Programme Regulations 2025/26
Degree of Bachelor of Science with Honours in:

Biochemistry	**C700**
Biochemistry with Professional Placement Year	**C703**
Biochemistry with Placement Year	**1304U**
Biomedical Sciences (Deferred Choice)	**B902**
Biomedical Sciences	**B940**
Biomedical Sciences with Professional Placement Year	**B943**
Biomedical Sciences with Placement Year	**1311U**
Biomedical Genetics	**B901**
Biomedical Genetics with Professional Placement Year	**B913**
Biomedical Genetics with Placement Year	**1302U**
Pharmacology	**B210**
Pharmacology with Professional Placement Year	**B213**
Pharmacology with Placement Year	**1301U**
Physiological Sciences	**B100**
Physiological Sciences with Professional Placement Year	**B103**
Physiological Sciences with Placement Year	**1300U**

Notes

(i) These programme regulations should be read in conjunction with the University's Taught Programme Regulations.

(ii) All optional modules are offered subject to the constraints of the timetable and to any restrictions on the number of students who may be taught on a particular module. Not all modules may be offered in all years and they are listed subject to availability.

(iii) Unless otherwise stated under 'Type', modules are not core.

(iv) A compulsory module is a module which a student is required to study.

(v) A core module is a module which a student must pass, and in which a fail mark may neither be carried nor compensated; such modules are designated by the board of studies as essential for progression to a further stage of the programme or for study in a further module.

(vi) All modules are delivered in Linear mode unless stated otherwise as Block, eLearning or distance learning.

1. Programme Structure

1.1 Stage 1

(a) All candidates shall take the following compulsory modules:

Code	*Descriptive title*	*Total Credits*	*Credits Sem 1*	*Credits Sem 2*	*Level*	*Type*
BGM1002	Biochemistry	15	15		4	*Core*

CMB1004	Cell Biology	15	15		4	*Core*
BGM1004	Genetics	15	15		4	*Core*
CMB1011	Professional and Practical Skills for Bioscientists	30	15	15	4	*Core*
CMB1003	Microbiology and Immunology	15		15	4	*Core*
PED1003	Pharmacology	15		15	4	*Core*
PSC1002	Physiology	15		15	4	*Core*

(b) In order to pass CMB1011 candidates must achieve an overall module mark of at least 40% and achieve at least 40% in all Semester 2 assessments.

If a candidate achieves an overall module mark which is below 40%, despite all Semester 2 assessments being passed, the candidate will fail the module and will be required to complete a resit assessment. The resit will be determined by the Board of Examiners.

If a candidate achieves an overall module mark of 40% or more but does not achieve 40% or more in all Semester 2 assessments, the candidate will fail the module and will be required to resit the failed Semester 2 assessments.

All candidates must demonstrate competency by passing the practical skills (Lab Exercise) assessment integrated throughout the module. Opportunities to pass the assessment will be provided during Stage 1 of the programme and candidates must pass the assessment prior to progressing to Stage 2.

(c) The University rules for compensation Taught Programme Regulations Section C27-30 (BSc) may be applied when considering the returned fail mark of 35%. **Note that all Stage 1 modules are core and therefore may not be compensated.**

(d) Candidates who have satisfied the Stage 1 requirements for the degree of Medical Sciences (Deferred Choice) shall select an Honours programme from the previous list, provided they have passed all core Stage 1 modules.

1.2 Stage 2

(a) All candidates shall take the following compulsory modules:

Code	*Descriptive title*	*Total Credits*	*Credits Sem 1*	*Credits Sem 2*	*Level*	*Type*
CMB2000*	Essential Biomedical Research Skills	20	20		5	*Core*
CMB2001	Control of Eukaryotic Gene Expression	10	10		5	
CMB2004	Cell and Molecular Biology of the Immune System	10	10		5	

**In order to pass the core CMB2000 module candidates must achieve a mark of at least 40% and attend all compulsory practical sessions.*

(b) Biochemistry candidates shall take the following compulsory modules:

Code	*Descriptive title*	*Total Credits*	*Credits Sem 1*	*Credits Sem 2*	*Level*	*Type*
BGM2002	Biochemistry and Genetics of Signalling and the Cell Cycle	20	20		5	
BGM2056	DNA Replication, Recombination and Repair	10		10	5	
BGM2062	Advanced Protein Analysis	10		10	5	
BGM2060	Proteins and Enzymes	20		20	5	
BGM2061	Protein Trafficking and Biological Membranes	20		20	5	

(c) Biomedical Sciences candidates shall take the following compulsory modules:

Code	*Descriptive title*	*Total Credits*	*Credits Sem 1*	*Credits Sem 2*	*Level*	*Type*
BMS2002	Cell Biology and Disease	20	20		5	
BMS2013	Practical and Presentational Skills in Biomedical Sciences	10		10	5	
CMB2007	Human Anatomy	10		10	5	

All Biomedical Sciences candidates shall take one optional module from each of the following lists:

List A:

Code	*Descriptive title*	*Total Credits*	*Credits Sem 1*	*Credits Sem 2*	*Level*	*Type*
BMS2012	Clinical Immunology and Viral Pathogens	20		20	5	
or						
BMS2014	The Biology of Ageing	20		20	5	

List B:

Code	*Descriptive title*	*Total Credits*	*Credits Sem 1*	*Credits Sem 2*	*Level*	*Type*
BMS2011	Neuroscience: from Cell to Cognition	20		20	5	
or						
BMS2015	Health and Disease at Mucosal Surfaces	20		20	5	
or						
BMS2023	The Principles of Cancer	20		20	5	

<u>Optional Semester 2 Study Abroad</u>

(d) Biomedical Sciences candidates may have the opportunity to study Semester 2, Stage 2 at Monash University. Permission to undertake this study abroad opportunity is subject to approval by the Degree Programme Director.

(e) Candidates studying Semester 2, Stage 2 at Monash University shall take the following compulsory modules:

Code	*Descriptive title*	*Total Credits*	*Credits Sem 1*	*Credits Sem 2*	*Level*	*Type*
MON2001	Structure of the Human Body: an evolutionary and functional perspective (Monash University)	15		15	5	
MON2004	Molecular and Cellular Immunology (Monash University)	15		15	5	
MON2006	Molecular Mechanisms of Disease (Monash University)	30		30	5	

(f) Biomedical Genetics candidates shall take the following compulsory modules:

Code	*Descriptive title*	*Total Credits*	*Credits Sem 1*	*Credits Sem 2*	*Level*	*Type*
BGM2002	Biochemistry and Genetics of Signalling and the Cell Cycle	20	20		5	
BGM2056	DNA Replication, Recombination and Repair	10		10	5	
BGM2057	Medical Genomics: from DNA to Disease	20		20	5	
BGM2058	Evolution	20		20	5	
BGM2063	Approaches to Analysis of Genes and Genomes	10		10	5	

(g) Pharmacology candidates shall take the following compulsory modules:

Code	*Descriptive title*	*Total Credits*	*Credits Sem 1*	*Credits Sem 2*	*Level*	*Type*
PSC2002	Membrane Transport and Cell Signalling in Health and Disease	20	20		5	
PED2001	Drug Disposition and Pharmacokinetics	20		20	5	
PED2006	Systems Pharmacology	20		20	5	
PED2007	Cardiovascular Pharmacology	20		20	5	

(h) Physiological Sciences candidates shall take the following compulsory modules:

Code	*Descriptive title*	*Total Credits*	*Credits Sem 1*	*Credits Sem 2*	*Level*	*Type*
PSC2002	Membrane Transport and Cell Signalling in Health and Disease	20	20		5	
PSC2018	Human Anatomy for Physiologists	10		10	5	
PSC2016	Molecular Physiology and Pathophysiology	15		15	5	
PSC2020	Cardiovascular System Physiology	15		15	5	
PSC2019	Renal and Respiratory Physiology	20		20	5	

1.3 Optional Placement Year

(a) On completion of Stage 2 and before entering Stage 3, candidates may have the opportunity to undertake a Professional Placement or Careers Placement with an approved organisation. Permission to undertake any of these placements is subject to approval by the Degree Programme Director. Candidates who are required to re-sit their Stage 2 assessment must delay the start of their placement until they have done so. Candidates who fail Stage 2 may not complete a placement year. On successful completion of the placement year, candidates will return to complete the relevant stage 3 modules as the final year of their degree. Candidates who fail the placement will return to complete Stage 3 on the original degree code.

(b) Candidates completing a programme with Professional Placement Year shall take the following compulsory module:

Code	*Descriptive title*	*Total Credits*	*Credits Sem 1*	*Credits Sem 2*	*Level*	*Type*
BMS3030*	Professional Placement Year	120	60	60	6	

*In order to pass BMS3030 candidates must achieve a mark of at least 40 in each of the three components of assessment (Report, Oral Presentation and Supervisor Report). If the Report or Oral Presentation is failed, they will have to be retaken and a pass mark obtained. However, no resit can be offered for the Supervisor Report. Thus, if the Supervisor Report is failed, this will constitute a fail for the entire module.

(c) Candidates completing a programme with Placement Year shall take ONE of the following compulsory modules:

Code	*Descriptive title*	*Total Credits*	*Credits Sem 1*	*Credits Sem 2*	*Level*	*Type*	*Mode*
NCL3000	*Careers Service Placement Year Module*	*120*	*60*	*60*	*6*		
*CMB3005**	*Bioscience Study Abroad Placement*	*120*	*60*	*60*	*6*		

*Candidates will study modules to the equivalent of 120 credits at the partner institution. In order to pass CMB3005 candidates must pass 90 credits at first attempt. No resit can be offered for the modules taken at the host institution, therefore if more than 30 credits are failed this will constitute a fail for the entire module. Candidates are also required to pass both components of the module assessment (Professional Skills Assessment and Reflective Log). The Professional Skills assessment requires students to successfully engage with the International Office's preparatory activities and there is no resit opportunity for this. Normal resit opportunities apply to the Reflective Log.

1.4 Stage 3

1.4.1 All programmes

(a) All candidates shall take ONE of the following compulsory modules in Semester 2:

Code	*Descriptive title*	*Total Credits*	*Credits Sem 1*	*Credits Sem 2*	*Level*	*Type*
CMB3000	Research Project	40		40	6	
CMB3002	Research Project for Exchange Students	40		40	6	

(b) All candidates shall take ONE optional module from the following list:

Code	*Descriptive title*	*Total Credits*	*Credits Sem 1*	*Credits Sem 2*	*Level*	*Type*
BMS3007*	Research in Biomedical Sciences	10	10		6	
BGM3046*	Research in Biochemistry and Genetics	10	10		6	
PSC3010*	Research in Physiological Sciences	10	10		6	
PED3013*	Research in Pharmacological Sciences	10	10		6	
BMS3003	Business Enterprise for the Bioscientist	10	10		6	
BMS3015	Health and Illness: Professional and Societal Perspectives	10	10		6	
BMS3016	Science Communication	10	10		6	
BMS3022	Bioethics	10	10		6	
BMS3025	Bioinformatics	10	10		6	

*Candidates select the research module appropriate to their named degree.

1.4.2 BSc Degree in Biochemistry and Biomedical Genetics

(a) Biochemistry candidates shall take the following compulsory modules:

Code	*Descriptive title*	*Total Credits*	*Credits Sem 1*	*Credits Sem 2*	*Level*	*Type*
BGM3057	Integrated Biochemistry	10		10	6	
BGM3063	Biochemistry of Gene Expression	20	20		6	
BGM3064	Applied Biochemistry	20	20		6	
BGM3065	Biochemistry of Cancer and Chronic Diseases	20	20		6	

(b) Biomedical Genetics candidates shall take the following compulsory modules:

Code	*Descriptive title*	*Total Credits*	*Credits Sem 1*	*Credits Sem 2*	*Level*	*Type*
BGM3024	The Molecular Basis of Cancer	10	10		6	
BGM3056	Evolution and Genomics	10	10		6	
BGM3060	Diagnostic Medical Genetics	20	20		6	
BGM3058	Integrated Genetics	10		10	6	
BGM3061	Genetic Variation in Common Disease	10	10		6	
BGM3062	Genetics of Development and its Disorders	10	10		6	

1.4.3 BSc Degree in Biomedical Sciences

(a) All candidates shall take the following compulsory module:

Code	Descriptive title	Total credits	Credits Sem 1	Credits Sem 2	Level	Type
BMS3008	Integrated Biomedical Sciences	10		10	6	

(b) All candidates shall take one optional module from each of the following lists:

List A:

Code	*Descriptive title*	*Total Credits*	*Credits Sem 1*	*Credits Sem 2*	*Level*	*Type*
BMS3010	Genetics and Human Disease	20	20		6	
or						
BMS3021	Immunology of Health and Disease	20	20		6	
or						
BMS3017	Clinical Ageing and Health	20	20		6	

List B:

Code	*Descriptive title*	*Total Credits*	*Credits Sem 1*	*Credits Sem 2*	*Level*	*Type*
BMS3012	Cancer Biology and Therapy	20	20		6	
or						
BMS3013	Disorders of the Human Nervous System	20	20		6	
or						
BMS3020	Chronic Disease	20	20		6	

List C:

Code	*Descriptive title*	*Total Credits*	*Credits Sem 1*	*Credits Sem 2*	*Level*	*Type*
BMS3023	Epidemiology	20	20		6	
or						
BGM3039	Medical Biotechnology	20	20		6	
or						
MIC3046	Microbiota and pathogens	20	20		6	

1.4.4 BSc Degree in Physiological Sciences

(a) All candidates shall take the following compulsory modules:

Code	*Descriptive title*	*Total Credits*	*Credits Sem 1*	*Credits Sem 2*	*Level*	*Type*
PSC3008	Physiology of the Nervous System	30	30		6	
PSC3011	Physiology of Gastrointestinal Tract 1	15	15		6	
PSC3013	Physiology of Gastrointestinal Tract 2	15	15		6	
PSC3012	Integrated Physiology	10		10	6	

1.4.5 BSc Degree in Pharmacology

(a) All candidates shall take the following compulsory modules:

Code	*Descriptive title*	*Total Credits*	*Credits Sem 1*	*Credits Sem 2*	*Level*	*Type*
PED3005	Advanced Pharmacogenetics	10	10		6	
PED3006	Carcinogenesis and Anticancer Drugs	10	10		6	
PED3007	Drug Discovery and Development	20	20		6	

PED3008	Advanced Topics in Neuropharmacology	10	10		6	
PED3011	Toxicology	10	10		6	
PED3012	Integrated Pharmacology	10		10	6	

2 Assessment Methods

Details of the assessment pattern for each module are explained in the module outline.

3 Degree Classification

(a) BSc candidates will be assessed for degree classification on the basis of all the modules taken at Stages 2 and 3 with the weighting of the stages being 1:2 for Stage 2 and Stage 3 respectively. Those candidates who are intercalating (joined Stage 3 from medicine, dentistry or veterinary degrees) are exempt from this regulation and degree classification will be based solely on stage 3 assessments (120 credits).

(b) Exit velocity will not be used: the stages are already weighted (1:2 for BSc degrees).

(c) Performance in individual modules will not be used for promotion.

(d) The Placement year does not contribute to the degree classification. However, candidates studying on these programmes must pass their placement module to graduate with one of these awards.

(e) A BSc candidate will be promoted if their final weighted average lies within 1% of the borderline (after rounding) **AND** 50% or more of the module credits are in the higher degree class(es) at **both** Stage 2 and Stage 3, with no more than 40 module credits in classes two or more below the proposed final class. Intercalating/direct entry candidates are exempt from this regulation and will be promoted if their final weighted average lies within 1% of the borderline (after rounding) **AND** 50% or more of the module credits are in the higher degree class(es) at Stage 3, with no more than 20 module credits in classes two or more below the proposed final class.

(f) In accordance with university regulations, a BSc candidate with a weighted average up to 2% below a classification borderline will be **considered** (with any special circumstances being noted) by the Board for promotion to the higher degree classification by use of discretion. Note however that a requirement to *consider* using discretion is not a requirement to use discretion.

4. Intercalation

The BSc Bioscience 3-year programmes accept intercalating students from Medicine, Dentistry and Veterinary degrees undertaken at Newcastle University and other UK institutions. Students will intercalate into the 3rd year of the degree programme.

5. Exemptions to the University Taught Programme Regulations

The BSc Biomedical Sciences suite of programmes with Professional Placement Year and Placement Year have a University exemption from the University's Taught Programme Regulations in relation to the offer of a resit for BMS3030 – see Section 1.3 (b) and CMB3005 – see Sections 1.3 (c). In the event of any inconsistency between the programme and University regulations in relation to the above section, the programme regulations take precedence over the University regulations.