BACHELOR OF SCIENCE - BIOCHEMISTRY

UNIVERSITY OF ALBERTA – FACULTY OF MEDICINE & DENTISTRY: HONORS OR SPECIALIZATION PROGRAM
UPDATED MARCH 2019

This guide has been created by the School of Arts & Sciences at Red Deer College using information attained from the University of Alberta’s academic calendar. This planning guide highlights only major points regarding admission and transfer.

Students are advised to read the University of Alberta academic calendar for full program and transfer information; for further details regarding Biochemistry, visit: http://calendar.ualberta.ca/

**PATTERN OF COURSES**

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Students studying Biochemistry will be able to pursue a number of research interests at the University of Alberta. The Department's research interests cover a broad spectrum of topics, including nucleic acid-protein interactions, regulation of gene expression, structure and function of proteins, receptors, muscle biochemistry, mechanisms of enzyme catalysis, metabolic regulation and the structure, function and assembly of biological membranes. See more at: http://biochem.med.ualberta.ca/

This degree can be completed as part of an Honors or Specialization program. Course sequencing differs slightly between the two programs in the first year. See page 2 for information on the Specialization program.

More specific information on the Honors & Specialization programs at the University of Alberta can be found on Page 3.
NOTES:

1. For the Biochemistry major at the U of A, the sequencing between the Honors and Specialization program are similar for the most part. The major difference is the Honors program requires students to complete 2 Physics courses, 1 calculus course and 1 additional MATH/STAT course. The specialization program requires the completion of only 2 courses total in PHYS/MATH or STAT.

Students planning to continue in the Honors Stream will require the following courses in their degree (recommended to complete in year 1 if possible):

- PHYS 205
- PHYS 226 (pre-req of PHYS 205)
- MATH 202 or MATH 203
- One of: MATH 204, MATH 221, STAT 251

If you are pursuing the Honors stream, take PHYS 205 in the fall and PHYS 226 in the winter (in lieu of the MATH, STAT, or PHYS Option).

Take MATH 202 or 203 in the Fall term (in lieu of option), and then one of MATH 204, MATH 221, or STAT 251 in the Winter term (in lieu of the other option).

If you are planning on applying to the Specialization program, choose 2 from the following list (one in Fall term, one in Winter term – note pre-reqs):

- PHYS 205
- PHYS 226 (pre-req of PHYS 205)
- MATH 202 or MATH 203
- MATH 204 (pre-req of MATH 202/203)
- MATH 221
- STAT 251

2. Examples of available Arts & Science Options for the 2019-2020 academic year can be viewed here: https://rdc.ab.ca/node/80375/attachment (you can pick up this printout from the School of Arts & Sciences in Room 2203 or view on the Loop)

Not all of these courses may be transferable to your University (the majority are). Remember to visit Transfer Alberta to check for course transferability, or check with an advisor.

3. Completing CHEM 351 and CHEM 212 in year 1 can offer students more versatility in course scheduling for their second year, however taking the course concurrently in Winter term can also create a heavier schedule. As such, students can choose to complete CHEM 351 and/or CHEM 212 in their first or second year of study, or through the use of a spring term.

CHEM 212 and CHEM 351 can also be completed in the Spring term. Students wishing to lighten their first-year course load should take one of CHEM 212/351 in the Winter term of Year 1, and then take the other course in the Spring term of Year 1.
IMPORTANT THINGS TO KNOW

University of Alberta calendar entry: http://calendar.ualberta.ca/

*It is highly advised you read and consult the University of Alberta calendar as it will have the answers to many questions, as well as provide information on the specifics of the program.*

Biochemistry can be completed at the University of Alberta as either an Honors or Specialization degree. Students studying at the Honors/Specialization level will need to maintain a higher level of academic standing, both GPA and course load wise. Students studying at the Honors/Specialization level will also concentrate the majority of their coursework on a single subject.

If you are pursuing an honors or specialization program, it is recommended to maintain of course load of at least 24 credits (*). This is generally 4 courses per Fall/Winter term (8 per year).

- **Honors Program:** It is recommended students complete a course load of at least 24 credits between Fall and Winter. For GPA requirements, please click here. Possession of the minimum GPA does not guarantee entry.

- **Specialization Program:** It is recommended students complete a course load of at least 24 credits between Fall and Winter. For GPA requirements, please click here. Possession of the minimum GPA does not guarantee entry.

- **General Program:** Will require completion of a major and minor. While no specific course load is required for transfer, students will need to meet general admission requirements. A GPA of 2.0 over a student’s previous 24 credits is required to apply for transfer. Possession of the minimum GPA does not guarantee entry. See RDC’s Bachelor of Science General Planning Guide for the U of A for more info.

PLEASE KEEP IN MIND

- **A minimum grade of C-** must be achieved in order for course credit to be transferable. While courses with grades of D or F will not transfer, they remain on your transcript and will be used in calculation of your GPA. Please talk to an Academic Advisor as soon as possible if you feel you may be in jeopardy of not getting a C- in a course you are enrolled in.

- **Spring term courses:** a spring term course may be taken in year of transfer if it is not required for admission to the program. The grade will not be calculated in the AGPA nor will it count towards Fall/Winter course load. Ensure the transcript submitted shows registration in the spring course.

- **Transfer after 1 year of study** is highly recommended.

- **Application and document deadlines:** March 1.
  Visit http://admissions.ualberta.ca/notices-deadlines.aspx for more detailed information on Application dates and deadlines as they can change each year.
HOW TO FIND MORE INFORMATION

School of Arts & Sciences
Advising & Recruiting
Room 2203
artscienceinfo@rdc.ab.ca
403-342-3585 (select option 1)
www.rdc.ab.ca/artsandsciences

Alberta Transfer Guide
http://transferalberta.alberta.ca

University of Alberta
http://www.ualberta.ca

Faculty of Medicine & Dentistry
http://www.med.ualberta.ca/
meddent@ualberta.ca

Department of Biochemistry
http://biochem.med.ualberta.ca/

University of Alberta Calendar + Program Information
http://calendar.ualberta.ca/

PLEASE NOTE:

This planning guide is designed to help you choose courses at RDC that will transfer to your destination institution and towards your intended degree. The recommendations in this guide are based off current RDC courses that transfer to the institution identified in this guide, as well as information provided by the institution (either through printed publication and/or communication between our institutions).

Institutions can make changes to their program and/or transfer requirements without consulting Red Deer College. As such, it is recommended you consult with the appropriate institutional information (i.e. university calendars, websites, advisors,) to gain the most up to date information.

You are responsible for ensuring that your registration is completed, and that your course choices comply with the program to which you have been admitted to at RDC and/or to the university to which you wish to transfer. This planning guide is meant to help you gain a basic understanding of your program and provide suggestions for course sequencing.

You are cautioned that any changes to your courses, your major, or your transfer destination may adversely affect your transferable credit or admission requirements for future programs. Consult with the student advisor (above) if you have any questions.

Students in university transfer programs are strongly advised to refer to the calendar of the university that they wish to attend, and should contact appropriate university departments as required.