Sample Course Plan - Semester 1 2019 entry

B1337 Bachelor of Science / Laboratory Medicine (<u>Laboratory Medicine</u>) - 96 credit points Second Major: Genetics and Molecular Biology

Academic Chair: Associate Professor Murray Adams | Email: M.Adams@murdoch.edu.au

Major Prerequisites: 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 should seek an exemption from their Academic Chair for CHE140 Fundamentals of Chemistry. Students who have completed previous chemistry not stated above should also consult their Academic Chair for clarification of their enrolment requirements.

Course variation: Breadth Units

Students studying Laboratory Medicine with a second major in Genetics and Molecular Biology need to contact the Academic Chair regarding a waiver from 3cp Breadth units.

	Semester 1		Semester 2	
Year 1	BSC100 Building Blocks for Science Students CHE140 Fundamentals of Chemistry BMS101 Introduction to the Human Body MAS183 Statistical Data Analysis	3pts 3pts 3pts 3pts 12pts	BSC150 What is Science? BIO152 Cell Biology BMS107 Foundations of Vertebrate Form and Function CHE144 Foundations of Chemistry	3pts 3pts 3pts 3pts 12pts
Year 2	Breadth Unit <i>(see note below)</i> Research Skills unit (<i>see note below</i>) BIO282 Molecular Biology BMS212 Medical Microbiology	3pts 3pts 3pts 3pts 12pts	Research Skills unit (see note below) BMS218 Haematology BMS211 Medical Immunology and Molecular Genetics BIO247 Biochemistry	3pts 3pts 3pts 3pts 12pts
Year 3	BMS321 Histology BMS314 Pathological Basis of Disease BIO356 Genetics and Evolution BIO394 Genetic Engineering	3pts 3pts 3pts 3pts 12pts	BIO378 Systems Biology Specified Elective (choose from list below) Specified Elective (choose from list below) And select one unit from below to be studied in Year 3 with the remaining two units to be studied in Year 4: BMS322 Clinical Immunology 3pts BMS325 Histopathology 3pts BMS327 Diagnostic Genomics 3pts	3pts 3pts 3pts 3pts
-	Year 3 Specified Electives - 6 credit point Select from the following: BMS323 Clinical Biochemistry I - 3 points MURDOCH: S2-internal (quota of 25 places) BMS324 Clinical Microbiology I - 3 points MURDOCH: S2-internal (quota of 25 places) BMS326 Clinical Haematology I - 3 points MURDOCH: S2-internal (quota of 25 places)	ts		

Disclaimer: This course plan is a <u>sample only</u> and must be read in conjunction with the full course structure, unit prerequisites and enrolment options as per the online <u>Handbook</u>. This course plan will vary depending on chosen additional majors/minors and your academic progression.

Students should note that due to unit prerequisites, commencing study in semester 2 may extend the duration of the course.

Core Units - 18 credit points

BMS431 Laboratory Medicine Practice I - 6 points

BMS432 Laboratory Medicine Practice II - 6 points

And select <u>one</u> unit from below to be studied in Year 3 with the <u>remaining two</u> units to be studied in Year 4:

- <u>BMS322</u> Clinical Immunology 3 points
- BMS325 Histopathology 3 points
- BMS327 Diagnostic Genomics 3 points

Year 4 Specified Electives - 6 credit points Select from the following:

BMS423 Clinical Biochemistry II - 3 points

BMS424 Clinical Microbiology II - 3 points

BMS426 Clinical Haematology II - 3 points

Additional Academic Progress Requirements

In order to commence the fourth year of the Bachelor of Science/Bachelor of Laboratory Medicine students must have achieved a minimum GPA of 2.0 (out of 4.0) over their second and third year units.

Note: Breadth and Research Skills Unit Requirements

Students require 6pts of Breadth units and 6pts of Research Skills units for Part II of their degree. Select from the prescribed lists of options – below.

Please note: A unit cannot be used to satisfy both the Breadth or Research Skills Unit requirements and the requirements of a major or minor. If taken at 100 level the unit(s) will be attributed to Part I. Note that no more than 30 credit points at Part I may be credited towards course completion requirements.

Research Skills Unit List: Laboratory Medicine

MAS223 Applied Statistics - 3 points MURDOCH: S2-internal, S2-external MAS224 Biostatistical Methods - 3 points MURDOCH: S1-internal, S1-external

BIO388 Forensic Science and Miscarriages of Justice - 3 points

MURDOCH: W-internal

BIO394 Genetic Engineering - 3 points

MURDOCH: S1-internal

BIO367 Forensic Toxicology - 3 points

MURDOCH: S2-internal BIO246 Microbiology - 3 points

MURDOCH: S1-internal

BMS316 Parasitology: People, Pets and Wildlife - 3 points

MURDOCH: S2-internal

Disclaimer: This course plan is a <u>sample only</u> and must be read in conjunction with the full course structure, unit prerequisites and enrolment options as per the online <u>Handbook</u>. This course plan will vary depending on chosen additional majors/minors and your academic progression.