

Quick Reference: Biochemistry and Molecular Biology Degree Requirements



Core degree requirements (including minimum grade requirements) for all Biochemistry and Molecular Biology 120 credit hour Major or Honours programs:

Year	Courses	Description
I	CHEM 1011 & 1012	Concepts in Chemistry (or equivalent) – B- or better for BIOC 2610
	BIOL 1010 & 1011	Principles of Biology (or equivalent) – B- or better for BIOC 2610
	MATH/STAT	6 credit hours (MATH 1000 or 1215; and, STAT 1060 or MATH 1010 or 1030)
	Writing Class	SCIE 1111 [3 credit hours] or 6 approved credit hours
п	BIOC 2300	Introduction to Biochemistry – B- or better for BIOC 3300 & 3700
	BIOC 2610	Biochemistry Laboratory Methods & Techniques – B- or better for BIOC 3700
	BIOL 2020	Cell Biology – B- or better for BIOC 3400
	BIOL 2030	Genetics and Molecular Biology – B- or better for BIOC 3400
	CHEM 2201	Introductory Analytical Chemistry. Note: recommended but not required for
		double major/combined honours. (<u>Required</u> for programs with Chemistry.)
	CHEM 2401 & 2402	Introductory Organic Chemistry – B- or better for BIOC 3700
III	BIOC 3300	Cellular and Integrated Metabolism
	BIOC 3400	Nucleic Acid Biochemistry & Molecular Biology
	BIOC 3700	Biomolecular Chemistry
		Note: an average grade of B or better for BIOC 3300, 3400 & 3700 is needed
		for BIOC 4604/4605 (Honours Research Project)
	BIOC 3XXX/4XXX	Number of credit hours based on program - detailed below
IV	BIOC 3XXX/4XXX	Number of credit hours based on program - detailed below

Additional BIOC 3XXX/4XXX requirements by degree:

Program	Credit hour requirements
Concentrated Honours in Biochemistry and Molecular Biology	3 credit hours: any BIOC 3XXX or BIOC 4XXX 9 credit hours: BIOC 40XX, 43XX, 44XX, 45XX, 47XX 6 credit hours: any BIOC 4XXX BIOC 4604/4605 (Research Project I & II)
Combined Honours in Biochemistry and Molecular Biology & another subject (B&MB as First subject)	6 credit hours: BIOC 40XX, 43XX, 44XX, 45XX, 47XX BIOC 4604/4605 (Research Project I & II)
Combined Honours in Biochemistry and Molecular Biology & another subject (B&MB as Second subject)	3 credit hours: any BIOC 3XXX or BIOC 4XXX 6 credit hours: BIOC 40XX, 43XX, 44XX, 45XX, 47XX
Major in Biochemistry and Molecular Biology	9 credit hours: any BIOC 3XXX or BIOC 4XXX 6 credit hours: any BIOC 4XXX
Double Major in Biochemistry and Molecular Biology & another subject	3 credit hours: any BIOC 3XXX or BIOC 4XXX 6 credit hours: any BIOC 4XXX

Note: a grade of C or better is required for you to count a course taken in your Honours subject(s) towards the credit-hour requirements for an Honours degree

Courses outside of BIOC that may be used towards
BIOC 3XXX or BIOC 4XXX credit hours:
CHEM 3601; CHEM 4601; MICI 4033; PATH 4035; PHAC 4403

BIOC courses that may be taken as electives but that may not be used as BIOC 3XXX credit hours towards a Major or Honours in B&MB: BIOC 3501; BIOC 3610