

BIOLOGICAL SCIENCES, PH.D.

Biological Sciences

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Biological Sciences Program Information

The department offers graduate training leading to Master of Science and Doctor of Philosophy degrees in a broad range of biological disciplines in both field and laboratory research.

Admission Information

Admission to the Faculty of Graduate and Postdoctoral Studies

Application and Admission Procedures are found in the Academic Guide (<https://catalog.umanitoba.ca/graduate-studies/academic-guide/application-admission-registration-policies/>).

Admission requirements for doctoral students are found in the Doctor of Philosophy General Regulations (<https://catalog.umanitoba.ca/graduate-studies/academic-guide/doctor-philosophy-general-regulations/>) section of the Guide.

Biological Sciences Ph.D. Admission Requirements

Applicants are required to have a Master's degree in Biology (or equivalent). Candidates normally have completed a M.Sc. degree before entering the Ph.D. program; however under certain circumstances transfer from a M.Sc. to Ph.D. program and entry into the Ph.D. without a M.Sc. is possible. Individual qualifications other than these will be considered.

Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Biological Sciences Ph.D. program of study (<https://umanitoba.ca/explore/programs-of-study/biological-sciences-phd/>) page.

Degree Requirements

Admission to the Ph.D. from a Master's Degree: a minimum of six credit hours of graded course work at the 7000 level (including the core course BIOL 7220: Critical Thinking in Biological Sciences), and a thesis are required.

Admission to the Ph.D. from an Honours Bachelor's Degree or equivalent: a minimum of 12 credit hours of graded course work at the 7000 level (including two core courses, BIOL 7100: Core Skills in Biological Sciences Research and BIOL 7220: Critical Thinking in Biological Sciences), and a thesis are required.

Upon recommendation by the Advisory Committee, the student may be required to take additional coursework beyond the minimum requirement.

Expected Time to Graduate: 3 - 4 years

Progression Chart

Where admission is directly from Master's¹:

Course	Title	Hours
Year 1		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
BIOL 7220	Critical Thinking in Biological Sciences	3
BIOL 7XXX	Major subject at 7000 level	3
Hours		6
Year 2		
GRAD 8020	Doctoral Re-registration	0
GRAD 8010	Doctoral Candidacy Examination	0
Hours		0
Year 3		
GRAD 8020	Doctoral Re-registration	0
Hours		0
Year 4		
GRAD 8020	Doctoral Re-registration	0
GRAD 8000	Doctoral Thesis	0
Hours		0
Total Hours		6

¹ Where admission to the Ph.D. is directly from a Master's Degree, a minimum of six (6) credit hours of graded course work at the 7000 level (including the core course BIOL 7220), and a thesis are required.

Where admission is directly from an Honours Bachelor's Degree or equivalent¹:

Course	Title	Hours
Year 1		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
BIOL 7100	Core Skills in Biological Sciences Research	3
BIOL 7220	Critical Thinking in Biological Sciences	3
BIOL 7XXX	Major subject at 7000 level	6
Hours		12
Year 2		
GRAD 8020	Doctoral Re-registration	0
GRAD 8010	Doctoral Candidacy Examination	0
Hours		0
Year 3		
GRAD 8020	Doctoral Re-registration	0
Hours		0
Year 4		
GRAD 8020	Doctoral Re-registration	0
GRAD 8000	Doctoral Thesis	0
Hours		0
Total Hours		12

¹ Where admission to the Ph.D. is directly from an Honours Bachelor's Degree or equivalent, a minimum of 12 credit hours of graded course

work at the 7000 level (including two core courses, BIOL 7100 and BIOL 7220), and a thesis are required.

Registration Information

Students should familiarize themselves with the Faculty of Graduate and Postdoctoral Studies 'GRAD' courses applicable to their program (<https://catalog.umanitoba.ca/graduate-studies/registration-information/>). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate and Postdoctoral Studies, and students should consult unit supplementary regulations (<https://umanitoba.ca/graduate-studies/supplementary-regulations/>) for these specific regulations.

Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (<https://catalog.umanitoba.ca/graduate-studies/academic-guide/academic-performance-general/#BFAR>) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (<https://catalog.umanitoba.ca/graduate-studies/academic-guide/academic-performance-general/#GRAD7500>) and Mandatory Research Integrity Online Course (<https://catalog.umanitoba.ca/graduate-studies/academic-guide/academic-performance-general/#GRAD7300>).

Students must also meet additional BFAR requirements (<https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#additional-requirements-by-program>) that may be specified for their program.

General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).