PART I

PRELIMINARY LEVEL (6 credit courses)

BIOL0011  Preliminary Biology I
BIOL0012  Preliminary Biology II

LEVEL 1

BIOL1017  Cell Biology
BIOL1018  Molecular Biology and Genetics
BIOL1262  Living Organisms I
BIOL1263  Living Organisms II

PART II

LEVEL 2

BIOL2164  Principles of Molecular Biology
BIOL2401  Research Skills and Practices in Biology
BIOL2402  Fundamentals of Biometry
BIOL2403  Principles of Ecology
BIOL2406  Eukaryotic Microbiology
BIOL2407  Biological Evolution
BIOL2408  Diving for Scientists (Summer)
BOTN2401  Plant Form and Systematics
BOTN2402  Physiology of Plants
ZOOL2402  Animal Physiology
ZOOL2403  Maintenance Systems in Animals
ZOOL2404  Coordination and Control in Animals

LEVEL 3

BIOL3400  Issues in Conservation Biology
BIOL3402  Biology of Fungi **
BIOL3403  The Biology of Soil
BIOL3404  Virology
BIOL3405  Pest Ecology and Management
BIOL3406  Freshwater Biology
BIOL3407  Oceanography
BIOL3408  Coastal Ecosystems
BIOL3409  Caribbean Coral Reefs
BIOL3410  Water Pollution Biology
BIOL3411  Research Project (6 credits, 2 Semesters)
BIOL3412  Internship
BIOL3413  Biology Project
BOTN3401  Principles of Plant Biotechnology
BOTN3402  Introduction to Plant Breeding **
BOTN3403  Fundamentals of Horticulture
BOTN3404  Economic Botany
BOTN3405  Plant Ecophysiology
BOTN3406  Tropical Forest Ecology
BOTN3407  Post-Harvest Technology
ZOOL3403  Entomology
ZOOL3404  Parasitology
ZOOL3405  Vertebrate Biology
ZOOL3406  Immunology
ZOOL3407  Human Biology **
ZOOL3408  Sustainable Use of Marine Fishable Resources
ZOOL3409  Aquaculture **
ZOOL3410  Advanced Topics in Animal Science

** Not offered 2021/2022

SYSTEM REQUIREMENTS FOR THE AWARD OF A DEGREE

In all cases a degree is granted for successful completion of courses such that the student has obtained, at minimum, the following:

- Level 1 Compulsory: 24 credits
- Levels 2 and 3: 60 credits
- Foundation courses: 9 credits
- Total: 93 credits

For more Information, contact:

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Or visit us online at
www.mona.uwi.edu/lifesciences

DEPARTMENT OF LIFE SCIENCES

BSc Programmes 2021-2022

:: BIOLOGY WITH EDUCATION
:: ENVIRONMENTAL BIOLOGY
:: EXPERIMENTAL BIOLOGY
### Programme Outline

The **BSc Biology with Education** is offered in conjunction with the Faculty of Humanities and Education. The biology courses are presented below, however students should consult the Faculty of Humanities and Education regarding the selection of Education Courses.

**Part 1:** A minimum of 24 credits from Level 1, 18 of which must be FST courses and must include:
- BIOL1263 Cell Biology
- BIOL1262 Molecular Biology and Genetics
- BIOL1261 Living Organisms I
- BIOL1260 Living Organisms II

In addition, the FST Level 1 courses MICR1010 & BIOC1020 (3 credits), one in each semester, are highly recommended.

A total of **63 credits** from **Part II** which must include:
- BIOL2401 Research Skills and Practices in Biology
- BIOL2402 Fundamentals of Biometry
- BIOL2403 Principles of Ecology
- BIOL2404 Eukaryotic Microbiology
- BIOL2405 Cell Biology
- BIOL2406 Principles of Molecular Biology
- BIOL2407 Biological Evolution
- BOTN2401 Plant Form and Systematics
- BOTN2402 Physiology of Plants
- ZOOL2403 Maintenance Systems in Animals
- ZOOL2404 Coordination and Control in Animals

**Please consult the Faculty of Humanities and Education regarding the selection of Education Courses.**

### BSc in Environmental Biology

**Programme Outline**

The **BSc in Environmental Biology** cannot be taken with any other major or minor because of the number of credits required which are as follows:

**Level 1**

A minimum of 24 credits from Level 1, 18 of which must be FST courses and must include:
- BIOL1263 Cell Biology
- BIOL1262 Molecular Biology and Genetics
- BIOL1261 Living Organisms I
- BIOL1260 Living Organisms II

A total of **sixty (60) credits from Advanced courses** which must include:

**Level 2 (30 credits)**

- BIOL2401 Research Skills and Practices in Biology
- BIOL2402 Fundamentals of Biometry
- BIOL2403 Principles of Ecology
- BIOL2404 Eukaryotic Microbiology
- BIOL2405 Cell Biology
- BIOL2406 Principles of Molecular Biology
- BIOL2407 Biological Evolution
- BOTN2401 Plant Form and Systematics
- BOTN2402 Physiology of Plants
- ZOOL2403 Maintenance Systems in Animals
- ZOOL2404 Coordination and Control in Animals

**Level 3:**

**Twelve (12) core credits**

- BIOL3400 Issues in Conservation Biology
- BIOL3401 Freshwater Biology
- BIOL3402 Coastal Ecosystems
- BOTN3405 Plant Ecophysiology

**And at least eighteen (18) credits from:**

- BIOL3403 Diving for Scientists
- BIOL3404 The Biology of Fungi
- BIOL3405 The Biology of Soil
- BIOL3406 Oceanography
- BIOL3407 Caribbean Coral Reefs
- BIOL3408 Water Pollution Biology
- BOTN3406 Tropical Forest Ecology
- ZOOL3403 Entomology
- ZOOL3404 Vertebrate Biology
- ZOOL3405 Human Biology
- ZOOL3406 Sustainable Use of Marine Fishable Resources
- ZOOL3407 Aquaculture

**Either**

- BIOL3412 Internship
- BIOL3413 Biology Project

**NOT offered this academic year**

**PLUS**

- BIOL3412 Internship
- BIOL3413 Biology Project

### BSc in Experimental Biology

**Programme Outline**

The **BSc in Experimental Biology** cannot be taken with any other major or minor because of the number of credits required.

**Level 1**

A minimum of 24 credits from Level I, 18 of which must be FST courses, and must include:
- BIOL1263 Cell Biology
- BIOL1262 Molecular Biology and Genetics
- BIOL1261 Living Organisms I
- BIOL1260 Living Organisms II

A total of **sixty (60) credits** which must include:

**Level 2 (30 credits)**

- BIOL2401 Research Skills and Practices in Biology
- BIOL2402 Fundamentals of Biometry
- BIOL2403 Principles of Ecology
- BIOL2404 Eukaryotic Microbiology
- BIOL2405 Cell Biology
- BIOL2406 Principles of Molecular Biology
- BIOL2407 Biological Evolution
- BOTN2401 Plant Form and Systematics
- BOTN2402 Physiology of Plants
- ZOOL2403 Maintenance Systems in Animals
- ZOOL2404 Coordination and Control in Animals

**Level 3:** At least **30 credits from final year courses**

Taken from the three (3) groups of courses below with a minimum of 3 credits from each group.

**GROUP A**

- BIOL3402 Principles of Plant Biotechnology
- BIOL3403 The Biology of Fungi
- BIOL3404 The Biology of Soil
- BIOL3405 Pest Ecology and Management
- BIOL3406 Oceanography
- BIOL3407 Virology

**GROUP B**

- BOTN3401 Principles of Plant Biotechnology
- BOTN3402 Introduction to Plant Breeding
- BOTN3403 Fundamentals of Horticulture
- BOTN3404 Economic Botany
- BOTN3405 Plant Ecophysiology
- BOTN3406 Post-Harvest Technology

**GROUP C**

- ZOOL3403 Entomology
- ZOOL3404 Parasitology
- ZOOL3405 Vertebrate Biology
- ZOOL3406 Immunology
- ZOOL3407 Human Biology
- ZOOL3408 Sustainable Use of Marine Fishable Resources

**PLUS**

- BIOL3412 Internship
- BIOL3413 Biology Project