics or *6 in geology.
- CHEM 351/352:** Students transferring to UofC must take both CHEM 351 and CHEM 352 at RDC to receive transfer credit for CHEM 351 and CHEM 353 at UofC. All students in BSc Biological Sciences require CHEM 351. If you will be at RDC for year two, you may take CHEM 351 in the winter of the your first year or in the fall of your second year. However, if you will take MICR 365 in 2nd year at RDC you must take CHEM 351 in winter of the year one as it is prerequisite to MICR 365. If you will transfer to UofC for year two leave the both CHEM 351/352 until you get to UofC. CHEM 352 is a required course for majors in Botany, CMMB, and Zoology and in Honours Biological Sciences.
- Majors in **Ecology** do not require a course in biochemistry. Do not take BIOC 301 instead of BIOC 393.
- Majors in **Botany or Zoology:** take ZOOL 325. Students majoring in **Cell, Molecular and Microbial Biology** (CMMB): take MICR 365. Students majoring in **Biochemistry, Biological Sciences, or Ecology:** take either MICR 365 or ZOOL 325.
- BREADTH REQUIREMENT:** Graduation requirements for this program require at least *60 from outside the major field, of which at least *24 must be courses selected from Faculties outside of the Faculty of Science. Of these *24, at least *6 must be taken from the Faculty of Arts.

Choose Faculty of Arts courses from university transferable: ANTH (not 309), ART, COMM, DRAM, ECON, ENGL, FILM, FREN, GEOG, HIST, MUSE, MUSI, PHIL, POLI, PSYC (not 312), SOCI (not 310), SPAN. Other subject areas that fulfill Breadth Requirements are: BADM, BUS, FAM 315, INTD 240, 241, 321; KNSS (not KNSS 200). Seats in some BADM, BUS and KNSS courses may have major restrictions and therefore your access to them may be limited. Do not take KNSS 200 or any physical activity courses (KPAC or KDNC) as these courses will not be credited to a Faculty of Science degree. Use the Alberta Transfer Guide to determine credit transfer to UofC.
- OPTION:** A university transferable course chosen from any of the subject areas listed in Note 9 plus courses in ASTR, BIOC, BIOL, CHEM, CMPT, GENE, MATH, MICR, PHYS, PSIO, STAT, ZOOL. Do not take KNSS 200 or any physical activity courses (KPAC or KDNC) as these courses will not be credited to a Faculty of Science degree.
- When selecting **Option and Breadth Requirement** courses, students should consider that UofC encourages all students to include an international component (see [Make Your Degree More International](#)).

ALL BSC BIOLOGICAL SCIENCE STUDENTS ARE STONGLY ADVISED TO:

- Consult [Course Descriptions](#) for any course pre-requisites,
- Check [Alberta Transfer Guide](#) concerning course credit transfer to UofC, and
- Consult the transfer admission and program requirements in the [UofC Calendar](#) and appropriate [UofC websites](#).

BIOLOGICAL SCIENCES BLOCK TRANSFER AGREEMENT

Most Alberta post-secondary institutions have determined that a Biological Sciences student requires specific courses and credits in the first two years of a [Biological Sciences program](#) and that those students should be able to transfer to any post-secondary institution included in the articulation agreement. A student may obtain up to *60 towards a Biological Sciences program at one of the post-secondary institutions offering Bachelor's Degrees in Biological Sciences by completing a specific block of courses. Transfer admission requirements must be met.

TRANSFER CHECKLIST

1. **Applicants with fewer than *24:** Those transferring with *3 to *6 (3 to 6 credits) will have their GPA taken on high school coursework only (minimum 78%). Applicants presenting *9 to *21 should consider applying to BSc Natural Sciences to clear any course deficiencies. The GPA for students with *9 to *15 will be taken from high school GPA (minimum 78%) and postsecondary average.
2. **Applicants with *24 or more** must include BIOL 217/218, CHEM 211/212, MATH 202 (or 203) and MATH 221 or MATH 204 completed with a minimum grade of C- or better to meet [admission requirements](#) for BSc Biological Sciences. If BIOL 301, 317, and/or 318 are completed, the grade must be C- or better. Students who do not meet these criteria may apply to the BSc Natural Sciences program to clear deficiencies as they will not be admitted into BSc Biological Sciences programs with deficiencies. Transfer students are encouraged to complete two years (*60) of transferable coursework before transferring to this program.
3. The transfer admission GPA is calculated over the most recent coursework to a maximum of *30. All grades within a term will be included except where the number of courses taken within a term exceeds that required to fulfill *30 in which case the highest grades in that term will be used to a maximum of *30.
4. Enrolment in BSc Biological Sciences programs at UofC is limited and admission is competitive; students are admitted in order of academic merit. You are encouraged to strive for a minimum GPA of 3.00 to be as competitive as possible. In Fall 2011 the [final admitting GPA](#) to this program was 2.80.
5. Students wishing to apply to an Ecology Coop or Ecology Honours Coop program should contact the Cooperative Education and Internship Program Office for application and deadline information (http://www.ucalgary.ca/careers/students/job_experience/).
6. Courses taken in the Spring term prior to admission will not be accepted towards the GPA calculation.
7. Transfer courses are courses that are considered to transfer to the UofC regardless of the grades obtained (including D and F grades) and all grades in such courses within the most recent *30 will be used in the determination of the admission GPA. A grade of D is transferable to UofC but restrictions exist (see UofC Calendar). A grade of C- is required to fulfill a prerequisite and should be achieved to facilitate admission to your chosen major.
8. Junior-level Courses: a maximum of *54 at a junior-level (200-level at UofC) may be taken towards this BSc degree.
9. **Academic Status:** Applicants who have earned a GPA below 1.7 in an academic year are considered by UofC to have earned the academic status equivalent of Required to Withdraw; you are advised to consult the UofC Calendar and the Registrar at UofC if this scenario applies to you.
10. **Application deadline:** April 1st. Applicants are encouraged to indicate up to two choices of programs when completing their application for admission. This should be done in the event that they are inadmissible to their first program choice. Applications will be accepted starting mid-October, but are normally made starting February when students have a better sense of what program they might want to pursue. Applications are batch processed once per year after the April deadline, and so early application does not provide any advantages. No additions or changes to the application can be made after April 1st and late applications are not considered. **Documentation deadline for transfer students:** June 30th

HOW TO FIND MORE INFORMATION

[Science Department](#)

Warren Elgersma, Chairperson
Office: 1607-E 403-343-4052
warren.elgersma@rdc.ab.ca
http://www.rdc.ab.ca/about_rdc/academic_departments/sciences

[Academic Advising](#)

Academic Advising Centre: Room 1102
advisors@rdc.ab.ca 403-342-3400
http://www.rdc.ab.ca/academic_advising

[RDC Website](#)

<http://www.rdc.ab.ca>

[RDC Timetable](#)

<http://www.rdc.ab.ca/timetable>

[Alberta Transfer Guide](#)

<http://www.acat.gov.ab.ca>

ACAT [Biological Sciences Transfer Agreement](#)

<http://alis.alberta.ca/ps/ep/aas/ta/transinformation.html>

[Faculty of Science](#)

<http://www.science.ucalgary.ca/>

[Department of Biological Sciences](#)

<http://www.bio.ucalgary.ca> 403-220-3140

Undergraduate Program Office ([UPO](#))

403-220-5881

UofC [Office of the Registrar](#)

<http://www.ucalgary.ca/registrar>

PLEASE NOTE:

Be aware that you are responsible for ensuring your registration is complete and appropriate and that your course choices comply with the program to which you have been admitted at RDC &/or to your destination university.

You are cautioned that any changes to your courses, your major or your transfer destination may adversely affect your transferable credit, admission requirements for future programs, or eligibility to graduate from a RDC diploma. Consult with an academic advisor if you have any questions.

The function of academic advisors is to provide students with information and resources that enable them to make informed decisions relevant to their education. These resources include the RDC Calendar, the Academic Planning Guide for your chosen program and destination university, the Alberta Transfer Guide, and the calendar and contact information for your destination university. Academic advisors will assist you in interpreting information from these resources or refer you to your destination university if appropriate. Students in university transfer programs are strongly advised to refer to the calendar of the university to which they wish to transfer and should contact appropriate university departments as required.