

Diploma/BSc (Hons) Biomedical Sciences - SC301 (Under Review) BSc (Hons) Biomedical Sciences (Upgrading) - SC302 (Under Review)

1. Special Note

Both Programmes are designed to be professional courses, like BSc (Hons) Medical Science Programme currently run by the Department of Medicine. Accordingly, the degree of flexibility will differ from most BSc (Hons) Programmes being run by the Faculty.

The programme design has taken into account the international subject benchmark for Biomedical Sciences set by the UK Quality Assurance Agency in consultation with the IBMS.

2. Objectives

The work of biomedical scientists is essential to ensure the effective operation of health care system. The Diploma/BSc (Hons) Biomedical Sciences is a professional course designed to:

- meet the multidisciplinary needs of the Professional Biomedical Scientists who assist the Medical Profession by providing laboratory-based investigation of human health and diagnosis and management of disease;
- integrate the knowledge base of the various specialist disciplines to further their understanding of the diagnosis and management of a clinical disorder; and
- enable graduates with this degree to either pursue higher studies (MSc, MPhil/PhD) or seek employment locally and internationally.

3. General Entry Requirements

As per General Entry Requirements for admission to the University for undergraduate degrees.

4. Programme Requirements

Credit in five subjects (School Certificate) including three Science subjects. Mathematics will count as a Science subject.

(a) Diploma/BSc (Hons) Biomedical Sciences - Part-Time

GCE Advanced Level passes (or equivalent) in Chemistry and Mathematics and either Biology or Physics.

(b) BSc (Hons) Biomedical Sciences (Upgrading Programme) - Part-Time

GCE Advanced Level passes (or equivalent) in two subjects.

Diploma in Medical Laboratory Technology of the University of Mauritius with a minimum final overall of 50% for the Diploma in MLT.

At least two years post-diploma relevant recent work experience.

5. Programme Duration - Part Time

	Normal	Maximum
Diploma in Biomedical Sciences	6 Semesters (3 years)	10 Semesters (5 years)
BSc (Hons) Biomedical Sciences	10 Semesters (5 years)	14 Semesters (7 years)
BSc (Hons) Biomedical Sciences (Upgrading)	4 Semesters (2 years)	6 Semesters (3 years)

6. General and Programme Requirements - Special Cases

Not applicable for the upgrading programme (SC302).

7. **Credits per Year:** Minimum 18, subject to regulation 5.

8. Minimum Credits Required for Awards

Diploma in Biomedical Sciences:	66
BSc (Hons) Biomedical Sciences:	100
BSc (Hons) Biomedical Sciences (Upgrading):	40

9. Specifications

Professional Training in the form of work training in Ministry of Health medical laboratories will form an essential part of the professional programmes and will be undertaken for 12h/week over all semesters (i.e. 180h per semester) on days where lectures/practicals are not scheduled. Details will be worked out with the Ministry of Health and Quality of Life.

10. Assessment

Professional Training

Workplace skills (lab and professional) will be assessed by means of a concise student-prepared logbook and a report in the form of a structured questionnaire, summarising and rating the work training and experience and a list of all experimental techniques used. Both log book and report will be signed by the immediate work supervisor. These will have to be submitted to the MoH training co-ordinator and to the programme co-ordinator at the end of each semester. Students will need to submit a satisfactory log book (Grade S) and obtain a satisfactory report (Grade S) in order to be awarded a Diploma/BSc (Hons) Degree in Biomedical Sciences. Unsatisfactory reports and unsatisfactory logbooks will be awarded Grade U. Professional Training does not carry any credit.

Assessment of Foundation Courses

The Foundation Courses in Biology and Physics will be based on both written examination and on continuous assessment. Grade S and Grade U will be awarded for these courses.

Continuous and Written Assessment of Modules

Each module will carry 100 marks and will be assessed yearly as follows (unless otherwise specified):

- **Written Exams**

Each module, except where specified, will be assessed by **a 2 hr written exam paper**. Modules will be examined at the end of the year in which they are taught.

Modules to be assessed singly:

Diploma/BSc (Hons) Biomedical Sciences

Year 1

BMS 1121; BMS 1231; BMS 1141 and BMS 1221.

Year 2

BMS 2111; BMS 2211; BMS 2221 and BMS 2241.

Year 3

BMS 3231 and BMS 3211.

Year 4

BMS 4111 and BMS 4221.

Year 5

BMS 5111; BMS 5211; BMS 5121 and BMS 5221.

The following pairs of modules will be assessed jointly by **a 3 hr written exam paper:**

Year 1

BMS 1111 and BMS 1211

BMS 1112 and BMS 1212

BMS 1131 and BMS 1241

Year 2

BMS 2121 and BMS 2131

BMS 2141 and BMS 2231

Year 3

BMS 3111 and BMS 3121

BMS 3131 and BMS 3221

Year 4

BMS 4121 and BMS 4211

BMS 4131 and BMS 4231

BSc (Hons) Biomedical Sciences (Upgrading)

The following pairs of modules will be assessed jointly by a **3 hr written exam paper:**

Year 1

BMS 4131 and BMS 4231

BMS 5131 and BMS 5231

BMS 2141 and BMS 2231

Year 2

The following modules will be assessed singly by a **2 hr written exam paper.**

BMS 5111; BMS 5221; BMS 5121 and BMS 3221.

- **Laboratory Work and Continuous Assessment**

- *Modules including a Practical Component*

There will be no practical exams. Laboratory work will be assessed on a continuous assessment basis and will carry a weighting of 30% of the total marks awarded for the respective modules involved.

Continuous assessment for the theory part of modules having a practical component may be in the form of assignments and should include at least one class test and will carry a weighting of 10% of total marks for the module.

The continuous assessment for laboratory work should be in the form of marks for practical reports and should include at least one formal Data Interpretation paper given as a class test in order to test skills acquired in Data Interpretation. Students must achieve an overall mark of **60%** in the continuous assessment for the practical component in order to pass modules including a practical component, which is indicated where appropriate.

- *Modules not including a practical component/Specialist Option Modules/Modules including demonstrations*

For the above modules continuous assessment may be in the form of assignments and should include at least one class test and will carry a weighting of up to 30% of total marks for the respective modules.

- **Assessment of Research Projects/Dissertations**

Project/Dissertations will carry a weighting of 10 credits towards degree award. They will be carried out normally in the area of specialisation.

11. Restrictions

A student is required to repeat all modules in which s/he has obtained an E or F or G grade unless otherwise specified by Faculty Board.

A student who repeats a module must submit new assignment(s), take part in class tests and re-write the examination.

A student will not be allowed to repeat a module in which s/he has already achieved a D grade or above.

12. Modules of Special Nature

Audit Modules

Students who wish to follow specific module(s) or are advised to do so by the Department may audit same. Such Audit modules are not examinable but will appear in their transcript subject to satisfactory attendance (Grade S).

13. List of Modules - Diploma/BSc (Hons) Biomedical Sciences

(L = Lectures; P = Practical; NA = Not Applicable)

* Module code name BMS is in line with subject benchmark statement for biomedical sciences, of the QAA, UK.

Code	Module Name	L/P	Credits
BMS 1111	Foundation Course in Biology I OR	30/30	-
BMS 1112	Foundation Course in Physics I	30/30	-
BMS 1121	Introduction to Human Anatomy and Physiology	45/0	3
BMS 1131	Basic Cell Biology	30/30	2+1
BMS 1141	Biomedical Techniques I	30/30	2+1
BMS 1211	Foundation Course in Biology II OR	30/30	-
BMS 1212	Foundation Course in Physics II	30/30	-
BMS 1221	Medical Microbiology I	30/30	2+1
BMS 1231	Basic Immunology	45/0	3
BMS 1241	Introduction to Basic and Clinical Biochemistry	30/30	2+1
BMS 2111	Histology and Histopathology I	30/30	2+1
BMS 2121	Haematology I	30/30	2+1
BMS 2131	Blood Group Serology & Transfusion Science I	30/30	2+1
BMS 2141	Biomedical Research Methods and Communication Skills	45/0	3
BMS 2211	Biomedical Techniques II	30/30	2+1
BMS 2221	Advanced Biochemistry	30/30	2+1
BMS 2231	Biostatistics and IT for the Biomedical Scientist	30/30	2+1
BMS 2241	Medical Microbiology II	30/30	2+1
BMS 3111	Histopathology II	30/30	2+1
BMS 3121	Parasitology	30/30	2+1
BMS 3131	Clinical Biochemistry I	30/30	2+1
BMS 3211	Specialist Option I	30/30	2+1
BMS 3221	Medical Physiology and Endocrinology	45/0	3
BMS 3231	Haematology II	30/30	2+1
BMS 3000	Project Dissertation	NA	6
BMS 4111	Clinical Biochemistry II	30/30	2+1
BMS 4121	Medical Bacteriology	30/30	2+1
BMS 4131	Molecular Cell Biology	45/0	3
BMS 4211	Medical Virology	30/30	2+1
BMS 4221	Blood Group Serology and Transfusion Science II	30/30	2+1
BMS 4231	Cellular Pathology	45/0	3
BMS 5000	Research Project/Dissertation	NA	10
BMS 5111	Molecular Diagnostics	30/30	3
BMS 5121	Biology of Disease	45/0	3
BMS 5211	Specialist Option II	30/30	3
BMS 5221	Professional Practice for the Biomedical Scientist	45/0	3

Modules specific to the BSc (Hons) Biomedical Sciences (Upgrading Programme)

BMS 5131	Recent Developments in Biomedical Sciences I	30/30	3
BMS 5231	Recent Developments in Biomedical Sciences II	30/30	3

14. Programme Plan – Diploma/BSc (Hons) Biomedical Sciences

Professional training will be carried out as indicated above.

Semester 1

Code	Module Name
BMS 1111 or BMS 1112	Foundation Course in Biology I or Foundation Course in Physics I
BMS 1121	Introduction to Human Anatomy and Physiology
BMS 1131	Basic Cell Biology
BMS 1141	Biomedical Techniques I

Semester 2

Code	Module Name
BMS 1211 or BMS 1212	Foundation Course in Biology II or Foundation Course in Physics II
BMS 1221	Medical Microbiology I
BMS 1231	Basic Immunology
BMS 1241	Introduction to Basic and Clinical Biochemistry

Semester 3

Code	Module Name
BMS 2111	Histology and Histopathology I
BMS 2121	Haematology I
BMS 2131	Blood Group Serology & Transfusion Science I
BMS 2141	Biomedical Research Methods and Communication Skills

Semester 4

Code	Module Name
BMS 2211	Biomedical Techniques II
BMS 2221	Advanced Biochemistry
BMS 2231	Biostatistics and Information Technology for the Biomedical Scientist
BMS 2241	Medical Microbiology II

Semester 5

Code	Module Name
BMS 3111 BMS 3121	Histopathology II Parasitology
BMS 3131 BMS 3000	Clinical Biochemistry I Project Dissertation

Semester 6

Code	Module Name
BMS 3211 BMS 3221	Specialist Option I Medical Physiology and Endocrinology
BMS 3231 BMS 3000	Haematology II Project Dissertation

Semester 7

Code	Module Name
BMS 4111 BMS 4121	Clinical Biochemistry II Medical Bacteriology
BMS 4131	Molecular Cell Biology

Semester 8

Code	Module Name
BMS 4211 BMS 4221	Medical Virology Blood Group Serology and Transfusion Science II
BMS 4231	Cellular Pathology

Semester 9

Code	Module Name
BMS 5111 BMS 5121	Molecular Diagnostics Biology of Disease
BMS 5000	Research Project

Semester 10

Code	Module Name
BMS 5211 BMS 5221	Specialist Option II Professional Practice for the Biomedical Scientist
BMS 5000	Research Project

15. Programme Plan - BSc (Hons) Biomedical Sciences - Upgrading Programme

Professional training will be carried out as indicated above.

Semester 1

Code	Module Name
BMS 4131	Molecular Cell Biology
BMS 5131	Recent Developments in Biomedical Sciences I
BMS 2141	Biomedical Research Methods and Communications Skills

Semester 3

Code	Module Name
BMS 5000	Research Project
BMS 5111	Molecular Diagnostics
BMS 5121	Biology of Disease

Semester 2

Code	Module Name
BMS 2231	Biostatistics and Information Technology for the Biomedical Scientist
BMS 4231	Cellular Pathology
BMS 5231	Recent Developments in Biomedical Sciences II

Semester 4

Code	Module Name
BMS 5000	Research Project
BMS 5221	Professional Practice for the Biomedical Scientist
BMS 3221	Medical Physiology and Endocrinology

MARCH 2010