B1380 Bachelor of Science (Major: Genetics and Molecular Biology)

Academic Chair: Dr Ravi Tiwari, R. Tiwari@murdoch.edu.au **Start Date:** Semester 1, 2024

	Semester 1 Units	CP	Semester 2 Units	CP
Year 1 – 2024	BMS100 Transition into Biomedical Sciences	3	BIO152 Cell Biology	3
	BMS101 Introduction to the Human Body	3	CHE144 Foundations of Chemistry	3
	MAS183 Statistical Data Analysis	3	MSP100 Career Learning	3
	CHE140 Fundamentals of Chemistry	3	Elective	3
	Winter Units	**CP**	**Summer Units**	**CP**
	Total	12	**Total**	12
	Semester 1 Units	**CP**	**Semester 2 Units**	**CP**
Year 2 - 2025	BIO282 Molecular Biology	3	BIO247 Biochemistry	3
	BMS212 Medical Microbiology*	3	Career Learning Unit#	3
	Elective	3	General Elective	3
	Elective	3	General Elective	3
	Winter Units	**CP**	**Summer Units**	**CP**
	Total	12	**Total**	12
	Semester 1 Units	**CP**	**Semester 2 Units**	**CP**
Year 3 - 2026	BIO394 Genetic Engineering	3	BIO390 Metabolic & Cellular Biochemistry	3
	BIO356 Genetics & Evolution	3	BIO378 Systems Biology	3
	Elective	3	Career Learning Unit#	3
	Elective	3	General Elective	3
	Winter Units	**CP**	**Summer Units**	**CP**
	Total	12	**Total**	12

TOTAL CREDIT POINTS 72

*** Or:**

BIO246 Microbiology

#Career Learning Unit
Choose any two from the following:

- MSP200 Building Enterprise Skills
- MSP201 Real World Learning
- MSP202 Data Analytics and Storytelling in the 21st Century
- VLS302 Professional Placement in Veterinary and Life Sciences

Note: To complete a second major within the B1380 Bachelor of Science, take the core units of that major in place of the indicated general electives.

Major Prerequisite: Chemistry Background
Students who achieved a final scaled score of 50 percent or more in Chemistry 3A/3B or Chemistry ATAR within the past three years will be granted a preclusion from CHE140 Fundamentals of Chemistry (and will take another unit in its place). Students who have completed previous chemistry not stated above should consult their Academic Chair for clarification of their enrolment requirements.

General Electives can be an elective unit or units towards a second major/minor. Students should keep in mind the Part 1 rule where no more than ten 100 level units are allowed.

Recommended Electives: BMS107 Foundations of Vertebrate Form and Function CHE103 Introduction to Forensic Science BMS206 Biomedical Physiology BMS211 Medical Immunology and Molecular Genetics BMS314 Pathological Basis of Disease BMS315 Advances in Medical Science BMS218 Haematology	BMS327 Diagnostic Genomics BMS213 Forensic Anatomy and Anthropology BIO367 Forensic Toxicology BIO309 Omics Technologies & Bioinformatics BIO311 Interactive Data Analytics and Visualisation MAS223 Applied Statistics MAS224 Biostatistical Methods BIO359 Forensic DNA Analysis BMS321 Histology

Please note: This course plan is a sample only and must be read in conjunction with the full course structure, unit prerequisites and enrolment options as outlined in the Handbook. This information is correct as at 22/10/2023.