# MHLS Undergraduate Programme Changes

## Amendments to Undergraduate Programmes from 2023-24

If you have been made an offer to study at Queen's, you will have received a copy of the <u>University's terms and conditions</u> which states that you will be made aware of any significant amendments made to the programmes for entry in 2023-24. The University is always looking at ways to make programmes better, and the changes outlined below have been designed to provide you with an enhanced student experience.

## **Biological Sciences**

#### (biolsci@qub.ac.uk)

BSc Biochemistry	We are writing to inform you of curriculum changes that will be introduced to
BSc Biochemistry with Professional Studies	your programme in 2023-24. Following feedback from external examiners and
MSci Biochemistry	students, the following module changes will be introduced to your programme:
MSci Biochemistry with Professional Studies	
	Module BIO1301 World of Microorganisms, which was a Stage 1 full year
	module worth 40 CAT points, has been split into 2 individual modules: each
	worth 20 CAT points. The two individual modules are called Fundamentals of
	Microbiology which will be delivered in the Semester 1 and World of
	Microorganisms which will be delivered in the Semester 2.

Module BIO1304 Molecular Basis of Life which was a Stage 1 full year module worth 40 CAT points, has been split into 2 individual modules: each worth 20 CAT points. The two individual modules are called Molecular Basis of Life which will be delivered in the Semester 1 and Genetics and the Molecular Toolbox which will be delivered in the Semester 2. Module BIO2102- Experimental Biochemistry is a 20 CAT, Stage 2 module that is compulsory for Biochemistry programmes. The change is to reduce the number of assessments and therefore to amend the assessment weightings. The current assessment is: 4 x lab reports worth 15% each and 2 x class tests worth 20% each. Class tests currently cover all lecture material. This will change to 3 x lab reports worth 20% each, 1 x lab report as formative assessment at the beginning of semester and 1x class test worth 40% of the module. The material on the single class test will focus 75% on the lecture material that was NOT covered by the lab reports, and 25% on the main take home messages from the remaining lectures. Module BIO2305 - Molecular Genetics and Bioinformatics, which was a Stage 2 full year module worth 40 CAT points, has been split into 2 individual modules: each worth 20 CAT points. The two individual modules are called Molecular Genetics and Bioinformatics 1 which will be delivered in the Semester 1 and

Molecular Genetics and Bioinformatics 2 which will be delivered in the
Semester 2.
Modulo BIO2204 Biomologulos in boolth and disease is a 40 CAT full year
Module BIO3304 - Biomolecules in health and disease is a 40 CAT, full year,
stage 3 module that is compulsory for Biochemistry programmes. The change
is to better align the outcomes of the module with a more integrated student
focussed approach with maps to subject bonchmark statements
Tocussed approach with maps to subject benchmark statements.
Some Descriptions of current Learning Outcomes are changing:
• Demonstrate an understanding of the chemistry, structure, and function
of biological molecules
Explain the biochemical processes that underlie the relationship
between genotype and phenotype.
<ul> <li>Demonstrate an understanding of the structure and function of both</li> </ul>
prokaryotic and eukaryotic cells.
This will change to:
LO1: Evaluate and discuss current principles in biochemistry.
LO2: Demonstrate an in-depth knowledge of the chemistry structure and
tunction of biological molecules, the major classes of signalling molecules, their
receptors and intracellular signalling pathways.

LO3: Demonstrate an understanding of the structure and function of both
prokaryotic and eukaryotic cells.
LO4: Explain the biochemical processes that underlie the relationship between
genotype and phenotype.
LO5: Explain the complex nature of the pathophysiology of selected
biochemical disorders.
LO6: Analyse ways of manipulating biochemical systems to prevent or treat
disease.
LO7: Apply problem solving skills.
LO8: Employ communication skills.
LO9: Demonstrate innovation in science through the application of knowledge.
As a result, the assessments and weightings are also required to change.
The current assessment is:
Class test: worth 10%, Class test 2: worth 30%, Final written
examination: worth 60%
This will change to: Class test: worth 10% Essay: worth 30% Final written
examination: worth 60%

BSc Microbiology	We are writing to inform you of curriculum changes that will be introduced to
BSc Microbiology with Professional Studies	your programme in 2023-24. Following feedback from external examiners and
MSci Microbiology	students, the following module changes will be introduced to your programme:
MSci Microbiology with Professional Studies	
	Module BIO1301- World of Microorganisms is a full year, Stage 1, 40 CAT
	module that is compulsory for Microbiology programmes. The change is to split
	this module into two 20 CAT modules; both will be compulsory on Microbiology
	programmes:
	Fundamentals of Microbiology delivered in semester 1 and World of
	Microorganisms delivered in semester 2.
	BIO1304 - Molecular Basis of Life is a full year, Stage 1, 40 CAT module that is
	compulsory for Microbiology programmes. The change is to split this module
	into two 20 CAT modules; both will be compulsory on Microbiology
	programmes: BIO1103 – Molecular Basis of Life – taking place during the
	autumn semester and BIO1304 – Genetics and the Molecular Toolbox- taking
	place during the spring semester.
	Module BIO2305 - Molecular Genetics and Bioinformatics is a full year, Stage
	2, 40 CAT module that is compulsory for Microbiology programmes. The
	change is to split this module into two 20 CAT modules; both will be

	compulsory on Microbiology programmes: Molecular Genetics and
	Bioinformatics 1 – taking place during the autumn semester and BIO2-
	Molecular Genetics and Bioinformatics 2 – taking place during the spring
	Semester.
	Module BIO1305 – Biodiversity is a full year, Stage 1, 40 CAT module that is
	optional for Microbiology programmes. The change is to split this module into
	two 20 CAT modules, both will be optional on Microbiology programmes:
	Biodiversity and Environmental Biology.
	Module BIO1309 Ecology and Environmental Sciences will undergo a name
	change to Environmental Sciences.
BSc Marine Biology	We are writing to inform you of curriculum changes that will be introduced to
BSc Marine Biology with Professional Studies	your programme in 2023-24. Following feedback from external examiners and
MSci Marine Biology	students, the following module changes will be introduced to your programme:
MSci Marine Biology with Professional Studies	
	A change in the continuous assessment for module BIO2108 Marine Systems
	delivered in Semester 1, Level 2. This module is compulsory for all Marine
	Biology undergraduate students and an optional module for Environmental
	Management Students. These changes are designed to help with group
	collaboration at the start of one of the central pieces of the continuous

assessment by introducing a planning exercise at the start worth 10% of the
module mark.
The ID guide (2022 Workshop) had been introduced during lockdown to
replace fieldwork experience but is no longer required with the content learned
first-hand during the field trips. Consequently, this assignment will be removed
from the module from 2023 onwards.
The current Continuous Assessment profile will change <b>from</b> :
A Practical Skills Portfolio: Workshop 1 Assignment (ID Guide) = 10%,
Workshop II Assignment (Habitat Mapping) = 15% and Workshop III
Assignment (Statistics) = 20% [45% in total], End of Course Class test: [35%
Total] and Group Presentations on a Choice of Topic (submitted in the form of
a public education video): [20%]
<b>To</b> : Practical Skills Portfolio: Workshop I Assignment (Habitat Mapping) =
15% and Workshop III Assignment (Statistics) = 20% [35% in total], End of
Course Class test: [35% Total], Group Presentations on a Choice of
Topic (submitted in the form of a public education video) =20%, plus an initial
project plan to support the presentation = $10\%$ [30% in total].

BSc Biological Sciences	We are writing to inform you of curriculum changes that will be introduced to
BSc Biological Sciences with Professional	your programme in 2023-24. Following feedback from external examiners and
Studies	students, the following module changes will be introduced to your programme:
MSci Biologicals Sciences	
MSci Biological Sciences with Professional	Module BIO1301: World of Microorganisms 40 CAT full year module;
Studies	compulsory for all Biological Sciences programmes. This will change from a 40
	CAT year-long module delivered across Semester 1 (S1) and 2 (S2) to two
	independent modules delivered separately in Semester 1 and 2 as:
	Fundamentals of Microbiology (Semester 1) and World of Microorganisms
	(Semester 2).
	Module BIO1304: Molecular Basis of Life 40 CAT full year module; compulsory
	for all Biological Sciences programmes. This will change from a 40 CAT
	yearlong module delivered across S1 and S2, to two independent modules
	delivered separately in S1 and S2 as BIO1103: Molecular Basis of Life
	(Semester 1) and BIO1304: Genetics and the Molecular Toolbox (Semester 2).
	Module BIO1305: Biodiversity 40 CAT full year module; compulsory for all
	Biological Sciences programmes. This will change from a 40 CAT year-long
	module delivered across S1 and S2 to two independent modules delivered
	separately in S1 and S2 as: BIO1305: Biodiversity (Semester 1) and
	Environmental Biology (Semester 2).

Module BIO2305: Molecular Genetics and Bioinformatics 40 CAT full year module; compulsory for all Biological Sciences programmes. This will change from a 40 CAT year -long module delivered across S1 and S2 to two independent modules delivered separately in S1 and S2 as Molecular Genetics and Bioinformatics 1 (Semester 1 and Molecular Genetics and Bioinformatics 2 (Semester 2)

Module BIO2305: Molecular Genetics and Bioinformatics 40 CAT full year module; compulsory for all Biological Sciences programmes. This will change from a 40 CAT year -long module delivered across S1 and S2 to two independent modules delivered separately in S1 and S2 as Molecular Genetics and Bioinformatics 1 (Semester 1), Molecular Genetics, and Bioinformatics 2 (Semester 2).

Module BIO2202: Microorganisms in Action,20 CAT module; optional for all Biological Sciences programmes. This will change through the assessment profile as: The Chromatography lab report (worth 15%); ELISA report (worth 15%); Class Test (worth 60%); Post Lab Quiz (10%), will change to a Chromatography lab report (worth 20%); presentation on AMR (worth 20%); Class Test (worth 50%); Post Lab Quiz (worth10%).

	Module BIO3304: Biomolecules in Health and Disease (40 CAT year-long
	module; optional for all Biological Sciences programmes), an update of
	Intended learning outcomes to map to national Subject Benchmark Statement
	requirements will be implemented.
BSc Zoology	We are writing to inform you of curriculum changes that will be introduced to
BSc Zoology with Professional Studies	your programme in 2023-24. Following feedback from external examiners and
MSci Zoology	students, the following module changes will be introduced to your programme:
MSci Zoology with Professional Studies	
	Module BIO1301 World of Microorganisms, 40 CAT full year module;
	compulsory for all Zoology programmes. This will undergo a change from a 40
	CAT full year module delivered across semester 1 (S1) and semester 2 (S2), to
	two independent modules delivered separately as Fundamentals of
	Microbiology (Semester 1) and World of Microorganisms (Semester 2).
	Module BIO1304 Molecular Basis of Life, 40 CAT full year module; compulsory
	for all Zoology programmes. This will undergo a change from a 40 CAT full
	year module delivered across semesters 1 & 2 to two independent modules
	delivered separately as BIO1103: Molecular Basis of Life (Semester 1) and
	BIO1304: Genetics and the Molecular Toolbox (Semester 2).
	Module BIO1305 Biodiversity, 40 CAT full year module; compulsory for all
	Zoology programmes. This will undergo a change from a 40 CAT full year

	module delivered across semesters1&2 to two independent modules delivered
	separately in S1 and S2 as BIO1305: Biodiversity (Semester 1), Environmental
	Biology (Semester 2).
	Module BIO2306 Animal Biology and Physiology, 40 CAT full year module;
	compulsory for all zoology programmes. This will undergo a change from a 40
	CAT full year module delivered across Semester 1 and 2 to two independent
	modules delivered separately in S1 and S2 as Comparative Animal Physiology
	(Semester 1) and Vertebrate Biology (Semester 2).
BSc Environmental Management	We are writing to inform you of curriculum changes that will be introduced to
BSc Environmental Management with	your programme in 2023-24. Following feedback from external examiners and
Professional Studies	students, the following module changes will be introduced to your programme:
	Module BIO1309 Ecology and Environmental Sciences will undergo a change
	of title to BIO1309 Environmental Sciences.
	The assessment framework of this module will change from an exam [worth
	50%], an essay [worth 35%] and field reports [worth 15%] to an exam [worth
	50%], an essay [worth 25%] and field reports [worth 25%].

# Medicine, Dentistry and Biomedical Sciences

Medicine	We are writing to inform you of curriculum changes that will be introduced to your
(medicaled@qub.ac.uk)	programme in 2023-24. Following feedback from external examiners and students, the
	following module changes will be introduced to your programme:
	Module MED2022 Foundations of Practice 2 which comprises of 4 units on an integrated
	system-based programme with the following 3 units:
	Personal and Professional Development Portfolio and the Integrated system-based
	programme.
	Gastrointestinal, Renal, Endocrine and Reproductive systems
	Neurological system
	Personal and Professional Development Portfolio and the Integrated system-based
	programme with the following 3 units:
	Gastrointestinal, Renal, Endocrine and Reproductive systems
	Neurological system
	Musculoskeletal system Part 2 and Skin
	Clinical Skills will change on these will change from – Clinical skills (including
	communication, examination and practical procedural skills relating to the cardiovascular,

respiratory, haematological and musculoskeletal systems) are taught in clinical skill centres
and through contact with real patients in primary and/or secondary care.
to – Clinical skills (including communication, examination and practical procedural skills
relating to the gastrointestinal, renal, endocrine, reproductive, neurological, dermatological
and musculoskeletal systems) are taught in clinical skill centres and through contact with real
patients in primary and/or secondary care.
We are also updating the module learning from:
1. Applying biomedical scientific principles, methods and knowledge to medical practice and
integrate these into patient care. Thus includes the principles and knowledge relating to the
anatomy (including embryology and histology), biochemistry, immunology, microbiology,
pathology, pharmacology and clinical pharmacology, and physiology of the GI, renal,
endocrine, reproductive, neurological and musculoskeletal systems.
2. Applying, in relation to the GI, renal, endocrine, reproductive, neurological,
musculoskeletal, and skin systems the principles, methods and knowledge of population
health and the improvement of health and sustainable healthcare to medical practice,
psychological concepts of health, illness and disease and sociological concepts of health,
illness and disease
3. Perform the designated clinical skills (communication, examination, and procedures)

specific to the GI, renal, endocrine, reproductive, neurological and musculoskeletal systems.
4. Reflecting on learning
To:
1. Describe the normal structure and function of each body system.
2. Discuss the concepts underpinning normal growth and development, and embryology
including fertilisation, implantation, gastrulation, neurulation and placentation.
3. Describe the functional microanatomy of the urinary, endocrine, immune, alimentary, and reproductive systems.
4. Describe the functional anatomy of the pelvis including the viscera, musculature; their
relations and the blood / lymph circulation and innervation.
5. Describe the functional anatomy of the breast.
6. Describe the functional anatomy of the abdominal cavity including the viscera,
musculature; their relations and the blood / lymph circulation and innervation.
7. Describe the functional anatomy of the endocrine system including the pituitary, thyroid
and parathyroid glands, adrenal glands, pancreas and other endocrine organs.
8. Demonstrate the basic skills of observation, description, interpretation and reporting of
previously unseen histological and anatomical specimens.

9. Explain how urine is formed by the kidneys and how renal blood flow, glomerular
filtration, and tubular reabsorption/secretion are involved in this process and how their
value can be calculated.
10. Explain how the osmolarity, volume and pH of urine is controlled to maintain body fluid
composition.
11. Describe how urine is expelled from the body.
12. Describe how food is moved, digested, processed and eventually evacuated from the
body.
13. Describe the principles of nutrition and body weight control and detail the metabolism and
control of blood concentration of carbohydrates, proteins and lipids.
14. Explain the concept of endocrine control of body function dealing specifically with
hypothalamic and pituitary influence of hormone secretion and the role and context of
hormone control of various body systems (e.g. insulin and glugagons, regulation of blood
glucose levels, lactation and ovulation, thyroid control of metabolic rate).
15. Describe male and female reproductive physiology, incorporating the physiology of
implantation, pregnancy, labour and lactation.
16. Outline the challenges faced by the newborn in adaption to extrauterine life.
17. explain how normal human structure and function and physiological processes applies,
including at the extremes of age, in children and young people and during pregnancy and
childbirth.
18. Illustrate how metabolic pathways are controlled by hormones and the connection
between nutritional state and energy sources.

19. Describe how the physiological control of stomach acid secretion can be targeted in the
treatment of peptic ulcer disease with non-pharmacological and pharmacological
treatments.
20. Discuss how liver and renal disease and extremes of age can influence drug metabolism,
efficacy and toxicity.
21. Identify and explain the different ways in which concurrent medications can interact with
potential beneficial or negative impact on efficacy and adverse effects.
22. Describe the principles behind assessment and management of common poisonings.
23. Apply the UK guidelines for the acute and chronic treatment of type 1 and type 2 diabetes
mellitus.
24. Outline the mode of action of lipid modifying drugs and their clinical uses.
25. Recognise the challenges of safe prescribing for patients in pregnancy, at extremes of
age and at the end of life.
26. Explain the clinicopathological features of common GI, renal, endocrine and reproductive
disorders.
27. Explain the relevant pathological processes underlying common and important disease
processes.
28. Explain the epidemiology, microbiology, pathophysiology and clinical features of common
and important infections of these systems.
29. Choose relevant diagnostic investigations for common and important infections and
interpret the results of investigations in the context of clinical findings.

30. Justify, through an explanation of the underlying fundamental principles and clinical
reasoning, the selection of appropriate laboratory investigations for common clinical
conditions, infections and diseases.
31. Describe the major genetic disorders associated with these systems, their molecular
basis, clinical presentation and treatment.
32. Discuss issues relating to health economics and equity, and clinical guidelines.
33. Discuss from a global perspective the determinants of health and disease and variations
in healthcare delivery and medical practice.
34. Discuss the role and impact of nutrition to the health of individual patients and societies.
35. Describe the functional microanatomy of the nervous system.
36. Describe the structure of the human brain, spinal cord and peripheral nervous system
including blood supply and osteology of the skull and neck.
37. Describe the functional microanatomy of the eye and ear and how this relates to the
function of these structures.
38. Describe the hierarches evident in the central nervous system processing and how these
relate to neural function.
39. Relate neurotransmitter systems of the brain to neural functions and normal and aberrant
behaviours.
40. Demonstrate the protective functions of the blood-brain barrier, requirements of the blood
supply and related this to metabolic demand.
41. Describe the physiological processes underpinning manifestations of pain.
42. Describe the major sensory pathways in the central nervous system.

43. Describe the special senses of vision, hearing and vestibular function.
44. Describe the major movement pathways and structures in the central nervous system.
45. Recognise where and how different functions including language interpretation and
production are processed.
46. Describe the vascular and neuronal connections between the hypothalamus and the
pituitary.
47. Describe the location and function of the principal neurotransmitters involved in the action
of drugs used in the treatment of the main mental illnesses, dementia, epilepsy and
Parkinson's disease.
48. Outline the modes of action, desired effects and adverse effects of the principal drugs
used in treatment of these disorders.
49. Explain the clinicopathological features of common neurological conditions.
50. Explain the relevant pathological processes underlying common and important
neurological disease processes.
51. Explain the epidemiology, microbiology, pathophysiology, and clinical features of
common and important infections of these systems.
52. Choose relevant diagnostic investigations for common and important infections and
interpret the results of investigations in the context of clinical findings.
53. Justify, through an explanation of the underlying fundamental principles and clinical
reasoning, the selection of appropriate laboratory investigations for common clinical
conditions, infections, and diseases.

54. Describe the major genetic disorders associated with these systems, their molecular
basis, clinical presentation, and treatment.
55. Explain the functional anatomy of the lower limb including the medically relevant
osteology and joints, musculature, blood / lymph circulation and innervation.
56. Describe the key anatomical relations associated with major anatomical structures of the
and lower limb.
57. Explain how working muscles and organs signal their need for perfusion to meet local
metabolic demands.
58. Describe the histological features of skin, ordinary connective tissue, fat, cartilage and
bone and the process of ossification.
59. Explain common musculoskeletal and dermatological clinical presentations making direct
reference to anatomical structures and anatomical relations.
60. Apply the UK guidelines for the treatment of musculoskeletal and dermatological (MSK)
conditions in theoretical clinical scenarios.
61. Compare the properties of the various classes of drugs that act on the skin, muscles and
joints and apply this knowledge to formulate appropriate treatment plans for common
MSK conditions.
62. Explain the clinicopathological features of common MSK and skin conditions.
63. Explain the relevant pathological processes underlying common and important MSK and
skin disease processes.
64. Explain the epidemiology, microbiology, pathophysiology, and clinical features of
common and important infections of these systems.

65. Choos	e relevant diagnostic investigations for common and important infections and
interpr	et the results of investigations in the context of clinical findings.
66. Justify	through an explanation of the underlying fundamental principles and clinical
reasor	ing, the selection of appropriate laboratory investigations for common clinical
conditi	ons, infections, and diseases.
67. Descri	be the major genetic disorders associated with the MSK and skin system, their
molecu	lar basis, clinical presentation, and treatment.
68. Perfor	n the designated clinical skills specific to each body system. Within this domain
they m	ust:
	a. Demonstrate professional attitudes towards patients and colleagues at all
	times.
	b. Adhere to infection control principles.
	c. Recognise normal clinical findings and appreciate abnormal clinical findings.
	d. Begin to interpret the clinical findings.
	e. Demonstrate good communication skills in the clinical setting.
	f. Discuss the importance of patient-centred care.
	g. Demonstrate appropriate attitudes towards patients in the clinical setting.
	h. Describe the roles and working relationships of the health care team.
	i. Relate the ethical principles and theories to the GMC guidance including duties
	of a doctor and to case studies.
	j. Behave according to the ethical and professional principles as set out in
	'Outcomes for Graduates'.

69. Discuss sociological concepts of health, illness, and disease.
Discuss the social determinants of health and health inequalities for people from diverse
social and cultural backgrounds.
70. Apply theoretical frameworks of psychology to explain the varied responses of
individuals, groups, and societies to disease.
71. Reflect on learning.
Module MED4024 Immersion in Practice 2 comprised 6 units and will change from:
Units 1 to 4 include clinical experience in clinical specialities (each specialty represents a
module unit) which will focus on life cycle from childhood, through reproduction to adult life to
old age. Students will undertake attachments in the following specialties: Child Health;
Mental Health; Women's Health; Cancer, Ageing and Health. Each specialty should not be
seen as discipline specific silos; rather, together the emphasis is on the patient in the
community, at home, in the GP surgery and in hospital at all stages of life.
Content for each specialty is co-designed and co-delivered by both primary and secondary
care physicians. Each clinical rotation will commence with a one-week introduction at QUB
followed by 6 weeks of workplace learning - four weeks in the secondary care environment
and 2 weeks in General Practice. Inter-professional and simulated learning opportunities will
also be provided. General Practice will constitute the Longitudinal Integrated Clerkship
component of Year 4. Students will be attached to the same general practice in four, two-
week long placements throughout the year.

For each unit the 2 weeks in primary care will have a focus on learning opportunities
pertinent to the relevant module unit. In addition, it offers 'overall' primary care learning time
to encompass the full range of patients and care in community settings. The emphasis will
be on:
Patient-centred care, population centred care, the efficacy of general practice
Case-based learning will again be used to integrate the 4 GCAT (Global and Population
Health, Clinical Science and Practice, Achieving Good Medical Practice, Teamwork for Safe
Care) themes, provide standardisation of learning and provide a 3rd 'spiral' of the body
systems as they present throughout the life cycle.
Key curriculum themes (GCAT) will be integrated as appropriate into the teaching
programme.
1 Integrated Clinical Science and Quality Healthcare unit which will be delivered over 6
1. Integrated Clinical Science and Quality Healthcare unit which will be delivered over 6
weeks – 2 at the beginning and 4 at the end of the year. This unit locuses on an
understanding of quality improvement methodology, nealthcare systems, and
consolidation of the clinical and biomedical science teaching from year 1-4.
2. Personal and Professional Development Portfolio
To comprise of 5 elements:

Elements 1 to 4 include clinical experience built around 4 life cycle pillars: Child Health;
Mental Health; Reproductive Health; Ageing and Health. Each pillar should not be seen as a
discipline specific silo; rather, together the emphasis is on the patient in the community, at
home, in the GP surgery and in different hospital settings at all stages of life.
Content for each pillar is co-designed and co-delivered by both primary and secondary care
physicians. Each pillar will commence with a one-week introduction ('pillar week') at QUB
followed by 8 weeks of workplace learning - 6 weeks in the secondary care environment
(including the Emergency Department) and 2 weeks in General Practice. Inter-professional
and simulated learning opportunities will also be provided. General Practice will constitute
the Longitudinal Integrated Clerkship component of Year 4. Students will be attached to the
same general practice in four, two-week long placements throughout the year.
For each pillar the 2 weeks in primary care will include some focus on learning opportunities
pertinent to the relevant pillar. Crucially, it offers 'overall' primary care learning time to
encompass the full range of patients and care in community settings. The emphasis will be
on: Patient-centred care, Population centred care, the efficacy of general practice.
Case-based learning will again be used to integrate the 4 GCAT (Global and Population
Health, Clinical Science and Practice, Achieving Good Medical Practice, Teamwork for Safe
Care) themes, provide standardisation of learning and provide a 3rd 'spiral' of the body
systems as they present throughout the life cycle.

Key curriculum themes (GCAT) will also be integrated as appropriate into the teaching programme.
1. Personal and Professional Development Portfolio
The Learning Outcomes have been updated with the Learning Outcomes below relating to
the following module units: Child Health; Mental Health; Women's Health; Cancer, Ageing and Health; Portfolio.
They have been changed to:
Apply an ethical framework to solve ethical dilemmas commonly encountered in primary care
has been changed to – Apply an ethical framework to solve ethical dilemmas across clinical contexts.
Integrate relevant anatomy, physiology, biochemistry, immunology, pathology, microbiology
of illness to each clinical specialty has been changed to – Integrate relevant anatomy,
physiology, biochemistry, immunology, pathology, microbiology of illness across each pillar area.
The following Learning Outcomes have been removed:
<ul> <li>Describe the process of clinical audit and its application.</li> </ul>

Describe the principles of Evidence Based Medicine and be able to critically appraise
a scientific paper.
<ul> <li>interpret common statistical tests used in medical research publications.</li> </ul>
Critically appraise a range of research information including study design, the results
of relevant diagnostic, prognostic and treatment trials, and other qualitative and
quantitative studies as reported in the medical and scientific literature.
<ul> <li>Describe the principles of quality assurance, quality improvement, quality planning</li> </ul>
and quality control, and in which contexts these approaches should be used to
maintain and improve quality and safety.
<ul> <li>Describe basic human factors principles and practice at individual, team,</li> </ul>
organisational and system levels and recognise and respond to opportunities for
improvement to manage or mitigate risks.
<ul> <li>Apply the principles and methods of quality improvement to improve practice (for</li> </ul>
example, plan, do, study, act or action research), including seeking ways to
continually improve the use and prioritisation of resources.
The following Learning Outcomes have been added to module MED5022 Preparation for
Practice 1
<ul> <li>Describe the process of clinical audit and its application.</li> </ul>
Describe the principles of Evidence Based Medicine and be able to critically appraise
a scientific paper.

<ul> <li>Interpret common statistical tests used in medical research publications.</li> </ul>
Critically appraise a range of research information including study design, the results
of relevant diagnostic, prognostic and treatment trials, and other qualitative and
quantitative studies as reported in the medical and scientific literature.
Describe the principles of quality assurance, quality improvement, quality planning
and quality control, and in which contexts these approaches should be used to
maintain and improve quality and safety.
<ul> <li>Describe basic human factors principles and practice at individual, team,</li> </ul>
organisational and system levels and recognise and respond to opportunities for
improvement to manage or mitigate risks.
<ul> <li>Apply the principles and methods of quality improvement to improve practice (for</li> </ul>
example, plan, do, study, act or action research), including seeking ways to
continually improve the use and prioritisation of resources.

BSc Biomedical Science	We are writing to inform you of curriculum changes that will be introduced to your
(biomedsci@qub.ac.uk)	programme in 2023-24. Following feedback from external examiners and students, the
	following module changes will be introduced to your programme:
	The changes include editing, clarification of Learning Outcomes, update of compulsory
	elements, skills, course content, contact and non-contact teaching methods, supplementary
	and resit profiles and the proportion of continuous assessment in assessment profiles and
	will impact the following modules:
	Module BMS3101Clinial Biochemistry
	Module BMS2106 The Sciences of Disease
	Module BMS2110 Principles of Cell Biology
	Module BMS1104 Human Structure and Function
	Module BMS3104 Molecular Markers of Disease
	Module BMS3108 Biology of Human Infection
	Module BMS3112 Research Project
	Module BMS2107 Professional Practice in Biomedical Science
	Module BMS2111 Clinical Genetics

BSc	Medical	Science	with	We are writing to	inform you of curricul	um char	nges that will be introduce	d to your	
Interca	alate			programme in 20	programme in 2023-24. Following feedback from external examiners and students, the				
(media	caled@qub	<u>.ac.uk</u> )		following module	changes will be introd	luced to	your programme:		
				The changes include editing, clarification of Learning Outcomes, update of compulsory elements, skills, course content, contact and non-contact teaching methods, supplementand resit profiles for:         • Module BMS3112 Research Project         • Module BMS3105 Embryology and Developmental Biology         A proportion of continuous assessment will impact the following modules:         Module Code       Assessment Profile changed					
					from				
				BMS3102	Written paper (180)	60	Written paper	60	
				Advanced Neurosciences	Oral Presentation	10	Continuous Assessment	40	
					Critical Appraisal (1000 word)	15			
					Class test	15			
					<u></u>	<b>_</b> J			

	BMS3106					
		Written Paper	50	Written paper	50	
	Principles of Pharmacology & Therapeutics	Problem-solving exercises (x2) Essay Poster Oral Presentation	20 10 10 10	Continuous Assessment	50	
	BMS3107	Written Paper	50	Written paper	50	
	Pathobiology & Treatment	Oral Presentations (x3) Essays (x2)	30 20	Continuous Assessment	50	
BSc Hons Human Biology	We are writing to	inform you of curriculu	ım char	ges that will be introduced	to your	
( <u>biomedsci@qub.ac.uk</u> )	programme in 2023-24. Following feedback from external examiners and students, following module changes will be introduced to your programme:				students, the	
	The changes include editing, clarification of learning outcomes, update of compulsory elements, skills, course content, contact and non-contact teaching methods, supplementary and resit profiles:					

The proportion of c	ontinuous a	ssessment will chang	ge in the fo	llowing modu
Module BMS2101	Anatomical	Sciences		
From:				
Written Paper (120)	)			40%
Anatomy Structured Presentation eleme	I Practical Ob nts	oservation Tests and		40%
Microanatomy Clas	s Presentatic	ท		20%
То:			<u></u>	
Written Paper				40%
Continuous Assess	ment			60%
Module BMS3112	Research P	roject		
From		То		
From Science Article	20	To Review	20	]
From Science Article Dissertation	20 40	To Review Dissertation	20 40	
From Science Article Dissertation Reports	20 40 20	To Review Dissertation Reports (x2)	20 40 20	

The Supplementary	and Resit profile will be amended for the r	nodules listed below:
Module Code	Resit Profile changed from	Change to
Module Code BMS2014 Scientific Methods/Statestics BMS2108 Psychological Sciences BMS3102 Advacned Neurosciences BMS3106 Principles of	Resit Profile changed from Resit Profile: Students must redo the assessment element they failed i.e. written exam paper or an additional piece of coursework as appropriate or both.	Change to The requirements of individual continuous assessments may vary from year to year, but details of this will be made available at the start of each year. Resit Profile: Students must redo the assessment element they failed i.e. where they have achieved a mark <40% for either the written exam paper or continuous assessment, or both. If the
Pharmacology & Therapeutics		written exam is failed they will take a resit exam at

Pathobiology & Treatment BMS2028 Human Physiological Measurement BMS 2015 Molecular Cell Biology	Resit Profile: Additional elements of coursework which must achieve a minimum of 40% to pass. The mark will be capped at 40% for classification purposes	will be required from a student who fails the continuous assessment element overall Resit Profile: Additional elements of coursework which must achieve a minimum of 40% to pass. The mark will be capped at 40% for classification purposes. an additional piece of work will be required from a student who fails the continuous assessment element overall
Cardiovascular		additional piece of work
Pathobiology &		will be required from a
Treatment		student who fails the continuous assessment element overall
BMS2028 Human Physiological Measurement BMS 2015 Molecular Cell Biology	Resit Profile: Additional elements of coursework which must achieve a minimum of 40% to pass. The mark will be capped at 40% for classification purposes	Resit Profile: Additional elements of coursework which must achieve a minimum of 40% to pass. The mark will be capped at 40% for classification purposes. an additional piece of work will be required from a student who fails the continuous assessment element overall

The assessment	profile will change for	the mod	dules listed below:	
Module Code	Assessment Profile cha from	anged	Change to	
BMS2105 Molecular Cell	Research Paper Analysis	25	Coursework	100
Biology	Essay Class MCQ	50 25		
BMS3102	Written paper (180)	60	Written paper (180)	60
Advacned Neurosciences	Oral Presentation	10	Continuous Assessment	40
	Critical Appraisal (1000 word)	15		
	Class test	15		

BMS3106	Written Paper	50%	Written paper	50	
Principles of Pharmacology	Problem-solving exercises (x2)	20%	Continuous Assessment	50	
& Therapeutics	Essay	10%			
	Poster	10%			
	Oral Presentation	10%			
BMS3107	Written Paper	50%	Written paper	50	
Cardiovascular Pathobiology & Treatment	Oral Presentations (x3)	30%	Continuous Assessment	50	
	Essays (x2)	20%			

#### Pharmacy

**BSc Pharmaceutical Sciences** 

BSc Pharmaceutical Sciences (Sandwich)

**BSc Pharmaceutical Biotechnology** 

BSc Pharmaceutical Biotechnology (Sandwich)

We are writing to inform you of curriculum changes that will be introduced to your programme in 2023-24. Following feedback from external examiners and students, the following module changes will be introduced to your programme:

We are combining the content of two modules into one larger module, which will provide students with a more coherent and integrated approach towards our teaching of the physical and chemical properties of drugs. Some content about the analysis of drugs (which was taught in second year) is becoming part of this new module, with some less relevant content being removed. This change is part of our continuing process of review and improvement, to ensure the degree is contemporary and will produce graduates to meet the needs of the pharmaceutical industry.

Module	Type of change	Details
PMY1025		
	Module title	Module title change from 'Physiochemical principles for
		Formulation to 'Properties and analysis of drug molecules'.
	CATS	CATS/CREDITS change from 20 to 40

			Number of lectures changes from 32 (PMY1025
		Content	Structure, Reactivity and Mechanism in Organic and
			Bioorganic Chemistry), and 34 (CHM1004 Structure,
			Reactivity and Mechanism in Organic and Bioorganic
			Chemistry ) to 50 plus 12 seminars
			Number of workshops and laboratory practical's
			changes from 4 (PMY1025) [and 4 (CHM1004)] to 5
			practical's and 3 workshops
			Assessment
		Assessment	Change from 75% exam and 25% coursework (PMY1025)
			[and 100% coursework (CMH1004)] to 40% exam and
			60% coursework
MPharm	We are writin	g to inform you of	curriculum changes that will be introduced to your
	programme ir	n 2023-24. Follow	ing feedback from external examiners, students and the
	professional l	body, the followin	g changes will be introduced to your programme:
	All applicants	: Please be awar	e that the General Pharmaceutical Council (GPhC)
	published new Standards for the initial education and training of pharmacists in 2		

which means information about the MPharm degree is subject to change to meet the new Standards. Prospective students should note that these changes are ongoing.

One important change that will be introduced for the 2023 intake onwards relates to the selection and admissions processes. The 2021 Standards stipulate that "all admissions and selection processes must include an interactive component, to assess applicants' values and professional suitability". Previously, an interactive component was only required in certain circumstances such as graduate entry.

Therefore, for 2023/24 entry and beyond, shortlisted applicants must complete an interview process.

The course integrates the chemical and biological sciences with the discovery, design, evaluation and production of medicines and their clinical application to all areas of practice and person-centred care. Laboratory classes, simulation-based learning and inter-professional opportunities, coupled with experiential learning in the workplace, help students become experts in medicine and a valued and effective member of the healthcare team. The MPharm strives to embed the principles of equality, diversity, inclusion, and fairness to help reduce discrimination and health inequalities.

Furthermore, students will learn about the importance of sustainable healthcare. Key Components of the MPharm course include:

• Chemistry, physical pharmaceutics, physiology, microbiology, pharmacology, clinical therapeutics, statistics, numeracy, drug design and development, drug formulation, drug delivery and administration, pharmacogenomics, epidemiology, and relevant social sciences.
• Skills development such as professional judgement, risk management, diagnostic and consultation skills. Attributes for prescribing, thereby enabling pharmacists to independently prescribe from the point of registration • Relevant legislation, ethics and professional standards.
<ul> <li>Pharmacy Practice in both simulated and real-world environments</li> </ul>
<ul> <li>The importance of research (including undertaking a research project) and evidence-based healthcare Professional Accreditation</li> </ul>

BSc Professional Nursing (Adult,	We are writing to inform you of curriculum changes that will be introduced to your
Children and Young People, Learning	programme in 2023-24. Following feedback from external examiners and students, the
Disability and Mental Health)	following module changes will be introduced to your programme:
	Module NFM1120 Professional Nursing Values: Change of current assessment – peer
	feedback 10%, group activity 20% and E-workbook 70%. Peer feedback to become
	formative to allow for feedback in preparation for next module this is included in.
	Weighted assessment to now be %, Group activity 30% and E-workbook 70%.
	Madula NEM1124 Public Health Paranastive: Currently appagament includes Crown
	wodule NFMT124 Public Health Perspective. Currently assessment includes Group
	poster 40%, Individual contribution 40% and peer feedback 10%. This will change to
	individual poster presentation 100% to ensure adequate individual assessment.
	Module NSY2124 Working Inter-professionally to Improve Mental Wellbeing: Change
	to assessment type to strengthen the emphasis on inter-disciplinary working within the
	module content and ease pressure of multiple coursework submissions in limited
	timeframe.

1 May 2023- Version 1